

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 4/28/80	
Company Knox Industries				Connection None	
Pool La Rica				Formation Morrow	
Completion Date 4/25/80		Total Depth 13,675		Plug Back TD 13,631	
Elevation 3989 GR		Name or Lease Name New Mexico State			
Csg. Size 5 1/2"	Wt. 17#	d S-95	Set At 13,675	Perforations: From 13,571 To 13,588	
Tub. Size 2 7/8"	Wt. 6.5#	d N-80	Set At 13,476	Perforations: From Open To Ended	
Type Well - Single - Protobhead - G.G. or G.O. Multiple Single				Packer Set At 13,470	
Producing Thru Tubing		Reservoir Temp. °F 232 @ 13,565		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State New Mexico			
L 13,565	H 13,565	G _g .6675	% CO ₂ 0	% N ₂ .6%	% H ₂ S 0
Prover X		Meter Run X		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
5!							4231	71°	Packer		67 hrs si
1.	4.0	1.75	650	10"	80°	3575	74°	Packer		1 hr.	
2.	4.0	1.75	650	16"	70°	3402	77°	Packer		1 hr.	
3.	4.0	1.75	650	31"	73°	3300	81°	Packer		1 hr.	
4.	4.0	1.75	650	67"	65°	2999	83°	Packer		1 hr.	
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	81.437	663.2	.9813	1.224	1.067	1558
2	14.93	103.010	663.2	.9905	1.224	1.071	1997
3	14.93	118.013	663.2	.9877	1.224	1.068	2275
4	14.93	210.794	663.2	.9952	1.224	1.076	4125
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	14536	Mcft/bbl.
1.	.99	540°	1.41	.879	A.P.I. Gravity of Liquid Hydrocarbons	58.0°	Deg.
2.	.99	530°	1.39	.872	Specific Gravity Separator Gas	.6675	X X X X X X X X
3.	.99	533°	1.40	.876	Specific Gravity Flowing Fluid	X X X X X	.994
4.	.99	525°	1.37	.863	Critical Pressure	669	P.S.I.A. 659
5.					Critical Temperature	382	R 487

P _c	4244.2	P _c ²	18013
NO.	P _r ²	P _w	P _w ²
1		3596.0	12931
2		3424.3	11726
3		3329.8	11087
4		2971.0	8827
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.960919$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8089$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.960919$$

Absolute Open Flow	8089	Mcfd @ 15.025	Angle of Slope	45°	Slope, n	1.000
Remarks:						
Approved By: <i>[Signature]</i>						
Conducted By:		West Tex. Well Tstrs.		Calculated By:		H. L. Hagler
Checked By:		<i>[Signature]</i>				