

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Haverhill Oil Co., Inc. ELEVATIONS _____

LEASE Dele #3 KB 1474

FIELD Buckhorn DF _____

LOCATION R310 E54 L59D E1L GI 1465

SEC 13 TWP R3 S RGE 4 W Measurements A & B

COUNTY Rock STATE Ks FROM R1B

CONTRACTOR Amphibious Drilling, Inc. SURFACE 13 1/2 2300

SPUD 9/30/1909 TD 4/1/19 PRODUCTION _____

RTD 3530 LTD 3532 ELECTRICAL SURVEYS _____

MUD UP 3200 TYPE MUD Cham Comp - dm 491

SAMPLES SAVED FROM 3100 TO R1D

DRILLING TIME KEPT FROM 2550 TO R1D

SAMPLES EXAMINED FROM 3100 TO R1D

GEOLOGICAL SUPERVISION FROM 2900 TO R1D










GEOLOGIST ON WELL Michael R. Kimmel

FORMATION TOPS LOG SAMPLES

1905 3270 = 1793 3268 = 1791

REMARKS

LEGEND

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| Anhydrite | Salt | Sandstone | Shale | Carb sh | Limestone | Coal/Lime | Chert | Dolomite |

SCALE " = 100'

| DEPTH | DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Increases | LITHOLOGY | SAMPLE DESCRIPTIONS | REMARKS |
|-------|--|-----------|---------------------|---------|
| 2550 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 2600 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 2700 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 2800 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 2900 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3000 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3100 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3200 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3268 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3300 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3400 | | | | |
| 10 | | | | |
| 20 | | | | |
| 30 | | | | |
| 40 | | | | |
| 50 | | | | |
| 60 | | | | |
| 70 | | | | |
| 80 | | | | |
| 90 | | | | |
| 3500 | | | | |
| 10 | | | | |
| 20 | | | | |

COMPANY _____ ELEVATION: _____

LEASE _____

LOCATION _____ SEC _____ TWP _____ RNG _____

COUNTY _____ STATE _____

RTD 3520 2013
RTD 3522 2013