C-122

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

Form C-122
Revised 9-1-65

RECEIVED
MAR 16 1973
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 3/3/73	
Company: Adobe Oil Company		Connection: Transwestern Pipeline Company			
Pool: Rock Tank Upper Morrow		Formation: Upper Morrow			Unit
Completion Date: 10/17/72	Total Depth: 10,315	Plug Back TD: 10,231	Elevation: 3902 KB		Farm or Lease Name: Smith Federal
Csg. Size: 5 1/2 / Wt.: 17# / d: 4.892 / Set At: 10,315		Perforations: From 9874 To 9898			Well No.: 1
Tbg. Size: 2 7/8 / Wt.: 8.7# / d: 2.259 / Set At: 10,045		Perforations: From Open end To			Unit: G / Sec.: 14 / Twp.: 23S / Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G. G. Multiple		Packer Set At: 10,045			County: Eddy
Producing Thru: Casing	Reservoir Temp. °F: 175 @ 10,196	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
9874	9874	.587	.0110	.0029	.09 Gr/CCF		X	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							Choke		2559		20
1.	2	X	1.125	860	16	66	9/64	58	2272		1
2.	2	X	1.125	880	28	55	11/64	58	2016		1
3.	2	X	1.125	880	49	50	14/64	58	1635		1
4.	2	X	1.125	880	60	56	17/64	58	1224		1
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	6.393	118.2	873.2	.9943	1.305	1.062	1041
2.	6.393	158.1	893.2	1.005	1.305	1.073	1422
3.	6.393	209.2	893.2	1.010	1.305	1.077	1899
4.	6.393	231.5	893.2	1.004	1.305	1.073	2081
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	1.17	526	1.50	.887
2.	1.33	515	1.47	.868
3.	1.33	510	1.46	.862
4.	1.33	516	1.47	.868
5.				

Gas Liquid Hydrocarbon Ratio: TSTM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .587 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. P.S.I.A.
Critical Temperature: 350 R R

P_c^2 2572.2 P_c^2 6616

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2285.2	5222	1394
2		2029.2	4118	2498
3		1648.2	2717	3899
4		1240.5	1539	5077
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.303$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.150$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2393$

Absolute Open Flow: 2393 Mcfd @ 15.025 | Angle of Slope θ: | Slope, n: .528

Remarks: Friction negligible – See C-122-E for rate No. 4

Approved By Commission:	Conducted By:	Calculated By: Norman Walker	Checked By: