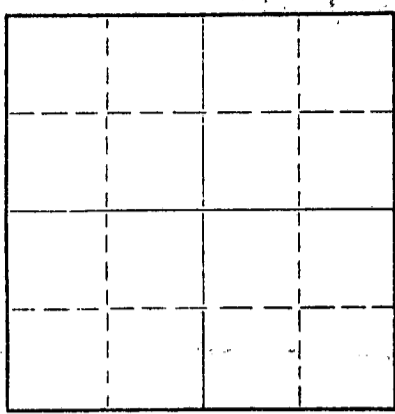


### WELL PLUGGING RECORD

STATE OF KANSAS  
 STATE CORPORATION COMMISSION  
 Give All Information Completely  
 Make Required Affidavit  
 Mail or Deliver Report to:  
 Conservation Division  
 State Corporation Commission  
 212 No. Market  
 Wichita, Kansas

Ellis County, Sec. 5 Twp. 11 Rge. 18 (E) (W)X  
 Location as "NE/CNW/SW" or footage from lines Center of NW/4



Locate well correctly on above Section Plat

Lease Owner Petroleum Management Inc.  
 Lease Name Cleve Well No. #1  
 Office Address Box 922, Great Bend, Kansas  
 Character of Well (completed as Oil, Gas or Dry Hole) \_\_\_\_\_  
 Date well completed \_\_\_\_\_ 19\_\_\_\_  
 Application for plugging filed \_\_\_\_\_ 19\_\_\_\_  
 Application for plugging approved \_\_\_\_\_ 19\_\_\_\_  
 Plugging commenced 9-9-69 19\_\_\_\_  
 Plugging completed 9-13-69 19\_\_\_\_  
 Reason for abandonment of well or producing formation \_\_\_\_\_

If a producing well is abandoned, date of last production \_\_\_\_\_ 19\_\_\_\_  
 Was permission obtained from the Conservation Division or its agents before plugging was commenced? \_\_\_\_\_

Name of Conservation Agent who supervised plugging of this well Leo Massey  
 Producing formation \_\_\_\_\_ Depth to top \_\_\_\_\_ Bottom \_\_\_\_\_ Total Depth of Well 3651' Feet  
 Show depth and thickness of all water, oil and gas formations.

#### OIL, GAS OR WATER RECORDS

#### CASING RECORD

FORMATION	CONTENT	FROM	TO	SIZE	PUT IN	PULLED OUT
				5 1/2"	3678'	814.31'
				8 5/8"	203'	

Describe in detail the manner in which the well was plugged, indicating where the mud fluid was placed and the method or methods used in introducing it into the hole. If cement or other plugs were used, state the character of same and depth placed, from \_\_\_\_\_ feet to \_\_\_\_\_ feet for each plug set.

Pumped plug with Halliburton. Mixed 15 sacks cement and pumped to 2830'. Squeezed hole with 15 sacks gel - 70 sacks cement - 5 sacks gel - 60 sacks cement to base of cellar.

RECEIVED  
 STATE CORPORATION COMMISSION  
 SEP 16 1969  
 CONSERVATION DIVISION  
 Wichita, Kansas

(If additional description is necessary, use BACK of this sheet)

Name of Plugging Contractor Southwest Casing Pulling Co.  
 Address Box 364, Great Bend, Kansas

STATE OF Kansas, COUNTY OF Barton, ss.  
Southwest Casing Pulling Co. (employee of owner) or (owner or operator) of the above-described well, being first duly sworn on oath, says: That I have knowledge of the facts, statements, and matters herein contained and the log of the above-described well as filed and that the same are true and correct. So help me God.

(Signature) W. C. Spencer Sec.  
Box 364, Great Bend, Kansas  
 (Address)

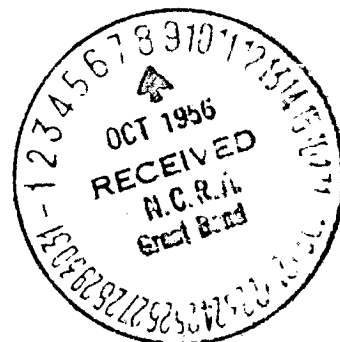
SUBSCRIBED AND SWORN to before me this 15 day of September, 19 69

My commission expires October 1972  
Sidney D. Miller  
 Notary Public.



GEOLOGICAL REPORT

NCRA #1 Cleave  
C NW/4 of Sec. 5-118-18W  
Ellis County  
Kansas



Rotary work commenced: September 20, 1956  
Rotary work completed: October 3, 1956  
Surface Casing: 8" 203 feet.

Samples were examined from 2900 feet to total depth. Drilling was supervised from 3250 feet to total depth. A 1 foot drilling time log was kept from 2900 feet to total depth.

All tops and zones of porosity were measured from the kelly bushing.

ELEVATION	2066 DF	2066 ID
TOPEKA (Electric Log)	3044 3050	-970 -970

There are no shows of oil or gas in the Topeka section.

