

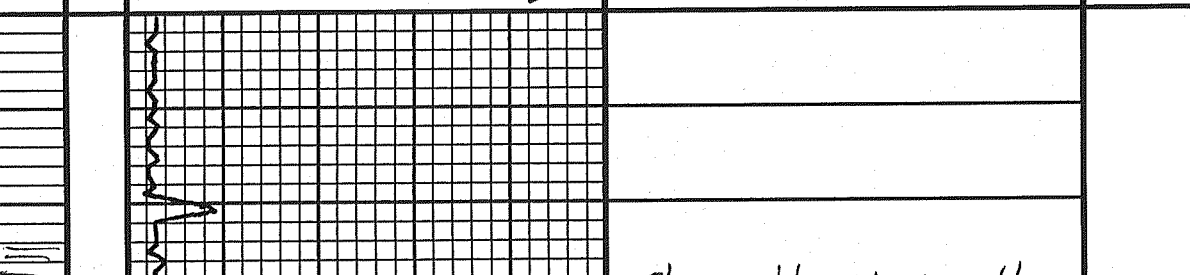
# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

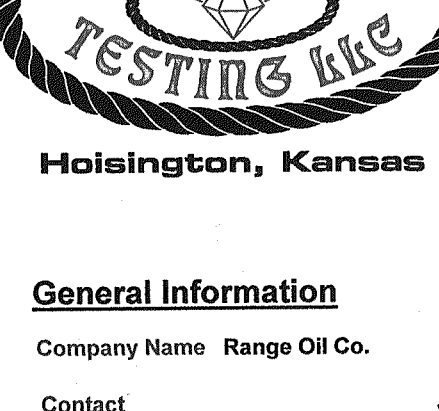
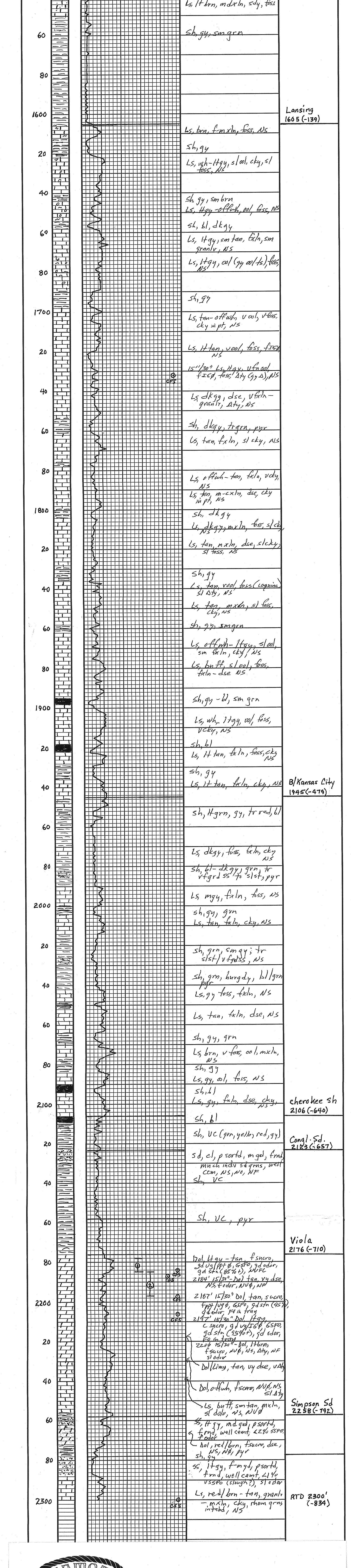
|                             |                              |             |                     |
|-----------------------------|------------------------------|-------------|---------------------|
| COMPANY                     | Range Oil Co., Inc.          | ELEVATIONS  |                     |
| LEASE                       | Madden Unit #3               | KB          | 1466'               |
| FIELD                       | Panther Ranch SW             | DE          | 1460'               |
| LOCATION                    | 2142' EWL + 1530' EWL, NW1/4 | CI          | 1460'               |
| SEC                         | 31 T19S R19E G6E             | FROM        | KA                  |
| COUNTY                      | Chase                        | STATE       | KS                  |
| CONTRACTOR                  | C+G Drilling Co. Rig #1      | CASING      | 8 1/2" 22.5 / 1805x |
| SPUD                        | 11-17-14                     | COMP        | 11-23-14            |
| RTD                         | 2300'                        | LTD         | 2298'               |
| MUD UP                      | 1500'                        | TYPE MUD    | Claym               |
| 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     |                     |
| B/KC                        | 1604 (-178)                  | 1645 (-113) |                     |
| B/KC                        | 1535 (-473)                  | 1445 (-473) |                     |
| Cherokee Sh                 | 2102 (-657)                  | 2106 (-657) |                     |
| Viola                       | 2173 (-707)                  | 2176 (-710) |                     |
| Simpson Sd                  | 2153 (-787)                  | 2258 (-834) |                     |
| RTD                         | 2288 (-832)                  | 2300 (-834) |                     |
| LTD                         |                              |             |                     |

