

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL ☐	GAS WELL ☒	DRY ☐	Other ☐										
b. TYPE OF COMPLETION:		NEW WELL ☒	WORK OVER ☐	DEEP-EN ☐	PLUG BACK ☐	DIFF. RESER. ☐	Other ☐								
2. NAME OF OPERATOR LONE STAR INDUSTRIES, INC.															
3. ADDRESS OF OPERATOR %JOHN E. SCHALK, P. O. BOX 2078, FARMINGTON, N.M.															
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2058' FROM THE SOUTH LINE, 1312' FROM THE EAST LINE At top prod. interval reported below SAME At total depth SAME															
14. PERMIT NO.		DATE ISSUED													
2724		11-16-73													
15. DATE SPUDDED		16. DATE T.D. REACHED		17. DATE COMPL. (Ready to prod.)		18. ELEVATIONS (DF, REB, RT, GR, ETC.)*		19. ELEV. CASINGHEAD							
12-14-73		12-21-73		1-08-74		6508' GR		6508'							
20. TOTAL DEPTH, MD & TVD		21. PLUG, BACK T.D., MD & TVD		22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY		24. ROTARY TOOLS							
3640'						ROTARY		CABLE TOOLS							
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 3451' - 3515' PICTURED CLIFFS								25. WAS DIRECTIONAL SURVEY MADE NO							
26. TYPE ELECTRIC AND OTHER LOGS RUN COMPENSATED FORMATION DENSITY LOG WITH GAMMA RAY COMPENSATED NEUTRON FORMATION DENSITY LOG WITH GAMMA RAY								27. WAS WELL CORRED NO							
28. CASING RECORD (Report all strings set in well)															
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED					
8-5/8"		32#		182' KB		12-1/4"		170 SACKS CLASS "A"		NONE					
2-7/8"				3636.88				450 SACKS 50/50 POSMIX		NONE					
29. LINER RECORD								30. TUBING RECORD							
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)		SIZE		DEPTH SET (MD)		PACKER SET (MD)	
NONE															
31. PERFORATION RECORD (Interval, size and number)								32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.							
3451' - 3480' 3488' - 3515' 1 SHOT PER FOOT								DEPTH INTERVAL (MD) 3451' - 3515' AMOUNT AND KIND OF MATERIAL USED 75,000# SAND AND 96,000 GALLONS WATER							
33.* PRODUCTION															
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WAITING ON PIPE LINE								WELL STATUS (Producing or shut-in) SHUT-IN					
DATE OF TEST		HOURS TESTED		CHOKE SIZE		PROD'N. FOR TEST PERIOD		OIL—BBL.		GAS—MCF.		WATER—BBL.		GAS-OIL RATIO	
1-15-74		4		5/16											
FLOW. TUBING PRESS.		CASING PRESSURE		CALCULATED 24-HOUR RATE		OIL—BBL.		GAS—MCF.		WATER—BBL.		OIL GRAVITY-API (CORR.)			
884								3888 AOF							
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) VENTED												TEST WITNESSED BY JOE ROBERSON			
35. LIST OF ATTACHMENTS SEPERATOR & VENT LINE															
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records															
SIGNED		TITLE						AGENT		DATE		6-17-74			

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Nacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH TOP TRUE VERT. DEPTH
PICTURED CLIFFS	3451	3515	GAS	OJO ALAMO	2608
				KIRTLAND	2827
				FRUITLAND	3174
				PICTURED-CLIFFS	3442
					2595
					2815
					3161
					3429

