

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☐ Special				Test Date 3-2-73		MAR 15 1973	
Company ADOBE OIL COMPANY				Connection TRANSWESTERN		O. C. C.	
Pool ROCK TANK <i>Lower Morrow</i>				Formation LOWER MORROW		Unit ARTESIA, OFFICE	
Completion Date 10-17-72		Total Depth 10,315		Plug Back TD 10,231		Elevation 3902 KB	
Farm or Lease Name SMITH FEDERAL				Well No. 1			
Csg. Size 5 1/2"	Wt. 17#	d 4,892	Set At 10,315	Perforations: From 10,182 To 10,210		Unit G	
Tbg. Size 2 7/8"	Wt. 8.7#	d 2,259	Set At 10,045	Perforations: From OPEN To ENDED		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 TUBING		Reservoir Temp. °F 175 @ 10,196		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO		L 10,045		H 10,045		G _g 0.585	% CO ₂ .0073
						% N ₂ .0040	% H ₂ S .10G/100
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							1711.0				
1.	4" X 1.75"			800.0	9.0	75	1543.0		PACKER-CHOKE		4 HRS.
2.	4" X 1.75"			830.0	21.0	64	1331.0			12/64"	1"
3.	4" X 1.75"			850.0	32.0	63	1142.0			17/64	1"
4.	4" X 1.75"			860.0	41.0	63	985.0			21/64"	1"
5.										27/64	1"

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.	14.93	85.55	813.2	.9859	1.307	1.059	1743
2.	14.93	133.06	843.2	.9962	1.307	1.066	2757
3.	14.93	166.20	863.2	.9971	1.307	1.069	3457
4.	14.93	189.21	873.2	.9971	1.307	1.070	3939
5.							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.21	535	1.53	.891	760,000 Mcf/bbl.	51.1 Deg.	.585	.X X X X X X X X	672 P.S.I.A.	350 R
2.	1.25	524	1.50	.880						
3.	1.28	523	1.49	.875						
4.	1.30	523	1.49	.873						
5.										

P _c 2138.2 P _c ² 4571.9		$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.8325$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5364$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1		1964.2	3858.1	713.8	
2		1745.2	3045.7	1526.2	
3		1583.2	2506.5	2065.4	
4		1441	2077.1	2494.8	
5					

Absolute Open Flow 6052 Mcfd @ 15.025		Angle of Slope θ 54.7°		Slope, n 0.709	
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Remarks: BOTTOM HOLE PRESSURE RECORDED WITH AMERADA GAUGE @ 10,196					
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Approved By Commission:	Conducted By: M. C. T.	Calculated By: R. L. W.	Checked By:
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