REMARKS: Production pipe set to further evaluate Viola.   
 11-14-14 - MRET   
 11-17-14 - Preparing to drill surface hole   
 11-18-14 - Drig @ 255', 74' @ 216'   
 11-19-14 - Drig @ 1000', 74' @ 872'   
 11-20-14 - Drig @ 1716', 74' @ 1338'   
 11-21-14 - Drig @ 2104', 74' @ 1848'   
 11-22-14 - RTD 2197' casing DST#2   
 11-23-14 - RTD 2300' Ran Pinner E-log; set 5 1/2" csg @ 2297' by 1805x. PD @ 9:03am

## LEGEND



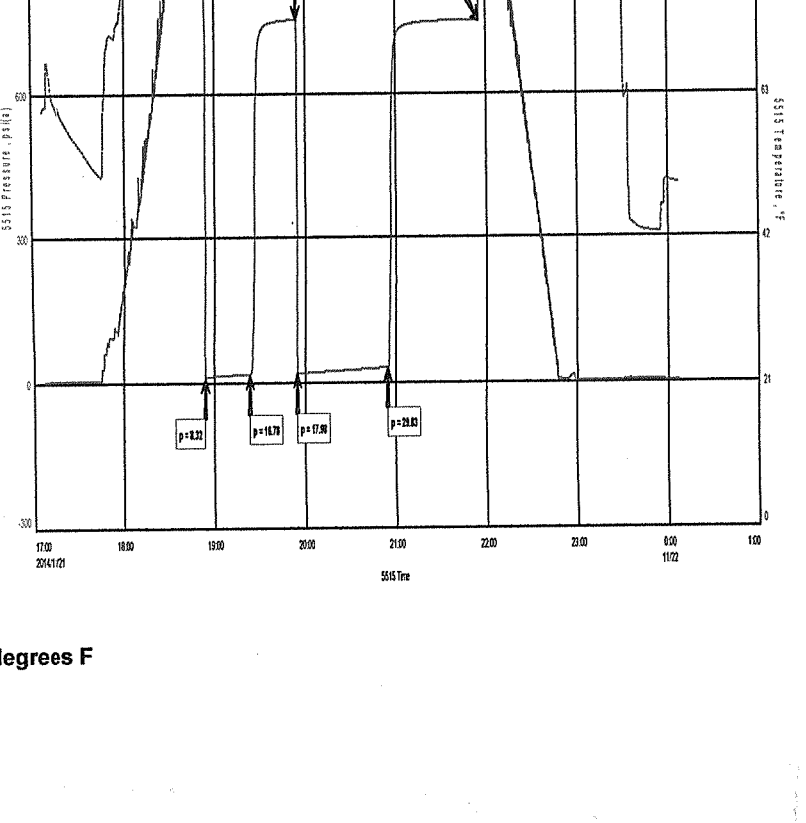
SCALE " = 100'



