

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

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12-12-74

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12/4/74		DEC 6 1974	
Company Felmont Oil Corporation					Connection None		O. C. C. ARTESIA, OFFICE	
Pool Atoka Penn					Formation Lower Morrow		Unit	
Completion Date 11/29/74		Total Depth 9311		Plug Back TD 9261		Elevation 3300 KB		Farm or Lease Name Atoka Com
Col. Size 4 1/2	Wt. 10.5 11.6	d 4.052 4.00	Set At 9310	Perforations: From 9126 To 9132		Well No. 2		
Tag. Size 2 3/8	Wt. 4.7	d 1.995	Set At 8895	Perforations: From Open Ended to		Unit P	Sec. 12	Twp. 18
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8895 KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 147°		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico
L 8895	H 8895	G _g .596	% CO ₂ 0.48	% N ₂ 0.25	% H ₂ S -	Prover -	Meter Run 4"	Taps Flange

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Choke	
SI							2975				72
1.	4	x	2.250	495	3.	77	2750	77		5/64	1
2.	4	x	2.250	517	5.5	80	2593	80		8/64	1
3.	4	x	2.250	517	10.5	78	2320	77		11/64	1
4.	4	x	2.250	517	20.0	78	1630	77		16/64	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{n_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	25.64	39.05	508.2	.9840	1.295	1.039	1326
2	25.64	54.00	530.2	.9813	1.295	1.040	1830
3	25.64	74.61	530.2	.9831	1.295	1.041	2535
4	25.64	102.98	530.2	.9831	1.295	1.041	3499
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio TSTM	A.P.I. Gravity of Liquid Hydrocarbons 55.9°	Specific Gravity Separator Gas .596	Specific Gravity Flowing Fluid XXXXX	Critical Pressure 675**	Critical Temperature 356**	Rate of Flow Q, Mcfd
1	0.75	537	1.51	.927							
2	0.79	540	1.52	.925							
3	0.79	538	1.51	.923							
4	0.79	538	1.51	.923							
5											

NO.	P _r	P _w	P _w *	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.808$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.390$
1	3630.2	13.178*	3443.2	11856		
2			3290.2	10825		
3			2962.2	8816		
4			2439.2	5950		
5						

Absolute Open Flow			Angle of Slope	
4864 Mcfd @ 15.025			60° 55'	
Slope, n .556				

Remarks: * From BHP Gauge @ 8864 KB	
** From Gas Analysis	
Approved By Commission:	Conducted By: <i>James Walker</i>
Calculated By: <i>James Walker</i>	Checked By: