PHOENIX SURVEYS, INC.

# COMPENSATED DENSITY
# COMPENSATED NEUTRON
# GAMMA RAY

Company
Well
Field
County
State/Prv

| | |
|---|---|
| Company | **Great Western Oil & Gas LLC** |
| Well | **Heinze 31-43** |
| Field | **Wattenberg** |
| County | **Weld** |
| State/Province | **Colorado** |

Location
1948' FSL & 652' FEL
NE SE
Sec 31, Twp - 7N, Rge - 63W

Other Services
Induction

| | | | |
|---|---|---|---|
| Permanent Datum | GL | Elevation | 4759 |
| Log Measured From | KB | | |
| Drilling Measured From | KB | | |

Elevation
K.B. 4771
D.F. 4770
G.L. 4759

| | | | |
|---|---|---|---|
| Date | August 23, 2010 | | |
| Run Number | 1 | | |
| Depth Driller | 7086 | | |
| Depth Logger | 7090 | | |
| Bottom Logged Interval | 7070 | | |
| Top Log Interval | 2850 | | |
| Casing Driller | 740 | | |
| Casing Logger | Not Logged | | |
| Bit Size | 7-7/8" | | |
| Type Fluid in Hole | Chem Gel | | |
| Density / Viscosity | 9.1 / 46 | | |
| pH / Fluid Loss | 7.5 / 10.4 | | |
| Source of Sample | Flowline | | |
| Rm @ Meas. Temp | 3.37 @ 87° F | | |
| Rmf @ Meas. Temp | 2.64 @ 87° F | | |
| Rmc @ Meas. Temp | 3.88 @ 87° F | | |
| Source of Rmf / Rmc | Measure / Calc | | |
| Rm @ BHT | 1.09 @ 203° F | | |
| Time Circulation Stopped | 0400 | | |
| Time Logger on Bottom | 1305 | | |
| Maximum Recorded Temperature | 203° F | | |
| Equipment Number | 50 | | |
| Location | Brighton, CO | | |
| Recorded By | Randy Conley | | |
| Witnessed By | Jay Pape | Mark Scanniello | |

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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.

