

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

207-0744
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-14-74	
Company Lone Star Industries, Inc.			Connection None		
Pool Basin Kakota			Formation Dakota		Unit
Completion Date 10-13-73		Total Depth 6292	Plug Back TD	Elevation 6888 DF	Form or Lease Name Schalk '94'
Cool. Size 4 1/2	Wt. 10.50	Set At 6313	Perforations: 6075-6082 From 6124 To 6138		Well No. 2
Cool. Size 2 3/8 EUE	Wt. 6	Set At 6181	Perforations: From 6146 To		Unit Sec. Twp. Rys. 26 32-N 8W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple			Packer Set At		County San Juan
Producing thru Tubing		Reservoir Temp. °F 60°	Mean Annual Temp. °F 60°		State New Mexico
L 6106	H 6106	Gg .590	% CO ₂	% N ₂	% H ₂ S Prever Meter Run Taps 2"

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prever 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	
1.	2"		3/32	1075		48	1075	48	1093	48	1 Hr
2.	2"		7/32	927		54	927	54	958	54	1 Hr
3.	2"		1/4	817		56	817	56	860	56	1 Hr
4.	2"		5/16	664		58	664	58	724	58	1 Hr

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Compress. Factor, F _{scv}	Rate of Flow Q, Mgd
1.	.1410		1087	1.0117	1.2403	1.102	226
2.	.8393		939	1.0058	1.2403	1.085	1136
3.	1.087		829	1.0039	1.2403	1.085	1298
4.	1.672		676	1.0019	1.2403	1.059	1595

NO.	P _r	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
1.	1.62	508	1.44	.823			XXXXXXX	XXXXXX	672	354
2.	1.40	514	1.45	.850						
3.	1.23	516	1.46	.850						
4.	1.01	518	1.46	.891						

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1.	1128	1105	1221	52
2.		970	941	332
3.		872	761	512
4.		736	542	731

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = \frac{1273}{52}$

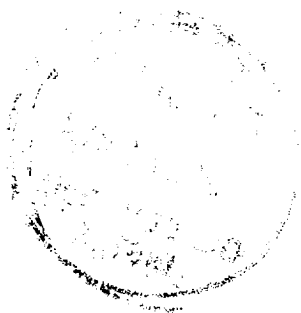
AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2501$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 11.070$

Absolute Open Flow	2501	Mgd @ 15.025	Angle of Slope °	53.06	Slope, n	.752
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Remarks:

