

MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special										Test Date: 9-7-78	
Company: Cleary Petroleum Corporation						Connection: Gas Company of New Mexico					
Pool: South Salt Lake						Formation: Morrow					
Completion Date:			Total Depth: 14170'			Plug Back TD: 13996'			Elevation: 3605' KB		
Form or Lease Name: Felmont-Federal						Well No.: 1					
Csg. Size: 5 1/2"		Wt.: 20.00		Set At: 14137'		Perforations: From 13539' To 13619'			Unit: 25 T-20-s R-32-E		
Tubg. Size: 2 7/8"		Wt.: 6.50		Set At: 13215'		Perforations: From To			County: Lea		
Type Well - Single - Provenhead - G.C. or G.O. Multiple: Single						Packer Set At: 13215"			State: New Mexico		
Producing Thru: Tubing			Reservoir Temp. °F: 188° 13579'			Mean Annual Temp. °F: 13.2			Baro. Press. - P _a		
L: 13215'		H:		G _g : .635		% CO ₂ : None		% N ₂ : 0.72		% H ₂ S: None	
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							2478		Packer		72 Hrs
1.	4.0		1.750	720	6.8	78	2150	72	Packer		1 hr
2.	4.0		1.750	724	11.6	72	2060	74	Packer		1 hr
3.	4.0		1.750	730	23.0	72	1890	76	Packer		1 hr
4.	4.0		1.750	732	41.0	73	1680	77	Packer		1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compens. Factor, F _{pv}	Rate of Flow Q, Mhd
1	16.80	70.61	733.2	.9831	1.255	1.066	1556
2	16.80	92.47	737.2	.9887	1.255	1.067	2051
3	16.80	130.74	743.2	.9887	1.255	1.065	2892
4	16.80	174.79	745.2	.9877	1.255	1.065	3877
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Cellulose Gravity Flowing Field	Critical Pressure	Critical Temperature
1	1.09	532	1.45	.880	55.7	57.8	0.635	XXXXXX	678	368
2	1.10	534	1.45	.879						
3	1.11	536	1.46	.881						
4	1.11	537	1.46	.881						
5										

NO.	P _r	P _w	P _w '	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	2491.2	6206			3.19897	2.41903
1		2332.3	5440	766		
2		2219.8	4928	1278		
3		2065.5	4266	1940		
4		1870.0	3497	2709		
5						

Absolute Open Flow: 6996		Mhd @ 15.025		Angle of Slope α: 52.8		Slope, n: .759	
Remarks:							
Approved By: Leon Arnett							
Conducted By: Leon Arnett							
Calculated By: H. L. Hagler							
Checked By: Leon Arnett							