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

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 1-22-74	
Company: Lone Star Industries, Inc.		Connection: None		
Pool:		Formation: Picture Cliff		Unit:
Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name: Schalk '49'
Csg. Size: 2 7/8 EUE / Wt. / d		Set At: 4461	Perforations: From 3835 To 4095	Well No.: 3
Tbg. Size / Wt. / d		Set At	Perforations: From To	Unit / Sec. / Twp. / Rge.
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At		County: Rio Arriba
Producing Thru: Casing	Reservoir Temp. °F: 140 @ 3965	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 12.0	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3965	3965	.610				X		

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI			1092		44			1092	44	
1.	2.0	3/32	1090		48			1090	48	1 Hr
2.	2.0	7/32	1048		54			1048	54	1 Hr
3.	2.0	1/4	1015		58			1015	58	1 Hr
4.	2.0	5/16	943		58			943	58	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	.1410		1102	1.012	1.280	1.117	249
2.	.8393		1060	1.006	1.280	1.106	1267
3.	1.087		1027	1.002	1.280	1.099	1575
4.	1.672		955	1.002	1.280	1.092	2236
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	1.64	508	1.40	.801
2.	1.58	514	1.42	.817
3.	1.53	518	1.43	.828
4.	1.41	518	1.43	.839
5.				

Gas Liquid Hydrocarbon Ratio: None Produced Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .610 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. P.S.I.A.
Critical Temperature: 362 R R

P_c 1104 P_c^2 1218.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	1214.2		1214.4	4
2	1123.6		1130.9	88
3	1054.7		1066.0	153
4	912.0		935.3	284
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1218.8}{284}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.11916$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 4738

Absolute Open Flow: 4738 Mcfd @ 15.025 | Angle of Slope θ: 62° 43' | Slope, n: .516

Remarks:

Approved by Commission: | Conducted By: ~~Don Douglas &~~ Joe Roberson | Calculated By: H L Hagler | Checked By:

WEST TEXAS CONSULTING SERVICE, INC.