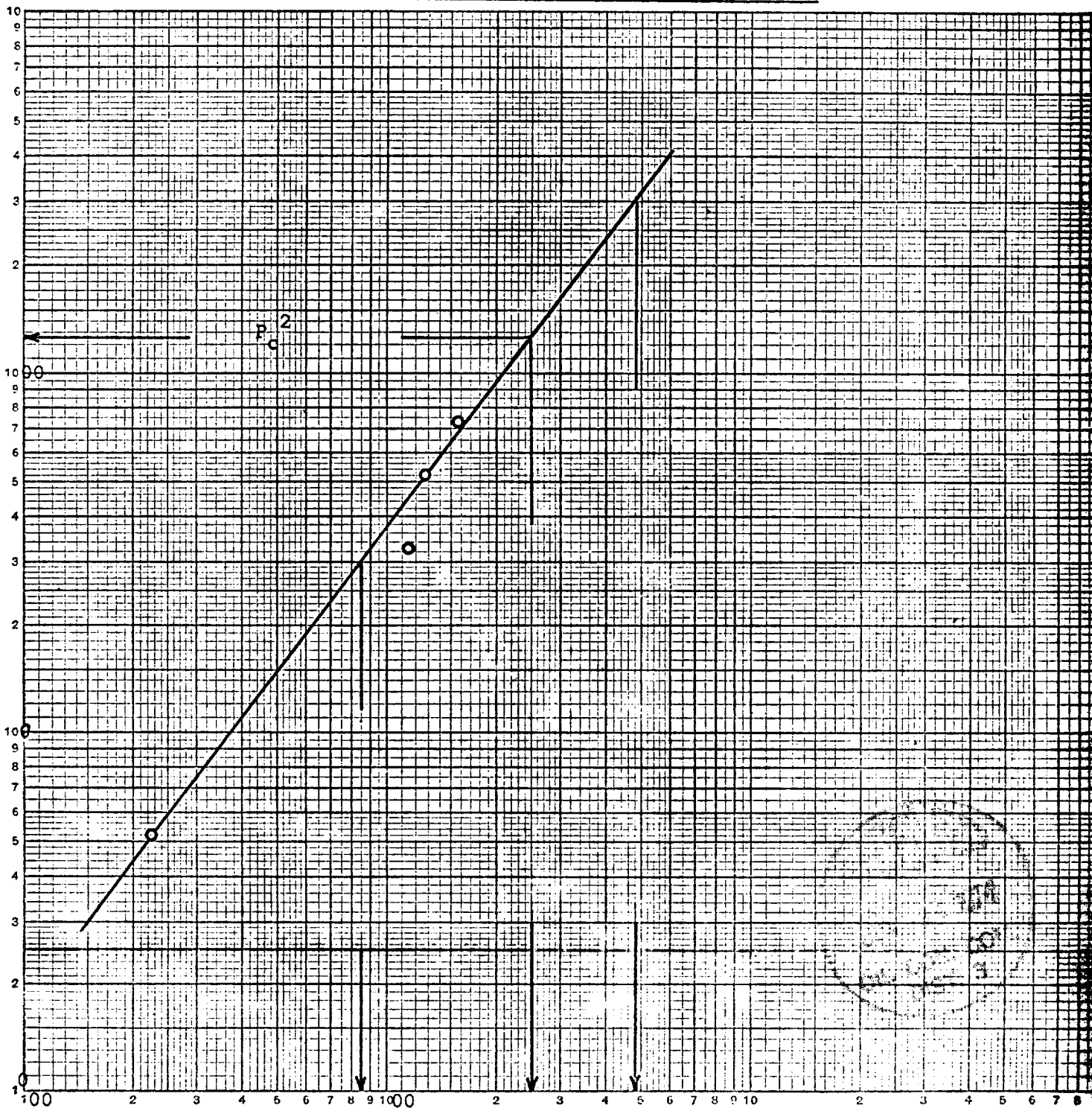
Approved by Commission	Conducted by: Don Douglas & Joe Roberson	Calculated by: H L Hagler	Checked by:
	West Texas Consulting Service, Inc.		



OPERATOR Lone Star Industries, Inc.
 LEASE Schalk '94'
 WELL NO. 2
 FIELD Basin Dakota
 COUNTY San Juan, New Mexico
 DATE January 14, 1974

$P_c^2 - P_w^2$

K&S LOGARITHMIC 46 7400
 3 X 3 CYCLES MADE IN U.S.A.
 KEUFFEL & ESSER CO.



Q in Mcf/Day

$\theta = 53.06^\circ$

$n = .752$

Absolute Open Flow = 2501 Mcf/Day

THOMAS S. SCHALK
618 FIRST WICHITA NATIONAL BANK BLDG.
WICHITA FALLS, TEXAS 76301

October 9, 1973

Mr. Ralph S. Cooley:

COMPLETION REPORT LONE STAR INDUSTRIES -SCHALK 94-2

Location: 1100 feet from South Line, 960 feet from
West line of Section 26, Twp 32 N Rge. 8W,
San Juan County, New Mexico.

Contractor: Arapahoe Drilling Company

Elevation: Ground 6881, K. B. 6893 (datum for logs)

Oct. 9, 1973: Perforated, G0, 6065 to 72, 6174 to 6188,
6146 to 6158 with 7½% HCL spotted on bottom.

Frac: Broke down 1700#
Treated w/ 300 sx at 1#/gal 52 bbl/min 2300 pounds
Fluid 30,420 gallons & 4200 gallons flush.
Dropped 15 balls at 15000 gallons, 15 at 24,000
gallons.
Shut in pressure 750 pounds, 5 min shut in 200
pounds, 15 min zero.
Set bridge plug @ 6025
Perf. 5851 to 5866 and 5970 to 5986
Frac: Broke down at 1500#
Treated w/300 sx 1#/gal 54 bbl/min at 2200#,
32,510 gallons of fluid w/4000 gallon flush.
Dropped 15 balls at 15000 gallons, 15 balls at
21,900 gallons, 10 balls at 28,700 gallons.
In both cases got some indication of ball action.
Shut in pressure 750#, 5 min 550#, 15 min. 300#

Bled pressure off well, went in hole with tubing and
bit to drill up bridge plug and swab.

Thomas S. Schalk

[Faint, illegible markings]