

**KEVIN L. KESSLER**  
**CONSULTING PETROLEUM GEOLOGIST**  
**( 316 ) 522-7338**

**OPERATOR : MULL DRILLING COMPANY INC.**  
**LEASE : JONES 'A' WELL # : 1 - 30**  
**LOCATION : 1249' FSL & 1136' FEL**  
**SEC: 30 TWP : 16 S RGE : 22 W**  
**COUNTY : NESS STATE : KANSAS**

**ELEVATION**  
**KB : 2445**  
**GL : 2440**  
MEASUREMENTS FROM  
**KB**

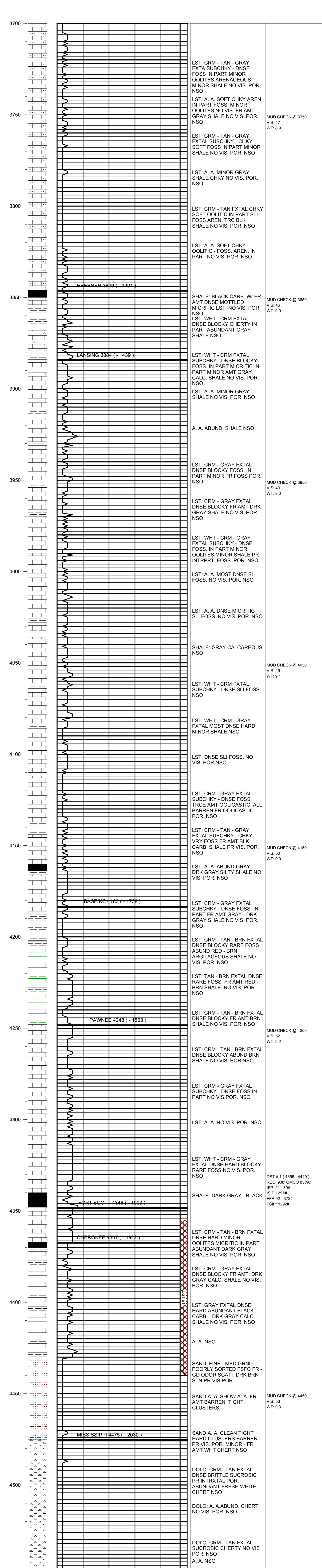
**CONTRACTOR : W W DRILLING RIG # 10**  
**COMM : 02 / 23 / 2011 COMP : 02 / 28 / 2011**  
**RTD : 4550 LOG TD : 4552**  
**SAMPLES SAVED FROM : 3700 TO: RTD**  
**GEOLOGICAL SUPERVISION FROM : 3700 TO : RTD**  
**MUD UP : 3600 TYPE MUD : CHEMICAL**

**CASING RECORD**  
**SURFACE :**  
**8 5/8" @ 227**  
**PRODUCTION :**  
**5 1/2" @ 4550**

**ELECTRICAL SURVEYS:**  
**DIL**  
**CNL / CDL**  
**MICRO**  
**SONIC**

FORMATION	TOP	LOG	DATUM	TOP	SAMPLE	DATUM	STRUCT. COMP.
HEEBNER	3846		- 1401	3846		- 1401	- 15
LANSING	3884		- 1439	3884		- 1439	- 14
B/KC	4183		- 1738	4183		- 1738	- 11
PAWNEE	4248		- 1803	4248		- 1803	- 03
FT SCOTT	4348		- 1903	4348		- 1903	- 08
CHEROKEE	4367		- 1922	4367		- 1922	- 09
MISSISSIPPI	4475		- 2030	4475		- 2030	- 19

**REFERENCE WELL FOR STRUCTURAL COMPARISON :**  
**MULL DRILLING # 1 - 30 JONES UNIT SEC. 30 - T 16S - R 22W NESS COUNTY KANSAS**