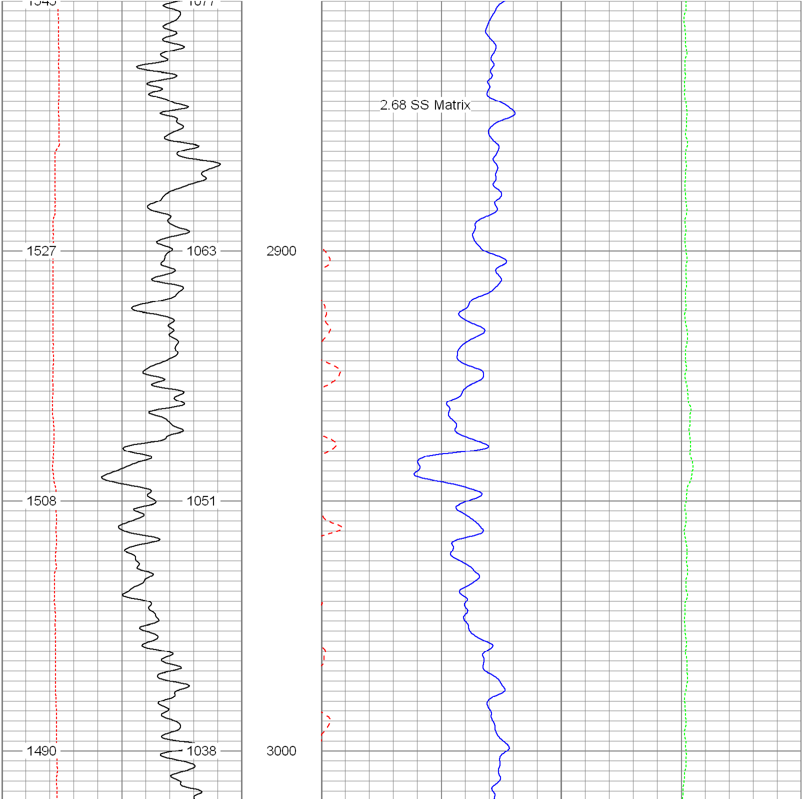
## Comments

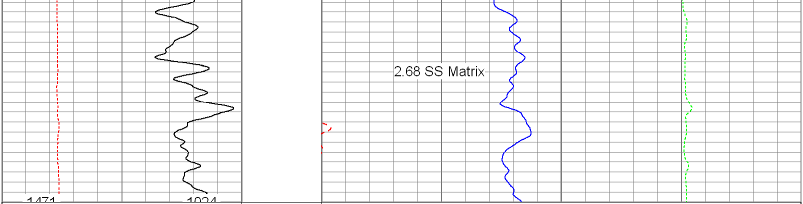
Annular volume calculated for 4.5" casing
Ensign Drilling Rig 33
Thank you for using Phoenix Surveys.
API #: 05-123-29746-00

Database File: 10884.db
Dataset Pathname: final
Presentation Format: poro1
Dataset Creation: Mon Aug 23 13:34:08 2010
Charted by: Depth in Feet scaled 1:240

6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
TBHV (ft3)
ABHV (ft3)

30 Density Porosity (pu) -10
30 Neutron Porosity (pu) -10
-0.5 Corr (g/cc) 0.5





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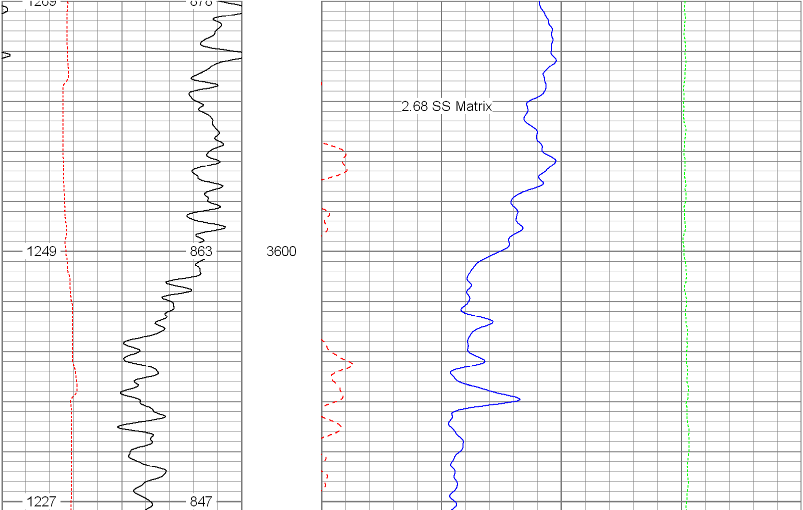

