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

Form C-122
Revised 9-1-65

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O. C. D.
ARTESIA, OFFICE

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 8-29-78	SPUD DATE: 5-27-78
Company: Hondo Drilling Company	Connection: El Paso Natural Gas Company		
Pool: N. Turkey Track ~~North~~ Morrow	Formation: Morrow		Unit: O
Completion Date: 7-17-78	Total Depth: 11300 ~~11502~~	Plug Back TD: 11233 ~~11500~~	Elevation: 3398gl. ~~N/A~~
Csg. Size: 5½ / Wt.: 17.0 @20 / d: / Set At: 11298 ~~11500~~	Perforations: From 10884 To 11108 ~~11214~~		Farm or Lease Name: Allscott Federal
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 10825	Perforations: From open To end		Well No.: 3
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10813 10825		Unit: O / Sec.: 31 / Twp.: 18 / Rge.: 29
Producing Thru: Tbg.	Reservoir Temp. °F: 182 @ 10825	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
			County: Eddy
			State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10825	10825	.628					4"	Flange

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					3053				
1.	4 x 1.750	872	2.56	84	2936				60 Min.
2.	4 x 1.750	902	7.29	83	2858				60 Min.
3.	4 x 1.750	921	25.00	78	2782				60 Min.
4.	4 x 1.750	942	53.29	70	2657				45 Min.
5.	4 x 1.750	954	100.00	60	2401				60 Min.

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RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	14.93	47.60	885.2	.9777	1.262	1.074	942
2.	14.93	81.68	915.2	.9786	1.262	1.071	1613
3.	14.93	152.82	934.2	.9831	1.262	1.079	3054
4.	14.93	225.62	955.2	.9905	1.262	1.086	4573
5.	14.93	310.99	967.2	1.000	1.262	1.096	6422

NO.	P_t	Temp. °R	T_f	Z
1.	1.32	544	1.49	.874
2.	1.36	543	1.49	.871
3.	1.39	538	1.47	.859
4.	1.42	530	1.45	.848
5.	1.44	520	1.42	.833

Gas Liquid Hydrocarbon Ratio 67.10 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.5 Deg.
Specific Gravity Separator Gas .628 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx .672
Critical Pressure 671 P.S.I.A. ____ P.S.I.A.
Critical Temperature 365 R ____ R

P_c 3066.2 P_c^2 9401.6

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2950.9	8707.8	693.8
2		2887.0	8334.8	1066.8
3		2852.4	8136.2	1265.4
4		2800.8	7844.5	1557.1
5		2683.6	7201.7	2199.9

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.274$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.274$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 27,448$

Absolute Open Flow 27,448 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.000

Remarks:

Approved By Commission:	Conducted By:	Calculated By: Bob McMurrain	Checked By: