

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

Form C-122
Revised 4-1-65

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special						Test Date: 11-12-72		NOV 20 1972	
Company: Felmont Oil Corporation				Location: None				D.O.C. ART 100-1000-1	
Pool: Astoka (Penn)				Morrow					
Completion Date: 11-11-72		Total Depth: 9191'		Perforations: 9143'		Elevation: 3319' GL		Farm or Lease Name: Aaron Unit	
Csg. Size: 4 1/2"	Wt. 11.6#	d 4.000	Set At: 9190'	Perforations: From 8894' To 8924'	Well No. 1				
Tbg. Size: 2 3/8"	Wt. 4.7#	d 1.995	Set At: 8798'	Perforations: From open end To	Unit N Sec. 11 Twp. 18 Rge. 26-E				
Type Well - Single - Bradenhead - G.C. or G.O. Multiple: G. G. Multiple						Packer Set At: 8794'		County: Eddy	
Producing Thru: Tubing		Reservoir Temp. °F: 157^a 9186		Mean Annual Temp. °F: 60		Baro. Press. - P _a : 13.2		State: New Mexico	
L 8798'	H 8798'	G _g .647	% CO ₂ .41	% N ₂ .41	% H ₂ S	Prover	Meter Run X	Type 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
SI	3"		2.25				2471	59			
1.	3"		2.25	500	29	67	2106	75	0		1 Hour
2.	3"		2.25	510	39	64	1925	70	0		1 Hour
3.	3"		2.25	510	55	64	1748	70	0		1 Hour
4.	3"		2.25	530	65	75	1594	69	0		1 Hour
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	28.78	121.99	513.2	.9933	1.243	1.050	4,352
2	28.78	142.84	523.2	.9962	1.243	1.052	5,355
3	28.78	169.63	523.2	.9962	1.243	1.052	6,360
4	28.78	187.90	530.2	.9859	1.243	1.049	6,932
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 161.616 Mcf/bbl.
1	.77	527	1.42	.907	A.P.I. Gravity of Liquid Hydrocarbons 56.6 Deg.
2	.78	524	1.41	.903	Specific Gravity Separator Gas .647 X X X X X X X X
3	.78	524	1.41	.903	Specific Gravity Flowing Fluid X X X X X
4	.79	535	1.44	.909	Critical Pressure 670 P.S.I.A. P.S.I.A.
5					Critical Temperature 372 R R

P _c 3260	P _c ² 10628	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.380$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.174$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	
1		2980	8880	1388	
2		2858	8168	2100	
3		2752	7574	2694	
4		2669	7124	3144	
5					

Absolute Oper. Flow 15,114 Mcfd @ 15.025		Angle of Slope Θ 57		Slope, n .649	
Remarks: PF Substituted for P_w Measured with Amerada RPS-3 Instrument @ 8794'					
Approved By Commission:		Conducted By: Massey		Calculated By: Massey	
				Checked By:	