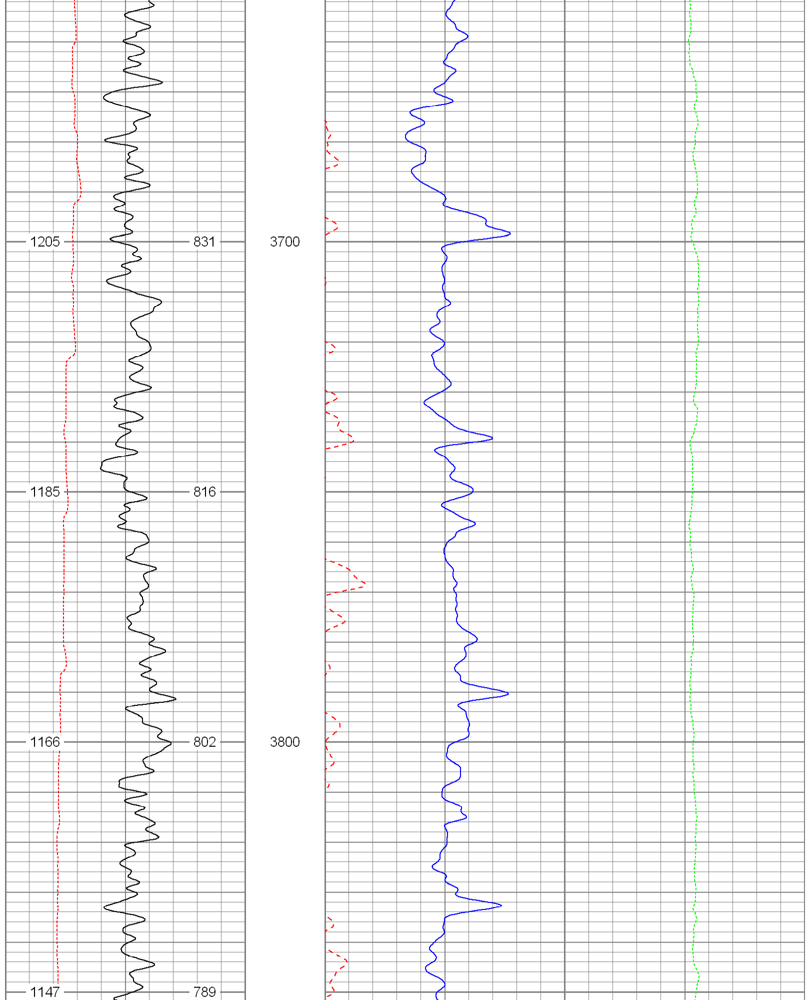

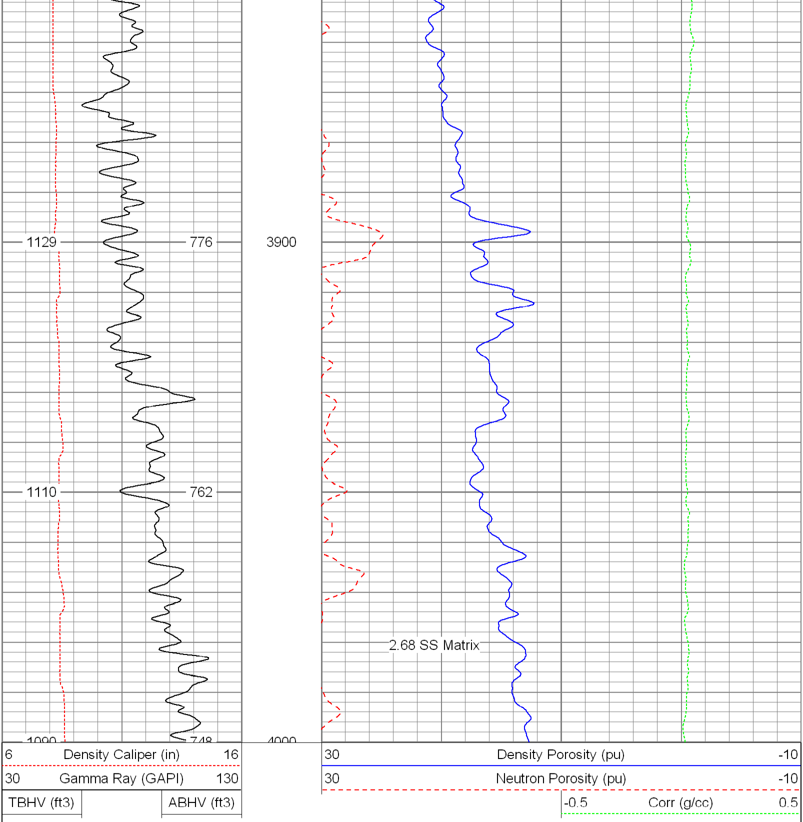

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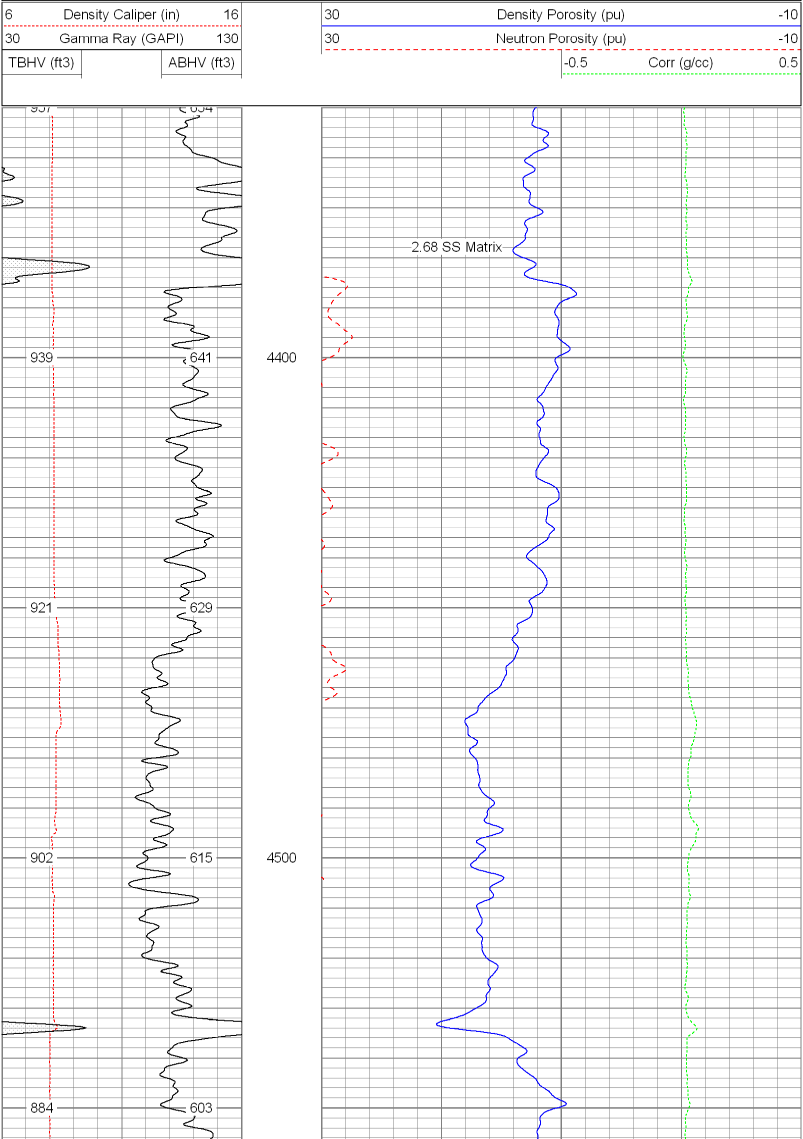

