KANSAS DRILLERS LOG & GEOLOGICAL REPORT

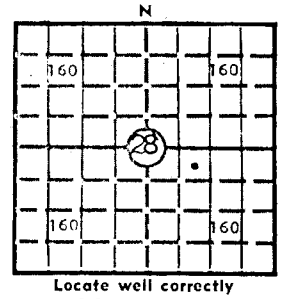
S. 28 T. 22 R. 16 E east W

API No. 15 — 031 (County) — 20614 (Number)

Loc. 40 ft. east NE, NW SE¼

County Coffey

640 Acres



Locate well correctly

Operator: LINCOLN - 77

Address: 8485 Kathy Lane, Lincoln, Nebraska 68506

Well No.: 2

Lease Name: Remer Riverside Farms, Inc.

Footage Location: 330 feet from (N) (S) line north; 1610 feet from (E) (W) line east line of SE¼ of 28

Principal Contractor: K & L Drilling Co. Neoshox Falls, Ks.

Geologist: Richard B. Schmidt

Spud Date: Dec. 1, 1976

Total Depth: 1030

P.B.T.D.: 1027

Elev.: Gr. 998 estimated from a USGS topo map DF KB

Date Completed: Dec. 22, 1976 w ithout fracing

Oil Purchaser: Mid-America Refining Co. Inc.

Fracing delayed since Frac people dwere too busy before ending of 1976

CASING RECORD Bad weather prevents Fracing well 6 inches of snow on ground 1/6 to 1/17/77

Report of all strings set — surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
fresh water protection	9½	7 inch		41.80ft	common	10	
Production for oil	6¼	4½ in.	10.5	1029	common	30	

Centralizers: ~~LINER~~ RECORD 1007 & 943 ft.

CORNISH PERFORATION RECORD Gamma Ray - N

Top, ft.	Bottom, ft.	Sacks cement

Shots per ft.	Size & type	Depth interval
2= total 15		994 to 1001

TUBING RECORD

Size	Setting depth	Packer set at

Well made 450 feet of oil in hole naturally and no water.

~~Not fractured yet~~ ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
80 gallons of 15 % Hydro Cl acid; 20 sacks of fine 12-30 sand; ~~(2,000 lbs.)~~	994 to 1001
130 sacks of medium 10 - 20 sand ~~(13,000 lbs.)~~ with 330 barrels of crude oil	
broke formation at 2100 lbs, frac pressure 1000 lbs. & dropped to 800 lbs for most of job.	

Excellent frac-job. by

INITIAL PRODUCTION Consolidated Oil Well, Chanute, Kansas

Date of first production	Producing method (flowing, pumping, gas lift, etc.)
February 24, 1977	flowing

RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio
	24 bbls.	5,000 MCF	none bbls.	CFPB

Disposition of gas (vented, used on lease or sold)	Producing interval(s)
vented	994 to 1001 feet

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator LINCOLN - 77, 8484 Kathy Lane Lincoln, Nebraska 68506		**DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:** Oil well
Well No. 2	**Lease Name** Remer Riverside Farms, Inc.	CORNISH - gamma ray -
S 28 T 22 R 16 E/W east		neutron log from 1027.4 to surface of ground

WELL LOG

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.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
Alluvium = fresh water sand	15	24	Alluvium	
Shale		195	Douglas	
Lime	195	240	LANSING	
Shale	240	324	Vilas	
Lime	324	340	Plattsburg	
Shale	340	354	Lane	
Lime	354	449	IOLA = KANSAS CITY	
Shale	449	488	Chanute	
Lime	488	564	Westerville & Winterset	
shale	564	570	Stark	
Lime	570	594	Swope	
shale	594	600	Hush	
Lime	600	616	Snibar of Hertha	
shale	616	621	Muncie Creek of Hertha	
lime BASE OF KANSAS CITY 626	621	626	Critzer of Hertha	
shale	626	782	~~Lenapah=k~~ Pleasanton	
Lime	806		Altamont	
Lime	872	903	Pawnee	
shale	903	906	Labette	
Lime	906	944	Higginsville = Ft. Scott	
shale	944	947	Little Osage	
Lime = five foot named locally	947	953	Black Jack Creek	
Shaele	953	957	EXCELLO = CHEROKEE top + 45	
Shale	957	988	Cherokee shale	
First lime cap rock	988	989		
Second lime cap rock 990	~~989~~	992		
OIL SAND cored from	993	1018	OIL SAND = LAGONDA, Squirrel	
Best Oil Sand = free gassy oil show	993	1001	+ 5	
Shale	1011	1030	Cherokee	

OIL FIELD RESEACH LABORATORIES, Chanute, Kansas, December 14, 1976

992.0 - 993.7 = Gray sandy shale [13.3 permable sand & 8.1 ft.
993.7 - 994.1 = Grayish brown laminated very shaly sandstone of Floodable sand.
994.1 - 994.6 = Dark fine grained slightly shaly sandstone = free gassy oil show
994.6 - 994.8 = Brownsish gray laminated very shaly sandstone " " " "
994.8 - 997.7 = Dark fine grained slightly laminated slightly shaly sandstone
997.7 - 997.9 = Brownish gray laminated very shaly sandstone " " " "
997.9 - 1001.5 = Dark fine grained slightly laminated slightly shaly sandstone ""
1001.5 - 1006.1 = Grayish brown laminated carbonaceous shaley sandstone

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.

Date Received

48.5 Average permeability
19.0 Average porosity
800. blls./A ft. oil content
2,164 blls/A ft. estimated primary ;& secondary recovery

Best sand is from 994 to 1001

Richard B Schmidt
Signature

Petroleum Geologist, Richard B. Schmidt
Title

January 17, 1977
Date

1219 College Avenue, Topeka, Kansas 66604