

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-2355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.

NM - 4449

6. IF INDIAN, ALLOTTEE OR TRIBES NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

SCHALK 49

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

BLANC
PICTURED CLIFFS - EAST11. 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

1190' FROM THE NORTH LINE, 790' FROM THE EAST LINE

At prod. interval reported below

SAME

At total depth

SAME

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 12-18-73 16. DATE T.D. REACHED 12-28-73 17. DATE COMPL. (Ready to prod.) 1-14-74

18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 7102' GR

19. ELEV. CASINGHEAD 7102'

20. TOTAL DEPTH, MD & TVD 4450'

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)*

3835' - 4095'

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 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#	180' KB	12-1/4"	170 SACKS CLASS "A"	NONE
2-7/8"		4441' KB	6-3/4"	400 SACKS HALLIBURTON LIGHTWEIGHT & 50/50 POSMIX	NONE

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
NONE					2-7/8"	4441'	

31. PERFORATION RECORD (Interval, size and number)

3835' - 3863'

3863' - 3875'

3881' - 3890'

4055' - 4095'

4 SHOTS PER FOOT

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3835' - 4095'	75,000# SAE 15W OIL 90,000 GALLONS WATER

33.*

PRODUCTION

DATE FIRST PRODUCTION

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1-22-74	4	5/16					
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.		
	943			4738 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

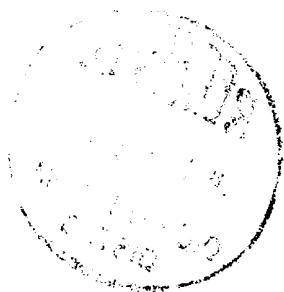
SIGNED

TITLE

AGENT

DATE 6-17-74

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



N MEXICO OIL CONSERVATION COM ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-22-74	
Company Lone Star Industries, Inc.		Connection None	
Well 		Formation Picture Cliff	
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	
Tub. Size 	Wt. 	d 	Set At
Perforations: From To		Unit Sec. Twp. Rye.	
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 3965	H 3965	G _g .610	% CO ₂ % N ₂ % H ₂ S Prover X 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.		Temp. °F
SI				1092		44			1092	44	<i>74</i>
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 F _g	Super Compress. Factor, F _{pv}	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	Gas Liquid Hydrocarbon Ratio	None Produced	Sec./bbl.
1	1.64	508	1.40	.801	A.P.I. Gravity of Liquid Hydrocarbons		Dec.
2	1.58	514	1.42	.817	Specific Gravity Separator Gas	.610	XXXXXXXXXX
3	1.53	518	1.43	.828	Specific Gravity Flowing Fluid	XXXXX	
4	1.41	518	1.43	.839	Critical Pressure	671	P.S.I.A. P.S.I.A.
5					Critical Temperature	362	R R

NO.	P _r	P _c 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) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1218.8}{284}$

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

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

Absolute Open Flow	4738	Mcf/d @ 15.025	Angle of Slope @	62° 43'	Slope, n	.516
Remarks:						

