State Geological Survey
WICHITA BRANCH

15-065-20926

KANSAS DRILLERS LOG

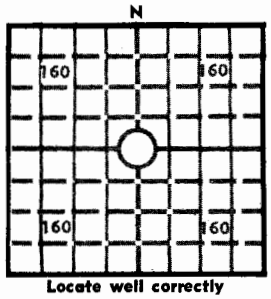
S. 6 T. 10 R. 24 E/W

API No. 15 — 065 (County) — 20,926 (Number)

Loc. NW NW NW

County Graham

640 Acres
N



Locate well correctly

Operator: Empire Drilling Co.

Address: 1750 Vickers KSB&T Building Wichita, Kansas 67202

Well No.	Lease Name
#4	Riedel

Footage Location: 440 feet from (N) ~~X~~ line 440 feet from ~~X~~ (W) line

Principal Contractor	Geologist
Murfin Drilling Company	Victor Reiserer

Spud Date	Total Depth	P.B.T.D.
June 11, 1977	4106	

Date Completed	Oil Purchaser
July 5, 1977	Mobil Oil Company

Elev.: Gr. 2507

DF _____ KB 2512

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
Surface	12 1/4	8 5/8	28#	191	60-40 Poz	175	2% gel 3% CC
Production	7 7/8	5 1/2	15.5#	4099	HLC 60-40 Poz A	100 175	2% gel 10% salt 3/4% CFR2 10# gil

LINER RECORD

Top, ft.	Bottom, ft.	Sacks cement

TUBING RECORD

Size	Setting depth	Packer set at
2 3/8	4055	

PERFORATION RECORD

Shots per ft.	Size & type	Depth interval
2	4" SDJ	3998-4003

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
500 gal MCA 2000 gal MOD 202	3998-4003

INITIAL PRODUCTION

Date of first production	Producing method (flowing, pumping, gas lift, etc.)
July 7, 1977	Pumping

RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio
	12 bbls.	MCF	3 bbls.	CFPB

Disposition of gas (vented, used on lease or sold)	Producing interval(s)
Vented	3998-4003

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.

C-10-1972

Operator	DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:
Empire Drilling Company	Oil

Well No.	Lease Name
4	Riedel

S 6 T 10S R 24 E/W

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
Surface soil, clay		35
sand		130
shale		660
shale, sand		1724
sand		1918
shale		3030
shale, lime		3485
lime		3595
shale, lime		3695
lime		4104
RTD		4104

DST #1 3806-25
Good blow off bottom. 30-30-30-30
Rec. 10' heavy oil cut mud. 1200' oilywtr. 1% oil.
IFP 359#, FFP 591#, ISIP 923#, FSIP 914#. Temp 121

DST #2 3847-66
Good blow bottom 1st open. Weak blow - died 30" 2nd open
Flushed. Weak blow 1" died. Rec. 1140' gas, 810' oil
IFP 89#, FFP 313#, No shut in pres. Temp. 121

DST #3 3874-3900
Open 60-60-60-60
Weak blow through out. Rec. 5' oil, 248' muddy salt water, few oil specks.
IFP 35#, FFP 161#, ISIP 627#, FSIP 618#. Temp 125

DST #4 3900-31
30-30-30-30
Weak blow 20 min. Rec. 20' watery mud w/ specks oil.
IFP 35#, FFP 44#, ISIP 672#, FSIP 654#, Temp 119

DST #5 3933-66
GB-BB 5" 60-60--60-60
Rec. 840' gas, 150' heavyoil gas cut mud, 120' oil, 600' gassy oily muddy water. 120' water. Gravity 37
IFP 54#, FFP 457#, ISIP 780#, FSIP 771#. Temp. 123

DST #6 3966-86
60-60-60-60
Weak blow 3" 1st open. Good blow 6" 2nd open.
Rec. 270' gas, 30' heavy oil cut mud, 60' muddy oil (SEE ABOVE)

NAME	DEPTH
Anhydrite	2156
Bse Anhydrite	2190
Howard	3492
Topeka	3556
Heebner	3772
Toronto	3785
Lansing	3812
Zone 2A	3839
Zone 3	3850
Zone 4	3890
Zone 5	3902
Zone 6	3950
Zone 6A	3974
Zone 7	3996
Zone 8	4018
Zone 9	4036
Log TD	4106
RTD	4104

DST #6 continued
IFP 27#, FFP 81#, ISIP 583#
FSIP 583#. Temp. 121

DST #7 4000-25
Open 60-60-60-60 Weak blow 1" 1st open. Fair blow 3" 2nd open. Rec. 10' gas, 110' gassy heavy oil cut mud. 20%
IFP 26#, FFP 80#, ISIP 1293#, FSIP 1194#. Temp 120

DST #8 4020-46
Open 30-30-30-30. Weak blow 20" first open. Weak blow 30" 2nd open. Rec. 20' watery oil cut mud.
IFP 34#, FFP 52#, ISIP 322#, FSIP 235#. Temp. 120

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

Date Received

J. C. Tokarska
Signature

Operations Manager
Title

August 12, 1977
Date

1608L