

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT & ONE POINT BACK PRESSURE TEST, OR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-28-75			
Company MESA PETROLEUM COMPANY				Connection TIPPERARY					
Pool TOWNSEND MORROW				Formation MORROW				Unit	
Completion Date 1-15-75		Total Depth		Plug Back TD 11924'		Elevation 3989' GR.		Farm or Lease Name MONSANTO STATE	
Csg. Size 4 1/2"	Wt. 10.5 11.6 13.5	d	Set At 12012'	Perforations: From 11849' To 11869'		Well No. 1			
Tbg. Size 2 3/8"	Wt. 4.7	d	Set At	Perforations: From 11849' To 11869'		Unit K		Sec. 14	Twp. 16S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GAS-OIL DUAL				Packer Set At 11799'		County LEA			
Producing Thru ANNALUS		Reservoir Temp. °F 175° @ 11859'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 11859'	H 11859'	Gg 0.6847	% CO ₂ 0.41	% N ₂ 1.37	% H ₂ S -0-	Prover -	Meter Run 4"	Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	(L-10 READINGS)					(EST.)	PACKER	CHOKE	1528.0		
1.	4" x	2.00"		4.40	4.70	60		6/64"	1230.0	50	60 MIN
2.	4" x	2.00"		5.00	5.20	60		12/64"	1055.0	54	60 MIN
3.	4" x	2.00"		5.60	5.40	60		20/64"	800.0	54	60 MIN
4.	4" x	2.00"		5.60	5.60	60		26/64"	540.0	54	60 MIN
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	L-10 METER FACTOR	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	2.236	96.8	1.000	1.208	1.013	1121
2	19.81	2.236	125.0	1.000	1.208	1.015	1412
3	19.81	2.236	156.8	1.000	1.208	1.016	1644
4	19.81	2.236	156.8	1.000	1.208	1.016	1705
5							

NO.	P _r	Temp. °R	T _r	Z	NOT AVAILABLE.	
1.	.14	520	1.36	.975	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
2.	.19	520	1.36	.970	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
3.	.23	520	1.36	.968	Specific Gravity Separator Gas 0.6847 X X X X X X X X	
4.	.23	520	1.36	.968	Specific Gravity Flowing Fluid 668 X X X X X	
5.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.	
					Critical Temperature 382 _____ R _____ R	

P _c 1541.2 P _c ² 2375.3				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	1545.5	*1243.2	*1545.6	829.7
2	1141.1	*1068.2	*1141.1	1234.2
3	661.3	826.6	683.3	1692.0
4	306.0	575.1	330.7	2044.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.8628$

* $\frac{P_c^2}{P_c^2 - P_w^2}$

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1897$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6920$

Absolute Open Flow	1897	Mcf/d @ 15.025	Angle of Slope °	63.5°	Slope, n	0.500 LIMIT
--------------------	------	----------------	------------------	-------	----------	-------------

Remarks: METER RANGE = 100" - 500#
USED 4 1/2" - 12.7# / FT - 3.92" I.D. CSG FOR FR. (FR = .0087240)

*FRICTION CALCULATIONS ON 3RD & 4TH RATES INDICATE NEGLEGIBLE FRICTION

Approved By Commission: 	Conducted By: WEST ENG. CO.	Calculated By: R. WEST	Checked By:
-----------------------------	--------------------------------	---------------------------	-------------

RECEIVED
JAN 11 1960
U. S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.