

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 *

5. LEASE DESIGNATION AND SERIAL NO.

NM - 4449

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

SCHALK 49

9. WELL NO.

2

10. FIELD AND POOL NAME

PICTURED CLIFFS

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

SEC. 23, T-30N, R-4W

12. COUNTY OR
PARISH

13. STATE

RIO ARriba NEW MEXICO

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

850' FROM THE SOUTH LINE, 1765' FROM THE EAST LINE

At top prod. interval reported below

SAME'

At total depth

SAME

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

11-21-73

16. DATE T.D. REACHED

12-1-73

17. DATE COMPL. (Ready to prod.)

12-13-73

18. ELEVATIONS (DF, REB, RT, GR, ETC.)*

7310' GR

20. TOTAL DEPTH, MD & TVD

4500'

21. PLUG, BACK T.D., MD & TVD

22. IF MULTIPLE COMPL.,
HOW MANY*23. INTERVALS
DRILLED BY

ROTARY TOOLS

19. ELEV. CASINGHEAD

7310'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

4036' - 4308'

PICTURED CLIFFS

25. WAS DIRECTIONAL
SURVEY MADE

NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

COMPENSATED FORMATION DENSITY WITH GAMMA RAY
COMPENSATED NEUTRON FORMATION DENSITY WITH GAMMA RAY

27. WAS WELL CORED

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#	183' KB	12-1/4"	170 SACKS CLASS "A"	NONE
2-7/8"		4486' KB	6-1/4"	450 SACKS CLASS "A"	NONE
				& POSMIX	NONE

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
NONE					

31. PERFORATION RECORD (Interval, size and number)

4036' - 4054'

4270'

4060' - 4074'

4124' - 4130'

4254' - 4260'

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4036' - 4308'	72,000# SAND & 71,280 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	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1-20-74	4	5/16					
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
	370			1780 AOF			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

VENTED

TEST WITNESSED BY

JOE ROBERSON

35. LIST OF ATTACHMENTS

SEPARATOR & VENT LINE

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

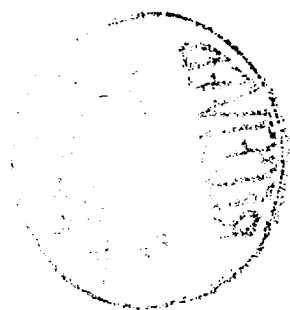
SIGNED

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.

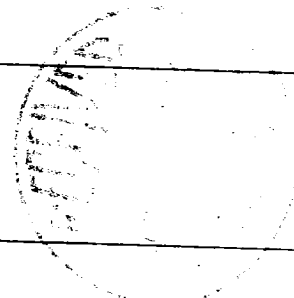
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formations and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal 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 16: 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: 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		38. GEOLOGIC MARKERS				
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.			
PICTURED CLIFFS	4036	4060	GAS			
						
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
				OJO ALAMO KIRTLAND PICTURED CLIFFS	3360 3694 4033	3348 3682 4021

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

Form G-122
Revised 9-1-68

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 1-20-74	
Company: Lone Star Industries, Inc.				Connection: None	
Pool:				Formation:	
Completion Date:		Total Depth:		Plug Back TD:	
				Elevation:	
Form or Lease Name: Schalk '49'					
Sec. Size: 2 7/8 EUE	Wt.:	d:	Set At:	Perforations: From 4036 To 4270	
Sec. Size: None	Wt.:	d:	Set At:	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At:	
Producing Thru Casing				County: Rio Arriba	
Reservoir Temp. °F: 138 s 4153		Mean Annual Temp. °F: 60		Baro. Press. - P _a : 12	
State: New Mexico					
L 4153	H 4153	G _g .610	% CO ₂	% N ₂	% H ₂ S
Prover X		Water 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	
51				1133		40			1133	40	
1.	2.0		3/32	1097		51			1097	51	1 Hr
2.	2.0		7/32	872		54			872	54	1 Hr
3.	2.0		1/4	665		56			665	56	1 Hr
4.	2.0		5/16	370		56			370	56	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 O. Mfd
1.	.1410		1109	1.0088	1.2804	1.115	228
2.	.8393		884	1.0058	1.2804	1.088	1055
3.	1.087		677	1.0039	1.2804	1.064	1026
4.	1.672		382	1.0039	1.2804	1.037	880
5.							