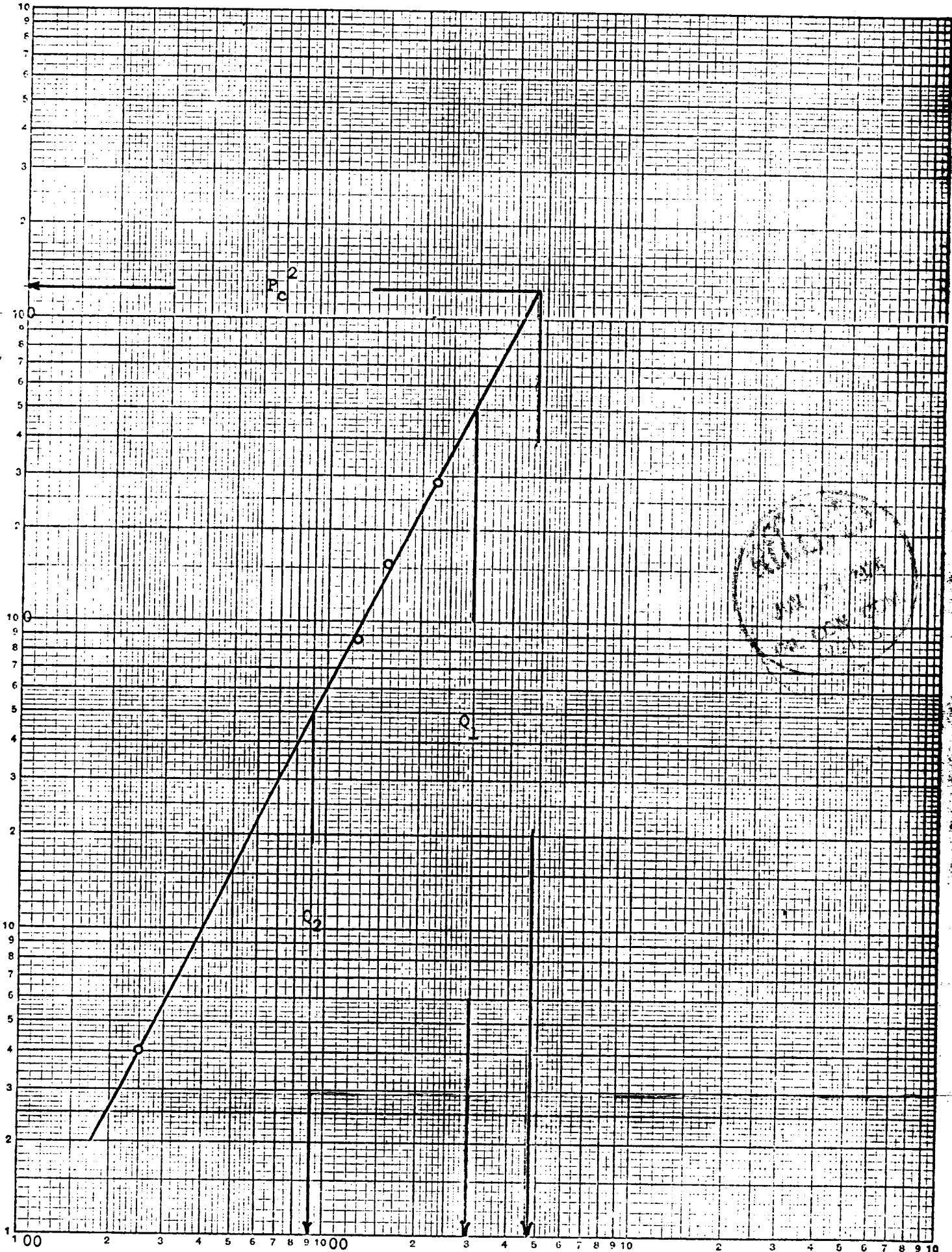
Approved by Commission:	Conducted by: Don Douglas & Joe Roberson	Calculated by: H L Hagler	Checked by:
WEST TEXAS CONSULTING SERVICE, INC.			



OPERATOR Lone Star Industries, Inc.
 LEASE Schalk '49'
 WELL NO. 3
 FIELD Wildcat
 COUNTY Rio Arriba, New Mexico
 DATE January 22, 1974

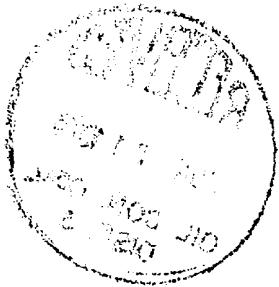
$P_C^2 - P_W^2$

K_{FE} LOGARITHMIC 46 7400
 1/2 CYCLES
 MADE IN U.S.A.
 ALUFFEL & ESSER CO.



Q in Mcf/Day
 $\theta = 62^\circ 43'$
 $n = .516$

Absolute Open Flow = 4738 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 49-3

Drilling Contractor - Arapahoe Drilling Company
Rig 2 - Pusher Doyle Castle

Location: 1190 feet FNL 790 feet FEL Section 23 30 N 4 W

Elevation: 7102 Gr. 7114 K B

County: Rio Arriba, New Mexico

Production Formation - Pictured Cliffs

Casing: 8-5/8 Surface @ 180' Cemented 170 sx neat w/2% Ca Cl
Cement Circulated
2-7/8 Production String @ 4450 cemented w/ 300 sx
HOWCO light 12 $\frac{1}{2}$ # Gilsonite followed by 100 sx Class A

Hole Size: 7-7/8 to top of Pictured Cliffs and 6-3/4 to T. D.

Logs: Schlumberger Compensated Formation Density Log with
Gamma Ray
Schlumberger Compensated Neutron-Formation Density
Log with Gamma Ray

Completion: Go International ran correlation log and perforated,
1 hole per foot, 4055-95, 3881-90, 3867-75, 3835-63
Frac: 500 gallons of 15% HCL followed by 750 sx sand
in 90,000 gallons w/WG-6 gelling agent
Formation broke down @ 3400#, treated 1# per gallon
3400# increasing to 3700#, back to 3500#, shut in @ 1100#
5 min 800#. Dropped 20 balls @ 50,000 gallons, no action,
15 balls @ 58,000 gallons, very little action, 15 balls
@ 65,000 gallons 150# increase. Left well shut in.
After about 18 hrs, opened up, well unloaded w/gas right
away.

Thomas S. Schalk

