



## GEOLOGIST'S REPORT

OPERATOR MURFIN DRILLING COMPANY, INC.  
LEASE KRAUS-STECKLEIN UNIT #1-28

LOCATION 2475 FNL & 1500 FWL  
SEC. 28 TWSP 14S RGE 18W

COUNTY ELLIS STATE KANSAS  
FIELD LEONHARDT

CONTRACTOR Murfin Drilling Company RIG NO. 16  
COMMENCED 4 Feb 2013 COMPLETED 13 Feb 2013  
MUD DISPLACED 2876 MUD TYPE Chemical

DRILLING TIME KEPT FROM 2980 TO 3790  
SAMPLES SAVED FROM 2980 TO 3790

ELECTRICAL SURVEYS:  
Pioneer Energy Services  
Dual Induction  
Comp. Neutron Density  
Micro-resistivity

CASING RECORD  
Conductor None  
Surface 8.58° @ 217'  
Production None

ALL MEASUREMENTS  
FROM K.B.

GL 2076 Ft.  
KB 2083 Ft.

REMARKS

GEOLIST ON WELL Paul Gunzelman

FORMATION NAME  
Stone Coral

DEPTH TOP DATUM TOP SAMPLE DATUM

TOPOKA  
Heebner Shale  
Toronto  
Lansing  
Base/Kansas City  
Arbuckle  
Total Depth

REMARKS

API 15-051-26474-00-00

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

Drill Stem Testing: Trilobite Testing, Inc.

Gas Trailer: No Gas Trailer

Reserve Pit Chlorides: 44,500 ppm.

DRILL TIME (MIN/FT)

DEPTH

LITHOLOGY

SHOWS

SAMPLE DESCRIPTIONS

REMARKS

1200

1250

1300

1350

1400

1450

1500

1550

1600

1650

1700

1750

1800

1850

1900

1950

2000

2050

2100

2150

2200

2900

2950

3000

3050

3100

3150

3200

3250

3300

3350

3400

3450

3500

3550

3600

3650

3700

3750

3800

3850

3900

1200

1250

1300

1350

1400

1450

1500

1550

1600

1650

1700

1750

1800

1850

1900

1950

2000

2050

2100

2150

2200

1200

1250

1300

1350

1400

1450

1500

1550

1600

1650

1700

1750

1800

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