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

Form O-123
Revised 5-6-66

Type Test: ☐ Initial ☐ Annual ☒ Special		Test Date 1-15-74	
Company Lone Star Industries, Inc.		Connection None	
Well Undesignated		Formation Picture Cliff	
Completion Date		Total Depth	Plug Back TD
Elevation		Farm or Lease Name Schalk '52'	
Csg. Size 2 7/8 EUE	Wt. 6.50	d 2.441	Set At
Perforations: From 3450-3515 To		Well No. 4	
Perf. Size None	Wt.	d	Set At
Perforations: From To		Unit Sec. Twp. Rgs.	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At	
Producing Thru Casing		County San Juan	
Reservoir Temp. °F 138° 3482		Mean Annual Temp. °F 60	
Bore. Press. - P _h 12.0		State New Mexico	
L 3482	H 3482	Cg .610	% CO ₂
			% N ₂
			% H ₂ S
			Prover
			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.	
SI				1111		44	1111	44		
1.	2"		3/32	1104		46	1104	46		1 Hr
2.	2		7/32	1026		46	1026	46		1 Hr
3.	2		1/4	982		46	982	46		1 Hr
4.	2		5/16	884		48	884	48		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 _{sp}	Rate of Flow Q, Veld
1	.1410		1117	1.0137	1.2403	1.134	235
2	.8393		1039	1.0137	1.2403	1.125	1290
3	1.087		995	1.0137	1.2403	1.119	1592
4	1.672		897	1.0117	1.2403	1.108	2185
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Vol./bbl.
1	1.66	506	1.36	.777	A.P.I. Gravity of Liquid Hydrocarbons		Sec.
2	1.55	506	1.36	.790	Specific Gravity Separator Gas	.610	XXXXXXXXXX
3	1.48	506	1.36	.798	Specific Gravity Flowing Fluid	XXXXXX	
4	1.34	508	1.37	.815	Critical Pressure	671	P.S.I.A.
5					Critical Temperature	372	R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1	1124	1141.5	1303	
2		1075.8	1157	107
3		1030.8	1062	202
4		927.2	860	404
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = \frac{1264}{404}$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3888$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.77924$

Absolute Open Flow	3888	Mcf @ 15.025	Angle of Slope	63.19°	Slope, n	.505
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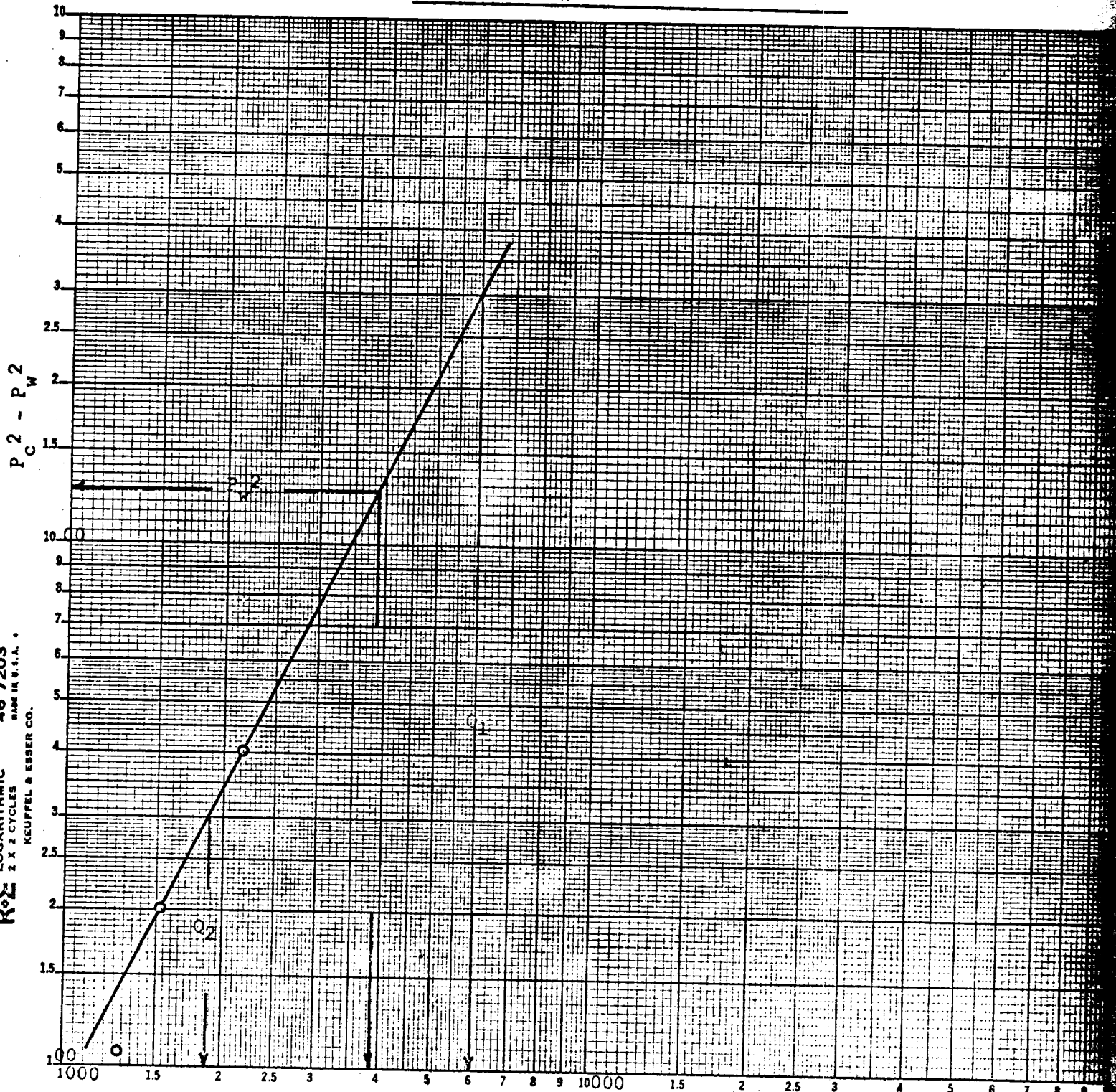
Remarks:

