

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.

5. LEASE DESIGNATION AND SERIAL NO.

NM - 4452

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

SCHALK 52

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

PICTURED CLIFFS

11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA

SEC. 24, T-29N, R-5W

12. COUNTY OR
PARISH

13. STATE

RIO ARRIBA NEW MEXICO

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. RESVR. ☐ 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

2470' FROM THE NORTH LINE, 695' FROM THE EAST LINE

At top prod. interval reported below

SAME

At total depth

SAME

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 11-17-73 16. DATE T.D. REACHED 11-22-73 17. DATE COMPL. (Ready to prod.) 12-02-73 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6532' GR 19. ELEV. CASINGHEAD 6532'

20. TOTAL DEPTH, MD & TVD 3667' 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS ROTARY

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 3476' - 3550' PICTURED CLIFFS 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN GAMMA RAY 27. WAS WELL CORRED COMPENSATED NEUTRON FORMATION, COMPENSATED FORMATION DENSITY 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#	183KB	12-1/4"	175 SACKS CLASS "A"	NONE
5-1/2"	15.5#	3665KB	7-7/8"	258 SACKS	NONE

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
NONE					2-3/8"	3655'	

31. PERFORATION RECORD (Interval, size and number)

3476' - 3550' 1 SHOT PER FOOT

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3476' - 3550'	60,000# SAND & 80,000 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—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
1-21-74	4	5/16	→				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
940	950	→		5612 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: "Sacks 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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
PICTURED CLIFFS	3476	3550	GAS	OJO ALAMO	2621	2609
				KIRTLAND	2861	2849
				FRUITLAND	3208	3196
				PICTURED CLIFFS		
					3472	3460

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-55

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-21-74	
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 '52'
Cas. Size 5 1/2	Wt. d	Set At 3665	Perforations: From 3476 To 3530		Well No. 2
Tub. Size 2 3/8 EUE	Wt. c	Set At 3632	Perforations: From To		Unit Soc. Twp. Rge. 24 29-N 5-W
Type Well - Single - Bradenhead - G.C. or G.O. Multiple			Packer Set At None		County Rio Arriba
Producing Thru		Reservoir Temp. °F 130 @ 3503	Mean Annual Temp. °F 60	Baro. Press. - P _a 12.0	State New Mexico
L 3503	H 3503	G _g .610	% CO ₂	% N ₂	% H ₂ S
			Prover X	Meter Run	Tags

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
Sl				1155		44	1155	44	1155	44	
1.	2.0		3/32	1139		50	1139	50	1143	50	1 Hr
2.	2.0		7/32	1065		58	1065	58	1076	58	1 Hr
3.	2.0		1/4	1000		60	1000	60	1015	60	1 Hr
4.	2.0		5/16	940		62	940	62	950	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mscf
1.	.1410		1151	1.010	1.280	1.119	235
2.	.8393		1077	1.002	1.280	1.105	1281
3.	1.087		1012	1.00	1.280	1.096	1543
4.	1.672		952	.9981	1.280	1.090	2217
5.							

