State of New Mexico, Energy and Minerals Department

Form C-107 Revised 2-1-82

RECEIVED
FEB 14 1995
OIL CON. DIV.
DIST. 3

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, New Mexico 87501

Application for Multiple Completion

Operator	County	Date
Meridian Oil Inc.	**Rio Arriba**	**February 10, 1995**

Address	Lease	Well No.
PO Box 4289, Farmington,NM 87499	**San Juan 28-6 Unit**	**109M**

Location of Well	Unit	Section	Township	Range
1850'FSL, 1555'FEL	**J**	**1**	**27N**	**6W**

All applications for multiple completion must complete Items 1 and 2 below.

1.	The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a.	Name of Pool & Formation	Blanco MV		Basin DK
b.	Top and Bottom of Pay Section (perforations)	4918-5818		7480-7665
c.	Type Production (Oil or Gas)	Gas		Gas
d.	Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
e.	Daily Production ____ Actual __X_ Estimated Oil - barrels; Gas - Mcf; Water - barrels	500 MCF/D 1 BOPD 0 BWPD		200 MCF/D 1 BOPD 0 BWPD

2. The following must be attached:

a. Diagrammatic sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.

b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.

c. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

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

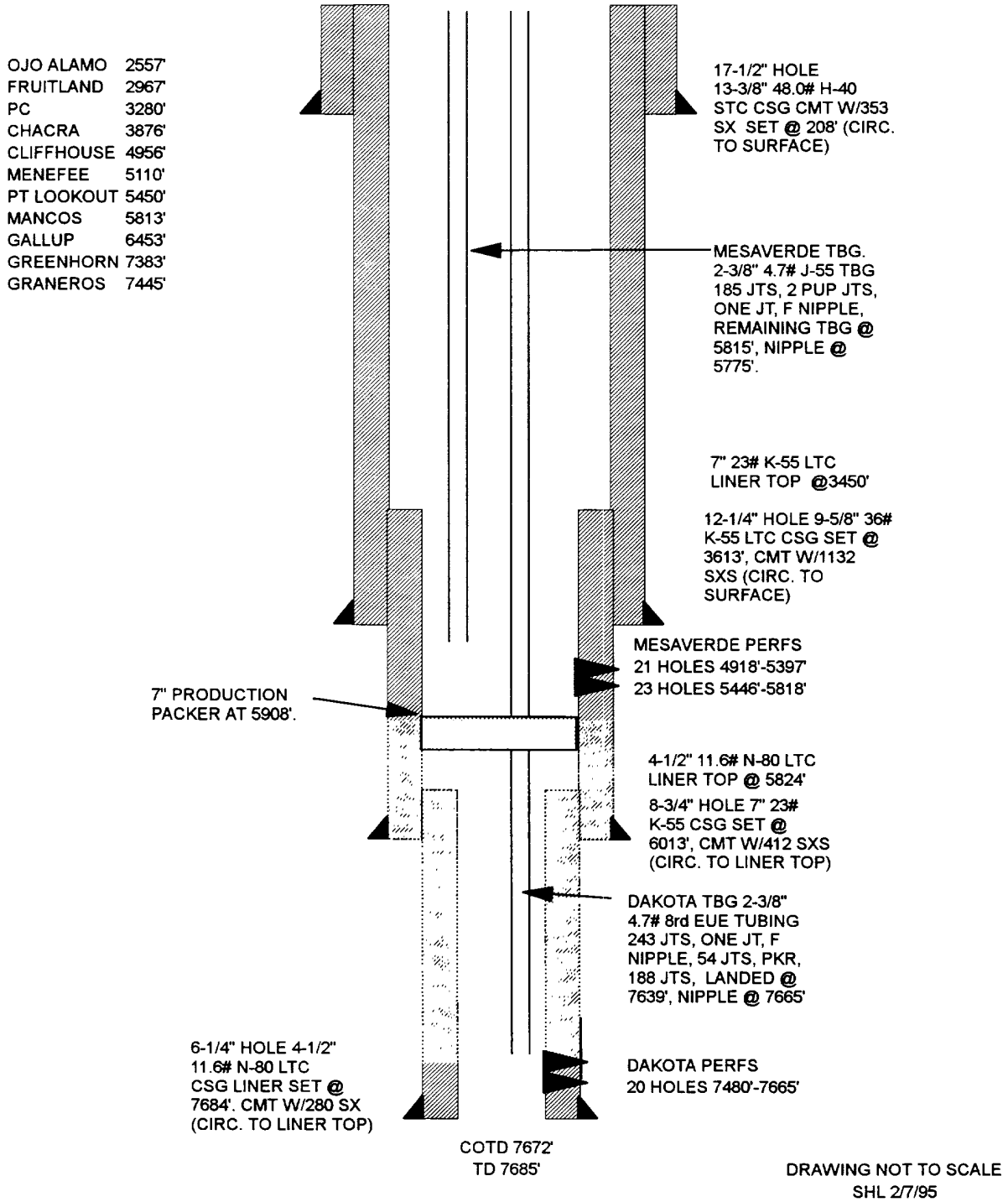
Peggy Bradfield — Regulatory Representative — February 10, 1995

