

Type Test		☒ Initial		☐ Annual		☐ Special		Date: 4-4-77	
Company CITIES SERVICE OIL CO.				To AIR					
Pool LA HERRA				MORROW				Unit	
Completion Date 4-4-77		Total Depth 11,550		Elev. to TD 11,505		Elevation 2119.5 ft		Farm or Lease Name TRACY "E"	
* 7 5/8" 25.56		d 6.969		Set At 11,548		Perforations: From 10,970 To 11,432		Well No. 1	
** 5" LINER 17.00		d 4.892		Set At		Perforations:		Unit Sec. Temp. Hgt.	
Log. Size 2 7/8		Wt. 6.5		d 2.441		Set At 11,234		E 30 21S 27E	
Type Well - Single - Brazenhead - G.G. or G.O. Acceptor						Packer Set At 11,222		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 192 to 11,120		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L		H		Gg 0.585		% CO ₂ 0.59		% N ₂ 1.73	
						% H ₂ S -0-		Prover	
								Meter Run 6"	
								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							3673.0	60		CHOKE	
1.	6" x 1.50"			490.0	24.0	88	3397.0	66		9/64"	60 MIN
2.	6" x 1.50"			490.0	38.5	77	3253.0	70		10/64"	60 "
3.	6" x 1.50"			510.0	64.0	106	3109.0	70		11/64"	60 "
4.	6" x 1.50"			510.0	89.0	104	2940.0	71		12/64"	60 "
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	10.70	109.89	503.2	.9741	1.307	1.030	1542
2	10.70	139.19	503.2	.9840	1.307	1.033	1979
3	10.70	182.99	523.2	.9585	1.307	1.028	2522
4	10.70	215.79	523.2	.9602	1.307	1.029	2982
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	TSTM	Mcft/cbl.
1	0.75	548	1.60	.942	A.P.G. Gravity of Liquid Hydrocarbons		Dng.
2	0.75	537	1.57	.937	Specific Gravity Separator Gas 0.585		X X X X X X X X
3	0.78	566	1.65	.947	Specific Gravity Flowing Fluid X X X X X		
4	0.78	564	1.64	.945	Critical Pressure 673 P.S.I.A.		P.S.I.A.
5					Critical Temperature 343 R		R

NO.	P _f	P _s	P _s	P _f - P _s	(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 3.078$	(2) $\left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 2.209$
1		4335.2	18794	2710		
2		4173.2	17416	4088		
3		4007.2	16058	5446		
4		3810.2	14518	6986		
5						

POSTED -
ID - 2
BOOK - 11
4-5

Absolute Open Flow 6587		Angle of Slope 54.8°		Slope, n 0.705	
Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA GAGE AT 11120'					
GOOD POINT ALIGNMENT & SPREAD - GOOD TEST					
* 7 5/8" - 8850'		** 5" LINER 8489' TO 11,548'			
Approved By Commission:		Conducted By:		Checked By:	
M.C.T.		R. WEST		J.W.W.	