**JACOB MCCALLIE**  
 620-627-7116  
 mccallie.dtlc@gmail.com

### General Information

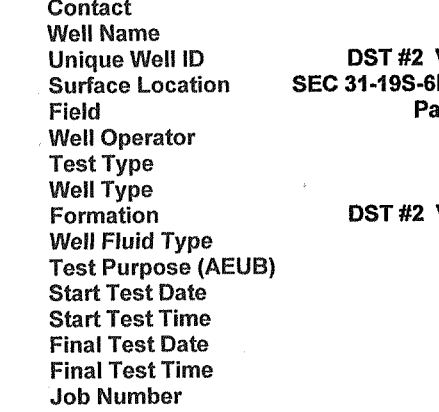
Company Name Range Oil Co.  
 Contact John Washburn  
 Well Name Madden Unit #3  
 Unique Well ID DST #1 Viola 2178-2187  
 Surface Location SEC 31-19S-6E Chase County  
 Field Panther Ranch SW  
 Well Operator Range Oil Co.  
 Test Type Drill Stem Test  
 Well Type Vertical  
 Formation 01 Oil  
 Well Fluid Type Initial Test  
 Test Purpose (AEUB) 2014/11/21  
 Start Test Date 17:07:00  
 Final Test Date 2014/11/22  
 Final Test Time 00:07:00  
 Job Number 50520  
 Representative Jacob McCallie  
 Prepared By Jacob McCallie  
 Report Date 2014/11/21



### FLUID RECOVERY

45 CO 100% O GRAVITY: 29 @ 60 degrees F  
 10 OCM 27% O 73% M  
 55 TOTAL FLUID

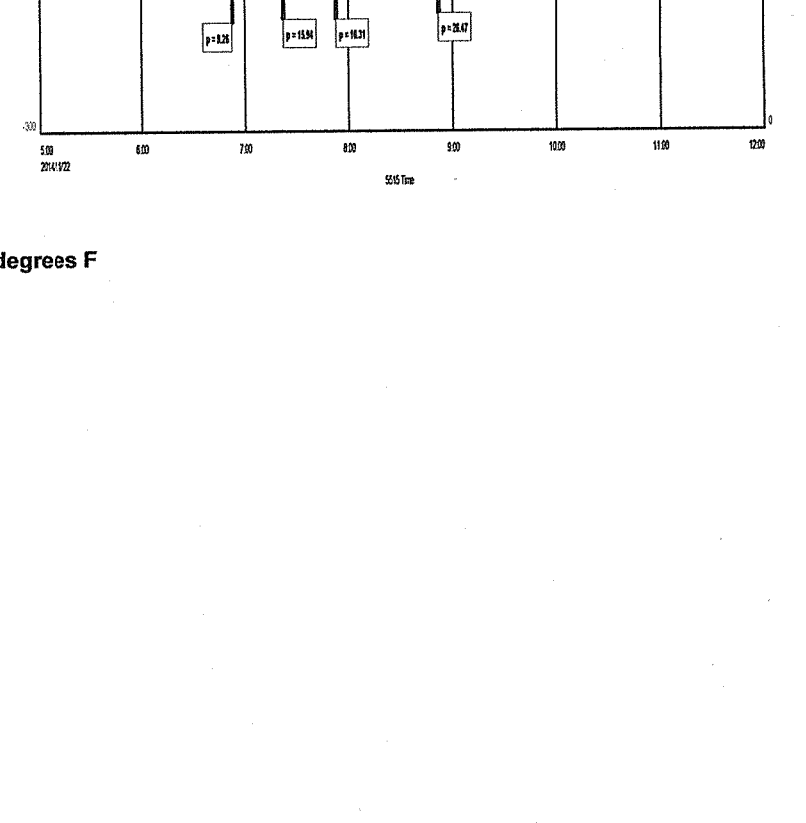
TOOL SAMPLE: 18% O 82% M



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### General Information

Company Name Range Oil Co.  
 Contact John Washburn  
 Well Name Madden Unit #3  
 Unique Well ID DST #2 Viola 2187-2197  
 Surface Location SEC 31-19S-6E Chase County  
 Field Panther Ranch SW  
 Well Operator Range Oil Co.  
 Test Type Drill Stem Test  
 Well Type Vertical  
 Formation 01 Oil  
 Well Fluid Type Initial Test  
 Test Purpose (AEUB) 2014/11/22  
 Start Test Date 05:06:00  
 Final Test Date 2014/11/22  
 Final Test Time 11:55:00  
 Job Number 50521  
 Representative Jacob McCallie  
 Prepared By Jacob McCallie  
 Report Date 2014/11/22



### FLUID RECOVERY

35 CO 100% O GRAVITY: 29 @ 60 degrees F  
 10 OCM 18% O 81% M  
 45 TOTAL FLUID

TOOL SAMPLE: 13% O 87% M