

State Geological Survey

WICHITA BRANCH KANSAS DRILLERS LOG

API No. 15 — 141 — 20,046
County Number

S. 19 T. 10S R. 15 W
Loc. 1200' FWL & 600' FWL
of NE 1/4
County Osborne

Operator
Graham-Michaelis Corporation

Address
P. O. Box 247, Wichita, Kansas 67201

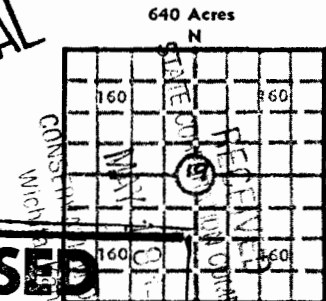
Well No. 4-19 Lease Name Locke

Footage Location
122 feet from (N) (X) line 600 feet from

Principal Contractor Red Tiger Drilling Company Geologist Harvey Gough

Spud Date August 17, 1978 Total Depth 3665 P.B.T.D. Date: APR 30 1982

Date Completed August 29, 1978 Oil Purchaser Koch Oil Company FROM CONFIDENTIAL



CONFIDENTIAL

RELEASED

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
To protect fresh water	12 1/2"	8 5/8"	24#	369' w/ 11' landing jt	common	225	2% gel, 3% cc
Production		4 1/2"	10 1/2#	3663			10% salt

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
none					
TUBING RECORD			2		3598-3601'
Size	Setting depth	Packer set at			
2 3/8"	3622.32				

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
none	

INITIAL PRODUCTION

Date of first production		Producing method (flowing, pumping, gas lift, etc.)			
		Pumping (State Test)			
RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio	
	90 bbls.	MCF	none bbls.	CFPB	
Disposition of gas (vented, used on lease or sold)			Producing interval (s)		

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.

PLEASE HOLD TIGHT

Operator Graham-Michaelis Corporation		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:	
Well No. 4-19	Lease Name Locke		Oil Well
S 19 T 10 R 15 W 1200' FNL & 600' FWL of NE $\frac{1}{4}$; Osborne Co.			
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

FORMATION

FROM

TO

PETRO-LOG

Radiation Guard Log

Borehole Compensated Sonic

Rock	0	53
Shale	53	370
Shale & Sand Streaks	370	590
Sand & Shale	590	786
Hard Sand	786	793
Shale	793	1125
Red Bed	1125	1232
Anhydrite	1232	1264
Shale	1264	1777
Shale & Lime	1777	2180
Lime & Shale	2180	3083
Lime	3083	3595
Conglomerate	3595	3665
RTD		3665

Drill Stem Test #1 - 3198-3240/90"

Rec.: 640' gas in pipe & 325' fluid (37' heavy oil & gas cut mud, 63' very heavy oil & gas cut mud, 189' muddy gassy oil)

IFP: 65-76/30"

FFP: 108-130#/60"

FSIP: 1109#/45"

FSIP: 1109#/90"

Drill Stem Test #2 - 3583-3605/90"

Rec: 1330' fluid (1015' clean oil;

126' heavy oil cut mud

189' mud cut oil

IFP: 140-259/30"

FFP: 335-519/60"

ISIP: 1024#/45"

FSIP: 1024#/90"

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

Date Received

Muriel F.C. Jeram

Signature

Geological Secretary

Title

December 7, 1979

Date

please hold info. tight

LE10L

19-10-15W

DRILLERS LOG

State Geological Survey
WICHITA, BRANCH

No. 4-19 Locke

CASING RECORD:

8 5/8" @ 369'
w/225 sx cement

4 1/2" @ 3,664'
w/175 sx cement

TOTAL DEPTH: 3,665'

COMPANY:

CONTRACTOR:

COMMENCED:

COMPLETED:

Graham-Michaelis Corporation

Red Tiger Drilling Company

August 16, 1978

August 25, 1978

DESCRIPTION:

1200' FNL & 600' FWL NE/4
Sec. 19-T10S-R15W
Osborne County, Kansas

ELEVATION: 2,047' GR

FORMATION

FROM

TO

REMARKS

Rock	0	53	
Shale	53	370	
Shale & Sand Streaks	370	590	
Sand & Shale	590	786	
Hard Sand	786	793	
Shale	793	1125	
Red Bed	1125	1232	
Anhydrite	1232	1264	
Shale	1264	1777	
Shale & Lime	1777	2180	
Lime & Shale	2180	3083	
Lime	3083	3595	
Conglomerate	3595	3665	
RTD		3665	

I certify that this is a true and correct copy of the above log to the best of my knowledge.

RED TIGER DRILLING COMPANY

Gloria Fawcett
Gloria Fawcett

Subscribed and sworn to before me this 29th day of August, 1978.

D'Ann Duran
Notary Public

RECEIVED