NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

file.

Form C-122
Revised 9-1-65

RECEIVED 8/22/80 file

AUG 18 1980

O. C. D.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 8-4-80	
Company: Hillin Production Co.		Connection: El Paso Natural Gas			
Pool: WINCHESTER Burton Flat Morrow		Formation: Morrow		Unit	
Completion Date: 5-16-80	Total Depth: 11220	Plug Back TD: 11185	Elevation: 3298 gr.	Farm or Lease Name: DWU	
Csg. Size: 5.5 / Wt. / d / Set At		Perforations: From 11006 To 11026		Well No.: 4	
Tbg. Size: 2.375 / Wt. / d / Set At: 10956		Perforations: From To		Unit: O Sec.: 34 Twp.: 19 Rge.: 28	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Multiple		Packer Set At		County: Eddy	
Producing Thru: ~~Tbg~~	Reservoir Temp. °F: a	Mean Annual Temp. °F	Baro. Press. – P_a	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10980	10980	.605	.82	.47			X	

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						1455				
1.	4.0	1.0	7.4	3.5	84	814	87			1HR
2.	4.0	1.0	7.4	3.8	89	722	90			1HR
3.	4.0	1.0	7.4	4.2	92	707	91			1HR
4.	4.0	1.0	7.4	4.7	96	642	93			1HR
5.										

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	4.753	*	518.4	.9777	1.286	1.039	505
2.	4.753	*	518.4	.9732	1.286	1.038	549
3	4.753	*	518.4	.9706	1.286	1.037	605
4.	4.753	*	518.4	.9671	1.286	1.036	674
5							

NO.	P_t	Temp. °R	T_f	Z
1.	.77	544	1.52	.926
2.	.77	549	1.53	.928
3.	.77	552	1.54	.930
4.	.77	556	1.55	.932
5				

Gas Liquid Hydrocarbon Ratio 83800 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 50° Deg.
Specific Gravity Separator Gas .605 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .642
Critical Pressure 671 P.S.I.A. 670 P.S.I.A.
Critical Temperature 358 R 372 R

P_c 2081.2 P_c^2 4332

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1379.2	1902	2430
2		1252.2	1568	2764
3		1219.2	1486	2846
4		1089.2	1186	3146
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.78272$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.78272$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 901

Absolute Open Flow 901 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.00

Remarks: * Square Root Chart Factor 3.162

Approved By Commission: Conducted By: Calculated By: Checked By: