

# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

<p>COMPANY: <u>Range Oil Co., Inc.</u></p> <p>LEASE: <u>Ferrell A #1</u></p> <p>FIELD: _____</p> <p>LOCATION: <u>SEC 33 T15P 28S R0E B2E</u></p> <p>SEC: <u>33</u> T15P <u>28S</u> R0E <u>B2E</u></p> <p>COUNTY: <u>Butler</u> STATE: <u>KS</u></p> <p>CONTRACTOR: <u>C-G Drilling Co. - Rig #1</u></p> <p>SPUD: <u>9-30-14</u> COMP: <u>10-7-14</u></p> <p>RID: <u>3100'</u> LTD: <u>3097'</u></p> <p>MUD UP: <u>1900'</u> TYPE MUD: <u>clean</u></p> <p>ELECTRICAL SURVEYS: _____</p> <p>DI, B, mirror: _____</p>	<p>ELEVATIONS</p> <p>KB: <u>164'</u></p> <p>DI: <u>1608'</u></p> <p>From: <u>KB</u></p> <p>Measurements Are All _____</p>																											
<p>SAMPLES SAVED FROM: <u>1950'</u> TO: <u>RTD</u></p> <p>DRILLING TIME KEPT FROM: <u>1950'</u> TO: <u>RTD</u></p> <p>SAMPLES EXAMINED FROM: <u>1950'</u> TO: <u>RTD</u></p> <p>GEOLOGICAL SUPERVISION FROM: <u>1950'</u> TO: <u>RTD</u></p> <p>GEOLOGIST ON WELL: <u>Ken Wallace</u></p>	<p>FORMATION TOPS LOG</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>FORMATION</th> <th>LOG</th> <th>SAMPLES</th> </tr> <tr> <td>Kansas City</td> <td>1990 (-376)</td> <td>1950 (-376)</td> </tr> <tr> <td>Stark Sh</td> <td>2133 (-519)</td> <td>2100 (-519)</td> </tr> <tr> <td>Hushpuckney</td> <td>2172 (-558)</td> <td>2133 (-558)</td> </tr> <tr> <td>Base Kansas City</td> <td>2200 (-586)</td> <td>2172 (-586)</td> </tr> <tr> <td>Marmaton</td> <td>2284 (-670)</td> <td>2200 (-670)</td> </tr> <tr> <td>Cherokee Sh</td> <td>2488 (-874)</td> <td>2284 (-874)</td> </tr> <tr> <td>Arbuckle</td> <td>3071 (-1457)</td> <td>2488 (-1457)</td> </tr> <tr> <td>Kindershook Sh</td> <td>3020 (-1406)</td> <td>3071 (-1406)</td> </tr> </table>	FORMATION	LOG	SAMPLES	Kansas City	1990 (-376)	1950 (-376)	Stark Sh	2133 (-519)	2100 (-519)	Hushpuckney	2172 (-558)	2133 (-558)	Base Kansas City	2200 (-586)	2172 (-586)	Marmaton	2284 (-670)	2200 (-670)	Cherokee Sh	2488 (-874)	2284 (-874)	Arbuckle	3071 (-1457)	2488 (-1457)	Kindershook Sh	3020 (-1406)	3071 (-1406)
FORMATION	LOG	SAMPLES																										
Kansas City	1990 (-376)	1950 (-376)																										
Stark Sh	2133 (-519)	2100 (-519)																										
Hushpuckney	2172 (-558)	2133 (-558)																										
Base Kansas City	2200 (-586)	2172 (-586)																										
Marmaton	2284 (-670)	2200 (-670)																										
Cherokee Sh	2488 (-874)	2284 (-874)																										
Arbuckle	3071 (-1457)	2488 (-1457)																										
Kindershook Sh	3020 (-1406)	3071 (-1406)																										

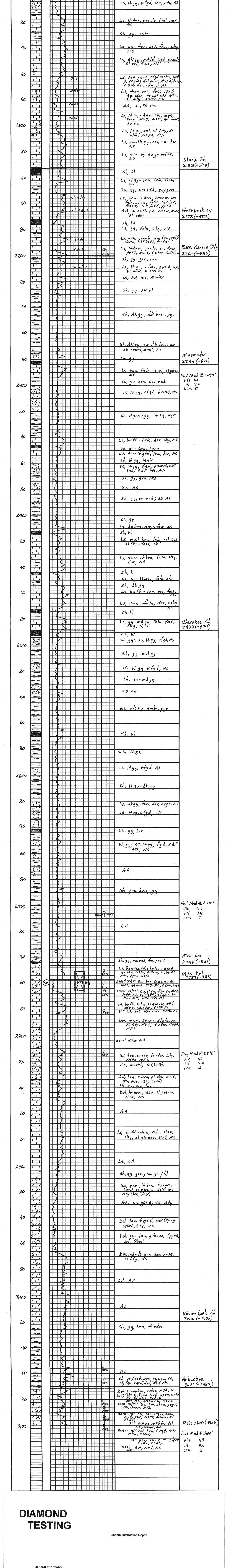
REMARKS: Production casing set to further evaluate Miss Dol (B57#1).

9-29-14 MIRT  
 9-30-14 8:30 A - Drig surface hole  
 10-1-14 7 A - Drig 55' @ 2704'  
 10-2-14 7 A - Drig 1160' @ 2777/1215'  
 10-3-14 7:45 A - Drig @ 2328', 1/2 @ 2425'  
 10-4-14 8 A - Drig @ 2704'  
 10-5-14 7 A - Drig @ 2812', 1/2 @ 2766'  
 DST #1 2151-2766, Miss Dol  
 10-6-14 8:45 A - RTD 3100'  
 10-7-14 7 A - LTD 3072', Set 5 1/2" @ 3089', Plug down @ 11:01pm 10-6-14.

LEGEND

--	--	--	--	--	--	--	--	--

SCALE " = 100'



## DIAMOND TESTING

General Information Report

<p>General Information</p> <p>Company Name: <u>RANGE OIL COMPANY, INC.</u></p> <p>Contact: <u>JOHN WASHBURN</u></p> <p>Well Name: <u>FERRELL A #1</u></p> <p>Unique Well ID: <u>DST #1, MISS DEL., 2751-2766</u></p> <p>Surface Location: <u>SEC 33-28S-E, BUTLER CO. KS.</u></p> <p>Field: <u>FERRELL SOUTH</u></p> <p>Well Type: <u>Vertical</u></p> <p>Test Type: <u>CONVENTIONAL</u></p> <p>Formation: <u>DST #1, MISS. DEL., 2761-2766</u></p> <p>Well Fluid Type: <u>01 OIL</u></p> <p>Start Test Date: <u>2014/10/04</u></p> <p>Final Test Date: <u>2014/10/04</u></p>	<p>Representative: <u>TIM VENTERS</u></p> <p>Well Operator: <u>RANGE OIL COMPANY, INC.</u></p> <p>Report Date: <u>2014/10/04</u></p> <p>Prepared By: <u>TIM VENTERS</u></p> <p>Qualified By: <u>KEN WALLACE</u></p> <p>Start Test Time: <u>13:25:00</u></p> <p>Final Test Time: <u>23:29:00</u></p>
---	---

Test Recovery:

RECOVERED: 1' CLEAN OIL  
 30' SOCM, 3% OIL, 97% MUD  
 31' TOTAL FLUID

TOOL SAMPLE: 2% OIL, 98% MUD