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.	1.65	511	1.41	.805						
2.	1.32	514	1.42	.845						
3.	1.01	516	1.43	.883						
4.	.57	516	1.43	.930						
5.										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1.		1134.3	1287	24
2.		910.4	829	482
3.		701.4	491	820
4.		457.9	210	1101
5.				

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = \frac{1311}{482} \quad (2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.68741$$

$$AOF = 0 \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1780$$

Absolute Open Flow: 1780 Mfd @ 15.025 Angle of Slope @ 62° 24' Slope, n .523

Remarks:

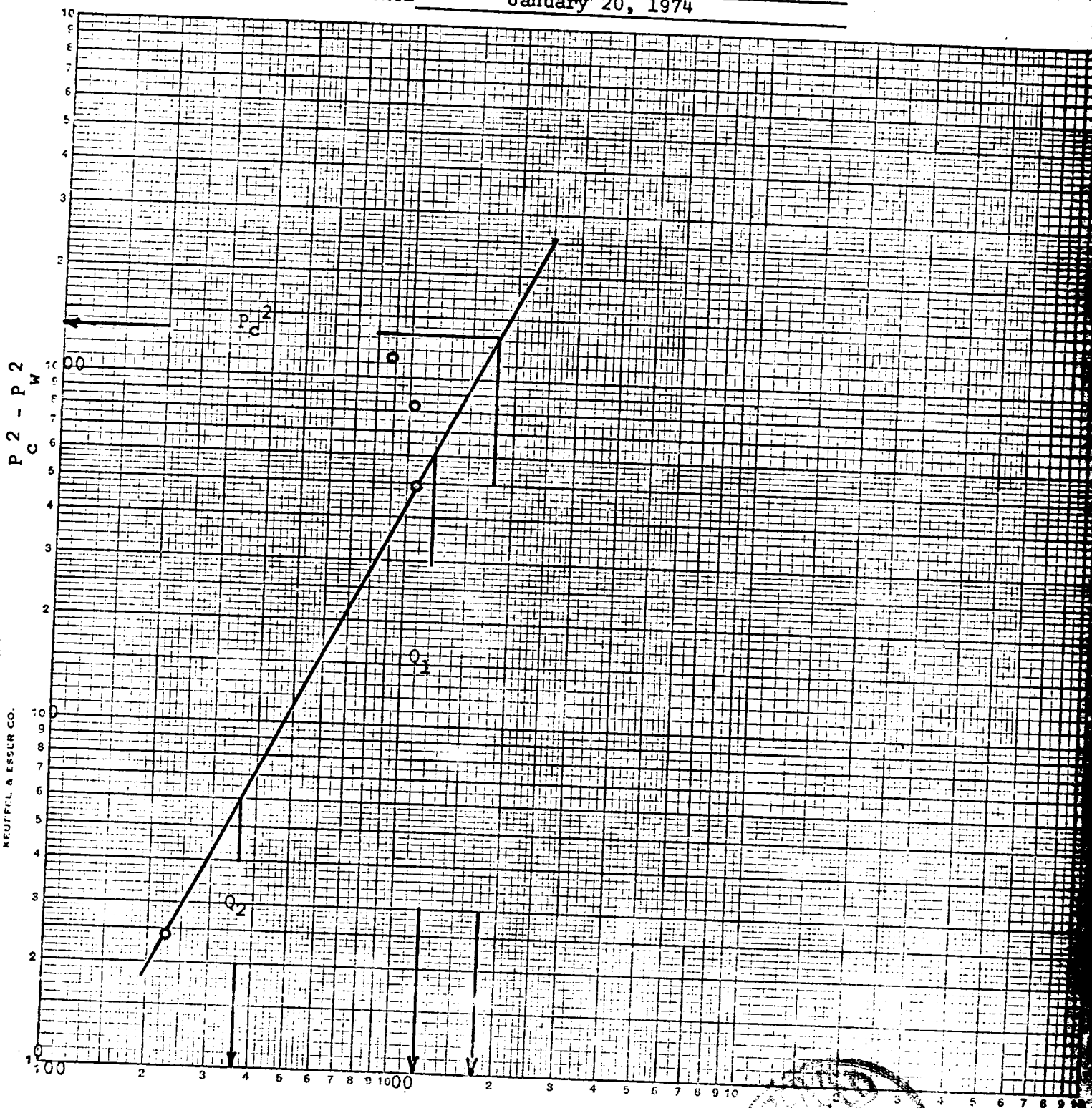
Don Douglas &

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

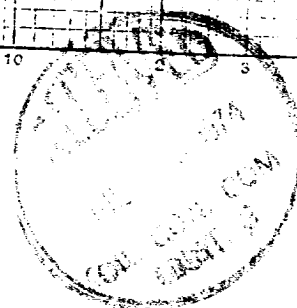


OPERATOR Lone Star Industries, Inc.
 LEASE Schalk '49'
 WELL NO. 2
 FIELD Wildcat
 COUNTY Rio Arriba, New Mexico
 DATE January 20, 1974

K&E LOGARITHMIC 46 7400
 3 X 3 CYCLES
 KEUFFEL & ESSER CO.



Q in Mcf/Day
 $\theta = 62^\circ 24'$
 $n = .523$
 Absolute Open Flow = 1780 Mcf/Day



December 12, 1973

Drilling and Completion Record

Lone Star Industries - Schalk 49-2

Drilling Contractor - Arapahoe Drilling Company
Rig 3 - Pusher Jack Murphy