LST: CRM - TAN - GRAY FXTA SUBCHKY - DNSE FOSS IN PART MINOR OOLITES ARENACEOUS MINOR SHALE NO VIS. POR. NSO

LST: A. A. SOFT CHKY AREN IN PART FOSS. MINOR OOLITES NO VIS. FR AMT GRAY SHALE NO VIS. POR. NSO

LST: CRM - TAN - GRAY FXTAL SUBCHKY - CHKY SOFT FOSS IN PART MINOR SHALE NO VIS. POR. NSO

LST: A. A. MINOR GRAY SHALE CHKY NO VIS. POR. NSO

LST: CRM - TAN FXTAL CHKY SOFT OOLITIC IN PART SLI FOSS AREN. TRC BLK SHALE NO VIS. POR. NSO

LST: A. A. SOFT CHKY OOLITIC - FOSS. AREN. IN PART NO VIS. POR. NSO

**HEEBNER 3846 (- 1401)**

SHALE: BLACK CARB. W/ FR AMT DNSE MOTTLED MICRITIC LST. NO VIS. POR. NSO

LST: WHT - CRM FXTAL DNSE BLOCKY CHERTY IN PART ABUNDANT GRAY SHALE NSO

**LANSING 3884 (- 1439)**

LST: WHT - CRM FXTAL SUBCHKY - DNSE BLOCKY FOSS. IN PART MICRITIC IN PART MINOR AMT GRAY CALC. SHALE NO VIS. POR. NSO

LST: A. A. MINOR GRAY SHALE NO VIS. POR. NSO

A. A. ABUND. SHALE NSO

LST: CRM - GRAY FXTAL DNSE BLOCKY FOSS. IN PART MINOR PR FOSS POR. NSO

LST: CRM - GRAY FXTAL DNSE BLOCKY FR AMT DRK GRAY SHALE NO VIS. POR. NSO

LST: WHT - CRM - GRAY FXTAL SUBCHKY - DNSE FOSS. IN PART MINOR OOLITES MINOR SHALE PR INTRPR. FOSS. POR. NSO

LST: A. A. MOST DNSE SLI FOSS. NO VIS. POR. NSO

LST: A. A. DNSE MICRITIC SLI FOSS. NO VIS. POR. NSO

SHALE: GRAY CALCAREOUS NSO

LST: WHT - CRM FXTAL SUBCHKY - DNSE SLI FOSS NSO

LST: WHT - CRM - GRAY FXTAL MOST DNSE HARD MINOR SHALE NSO

LST: DNSE SLI FOSS. NO VIS. POR. NSO

LST: CRM - GRAY FXTAL SUBCHKY - DNSE FOSS. TRCE AMT OOLICASTIC ALL BARREN FR OOLICASTIC POR. NSO

LST: CRM - TAN - GRAY FXTAL SUBCHKY - CHKY VRY FOSS FR AMT BLK CARB. SHALE PR VIS. POR. NSO

LST: A. A. ABUND GRAY - DRK GRAY SILTY SHALE NO VIS. POR. NSO

**BASE/KC 4183 (- 1738)**

LST: CRM - GRAY FXTAL SUBCHKY - DNSE FOSS. IN PART FR AMT GRAY - DRK GRAY SHALE NO VIS. POR. NSO

LST: CRM - TAN - BRN FXTAL DNSE BLOCKY RARE FOSS ABUND RED - BRN ARGILACEOUS SHALE NO VIS. POR. NSO

LST: TAN - BRN FXTAL DNSE RARE FOSS. FR AMT RED - BRN SHALE NO VIS. POR. NSO

LST: CRM - TAN - BRN FXTAL DNSE BLOCKY FR AMT BRN SHALE NO VIS. POR. NSO

LST: CRM - TAN - BRN FXTAL DNSE BLOCKY ABUND BRN SHALE NO VIS. POR. NSO

LST: CRM - GRAY FXTAL SUBCHKY - DNSE FOSS IN PART NO VIS. POR. NSO

LST: A. A. NO VIS. POR. NSO

LST: WHT - CRM - GRAY FXTAL DNSE HARD BLOCKY RARE FOSS NO VIS. POR. NSO

SHALE: DARK GRAY - BLACK

**FORT SCOTT 4348 (- 1903)**

**CHEROKEE 4367 (- 1922)**

LST: CRM - TAN - BRN FXTAL DNSE HARD MINOR OOLITES MICRITIC IN PART ABUNDANT DARK GRAY SHALE NO VIS. POR. NSO

LST: CRM - GRAY FXTAL DNSE BLOCKY FR AMT. DRK GRAY CALC. SHALE NO VIS. POR. NSO

LST: GRAY FXTAL DNSE HARD ABUNDANT BLACK CARB. - DRK GRAY CALC. SHALE NO VIS. POR. NSO

A. A. NSO

SAND: FINE - MED GRND POORLY SORTED FSFO FR - GD ODOR SCATT DRK BRN STN PR VIS POR.

SAND A. A. SHOW A. A. FR AMT BARREN TIGHT CLUSTERS

SAND A. A. CLEAN TIGHT HARD CLUSTERS BARREN PR VIS. POR. MINOR - FR AMT WHT CHERT NSO

DOLO: CRM - TAN FXTAL DNSE BRITTLE SUCROSIC PR INTRXTAL POR. ABUNDANT FRESH WHITE CHERT NSO

DOLO: A. A. ABUND. CHERT NO VIS. POR. NSO

DOLO: CRM - TAN FXTAL SUCROSIC CHERTY NO VIS. POR. NSO

A. A. NSO

MUD CHECK @ 3750  
VIS: 47  
WT: 8.9

MUD CHECK @ 3850  
VIS: 46  
WT: 9.0

MUD CHECK @ 3950  
VIS: 49  
WT: 9.0

MUD CHECK @ 4050  
VIS: 49  
WT: 9.1

MUD CHECK @ 4150  
VIS: 50  
WT: 9.0

MUD CHECK @ 4250  
VIS: 52  
WT: 9.2

MUD CHECK @ 4450  
VIS: 53  
WT: 9.3

DST # 1 ( 4355 - 4440 )  
REC: 938' GMCO 85%O  
IFP: 21 - 89#  
ISIP: 1297#  
FFP: 92 - 372#  
FSIP: 1292#

RTD = 4550 LTD = 4552

**COMMENTS:**

5 1/2 " PRODUCTION CASING WAS SET TO FURTHER EVALUATE  
 THE PRODUCTIVITY OF THIS WELL

KEVIN L. KESSLER