(This space for State Use)

Approved by Original Signed by FRANK T. CHAVEZ Title SUPERVISOR DISTRICT # 3 Date FEB 14 1995

Note: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

San Juan 28-6 Unit #109M
1850' FSL 1555 ' FEL
SECTION 1, T-27-N, R-06-W
RIO ARRIBA COUNTY, NEW MEXICO
FINAL WELLBORE CONFIGURATION



DRAWING NOT TO SCALE
SHL 2/7/95

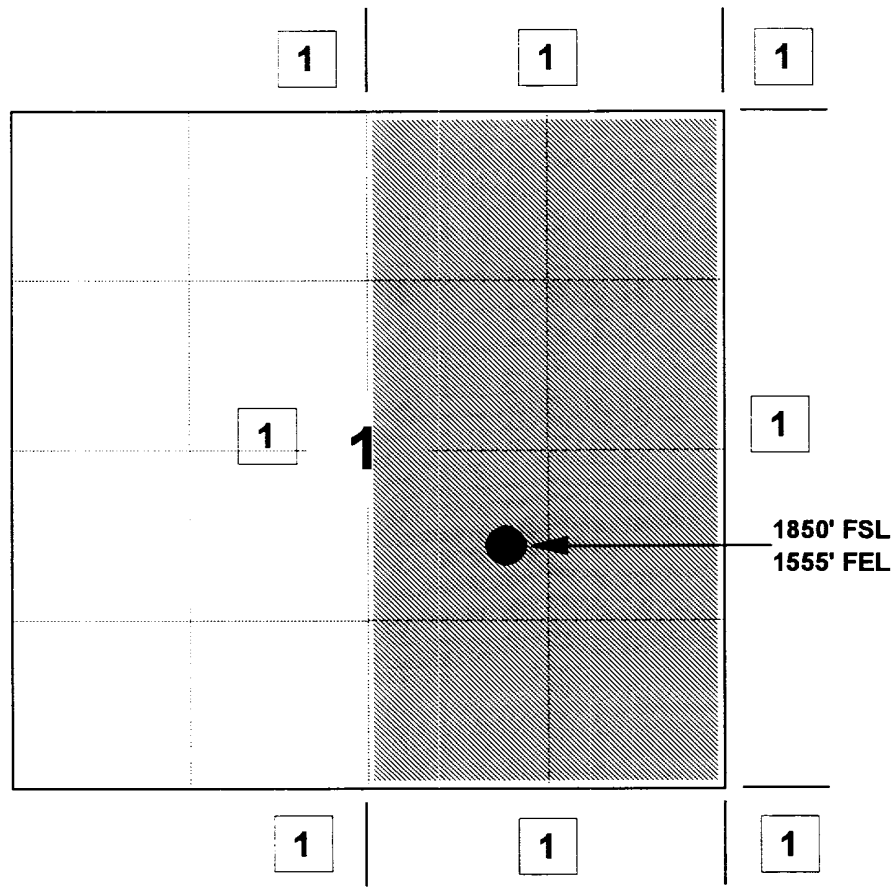
MERIDIAN OIL INC

SAN JUAN 28-6 UNIT #109M

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Dakota Formations Dual Completion Well

Township 27 North, Range 6 West



1) Meridian Oil Inc.

