# PSI PHOENIX SURVEYS, INC.

# V.D.L. C.C.L GAMMA-RAY CEMENT BOND LOG

| | |
|---|---|
| Company | HRM RESOURCES, LLC |
| Well | DUTTON 0-2-22 |
| Field | WATTENBERG |
| County | WELD |
| State | COLORADO |

Company HRM RESOURCES, LLC
Well DUTTON 0-2-22
Field WATTENBERG
County WELD State COLORADO

Location: API #: 05123322410O
SHL 1158' FNL & 1177' FWL NWNW
BHL 1294' FNL & 76' FWL NWNW
SEC 22 TWP 4N RGE 67W

Other Services

| | | | |
|---|---|---|---|
| Permanent Datum | GL | Elevation | 4871' |
| Log Measured From | KB | | |
| Drilling Measured From | KB | | |

Elevation
K.B. 4886'
D.F. 4885'
G.L. 4871'

| | |
|---|---|
| Date | DEC. 21 2010 |
| Run Number | ONE |
| Depth Driller | 7540' |
| Depth Logger | 7488' |
| Bottom Logged Interval | 7476' |
| Top Log Interval | 2934' |
| Open Hole Size | 7-7/8" |
| Type Fluid | WATER |
| Density / Viscosity | NA |
| Max. Recorded Temp. | 211 DEG. F |
| Estimated Cement Top | 3134' |
| Time Well Ready | NA |
| Time Logger on Bottom | NA |
| Equipment Number | 9605 |
| Location | FORT MORGAN |
| Recorded By | TODD YOUNG |
| Witnessed By | TOM COBB |

Borehole Record / Tubing Record

| Run Number | Bit | From | To | Size | Weight | From | To |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

| Casing Record | Size | Wgt/Ft | Top | Bottom |
|---|---|---|---|---|
| Surface String | | | | |
| Prot. String | 4.5" | 11.6 LB. | SURFACE | 7488' |
| Production String | | | | |
| Liner | | | | |

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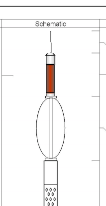
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

WCR 19 & WCR 44 1/2 MILE S E 7/10 N INTO

THANK YOU FOR USING P.S.I.

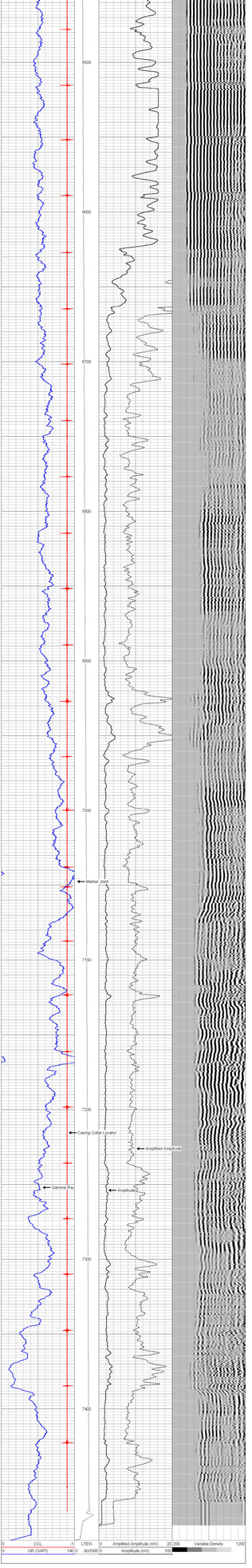


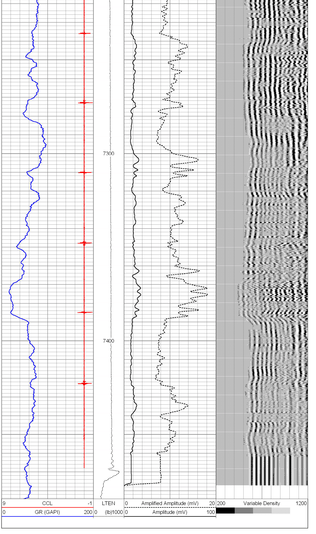
| Sensor | Offset (ft) | Description | Len (ft) | OD (in) | Wt (lb) |
|---|---|---|---|---|---|
| | | STNDRD Standard Cable Head | 1.00 | 1.69 | 1.00 |
| CCL | 19.06 | CCL-titan01 (01t) | 1.92 | 2.75 | |
| | | SDSCENT Centralizer | 2.88 | 2.75 | 20.00 |
| WVF3 | 10.79 | CBL-Probe (050215) | 8.75 | 2.75 | 93.00 |
| WVF5 | 9.79 | | | | |
| | | SDSCENT Centralizer | 2.88 | 2.75 | 20.00 |
| GR | 1.13 | GR-probe 2.75 (51013) | 3.67 | 2.75 | 100.00 |

| | |
|---|---|
| Dataset: | hrmdutton0-2-22.db: field/well/run1/pass2 |
| Total Length: | 21.08 ft |
| Total Weight: | 234.00 lb |
| O.D. | 2.75 in |

| | |
|---|---|
| Database File: | hrmdutton0-2-22.db |
| Dataset Pathname: | pass2 |
| Presentation Format: | cbl_dr |
| Dataset Creation: | Tue Dec 21 15:35:53 2010 by Log Std Casedhole 08121 |
| Charted by: | Depth in Feet scaled 1:240 |

| | | | |
|---|---|---|---|
| 9 CCL -1 | LTEN | 0 Amplified Amplitude (mV) 20 | 200 Variable Density 1200 |
| 0 GR (GAPI) 140 | 0 (lb) 1000 | 0 Amplitude (mV) 100 | |




Database File: tonsulton0-3-22.db
Dataset Pathname: pass1
Presentation Format: GR_B
Dataset Creation: Tue Dec 21 15:26:44 2010 by Log ibis Casedhole 08121
Charted by: Depth in Feet scaled 1:240