

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-30-73		AUG 8 1973	
Company Texas International			Connection NONE		Unit P.C.C. OFFICE
Pool San Juan			Formation Morrow		
Completion Date 7-26-73		Total Depth 11900'		Plug Back TD 11852'	
Elevation 3260' KB		Farm or Lease Name Sun State			
Casing Size 5 1/2"	Wt. 17	4.892	Set At 11900'	Perforations: From 11350' To 11684'	
Tub. Size 2 3/8"	Wt. 4.7	1.995	Set At 11670	Perforations: From Open To Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11282' U 11670' L	
Producing Thru Tubing		Reservoir Temp. °F 180° 11279'		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 11517'	H -	Gg 0.616	% CO ₂ 2.63	% N ₂ 1.90	% H ₂ S 0.00
Prover X		Meter Run X		Taps F	

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. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3638		PACKER		74.0 hrs
1.	4 6/64		1.125	420	15.5	70	3539	79			1.0
2.	4 8/64		1.500	405	8.5	98	3170	75			1.0
3.	4 10/64		1.500	495	16.5	90	2822	72			1.0
4.	4 12/64		1.500	500	27.5	91	2300	72			1.5
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	6.031	81.94	433.2	0.9905	1.274	1.034	644.8
2	10.84	59.61	418.2	0.9653	1.274	1.026	815.4
3	10.84	91.57	508.2	0.9723	1.274	1.033	1270.1
4	10.84	118.80	513.2	0.9715	1.274	1.033	1646.5
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Gas Mcf/bbl.	
1	0.61	530	1.51	0.936	A.P.I. Gravity of Liquid Hydrocarbons - Deg.	
2	0.62	558	1.59	0.950	Specific Gravity Separator Gas 0.616 XXXXXXXXXX	
3	0.75	550	1.57	0.937	Specific Gravity Flowing Fluid XXXXXX	
4	0.75	551	1.57	0.937	Critical Pressure 680 P.S.I.A. - P.S.I.A.	
5					Critical Temperature 351 °R - °R	

P_c 4663.2 P_w 21745.4				
NO.	P _t ²	P _w *	P _w ²	P _c ² - P _w ²
1	-	4415.2	19494.0	2251.4
2	-	4261.2	18157.8	3587.6
3	-	3761.2	14146.6	7598.8
4	-	3112.2	9685.8	12059.6
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 9.659$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2270$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.52$$

Absolute Open Flow 2270 Mcfd @ 15.025	Angle of Slope @ 61° 03"	Slope, n 0.553
Remarks: * BHP @ (-8257') @ 11517' used for pressure calculations		
Approved By Commission:	Conducted By: COLEMAN PET.ENG.CO.	Calculated By: Joe A. Coleman
		Checked By: Joe A. Coleman