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State of New Mexico
Energy, Minerals and Natural Resources Department

RECEIVED Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MAY 16 1994

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator HALLWOOD PETROLEUM						Lease or Unit Name TARGET 23 STATE					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-29-94		Well No. 1			
Completion Date 4-20-94		Total Depth 12,700'		Plug Back TD 11,300		Elevation 3233' KB		Unit Ltr. - Sec. - TWP - Rge. 23 - 24S - 27E			
Csg. Size 5 1/2	Wt. 20#	d 4.653	Set At 11,711	Perforations: From: 10796 To: 10804		County EDDY					
Tbg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 10,508	Perforations: From: To:		Pool UNDESIGNATED					
Type Well - Single - Bradenhead - G.G. or L.O. Multiple SINGLE						Packer Set At 10470		Formation WOLFCAMP			
Producing Thru TBG.		Reservoir Temp. °F 180°		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection PIPELINE			
L *10455	II 10455	Gg .661	% CO ₂ .21	% N ₂ .52	% H ₂ S	Prover		Meter Run 3.068		Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	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	67 Hrs.					2339				
1.	3.068 X 1.500	640	3	81	2320			Phr.		1 hr.
2.	3.068 X 1.500	640	7	74	2305					1 hr.
3.	3.068 X 1.500	640	18	58	2270					1 hr.
4.	3.068 X 1.500	650	60	52	2120					1 hr.
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv} .	Rate of Flow Q, Mcfd
1.	11.13	44.27	653.2	.9804	1.230	1.068	635
2.	11.13	67.62	653.2	.9868	1.230	1.068	976
3.	11.13	108.43	653.2	1.002	1.230	1.079	1605
4.	11.13	199.48	663.2	1.008	1.230	1.080	2973
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.98	541	1.43	.877	A.P. I. Gravity of Liquid Hydrocarbons	DRY	Deg.
2.	.98	534	1.41	.877	Specific Gravity Separator Gas	.661	XXXXXXXXXX
3.	.98	518	1.37	.859	Specific Gravity Flowing Fluid	DRY	XXXXXX
4.	.99	512	1.36	.859	Critical Pressure	670	P.S.I.A.
5.					Critical Temperature	378	R

P _c 2446.8		P _c ² 5986.83	
NO.	P _t ²	P _w	P _w ²
1.		2427.8	5894.21
2.		2410.3	5809.55
3.		2365.8	5597.01
4.		2289.7	5242.73
5.			

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.046$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.939$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 14,683.6$

Absolute Open Flow 14683.6 Mcfd @ 15.025		Angle of Slope θ 52°		Slope, n .76592	
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Remarks: **NO FLUID MADE DURING TEST**

*** THIS IS WHERE BHP INFO. WAS OBTAINED**

Approved By Division	Conducted By: PRO WELL TESTERS R.G.	Calculated By: K.S.	Checked By: B.M.
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