

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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Type of Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 2-16-83		MAR 01 1983	
Company: The Superior Oil Co.				Direction: Air		R. D. WORLEY	
Pool:				Formation: Strawn		Unit:	
Completion Date: 2-16-83		Total Length: 15997		Plug Back TD: 14960		Elevation: 3302 GL	
Casing Size: 9 5/8		ID:		Set At: 15997		Perforations: From 14270 To 14280	
Tubing Size: 2 7/8		ID:		Set At: 14112		Perforations: From 14445 To 14458	
Type Well - Single - Brokenhead - G.G. or G.O. Multiple: Single				Packer Set At: 14112		County: Lea	
Producing thru: Tbg.		Reservoir Temp. °F: 217 @ 14275		Mean Annual Temp. °F: 60°		State: N.M.	
L: 14275		H: 14275		Gv: .7268		% CO ₂ : 1.536	
				% N ₂ : .914		% H ₂ S:	
				Prover:		Meter Run: 4"	
						Type: Flg.	

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
51							7480				166 hrs.
1.	4 X 1.500			100	20.0	108	550				2 hrs.
2.	4 X 1.500			100	17.0	101	720				2 hrs.
3.	4 X 1.000			100	50.0	74	1050				2 hrs.
4.	4 X 1.000			100	12.0	60	1510				2 hrs.
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, Mgd
1	10.84	47.58	113.2	.9568	1.173	nil	579
2	10.84	43.87	113.2	.9628	1.173	nil	537
3	4.753	75.23	113.2	.9868	1.173	nil	414
4	4.753	36.86	113.2	1.000	1.173	nil	206
5.							

NO.	R ₁	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
					16.093					
1	.17	568	1.42	nil		48.1	.7268		668	401
2	.17	561	1.40	nil						
3	.17	534	1.33	nil						
4	.17	520	1.30	nil						
5.										

NO.	BHP	P _w	P _w ²	P _c ² - P _w ²
1	1807.2	996.3	992.6	55155.4
2	2297.2	1212.6	1470.5	54677.5
3	2986.2	1579.5	2494.9	53653.1
4	4105.2	2324.8	5404.8	50743.2
5	10642.2	S.I.P.		

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.018$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .589$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.018$

Absolute Open Flow: 589	Reloc. 15.025	Angle of Slope: 45°	Slope: 1.000
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Remarks: Produced 9 bbls. of oil during the test

Approved by:	Conducted by:	Calculated by:	Checked by:
	Davis Services, Inc.	Rick Pagan	

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FEB 16 1984
O.C.D.
HOBBS OFFICE