HEEBNER (Electric Log)	3270 3270	-1200 -1200
TORONTO (Electric Log)	3267 3288	-1810 -1810
LANSING (Electric Log)	3309 3313	-1210 -1210

3313-3315 Limestone, white, cherty, oolitic, fossiliferous with fair porosity, fair show free oil and fair stain. No value. See DST #2.

DST #1 3310-3318

Miarun.

DST #2 3296-3318

Open 1 hour, recovered 30 feet oil spotted mud. DIP 60/30 minutes.

3345-3350

Limestone, white to cream, crystalline, granular, fair regular porosity, some oolitic porosity, fair show of free oil, fair odor, fair stain. No value. See DST #3.

3354-3356

Limestone, white, fossiliferous with fair regular porosity, show free oil, fair stain. No value. See DST #3.

DST #3 3317-3360

Open 1 hour, recovered 210 feet very slightly gas and oil cut mud. ISIP 1190/20 minutes, FSIP 1120/20 minutes.

REPA OF FLOW - PORE 2

- 3333-3360 Limestone, white, calcitic, fossiliferous. Good regular fossiliferous porosity with free oil, color and fair otolite. Recommended for further testing. Perforated from 3336-3360 by Schlumberger Electric Log.
- 3376-3382 Limestone, white to gray fossiliferous, calcitic, streaks of good regular porosity with show of free oil, good color and otolite. No value. See drill stem tests 04 and 05.
- 3384-3388 Same as above.
- TEST 04 3363-3390 Open 1 hour, recovered 1055 foot oil cut salt water, and 700 foot salt water. FP 210-11100, SIP 11450/20 minutes.
- TEST 05 3379-3390 Open 1 hour, recovered 1090 foot oil cut salt water. BSIP 11000/20 minutes, FP 1400 - 0200, PSIP 11350/20 minutes.
- 3394-3397 Limestone, white, good fossiliferous regular porosity, some fair pinpoint porosity. Good show free oil, color and otolite. No value. See EST 07.
- 3407-3412 Limestone, white, crystalline to cherty, fair to poor regular, to pinpoint porosity. Shows free oil, fair otolite. No value. See EST 07.
- TEST 06 3394-3418 Anomalous.
- TEST 07 3394-3419 Open 1 hour, recovered 120 foot oil cut salt water and 320 foot salt water. FP 200 - 1000, SIP 1000/20 minutes.
- 3407-3409 Limestone, white, calcitic, cherty, fair porosity. Shows free oil, light otolite. Judged to be of no commercial value.
- 3403-3470 Limestone, white to gray, crystalline, fossiliferous, with some regular and pinpoint porosity. Good show free oil, color, good otolite. Recommended for further testing. Perforated from 3403-3470 by Schlumberger Electric Log.
- 3401-3403 Limestone, gray, crystalline, fair pinpoint porosity. Free oil, very dark otolite. Judged to be of no commercial value.
- TEST 08 3407-3409 Open 1 hour, recovered 620 foot gas in drill pipe, and 100 foot heavily oil and gas cut mud. SIP 10000/20 minutes.
- 3403-3410 Limestone, gray, some crystalline, fossiliferous, good porosity with black free oil, fair otolite. No value. See EST 07.
- 3403-3409 Limestone, white, calcitic, fossiliferous with fair porosity and otolite. No value. See EST 07.

NERA #1 Cleve - Page 3

WST 49 348-3531

Open 1 hour, recovered 10 feet rotary mud and 2 feet heavy black free oil. SIP 505 $\frac{1}{2}$ /20 minutes.

BASE KANSAS CITY 353 $\frac{1}{4}$  -1146

CONGLOMERATE 361 $\frac{1}{4}$  -1516

SIMPSON 363 $\frac{1}{4}$  -1566

The Simpson section consisted of shale, sandstone, shaly sandstone, dolomite and sandy dolomite, with fair porosity with black tar. Judged to be of no commercial value.

ARBUCKLE 3676 -1608

Dolomite, tan to white, fine to coarse crystalline, compact. Some vugular porosity with very heavy black oil. Very faint odor, dark spotted stain. Judged to be of no commercial value.

ROTARY TOTAL DEPTH 3682 -1614

Run Schlumberger Gamma Ray, Lateral Log and Micro Lateral Log at TD.

SCHLUMBERGER TOTAL DEPTH 3681 -1613

5 $\frac{1}{2}$ " set at 3678 -1610

#### RECOMMENDATIONS FOR COMPLETION

Perforate from 3466-3470. Complete in this zone if commercial production is established. Upon depletion of this zone, perforate from 3366-3368.

NATIONAL COOPERATIVE REFINERY ASSOCIATION

  
Edgar A. Darrow  
Geologist

CAD:fw

CC: Keplinger and Wannenmacher  
Great Bend (2) —  
Ross Sears