



GEOLOGISTS' REPORT

OPERATOR **MURFIN DRILLING COMPANY, INC.**
LEASE **MUNN #1-12**
ELEVATIONS
KB **3228 Ft.**

LOCATION **1770 FSL & 450 FEL**
SEC. **12** TWP **2S** RGE **38W**
COUNTY **CHEYENNE** STATE **KANSAS**
FIELD **SAWYER CANYON**

CONTRACTOR **Murfin Drilling Company** REG. NO. **3**
COMMENCED **1 June 2016** COMPLETED **12 June 2016**
MUD LOGGING AGENCY **3222** MUD TYPE **Chemical**
SAMPLING METHOD **FROM** **3520** TO **4860**
SAMPLER EXAMINED **FROM** **3520** TO **4860**

GEOLOGICAL SUPERVISION FROM **3478** TO **4860**
GEOLOGIST ON WELL **Paul Guzdalian**
FORMATION **LOG** **SAMPLE**
STORE CORRAL **3195** **+89** **3172** **+91**
Base/Anhydrite **3198** **+60** **3172** **+66**
Foraker **3718** **-490** **3720** **-492**
Oread **3988** **-710** **3940** **-712**
Lansing **4085** **-925** **4090** **-928**
Base/Kansas City **4153** **-925** **4156** **-928**
Pawnee **4432** **-1204** **4436** **-1208**
Cherokee **4559** **-1331** **4564** **-1336**
Total Depth **4630** **-1412** **4638** **-1410**
4888 **-1630** **4860** **-1632**

FORMATION	LOG	SAMPLE
NAME	TOP	DEPTH
Store Corral	3195	+89
Base/Anhydrite	3198	+60
Foraker	3718	-490
Oread	3988	-710
Lansing	4085	-925
Base/Kansas City	4153	-925
Pawnee	4432	-1204
Cherokee	4559	-1331
Total Depth	4630	-1412
	4888	-1630
	4860	-1632

DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS
3100			
3150			
3200			
3500			
3600			
3650			
3700			
3750			
3800			
3850			
3900			
3950			
4000			
4050			
4100			
4150			
4200			
4250			
4300			
4350			
4400			
4450			
4500			
4550			
4600			
4650			
4700			
4750			
4800			
4850			
4900			

REMARKS
API 15-023-21451-00-00
Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer)
Drill Stem Testing: Triolite Testing, Inc. (James Winder, tester)
Gas Trailer: No Gas Trailer
Reserve Pit Chlorides: 700 PPM

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BASE/ANHYDRITE
3172 (+56)

NEVA
3602 (-377)

RED EAGLE
3672 (-444)

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3720 (-492)

STOTLER
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