

Robert D. Hendrix

Petroleum Geologist

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY **Murfin Drilling Co. Inc.**

LEASE **Mary Ann #2-1**

FIELD **KB 30951**

LOCATION **3307fml & 15207fml**

SEC **1** TWPSP **1S** RGE **96W**

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

CONTRACTOR **Murfin Drilling Co. Inc. rig #14**

SPUD **7/30/2013** COMP **8/8/2013**

RTD **44:20'** LTD **4410'**

MUD UP **3:40'** TYPE MUD **Chemical**

SAMPLES SAVED FROM **3400'** TO **4420'**

DRILLING TIME KEPT FROM **3400'** TO **4420'**

SAMPLES EXAMINED FROM **3400'** TO **4420'**

GEOLOGICAL SUPERVISION FROM **3462'**

GEOLOGIST ON WELL **Robert D. Hendrix**

FOUNDED/INDUSTRIAL/MINOR/SOME **Pioneer Energy Services**

FORMATIONS TOPS

ANHYDRITE **3026 (-69)** **3028 (-67)**

NEVA **3507 (-112)** **3513 (-118)**

FORAKER **3616 (-121)** **3618 (-123)**

TOPEKA **3826 (-133)** **3830 (-135)**

OREAD **3940 (-145)** **3940 (-145)**

LANSING **4044 (-149)** **4048 (-153)**

STARK SHALE **4262 (-167)** **4263 (-168)**

BKC **4318 (-1223)** **4319 (-1224)**

ELEVATIONS

KB 30951

DF

GL 3085'

Measurements Are All From Kelly Busting

CASING

CONDUCTOR

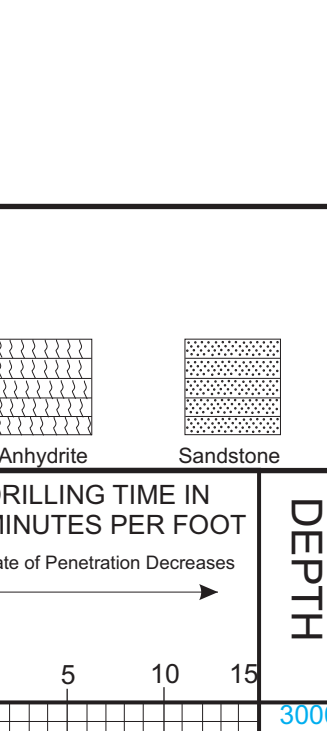
SURFACE 8-7/8" @ 223'

PRODUCTION 5-1/2"

ELECTRICAL SURVEYS

Pioneer Energy Services

AP7# 15-153-20933



REMARKS: It is recommended that casing be set to further evaluate the D zone. Due to extreme rain the Pioneer Logging truck was stuck and the hole remained open for 6 hours providing the 10' of fill difference seen between the RTD and LTD.

LEGEND

