

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

Form C-1220-122
Revised 9-1-65

OCT 27 1971

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 10-22-71	
Company David Fasken ✓			Connection Transwestern		
Pool Atoka (Penn.)			Formation Morrow		Unit 1
Completion Date Feb. 10, 1971		Total Depth 9000		Plug Back TD 8875	Elevation 3472 KB
Csg. Size 4 1/2	Wt. 10.5	d 4.052	Set At 8999	Perforations: From 8823 To 8872	
Tbg. Size 2 3/8	Wt. 4.70	d 1.995	Set At 8773	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas				Packer Set At Otis P.L. @ 8773'	
Producing Thru Tubing		Reservoir Temp. °F 153 @ 8750		Baro. Press. - P _a 13.2	
L 8846		H 8846	G _g 0.621	% CO ₂	% N ₂
				% H ₂ S	Prover
				Meter Run 1000#x100"	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.	
SI							2769	70	Packer	
1.	4"		1.750	765	5	82	2652	70	"	
2.	4"		1.750	785	10	82	2594	70	"	45 Min.
3.	4"		1.750	795	21	71	2490	70	"	45 Min.
4.	4"		1.750	805	39	58	2284	70	"	45 Min.
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	14.93	62.4	778.2	0.9795	1.269	1.065	1233.3
2	14.93	89.3	798.2	0.9795	1.269	1.065	1764.9
3	14.93	130.3	808.2	0.9896	1.269	1.074	2623.8
4	14.93	178.6	818.2	1.002	1.269	1.083	3672.0
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.16	542	1.48	0.882	83.333 Mcf/bbl.	57 Deg.	0.621	XXXXXXX	671 P.S.I.A.	365 R
2.	1.19	542	1.48	0.879					670 P.S.I.A.	375 R
3.	1.20	531	1.45	0.869						
4.	1.22	518	1.42	0.856						
5.										

NO.	P _t ²	P _s ²	P _s ² - P _t ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$
1	3447.2	11883	728		
2	3389.2	11487	1124		
3	3269.2	10688	1923		
4	3077.2	9469	3142		
5					

Absolute Open Flow 10,000 Mcfd @ 15.025				Angle of Slope @ 54° 8.5'	Slope, n 0.72277
Remarks: BHP measured with Amerada RPG-3 Gauge.					
Approved By Commission:		Conducted By: Tefteller, Inc.		Calculated By: Farrest Tefteller	
Checked By:					