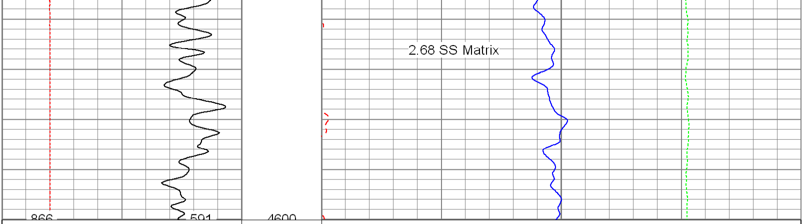

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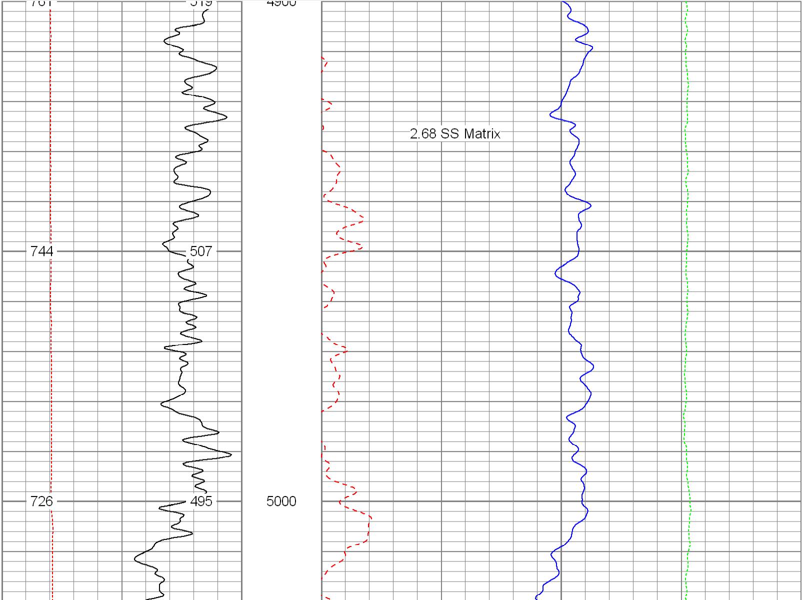

