

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form G-2
Revised 5-64

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 1-19-74	
Company: Lone Star Industries, Inc.			Connection: None	
Well: Wildcat			Formation: Picture Cliff	
Completion Date:		Total Depth:	Plug Back TD:	Elevation:
Farm or Lease Name: Schalk '52'				
Csg. Size: 5 1/2	Wt.:	Set At: 3634	Perforations: From 3422 To 3494	
Well No. 3				
Tub. Size: 2 3/8 EUE	Wt.:	Set At: 3491	Perforations: From To	
Unit Sec. Twp. Rge.				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple			Packer Set At	
Single			None	
Producing Thru Tubing			Baro. Press. - P _a	
Reservoir Temp. °F: 132 @ 3458			12	
Mean Annual Temp. °F: 60			State: New Mexico	
L: 3458	H: 3458	G _g : .610	% CO ₂ :	% N ₂ :
			% H ₂ S:	Prover: X
Meter Run:		Taps:		

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				1167		40	1167	40	1167	40	
1.	2.0		3/32	1158		54	1158	54	1159	54	1 Hr
2.	2.0		7/32	1117		58	1117	58	1127	58	1 Hr
3.	2.0		1/4	1094		58	1094	58	1112	58	1 Hr
4.	2.0		5/16	1042		62	1042	62	1072	62	1 Hr
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.	.1410		1170	1.006	1.280	1.117	237
2.	.8393		1129	1.002	1.280	1.110	1349
3.	1.087		1206	1.002	1.280	1.117	1878
4.	1.672		1054	.9981	1.280	1.098	2472
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Mcfd/bbl.
1.	1.74	514	1.42	.801	A.P.I. Gravity of Liquid Hydrocarbons		Deq.
2.	1.68	518	1.43	.812	Specific Gravity Separator Gas	.610	XXXXXXXXXX
3.	1.80	518	1.43	.802	Specific Gravity Flowing Fluid	XXXXXX	
4.	1.57	522	1.44	.829	Critical Pressure	671	P.S.I.A.
5.					Critical Temperature	362	R

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1.	1179	1171	1390	1371	19
2.		1139		1297	93
3.		1124		1263	127
4.		1084		1175	215
5.					

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1390}{127}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 10327$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.49872$$

Absolute Open Flow: 10327*	Mcfd @ 15.025	Angle of Slope @ 54° 32'	Slope, n: .712
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*NOTE: The calculated AOF does not correspond to the AOF as drawn on the curve because the curve does not pass directly through any point.

Approved By Commission:	Conducted By: Don Douglas & J F Roberson	Calculated By: H L Hagler	Checked By:
	WEST TEXAS CONSULTING SERVICE, INC.		