Mesaverde and Dakota Formations

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

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-122
Revised 4-1-91

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator						Lease or Unit Name			
Meridian Oil, Inc						San Juan 28-6 Unit			
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 02-07-95		Well No.: 109M	
Completion Date: 11-24-94	Total Depth: 7,685	TVD / MD	Plug Back TD		Elevation: 6,485	Unit Letter - Sec. - TWN - RNG: J-1-027N-06W			
Csg. Size: 4.500	Wt.: 11.6	d: 4.000	Set At: 7,684	Perforations: From 4,918	To 5,818	County: RIO ARRIBA			
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 5,815	Perforations: From	To	Pool: BLANCO			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: DUAL - DK/MV			Packer Set At: 5908			Formation: MESAVERDE			
Prod Thru: Tubing	Resv Temp °F	Mean Ann T °F	Baro. Press. Pd: 12.20			Connection			
L	H	Gg: 0.700	% CO2: 0.000	% N2: 0.000	% H2S	Prover		Meter Run	Taps

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X	Orfice Size	Press. p.s.i.g.	Diff. hw	Temp. F°	Press. p.s.i.g.	Temp. F°	Press. p.s.i.g.	Temp. F°	Duration of Flow
SI	2		0.750				798		885		S.I.
1.							318	61	791		1 Hour
2.							287	63	722		2 Hours
3.							274	63	696		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		286.2	0.9971	1.1952	1.0000	3,752.00
2.							
3.							
4.							
5.							

NO.	Pr	Temp. °R	Tr	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
API Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXXXXXXXXXX
Specific Gravity Flowing Fluid XXXXXXX
Critical Pressure _____ P.S.I.A _____ P.S.I.A
Critical Temperature _____ R _____ R

Pc 897.20 Pc2 804,967.84

NO.	Pt2	Pw	Pw2	Pc2 - Pw2
1.		708.20	501,547.24	303,420.60
2.				
3.				
4.				
5.				

(1) $\frac{Pc2}{Pc2 - Pw2} = 2.6530$ (2) $\left[\frac{Pc2}{Pc2 - Pw2}\right]^n = 2.0787$

$AOF = Q\left[\frac{Pc2}{Pc2 - Pw2}\right]^n = 7,799.44$

Absolute Open Flow	7,799 Mcfd @ 15.025	Angle of Slope		Slope, n	0.75

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	MICK FERRARI	TANYA ATCITTY	LARY BYARS

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

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-122
Revised 4-1-91

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator						Lease or Unit Name		
Meridian Oil, Inc.						San Juan 28-6 Unit		
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 02-07-95		Well No.: 109M
Completion Date: 11-24-94	Total Depth: 7,685	TVD / MD	Plug Back TD: 7,672		Elevation: 6,485	Unit Letter - Sec. - TWN - RNG: J-1-027N-06W		
Csg. Size: 4.500	Wt.: 11.6	d: 4.000	Set At: 7,684	Perforations: From 7,480	To 7,665	County: RIO ARRIBA		
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 7,638	Perforations: From	To	Pool: BASIN		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: DUAL - DK/MV			Packer Set At: 5908			Formation: DAKOTA		
Prod Thru: Tubing	Resv Temp °F	Mean Ann T °F	Baro. Press. Pd: 12.20			Connection		
L	H	Gg: 0.700	% CO2: 0.000	% N2: 0.000	% H2S	Prover	Meter Run	Taps

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X	Orfice Size	Press. p.s.i.g.	Diff. hw	Temp. F°	Press. p.s.i.g.	Temp. F°	Press. p.s.i.g.	Temp. F°	Duration of Flow
SI	2		0.750				1730		885		S.I.
1.							290	59	791		1 Hour
2.							262	59	722		2 Hours
3.							239	60	696		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		251.2	1.0000	1.1952	1.0000	3,302.66
2.							
3.							
4.							
5.							