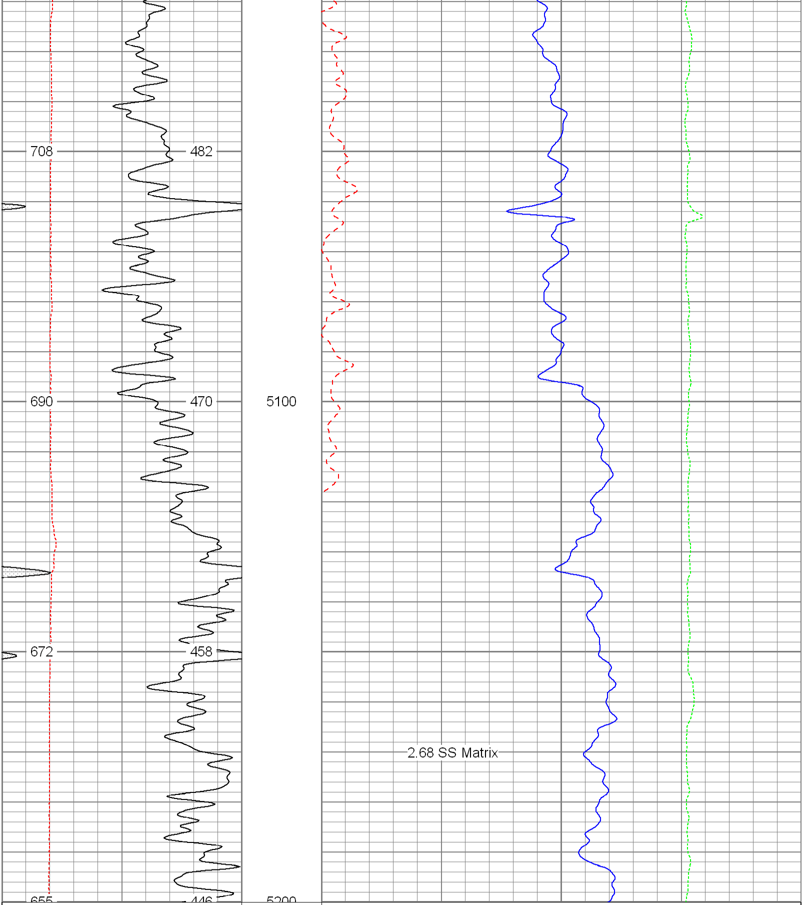

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