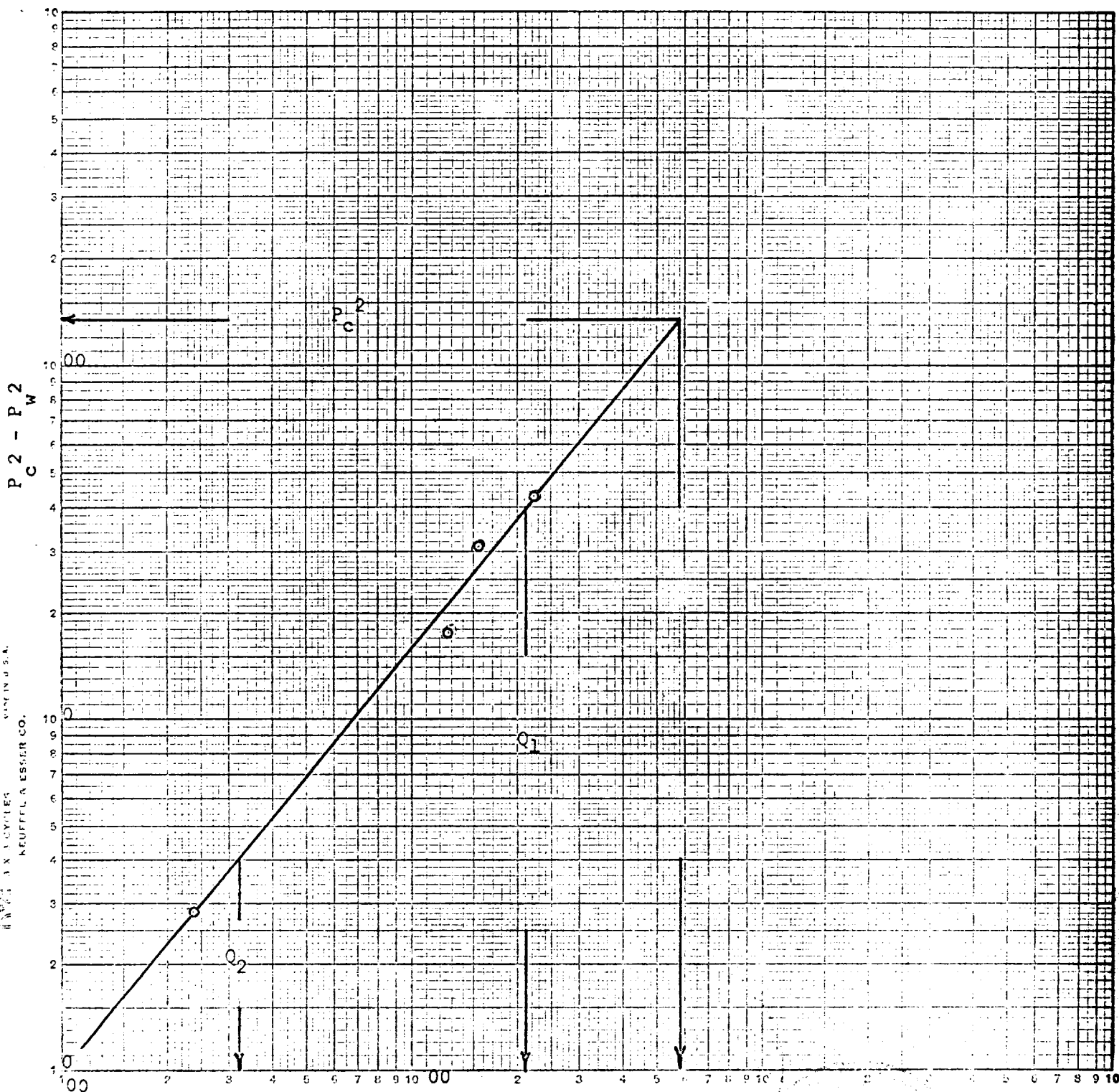
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	Specific Gravity Separator Gas _____ XXXXXXXXXX	Specific Gravity Flowing Fluid _____ XXXXX	Critical Pressure _____ 671 P.S.I.A.	Critical Temperature _____ 362 R
1.	1.72	510	1.41	.798						
2.	1.61	518	1.43	.819						
3.	1.51	520	1.44	.832						
4.	1.42	522	1.44	.842						
5.										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = \frac{1362}{437}$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.53153$
1.	1167	1155	1334	28		
2.		1088	1184	178		
3.		1027	1055	307		
4.		962	925	437		
5.						

AOFP = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 5612$		AOFP = 5612		Mscf @ 15.025		Angle of Slope @ 50° 45'		Slope, n .817	
Approved By: _____ Conducted By: Don Douglas & Joe Roberson Calculated By: H L Hagler WEST TEXAS CONSULTING SERVICE, INC.									

OPERATOR Lone Star Industr , Inc.
 LEASE Schalk '52'
 WELL NO. 2
 FIELD Wildcat
 COUNTY Rio Arriba, New Mexico
 DATE January 21, 1974

46 7400
 KEUFFEL & ESSER CO.
 MADE IN U.S.A.



Q in Mcf/Day
 $\theta = 50^\circ 45'$
 $n = .817$

Absolute Open Flow = 5612



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

December 5, 1973

Drilling and Completion Record

Lone Star Industries - Schalk 52 -2

Location: Sec. 24 T -29N R -5W

County: Rio Arriba, New Mexico

Zone: Pictured Cliffs

Casing: 8-5/8 32# @ 183' W/175 sx Class "A" 1/4# flowseal 2% CaCl₂
5-1/2 @3667' W/138 sx HOWCO Light 120 sx Class A
Prozmix 2% gel

Logs: Schlumberger Compensated Neutron Formation
Density with Compensated Formation Density Log.
Gamma Ray back to surface.

Completion; Perforated (Go International) 3476 to 3528
(Schlumberger measurements)

Frac 600 sx

Broke 1600#

1st Stage 58 bbl/min 1400# 30,000 gal.

2nd Stage Dropped 10 balls

57 bbl/min 1400# 40,000 gal.

3rd Stage Dropped 10 balls

53 bbl/min 1500#

4th Stage Dropped 15 balls 50,000 gal.

50 bbl/min 1800#

Good ball action.

Shut in pressure 800# 5 min 700#

12 hrs 400#, opened well up, started unloading
frac water & gas

After 15 hrs well loaded up, ran tubing, swabbed
well.

2 3/8 EUE



Thomas S. Schalk