

45F
F.1e
Form C-122
REV 10-1-78
RECEIVED
SEP 23 1983
O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 8/5/83	
Company ELK OIL COMPANY		Connection Air	
Pool Four Branch Refinery		Formation Montoya	
Completion Date 8-2-83		Total Depth 6150	Plug Back TD 6110
Csq. Size 5 1/2		Wt. 15.5	d Set At 6150
Thq. Size 2 3/8		Wt. 4.7	d Set At 5858
Perforations: From 5957 To 6016		Well No. 2	
Perforations: From open To ended		Unit Sec. Twp. Rge. G 19 9S 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 5858	
Producing Thru Tubing		Baro. Press. - P _a 13.2	
Reservoir Temp. °F 60		State New Mexico	
Mean Annual Temp. °F 60		County CHAVES	
L	H	G _q	% CO ₂ % N ₂ % H ₂ S Prover Meter Run Taps
2"			

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	
SI							1956		Packer		
1.	2	X	3/16	250		69	1891				1 hr
2.	2	X	3/16	735		68	1761				"
3.	2	X	1/4	1150		82	1143				"
4.	2	X	5/16	1080		82	1084				"
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.6082		263.2	.9915	1.2127	1.0266	198
2	.6082		748.2	.9924	1.2127	1.0826	592
3	1.0870		1163.2	.9795	1.2127	1.1183	1680
4	1.672		1093.2	.9794	1.2127	1.1110	2404
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ XXXXXXXXXX
3.					Specific Gravity Flowing Fluid _____ XXXXX
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 2354 P _c ² 5541				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		2268	5144	397
2		2111	4456	1085
3		1396	1949	3593
4		1315	1729	3812
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.4536$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3542$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4730$$

Post FD-2
10-7-83
Camp & BH

Absolute Open Flow _____ 3542 _____ Mcfd @ 15.025	Angle of Slope θ _____ 44 _____	Slope, n _____ 1.0355 _____
Remarks: Bottom hole pressures recorded with Amerada type gauge.		

Approved By Division	Conducted By: KELTIC SERVICES	Calculated By: Kelly	Checked By:
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