Don Douglas &

Approved by Commission:	Conducted By: Joe Roberson	Calculated By: H L Hagler	Checked By:
WEST TEXAS CONSULTING SERVICE, INC.			

OPERATOR Lone Star Industries, Inc.
 LEASE Schalk '52'
 WELL NO. 4
 FIELD Undesignated
 COUNTY San Juan, New Mexico
 DATE 1-15-74

K&E LOGARITHMIC 46 7203
 2 X 2 CYCLES
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.



Q in Mcf/Day
 $\theta = 63.19^\circ$
 $n = .505$
 Absolute Open Flow = 3888 Mcf/Day

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

January 28, 1974

DRILLING and COMPLETION RECORD

Lone Star Industries - Schalk - 52-4

Drilling Contractor - Arapahoe Drilling Company

Location: 1312' F E L, 2058' F S L Sec. 24 29 N 5 W

Elevation: 6508 Gr 6520 K B

County: Rio Arriba, New Mexico

Producing Zone: Pictured Cliffs

Casing: 8-5/8 Surface @ 183' w/170 sx neat 2% CaCl
1/4# Flocele.
2-7/8 production string @ 3630 w/350 sx HOWCO
light 12 1/2# Gilsonite per sx, 100 sx posmix 2% gel

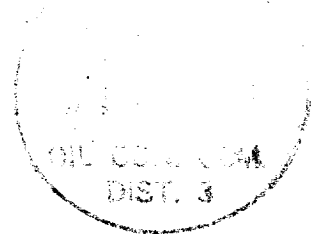
Hole Size: 7-7/8 to top of Pictured Cliffs 6-1/4 to T. D.

Logs: Schlumberger Compensated Formation Density Log
w/ Gamma Ray
Schlumberger Compensated Neutron - Formation Density
Log w/ Gamma Ray

Completion: Go International ran correlation Log and
perforated 1 hole per foot 3451-80, 3488-3515
Frac - Halliburton - 750 sx - 76,000 gallons w/WG-6
Formation broke @ 1900#, pumped 500 gal 15% HCL
ahead of frac. Started sand 1/2# per gallon @3200#
increased to 1# 3400#, shut in 900#, 5 min 800#
Dropped 10 balls 40,000 gallons 200# increase,
10 balls @ 53,000 gallons, no action, 10 balls at
64,000 gallons no action. Well shut in 18 hrs.

Well unloaded after swabbing.

Thomas S. Schalk



WILLIAM S. WILSON