

# Jeff Christian

## PETROLEUM GEOLOGIST

Wichita, Kansas

### GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR **MURKIN DRILLING COMPANY**  
 LEASE **WESSSEL # 1-18**  
 LOCATION **630' FSI & 2015' FWL**

SEG. **18** TWSP **4 S** RING **29 W**  
 COUNTY **DECATUR** STATE **KANSAS**  
 FIELD **WILD CAT**  
 API **15-039-21150**

CONTRACTOR **MURKIN** RIG NO. **8**  
 DRILLING STARTED **06/05/2012** COMPLETED **06/12/2012**  
 MUD DISGAGED **3133'** MUD TYPE **CHEMICAL**  
 DRILLING TIME/FEET FROM **3560'** TO **RTD**  
 DRILLING TIME/FEET FROM **3580'** TO **RTD**  
 SAMPLES SAVED FROM **3580'** TO **RTD**  
 SAMPLES EXAMINED FROM **3580'** TO **RTD**  
 GEOLOGICAL SUPERVISION FROM **3645'** TO **RTD**

MEASUREMENTS FROM LAB  
 CASING RECORD  
 CONDUIT **NONE**  
 SURFICE **8.5' @ 218'**  
 WT / 95 SX  
 PRODUCTION **NONE**

FORMATION NAME LOG DATE TIME TOP DATE TIME TOP DATE TIME TOP  
 ANHYDRITE 2551' (-207) 2550' (-208)  
 TOPEKA 3664' (-906) 3660' (-902)  
 HEBNER 3833' (-1073) 3831' (-1073)  
 LANSTING 3882' (-1124) 3882' (-1124)  
 STARK 4038' (-1278) 4036' (-1278)  
 BKC 4083' (-1323) 4082' (-1323)  
 PAWNEE 4191' (-1433) 4185' (-1427)  
 CHEROKEE 4280' (-1522) 4277' (-1519)  
 MISSISSIPPIAN 4394' (-1636) 4394' (-1636)  
 MISSISSIPPIAN 4452' (-1694) 4450' (-1692)

ELEVATIONS  
 BK **2758'**  
 GL **2753'**

DATE	7:00 AM DEPTH	REMARKS
6/5/12	MIRT	SPUD 2:30 pm
6/6/12	560'	DRLG dev 1/2 deg. @ 218'
6/7/12	2420'	DRLG
6/8/12	3390'	DRLG
6/9/12	3914'	CFS dev 1/4 deg
6/10/12	3956'	TIH for DST # 2
6/11/12	4064'	OB w/ DST # 3
6/12/12	4310'	CFS RTD 4450' @ 2:15 pm dev 1/2 deg. Finish Logging 2:00 am 6/13/12 P&A

**Remarks**  
 The Wessel # 1-18 was declared dry and abandoned.  
 All sample shows of oil were condemned by drill stem tests.

Electric log measurements correlate about 2' deep compared to rotary measurements.  
 Sample tops adjusted to the electric log.

Samples deposited at the Kansas Geological Survey.

Respectfully Submitted,  
*Jeff Christian*  
 Jeff Christian

LITH	DRILL TIME (MIN-FT)	DEPTH	SAMPLE DESCRIPTIONS	REMARKS
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