Location - 850' FSL 1765' FEL Section 23 T-30N R-4 W

County - Rio Arriba, New Mexico

Zone - Pictured Cliffs

Casing - 8-5/8 surface at 183'
2-7/8 production string @ 4486 cemented w/350 sx
Halliburton light, followed w/100 sx 50-50 poxmix.
Cemented 14' off bottom w/TD 4500. Plug down
6:50 AM Dec. 3, 1973.

Hole size: 7-7/8 below surface to 3998, 6½ to 4406,
6¼ to 4500

Logs: Schlumberger Compensated Formation Density Log with
Gamma Ray
Schlumberger Compensated Neutron-Formation Density
Log w/ Gamma Ray.
These logs run from TD to surface.

Completion: Go International Perforated 4036-4054, 4060-4074
4124-4130, 4254-4260 4270
Frac - Halliburton - 720 sx
Broke 2500#

1st Stage 3/4# sd/gallon 28 bbl/min at 3500#
Increased to 1#/gal pressure went to 3800#.

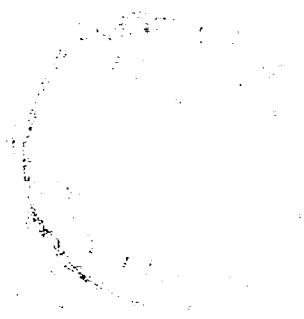
2nd Stage Dropped 15 balls at 40,000 gallons
Little or no ball action.

3rd Stage Dropped 15 balls at 50,000 gallons, no
ball action rate 28 bbl/min @ 3800#.

4th Stage Dropped 15 balls at 60,000 gallons, no
ball action, 28 bbl/min @ 3800#.

Total Sand 72,000#
Total frac fluid 71,280 gallons
Shut in pressure 750#
15 min 600.

Well started unloading after about 16 hrs swabbing.



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