

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
 ENER AND MINERALS DEPARTMENT

P. O. BOX 2088
 SANTA FE, NEW MEXICO 87501

Form C-122
 Revised 10-1-78

File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL **RECEIVED**

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 3/2/88		MAR 14 '88			
Company Enron Oil & Gas Company				Connection None					
Pool Wildcat <i>WOLF CAMP</i>				Formation Wolfcamp		Unit O.C.D. ARTESIA OFFICE			
Completion Date 2/23/88		Total Depth 12920'		Plug Back TD 12000'		Elevation 3171' GL		Farm or Lease Name Harkey 35 State	
Case Size 4 1/2"	Wt. 13.5#	d 3.920	Set At 12920'	Perforations: From 10364' To 10380'		Well No. 1			
Trq. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 10083'	Perforations: From Open To Ended		Unit Sec. Twp. Rge. J 35 24s 27e			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 10083'		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 166 @ 10372'		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2		State New Mexico	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	
-	-	0.672	0.262	0.525	-	-	4.027	Flg	

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							5680	60	PACKER		144 hrs.
1.	4.026	2/64	0.750	475	6	74	5270	60			1.0 hrs
2.	4.026	4/64	0.750	550	18	71	4820	60			1.0 hrs
3.	4.026	5/64	0.750	625	32	70	4170	60			1.0 hrs
4.	4.026	6/64	0.750	675	50	71	3405	60			1.0 hrs
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	2.661	54.12	488.2	0.9868	1.220	1.049	181.87
2	2.661	100.69	563.2	0.9896	1.220	1.058	342.24
3	2.661	142.91	638.2	0.9905	1.220	1.065	489.41
4	2.661	185.50	688.2	0.9896	1.220	1.070	637.66
5							

NO.	R _f	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 34.40 _____ Mcf/bbl.
1	0.73	534	1.41	0.909	A.P.I. Gravity of Liquid Hydrocarbons _____ 57 _____ Deg.
2	0.84	531	1.40	0.894	Specific Gravity Separator Gas _____ 0.672 _____ XXXXXX
3	0.95	530	1.40	0.881	Specific Gravity Flowing Fluid _____ XXXXXX _____
4	1.02	531	1.40	0.873	Critical Pressure _____ 672 _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ 378 _____ R _____ R

NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.686$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.474$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 939.911$ <i>Post FD-2 4-1-88 comp & BK</i>
1		7146.2	51068.2	6360.9	
2		6541.2	42787.3	14641.8	
3		5706.2	32560.7	24868.4	
4		4833.2	23359.8	34069.3	

Absolute Open Flow _____ 940 _____ Mcfd @ 15.025	Angle of Slope @ _____ 53° 23'	Slope, n _____ 0.743
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Remarks: * BOTTOM HOLE PRESSURES @ 10372' (-7201) USED FOR PRESSURE CALCULATIONS
 WELL PRODUCED 2 BBL CONDENSATE IN 4 HRS = 12 BC/D

Approved By Division _____	Conducted By: Jarrel Services, Inc	Calculated By: D. Dickerson	Checked By: <i>D. Dickerson</i>
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