NO.	Pr	Temp. °R	Tr	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
API Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXXXXXXXXXX
Specific Gravity Flowing Fluid XXXXXXX _____
Critical Pressure _____ P.S.I.A _____ P.S.I.A
Critical Temperature _____ R _____ R

Pc 897.20 Pc2 804,967.84

NO.	Pt2	Pw	Pw2	Pc2 - Pw2
1.		708.20	501,547.24	303,420.60
2.				
3.				
4.				
5.				

(1) $\frac{Pc2}{Pc2 - Pw2}$ = 2.6530 (2) $\left[\frac{Pc2}{Pc2 - Pw2}\right]^n$ = 2.0787

$AOF = Q\left[\frac{Pc2}{Pc2 - Pw2}\right]^n$ = 6,865.36

Absolute Open Flow	6,865 Mcfd @ 15.025	Angle of Slope		Slope, n	0.75

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	MICK FERRARI	TANYA ATCITTY	LARY BYARS

STATE OF NEW MEXICO
ENERGY and MINERALS
DEPARTMENT
This form is not to be used for reporting packer leakage tests in Southeast New Mexico

OIL CONSERVATION DIVISION

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Meridian Oil Inc. Leas San Juan 28-6 Unit Well No. 109M

Location of Well: Uni J Se 1 Twp. 27N Rge. 06W County Rio Arriba

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (Oil or Gas)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Csg.)
Upper Completion	Mesaverde	Gas	Flow	Tbg
Lower Completion	Dakota	Gas	Flow	Tbg

PRE-FLOW SHUT-IN PRESSURE DATA

	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Upper Completion	2-8-95		798	
Lower Completion	2-7-95		1730	

FLOW TEST NO. 1

Commenced at (hour,date)*				Zone producing (Upper or Lower)	
TIME (hour,date)	LAPSED TIME SINCE*	PRESSURE Upper Completion	PRESSURE Lower Completion	PROD. ZONE TEMP	REMARKS
					See reverse for test.

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hours. _____ Grav. _____ GOR _____

Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

MID-TEST SHUT-IN PRESSURE DATA

	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Upper Completion				
Lower Completion				

(Continue on reverse side)

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

FLOW TEST NO. 2

Commenced at (hour,date)**				Zone producing (Upper or Lower):	LOWER
TIME (hour,date)	LAPSED TIME SINCE**	PRESSURE Upper Completion	PRESSURE Lower Completion	PROD. ZONE TEMP.	REMARKS
1st hour		802	290		
2nd hour		804	262		
3rd hour		804	239		

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hours. _____ Grav. _____ GOR _____

Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

Remarks: _____

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

Approved _____ 19 _____ Operator Meridian Oil Inc.

New Mexico Oil Conservation Division By Tanya Atcitty

By _____ Title Operations Assistant

Title _____ Date 2-10-95

NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

1. A packer leakage test shall be commenced on each multiply completed well within seven days after actual completion of the well, and annually thereafter as prescribed by the order authorizing the multiple completion. Such tests shall also be connected on all multiple completions within seven days following recompletion and/or chemical or frac-ture treatment, and whenever remedial work has been done on a well during which the packer or the tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Division.
2. At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Division in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.
3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.
4. For flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days if the case of a gas well and for 24 hours in the case of an oil well. Note: if, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.
5. Following completion of flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.
6. Flow Test No. 2 shall be conducted even though no leak was indicated during flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.
7. Pressures for gas-zone tests must be measured on each zone with a deadweight pressure gauge at time intervals as follows: 3 hours tests: immediately prior to the beginning of each flow-period, at fifteen minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the flow period, at least one time during each flow period (at approximately the midway point) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.

   24-hour oil zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges the accuracy of which must be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressures as required above being taken on the gaz zone.
8. The results of the above described tests shall be filed in triplicate within 15 days after completion of the test. Tests shall be filed with the Aztec District Office of the New Mexico Oil Conservation Division of Northwest New Mexico Packer Leakage Test form Revised 10/01/78 with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only).