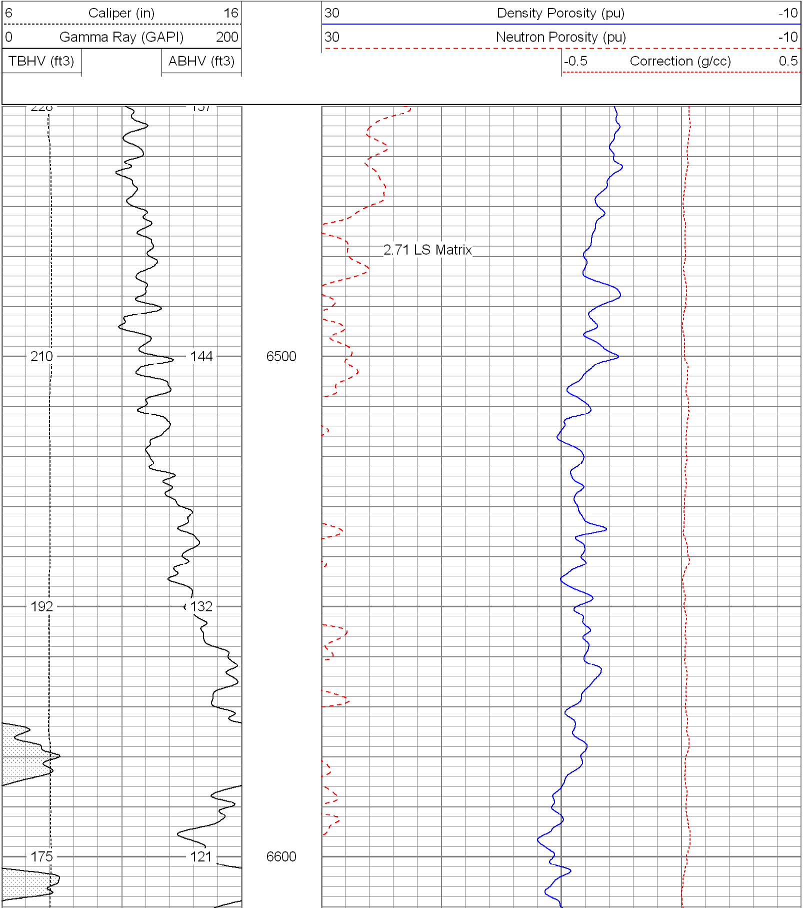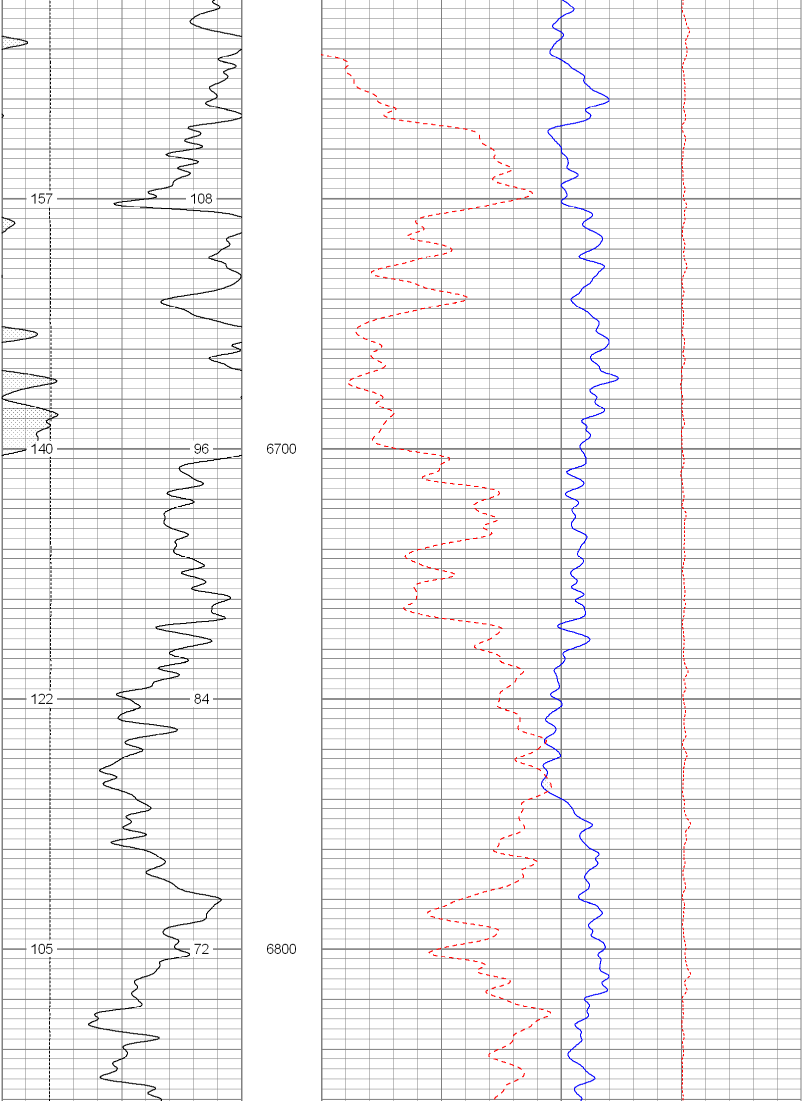