

## GEOLOGIST'S REPORT

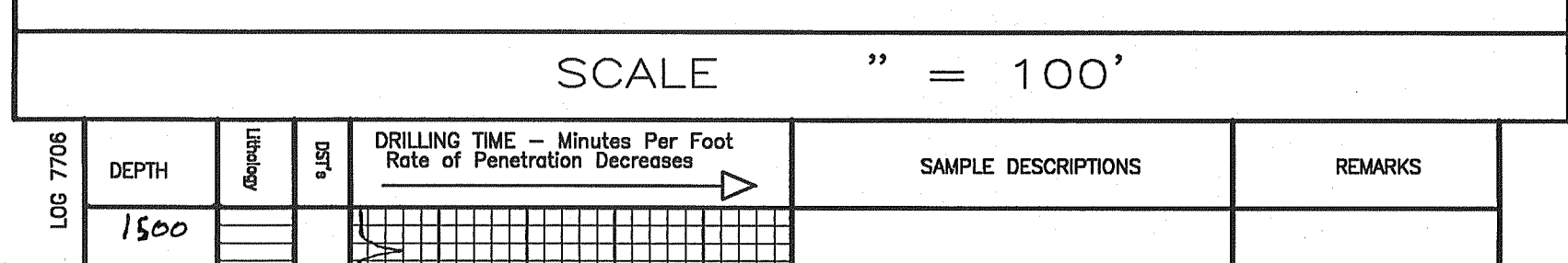
DRILLING TIME AND SAMPLE LOG

|                                    |  |
|------------------------------------|--|
| COMPANY: Range Oil Co., Inc.       | ELEVATIONS: KB 1458'                     |
| LEASE: Jacobson #1                 | DF: 1452'                                |
| FIELD: 280' FUL + 1570' FUL        | GL: 1452'                                |
| LOCATION: 280' FUL + 1570' FUL     | MEASUREMENTS ARE ALL FROM KB             |
| SEC: 31 TWP: 19 S RCE: 6 E         | CONTRACTOR: C & G Drilling Co. Rig #1    |
| COUNTY: Classie STATE: KS          | PRODUCTION: 2306' @ 2306'                |
| SPUD: 6-8-15 COMP: LTD 2310        | ELECTRICAL SURVEYS: AS, D, M, L          |
| RTD: 2310                          | MUD UP: 1570' TYPE MUD: CHEM             |
| SAMPLES SAVED FROM: 1570 TO RTD    | DRILLING TIME KEPT FROM: 1500 TO RTD     |
| SAMPLES EXAMINED FROM: 1570 TO RTD | GEOLOGICAL SUPERVISION FROM: 1600 TO RTD |
| GEOLOGIST ON WELL: Ken Wallace     |  |

| FORMATION TOPS | LOG         | SAMPLES |
|----------------|-------------|---------|
| Lansing        | 1594 (-136) |         |
| B/KC           | 1930 (-472) |         |
| Cherokee       | 2096 (-638) |         |
| Conq. Sd       | 2116 (-658) |         |
| Viola          | 2166 (-708) |         |
| Smp Sd         | 2240 (-782) |         |
| ML Smp Sd      | 2300 (-842) |         |
| ML Smp Sd      | 2306 (-848) |         |
| RTD            | 2310 (-853) |         |

REMARKS: Production casing set to further evaluate Viola.

6/2/15 MTR  
 6/8/15 10 am - Spud  
 6/9/15 8 am - Drig @ 971'; Set 2.10' surface casing  
 1/2" @ 559' A  
 6/10/15 9 am - Drig @ 1899' 1/4" @ 1055' + 1570'  
 6/11/15 8:30 am - RTD 2180', Running DST #1 2169'-2180'; 1/2" @ 2048'  
 6/12/15 8 am - Drig @ 2157', Ran DST #2 2172'-2190'  
 Set 5.5" casing @ 2306'; PD @ 8:29 pm



SCALE " = 100'

