

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

Copy 14
Form C-122
Revised 9-1-67

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 8-12-73		AUG 22 1973	
Company ADOBE OIL COMPANY				Connection TRANSWESTERN PIPELINE CO.		O. C. C.	
Pool ROCK TANK				Formation Upper Morrow		Unit ARTESIA, OFFICE	
Completion Date 4-10-73		Total Depth 10,300'		Plug Back TD 10,250'		Elevation 3874 GR.	
Farm or Lease Name SMITH FEDERAL		Well No. 2					
Csg. Size 5 1/2"	Wt. 17#	d 4.892	Set At 10,300	Perforations: From 9704 To 9713			
Tubg. Size 2 1/2"	Wt. 6.5#	d 2.441	Set At 10,091	Perforations: From To		Unit Sec. Twp. Rge. P 11 23S 24E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. MULTIPLE				Packer Set At 10,091		County EDDY	
Producing Thru CASING		Reservoir Temp. °F 172 @ 10,200'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO							
L 9709	H 9709	G _g 0.5819	% CO ₂ 0.62	% N ₂ 0.71	% H ₂ S TRACE	Prover	Meter Run 4"
						Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	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							PKR. CHOKE		1825.0		48 HRS
1.	4" x 1.250"			735.0	28.0	88	8/64		1770.0	80	1.0
2.	4" x 1.250			740.0	48.0	86	10/64		1720.0	82	1.0
3.	4" x 1.250			740.0	56.0	86	11/64		1655.0	80	1.0
4.	4" x 1.250			740.0	67.0	86	12/64		1600.0	80	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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	144.7	748.2	0.9741	1.311	1.049	1448
2	7.469	190.1	753.2	0.9759	1.311	1.051	1909
3	7.469	205.4	753.2	0.9759	1.311	1.051	2063
4	7.469	224.6	753.2	0.9759	1.311	1.051	2256
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	1.11	548	1.57	0.909	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	1.12	546	1.56	0.905	Specific Gravity Separator Gas _____ 0.5819
3.	1.12	546	1.56	0.905	Specific Gravity Flowing Fluid _____ XXXXX
4.	1.12	546	1.56	0.905	Critical Pressure _____ 672 P.S.I.A.
5.					Critical Temperature _____ 350 R

P _c 1838.2	P _c ² 3379.0		
NO.	P _r ²	P _w	P _c ² - P _w ²
1	3179.8		3183.7
2	3004.0		3010.8
3	2782.9		2790.7
4	2602.4		2611.6
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 17.302$

AOF = Q $\left[\frac{P_r^2}{P_c^2 - P_w^2} \right]^n = 6023$

(2) $\left[\frac{P_r^2}{P_c^2 - P_w^2} \right]^n = 4.1596$

Absolute Open Flow	6023	at 15.025	Angle of Slope	63.4°	Slope	0.500
Remarks						LIMIT

Approved By Commission:	Conducted By: D.A.T.	Calculated By: R.J.W.	Checked By: J.W.W.
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