

NE. 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 2/8/82		FEB 22 1982	
Company ELK OIL COMPANY				Connection AIR		990 FNL	
Pool Undesignated				Formation Abo		O. C. D. 1980 FWARTESIA, OFFICE	
Completion Date 2/8/82		Total Depth 5200		Plug Back TD 5160		Elevation 3809 Gr.	
Csg. Size 4 1/2		ID 11.6#		Set At 5200		Perforations: From 4899 To 4943	
Tub. Size 2 3/8		ID 4.7#		Set At 4840'		Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 98 @ 4800		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 4840		H 4840		G _g .675		% CO ₂ 3.22	
				% N ₂ 6.27		% H ₂ S	
				Prover		Meter Run 2"	
						State New Mexico	

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	
1.	2	X	1"		4.910		980	55			1 hr.
2.	2	X	1"		7.368		955	60			1 hr.
3.	2	X	1"		9.824		800	68			1 hr.
4.	2	X	1"		13.262		550	65			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, Mhd
1	39.74			1.00489	1.59	1.0847	388
2	39.74			1.00	1.59	1.0746	500
3	39.74			.9924	1.59	1.0721	660
4	39.74			.9952	1.59	1.0630	886
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/Dnl.
1	1.64	558	1.52	.85	A.P.L. Gravity of Liquid Hydrocarbons	Deq.
2	1.45	558	1.52	.866	Specific Gravity Separator Gas .675	X X X X X X X X
3	1.28	558	1.52	.87	Specific Gravity Flowing Fluid	X X X X X
4	1.22	558	1.52	.885	Critical Pressure 676	P.S.I.A.
5					Critical Temperature 359	R

NO.	P _r ²	P _w ²	P _r ² - P _w ²
1	1101	1212	3
2	974	947	268
3	928	861	344
4	821	674	541
5			

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.25$

ADP = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1650$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = .33$

Absolute Open Flow 1650	Mhd @ 15,025	Angle of Slope @ 52	Slope, n 1.54
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Remarks: Bottom Hole Pressure gauge used for P_c & P_w

Approved By Certification:	Conducted By: M. Kelly	Calculated By: M. Kelly	Checked By:
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ELK OIL COMPANY

VIKING ST COM

FEB 8, 1982

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 $P^2 - P$

LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

