



## GEOLOGIST'S REPORT

OPERATOR MURFIN DRILLING COMPANY, INC.  
LEASE KACIREK # 1-21  
LOCATION 1800 FNL & 2310 FEL  
SEC. 21 TWSP. 2S RGE 36W  
COUNTRY RAWLINS STATE KANSAS

FIELD WILDCAT

CONTRACTOR Murfin Drilling Company RIG NO. 14

MUD DISPLACED 3435 PINTS  
TIME REACHED 3000 TO 5100

SAMPLES SAVED FROM 3200 TO 5100

SAMPLES EXAMINED FROM 3201 TO 5100

GEOLOGIST ON WELL Paul Guenzelmann

FORMATION NAME TOP LOG SAMPLE

TOP DATUM TOP DATUM

ALL MEASUREMENTS

FROM KB.

CASING RECORD

Conductor Name Surface 8.58' @ 363'

Production None

ELECTRICAL SURVEYS:

Log-Tech, Inc.

Dual induction

Comp. Neutron

Micro-resistivity

Comp. Sonic

REMARKS

Drill Stem Testing: Trilobite Testing, Inc. (Mike Roberts, tester)

Gas Trailer: No Gas Trailer

Reserve Pit Chlorides: 1,000 PPM

API 15-153-20905-00-00

Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer)

Stonwell: 1000 ppm, LCM: 4#

Base/Anhydrite: 3285 (+70)

Neva: 3747 (-392)

Foraker: 3866 (-511)

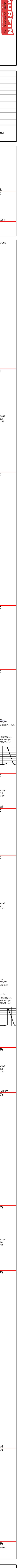
Stotler: 4020 (-665)

Topeka: 4094 (-739)

Pawnee: 4712 (-1357)

Cherokee: 4787 (-1432)

Mississippian: 4992 (-1637)



TOTAL DEPTH 5100 (-1745)

4:11 AM, 22 September 2012

Location: 1800 FNL & 2310 FEL SEC. 21 TWSP. 2S RGE 36W

Operator: MURFIN DRILLING COMPANY, INC.

Lease: KACIREK # 1-21

County: RAWLINS

State: KANSAS