

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-11-85	
Company Harper Oil Company		Connection To Air	
Pool SOUTH DALLAS MONTANYA		Formation Penn Wildcat	
Completion Date 10-17-84	Total Depth 6560'	Plug Back TD 6521'	Elevation 3843 GL.
Casing Size 5 1/2"	Wt. 15 1/2#	d 4.950	Set At 6560'
Perforations: From 6106 To 6136	Well No. 1		
Perforations: From OPEN-ENDED	Unit F	Sec. 2	Twp. 10S
County Chaves	State New Mexico		
Type Well - Single - Brdenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 6028'	
Producing Thru Tubing	Reservoir Temp. °F 135°	Mean Annual Temp. °F 60°	Baro. Press. - P ₀ 13.2
L 6121	H 6121	G _g 598	% CO ₂ .101
% N ₂ 2.687	% H ₂ S	Prover 3"	Meter Run 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	
51							1495	41	PKR.	CHOKE	72 Hrs.
1.	3	X	1.00	20	48"	40°	45	42		24/64	1 Hr.
2.	3	X	1.00	20	27	40	48	45		20/64	1 Hr.
3.	3	X	1.00	20	22	40	60	47		16/64	45 Min.
4.	3	X	1.00	20	18	40	125	49		12/64	1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.789	39.92	33.2	1.020	1.293	NIL	252
2	4.789	29.94	33.2	1.020	1.293	NIL	189
3	4.789	27.03	33.2	1.020	1.293	NIL	171
4	4.789	24.45	33.2	1.020	1.293	NIL	154
5							

NO.	R	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.03	500	1.45	NIL	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.03	500	1.45	NIL	Specific Gravity Separator Gas _____ 598
3	.03	500	1.45	NIL	Specific Gravity Flowing Fluid _____ XXXXX
4	.03	500	1.45	NIL	Critical Pressure _____ 663 P.S.I.A.
5					Critical Temperature _____ 349 R

NO.	P ₁ ²	P _w ²	P _u ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_u^2 - P_w^2} = 1.045$	(2) $\left[\frac{P_c^2}{P_u^2 - P_w^2} \right]^n = 1.045$
1	315.6	99.6	2202.3			
2	324.3	105.2	2196.7			
3	360.2	129.7	2172.2			
4	431.9	186.5	2115.4			
5						

Absolute Open Flow _____ 263 _____ Mcfd @ 15.025		Angle of Slope @ _____ 45°	Slope, n _____ 1.00
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Remarks: Made 1 Bbl. of water during test. P _c and P _w were calculated from known BHP measured with a Kuster Gauge.			
Approved By Commission:	Conducted By: W.S.	Calculated By: R.R.	Checked By: R.R.