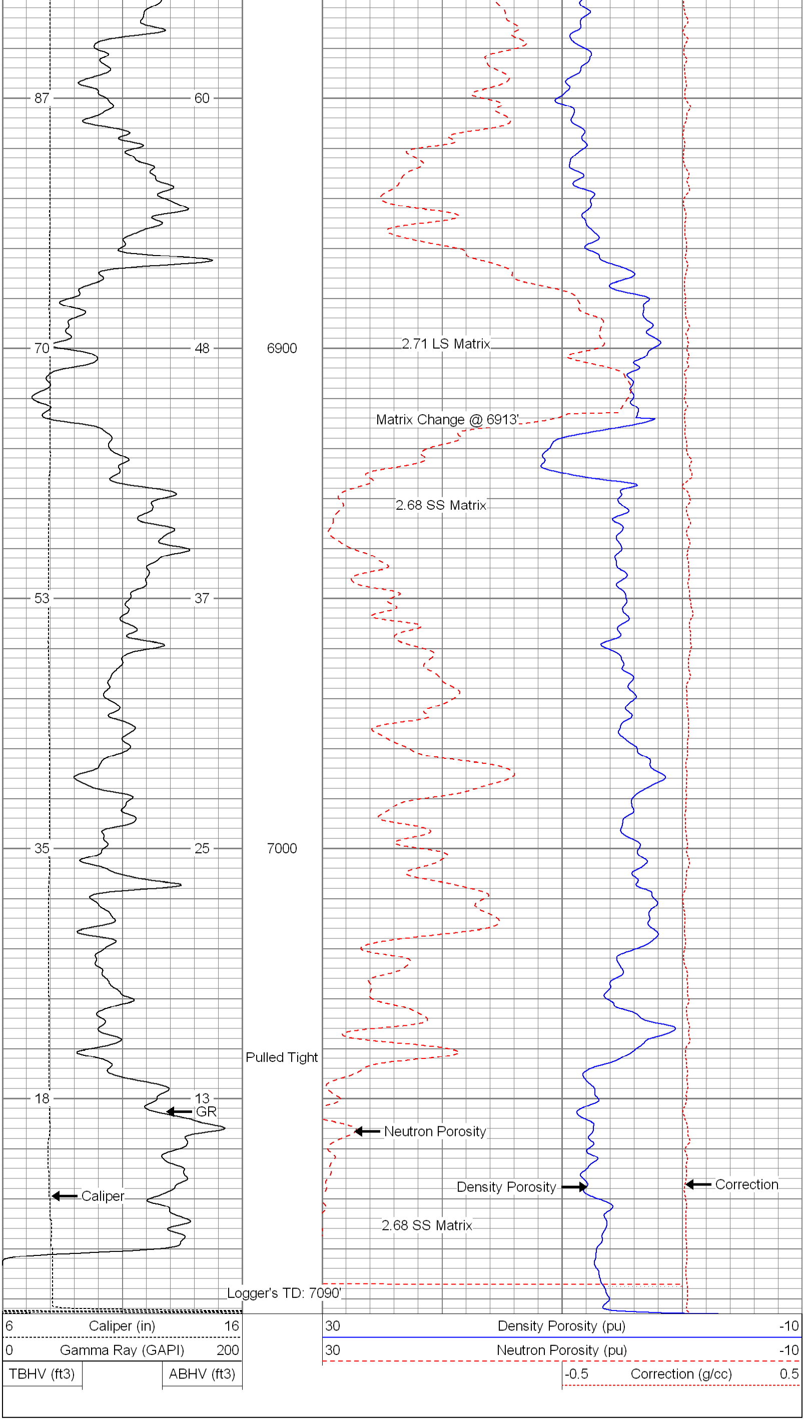Database File: 10884.db
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