

Robert D. Hendrix

Petroleum Geologist

GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY **Murfin Drilling Company Inc.**

LEASE **Burk Trust A #5-23**

FIELD **East Fork**

LOCATION **990Hl & 1650'W1**

SEC **23** TWP **1s** RGE **36W**

COUNTY **Rawlins** STATE **Kansas**

CONTRACTOR **Murfin Drilling Co. Inc. Rig #2**

SPUD **4/23/2014** COMP **5112014**

RTD **5/12/14** LTD **5/18/14**

MUD UP **3408'** TYPE MUD **Chemical**

SAMPLES SAVED FROM **3630'** TO **TD**

DRILLING TIME KEPT FROM **3630'** TO **TD**

SAMPLES EXAMINED FROM **3630'** TO **TD**

GEOLOGICAL SUPERVISION FROM **3630'**
GEOLOGIST ON WELL **Robert D. Hendrix**
Rosemary, Induction, Micro Stone

| FORMATION TOPS | ELECTRIC LOG | SAMPLE |
|----------------|--------------|--------------|
| Anhydrite | 3170 (.98) | 3173 (-693) |
| Neva | 3657 (.984) | 3657 (-697) |
| Foraker | 3720 (.502) | 3721 (-503) |
| Topeka | 3986 (.718) | 3988 (-720) |
| Oread | 4098 (.835) | 4102 (-834) |
| Lansing | 4198 (.893) | 4202 (-934) |
| Stark Shale | 4421 (1.153) | 4423 (-1156) |
| BKC | 4470 (1.202) | 4475 (-1207) |
| Arbuckle | 5002 (1.734) | |

ELEVATIONS

KB **2926'**

DF _____

GL **3257'**

Measurements are All From **Kelly Bushing**

CASING

CONDUCTOR _____

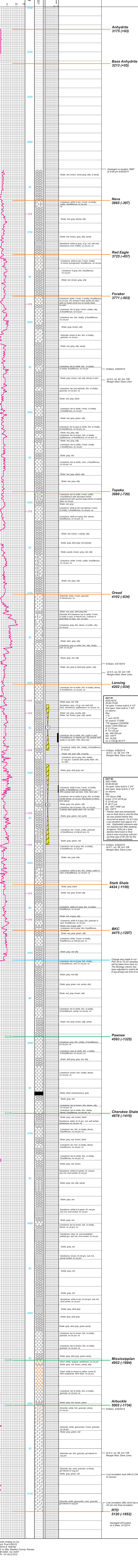
SURFACE **8,582'** at **2627'**

PRODUCTION C **112'** at **3117'**

ELECTRICAL SURVEYS

| FORMATION TOPS | ELECTRIC LOG | SAMPLE |
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REMARKS:

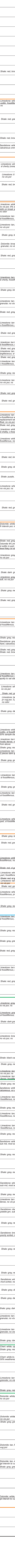


LEGEND

Legend symbols for Lithology: Anhydrite (cross-hatch), Sandstone (vertical lines), Limestone (horizontal lines), Shale (horizontal dashes), Carb Sh (diagonal lines), Cherty LS (diagonal lines with dots), Chert (triangles), Dolomite (wavy lines).

DRILLING TIME IN MINUTES PER FOOT

Rate of Penetration Decreases



FORMATION TOPS

3170 (.98), 3657 (.984), 3720 (.502), 3986 (.718), 4098 (.835), 4198 (.893), 4421 (1.153), 4470 (1.202), 5002 (1.734)

Murfin Drilling Co Inc
Burk Trust A #5-23
990Hl & 1650'W1
23-1s-36w, Rawlins County, Kansas
KB=3268', GL=3257'
API# 15-153-21010