

State Geological Survey
WICHITA, BRANCH

KANSAS DRILLERS LOG

S. 2 T. 15 R. 14^{Ek}_W
 Loc. 100' EWL & 1111' NSL SE
 County Russell

API No. 15 — 167 — 20,865
County Number

Operator
National Cooperative Refinery Association

Address
Box 6 Great Bend, Kansas 67530

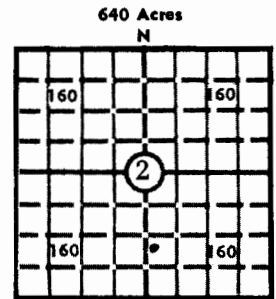
Well No. #15 Lease Name Michel "A"

Footage Location
100' EWL & 1111' NSL SE/4
feet from (N) (S) line feet from (E) (W) line

Principal Contractor Rains and Williamson Geologist J. C. Musgrove

Spud Date March 22, 1976 Total Depth 3352' P.B.T.D.

Date Completed April 30, 1976 Oil Purchaser



Locate well correctly
 Elev.: Gr. 1710'
 DF 1712' KB 1715'

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	17 1/2"	10 3/4"	32.75#	735'	50/50 Poz.	125	3% CaCl.
					Common	700	3% CaCl. 2% Gel
Production	7 7/8"	5 1/2"	15.5#	3226'	50/50 Poz.	150	18% Salt Saturated 3/4 of 1% CFR-2
					Howcolite	110	18% salt Saturated

LINER RECORD

PERFORATION RECORD

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

TUBING RECORD		
Size	Setting depth	Packer set at
2 7/8"	3231'	

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
2000 Gal. 15% Acid	3231'-3352' (Open Hole)

INITIAL PRODUCTION

Date of first production <u>SWD operations started</u>	Producing method (flowing, pumping, gas lift, etc.) <u>4-30-76</u>
RATE OF PRODUCTION PER 24 HOURS	Oil <u> </u> Gas <u> </u> Water <u> </u> Gas-oil ratio <u> </u>
	<small>bbls. MCF bbls. CFPB</small>
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.

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

Well No. 15 Lease Name Michel "A"

S 2 T 15 R 14 ^{XK} W 100' EWL and 1111' NSL SE/4

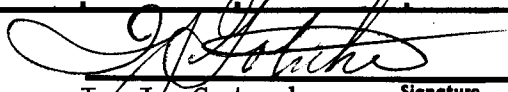
WELL LOG

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
Limestone; cream. Finely fossiliferous, chalky, spotty lt. brown stain.	2784'	2796'	Tops: Heebner	<u>Sample</u> 2856' <u>Log</u> 2856'
Limestone; white to gray. Fossiliferous, chalky, trace spotty lt. brown to dark black (dead) stain.	2805'	2828'	Toronto Douglas	2875' 2874' 2889' 2890'
Limestone; white to dirty gray, chalky slightly fossiliferous, scattered dark dead stain.	2875'	2882'	Lans.-KC Shaley Cong.	2923' 2924' 3186'
Sand; gray, fine grained, micaceous, shaley, spotty lt. brown stain.	2918'	2922'	Cherty Cong.	3204'
Limestone; gray, oolitic to fossiliferous, chalky trace spotty stain	2924'	2930'	Arbuckle	3218' 3214'
Limestone; gray to white. Oocastic good oocastic porosity, trace spotty stain at top.	2952'	2970'	Quartzite	3308' 3310'
Limestone; cream to white, oocastic, good oocastic porosity, trace lt. brown stain.	3016'	3028'	RTD	3352'
Chert; white, boney to mousey gray fossiliferous.	3050'	3060'		
Limestone; cream oolitic to oocastic, fair oocastic porosity, lt. spotty stain.	3072'	3082'		
Limestone; dirty gray. Fossiliferous even lt. brown stain.	3091'	3098'		
Limestone; cream oolitic, fair lt. brown stain.	3106'	3108'		
Limestone; gray to buff, oocastic, good even stain and saturation.	3114'	3121'		
Vari-colored shale and gray chalky limestone.	3187'	3204'		
Abundant vari-colored opaque chert plus vari-colored shale, traces of Gorham type sand, white med. to coarse grained, quartzitic,	3204'	3212'		

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

Date Received	
	I. J. Gotsche Signature District Superintendent Title
	May 4, 1976 Date

consolidated, poorly sorted,
abundant loose coarse quartz
grains, show of free oil and
lt. spotty stain.

Dolomite; white, med. to coarse crystalline, good inter- crystalline porosity, lt. brown to dark black stain, show of free oil and no odor in fresh samples.	3214'	3226'
Dolomite; as immediately above. Trace of gray coarse crystalline with good inter-crystalline porosity and lt. spotty stain.	3228'	3239'
Dolomite; gray to white, finely crystalline, arenaceous.	3242'	3246'
Increase in white med. crystalline Dolomite with spotty lt. brown stain.	3246'	3256'
Dolomite; white, highly arenaceous, plus gray med. crystalline Dolomite, good inter-crystalline porosity. No shows of oil.	3258'	3286'
Dolomite; white to gray, finely crystalline, cherty, arenaceous, spotty inter-crystalline porosity. No shows of oil.	3286'	3310'
Clear, pure quartz sandstone with traces of white to gray mica, highly fractured. No shows of oil.	3310'	3353'