## **GEOLOGIST'S REPORT** DRILLING TIME AND SAMPLE LOG **ELEVATION** KB: 2188' **BACH OIL PRODUCTION** GL: 2183' WELL: O'NIELL A #3 LOG MEASURED FROM: KB LOC .: 1450' FNL & 1400 FWL SEC. 23-1-18W SURFACE CASING PHILLIPS COUNTY, KANSAS 8 5/8" surface csg. Set @218' KB. API: 15-147-20645-00-00 Cem. w/150sx Common, 3% CC, 2% Gel. PRODUCTION CASING DRILLING CONTR.: MURFIN RIG #16 SPUD: 05-23-11 COMP: 05-27-11

MUD UP: 3000' TYPE MUD: CHEM.

SAMPLES SAVED: 3150'-RTD

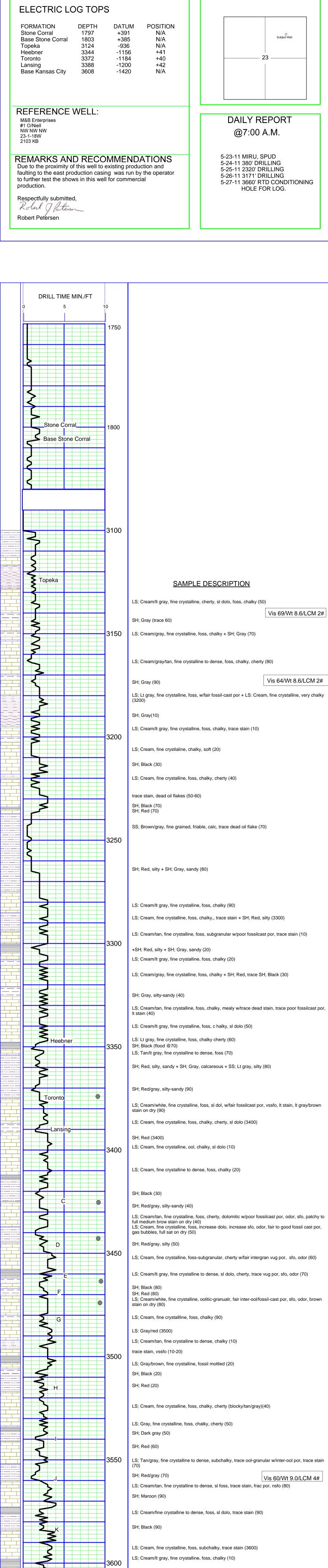
DRILL TIME: 3100-RTD

RTD: 3660' LTD:3658'

**RAG** GEOLOGIST: ROBERT J. PETERSEN **ELECTRIC LOG TOPS** DEPTH **FORMATION** DATUM **POSITION** 1797 Stone Corral +391 N/A O Subject Well N/A Base Stone Corral 1803 +385 Topeka 3124 -936 N/A Heebner 3344 -1156 +41 23 +40 Toronto 3372 -1184 3388 -1200 +42 Lansing Base Kansas City 3608 -1420 N/A REFERENCE WELL: DAILY REPORT M&B Enterprises #1 O/Niell NW NW NW @7:00 A.M. 23-1-18W 2103 KB

5 1/2" Production set

WELL LOG SURVEYS



sl dol (20)

3650

BKC

RTD

SH; Black (30)

SH; Red/gray, silty (30)

LS; Gray, fine crystalline, dolo (40)

SH; Red/gray, silty-sandy (60)

SH; Red/gray, silty-sandy + SS; Gray,fine grained, angular, hard + SH; Black (50)

VIS 61/Wt 9.1

LS; Gray, fine crystalline, foss + LS; Cream, fine crystalline, chalky (60)