NE MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
DEC 1 1971
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☒ Annual ☐ Special			Test Date: 11-16-71	
Company: Morris R. Antweil	Connection: Llano, Inc.			
Pool: South Carlsbad Strawn	Formation: Strawn			Unit: -
Completion Date: 4-1-71	Total Depth: 11818'	Plug Back TD: 11759'	Elevation: 3206'KB	Farm or Lease Name: Little Jewel Com
Csg. Size: 7" / 4 1/2" — Wt.: 23 / 11.60 — d: 6.366 / 4.000 — Set At: 10703'		Perforations: From 10362' To 10440'		Well No.: 1 UT
Tbg. Size: 2 3/8" — Wt.: 4.60 — d: 1.995 — Set At: 10452'		Perforations: From Open To ended		Unit: F — Sec.: 31 — Twp.: 22s — Rge.: 27e
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G.G.Multriple		Packer Set At: 11390'		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 173 @ 10401'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10401'	-	0.644	0.32	0.56	0.00		X	F

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. DWT	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						3955				48.0 hrs
1.	4	9/64 1.750	540	14	68	3930	77	PACKER		1.0
2.	4	10/64 1.750	550	20	65	3920	78	-	-	1.0
3.	4	12/64 1.750	560	51	60	3855	79	-	-	1.0
4.	4	14/64 1.750	560	72	65	3810	77	-	-	1.0
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	14.93	88.01	553.2	0.9924	1.246	1.052	1707.3
2	14.93	106.13	563.2	0.9952	1.246	1.052	2067.0
3	14.93	170.97	573.2	1.0000	1.246	1.057	3361.8
4	14.93	203.15	573.2	0.9952	1.246	1.054	3964.0
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.82	528	1.43	0.904
2	0.84	525	1.43	0.903
3	0.85	520	1.41	0.895
4	0.85	525	1.43	0.900
5				

Gas Liquid Hydrocarbon Ratio 21.412 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 56.9 Deg.
Specific Gravity Separator Gas 0.644 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX -
Critical Pressure 673 P.S.I.A. - P.S.I.A.
Critical Temperature 368 R - R

P_c 5196.2 P_c^2 27000.5

NO	P_t^2	P_w *	P_w^2	$P_c^2 - P_w^2$
1	-	5181.2	26844.8	155.7
2	-	5175.2	26782.7	217.8
3	-	5142.2	26442.2	558.3
4	-	5122.2	26236.9	763.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 35.36$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6.50$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 25766$

Absolute Open Flow 25750 Mcfd @ 15.025 Angle of Slope θ 62° 18' Slope, n 0.525

Remarks: * BHP @ (-7195') 10401' used for pressure calculations

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	COLEMAN PET.ENG.	JOE A. COLEMAN	JOE A. COLEMAN