

State Geological Survey
WICHITA, BRANCH

KANSAS DRILLERS LOG

S. 19 T. 9 R. 20 W

API No. 15 — 163 — 20602
County Number

Loc. C 5E SW NW

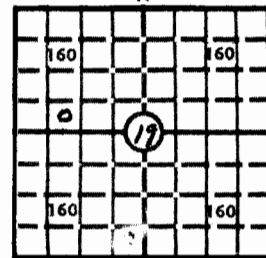
Operator
M.L. Brown Co.

County Rooks

Address
1500 Vickers KSBT Bldg. Wichita, Ks. 67202

640 Acres
N

Well No. 10 Lease Name Copeland



Footage Location
2310 feet from (N) line 990 feet from (W) line

Locate well correctly

Principal Contractor Abercrombie Drlg. Geologist Ed Donnelly

Elev.: Gr. 2271

Spud Date 3-17-76 Total Depth 3814 P.B.T.D.

Date Completed 4-22-76 Oil Purchaser Mobil

DF KB 2279

CASING RECORD

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
<u>Surface</u>	<u>12 1/4</u>	<u>8 7/8</u>	<u>28</u>	<u>223</u>	<u>Common</u>	<u>160</u>	<u>3% CCl.</u>
<u>Oil</u>	<u>7 7/8</u>	<u>5 1/2</u>	<u>14-15.5</u>	<u>3813</u>	<u>Poz (65-35)</u>	<u>150</u>	<u>10% Gilsonite / 5% 3/4% CCl, 10% Muc 1/2% Tuf Fiber</u>

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval

TUBING RECORD

Open Hole

Size	Setting depth	Packer set at
<u>2 7/8</u>	<u>1814</u>	

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
<u>110 GMA, 250 GMA w/1/2</u>	<u>3813-3814</u>

INITIAL PRODUCTION

Date of first production <u>4-27-76</u>	Producing method (flowing, pumping, gas lift, etc.) <u>Pump</u>		
RATE OF PRODUCTION PER 24 HOURS	Oil <u>13</u> bbls.	Gas <u>—</u> MCF	Water <u>163</u> bbls.
Disposition of gas (vented, used on lease or sold)		Producing interval (s) <u>Arbuckle</u>	

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 *M. L. Brown Co.*

DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:

Well No. *10*

Lease Name *Copeland*

Oil

S *19* T *9* R *20* W *Rocks County*

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
<p><i>See attached logs.</i></p> <p><i>Dresser Atlas</i></p> <p><i>1. GRN laterolog</i></p> <p><i>2. BHC Acoustilog</i></p> <p><i>Geol. strip log.</i></p>				

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

Date Received

Steve Park

Signature

Division Engr.

Title

7-22-74

Date

99770

OPERATOR: Maurice L. Brown Company
 CONTRACTOR: Abercrombie Drilling, Inc.
 WELL NAME: COPELAND #10
 LOCATION: C SE SW NW Sec. 19-9S-20W
 Rooks County, Kansas
 SPUD DATE: March 17, 1976
 COMPLETION DATE: March 27, 1976

0	70	Rock & Sand
70	620	Shale
620	1280	Shale & Sand
1280	1520	Sand
1520	1792	Shale
1792	1830	Anhydrite
1830	1995	Shale
1995	2266	Shale & Lime
2266	2466	Lime & Shale
2466	2630	Shale & Lime
2630	3193	Lime & Shale
3193	3286	Lime
3286	3381	Shale & Lime
3381	3528	Lime
3528	3563	Shale & Lime
3563	3702	Lime
3702	3715	Shale & Lime
3715	3731	Lime
3731	3802	Lime & Chert
3802	3815	Shale & Lime
	3815	Rotary Total Depth

Drilled 223' of 12 $\frac{1}{4}$ " hole. Ran 6 jts. 8 5/8" 28# used surface casing, Set @ 223' K.B. Tallied 221'. Cemented with 160 sx. Sunset cement. Ran 2 centralizers. Cement did circulate. Plug was down @ 3:30 p.m. March 17, 1976.
 Ran 118 jts. - 5 $\frac{1}{2}$ " casing, cemented with 150 sx. of 55/35. Plug was down @ 1:15 a.m. March 27, 1976.

SAMPLE TOPS:
 Anhydrite 1792'
 B/Anhydrite 1830'

STATE OF KANSAS)
) SS
 COUNTY OF SEDGWICK)

Jerry A. Langrehr, Executive Vice President of Abercrombie Drilling, Inc., does hereby state that the above and foregoing is a true and correct copy of the log of the COPELAND #10 C SE SW NW Section 19-9S-20W, Rooks County, Kansas.

ABERCROMBIE DRILLING, INC.