

MULTIPOINT AND FLOW TEST, BACK PRESSURE TEST FOR GAS WELL

Form C-12,
Revised 1-1-65

RECEIVED

Type Well X <u>Flow Test</u>						Date 3-31-81		APL 222 T81	
Company Elk Oil Company						TO AIR		C. L. E.	
Well Undesignated						Abo		State SE	
Completion Date 3-1-81		Depth 4966		Flow Rate 4920		Production 3791 GL.		Well No. 1	
Log Size 4 1/2	Wt. 11.6#	d 4.000	At 4966	From 4818 To 4832		Unit M 23 9S 26E			
Log Size 2 3/8	Wt. 4.6#	d 1.995	At 4680	From OPEN To ENDED		County Chaves			
Type Well - Single - Graduated - G.S. or G.S. or G.S.						Marker Set At NONE		State New Mexico	
Producing Thru Tubing		Reservoir Temp 93 @ 4825'		Mean Ambient Temp 60°		Bottom Press. - P _B 13.2		Flange	
L 4825	H 4825	G _g .6284	G _w .151	N ₂ 3.913	H ₂ S -0-	Prover -0-	Meter Run 4"	Flange	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Critical Size	Press. p.s.i.g.	Flow Rate	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI			S.I.				1260		PKR	Choke	72 Hrs.
1.	4"	x	1"	510	3"	64	1115	66		7/64	1 Hr.
2.	4"	x	1"	510	20"	60	855	68		11/64	1 Hr.
3.	4"	x	1"	510	20"	68	641	70		12.5/64	1 Hr.
4.	4"	x	1"	260	40"	65	467	71		17/64	1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_w P_R}$	Flow Temp. °F	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mscf/d	
1	4.939	64.70	523.2	.9962	1.048	421.03	
2	4.939	102.29	523.2	1.000	1.048	668.18	
3	4.939	102.29	523.2	.9924	1.045	661.20	
4	4.939	104.54	273.2	.9952	1.024	664.04	
5							

NO.	P _R	Temp. °R	T _R	T _R	Oil Solubility Hydrocarbon Ratio	TSTM	Mol/cu. ft.
1	759	524	1.46	.911	A factor of unity of Liquid Hydrocarbons	.6284	Dep.
2	759	520	1.45	.911	Specific Gravity Relative Gas		X X X X X X X X
3	759	528	1.47	.915	Specific Gravity Flowing Fluid	X X X X X	
4	404	525	1.46	.953	Critical Pressure	676	P.S.I.A.
5					Critical Temperature	359	P.S.I.A.

NO.	P _R ²	P _w	P _w ²	P _R ² - P _w ²	P _R ²	P _w ²	P _R ² - P _w ²
1	1136.17	1290.88	330.16		4.91135		2.21616
2	771.73	559.5	1061.44				
3	589.33	347.31	1273.73				
4	184.76	34.24	1586.9				
5							

Absolute permeability	433	Angle of Slope	63.5	Intercept	.5000
-----------------------	------------	----------------	-------------	-----------	--------------

Remarks: **Used 63.5 thru the low rate.**

* Calculated from known Bottom Hole Pressures.

Approved by Commission: _____