



Pioneer Energy Services

Computer Processed Interpretation

API No. 15-135-25,602-00-00

Company **American Warrior, Inc.**

Well **Schaben #5-24**

Field **Schaben North**

County **Ness** State **Kansas**

Location **460' FNL & 260' FEL**

Sec: **24** Twp: **19S** Rge: **22W**

Permanent Datum **Ground Level** Elevation **2215**

Log Measured From **Kelly Bushing** 6 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing**

Date Recorded **6/29/2013**

Depth Logger **4346**

Curve Definitions

SW **Water Saturation**

SXO **Water Saturation In The Flushed Zone**

VCL **Volume Of Clay**

PHIE **Density - Neutron Crossplot Shale Corrected**

BWV **Bulk Volume Water**

BWMSXO **Bulk Volume Water In Flushed Zone**

DCAL **Caliper**

SPC **SP Corrected For Baseline**

DGA **Apparent Grain Density**

Payflag **If: PHIE > 2 %, VCL < 40 %, SPC > -10 , SW < 50 % & DCAL < 11**

Recorded By **J. Long**

Witnessed By **Jason Alm**

Analysis By **Dale Legleiter**

Other Services
DIL/CNL/CDL

Elevation

K.B. 2221

D.F. 2215

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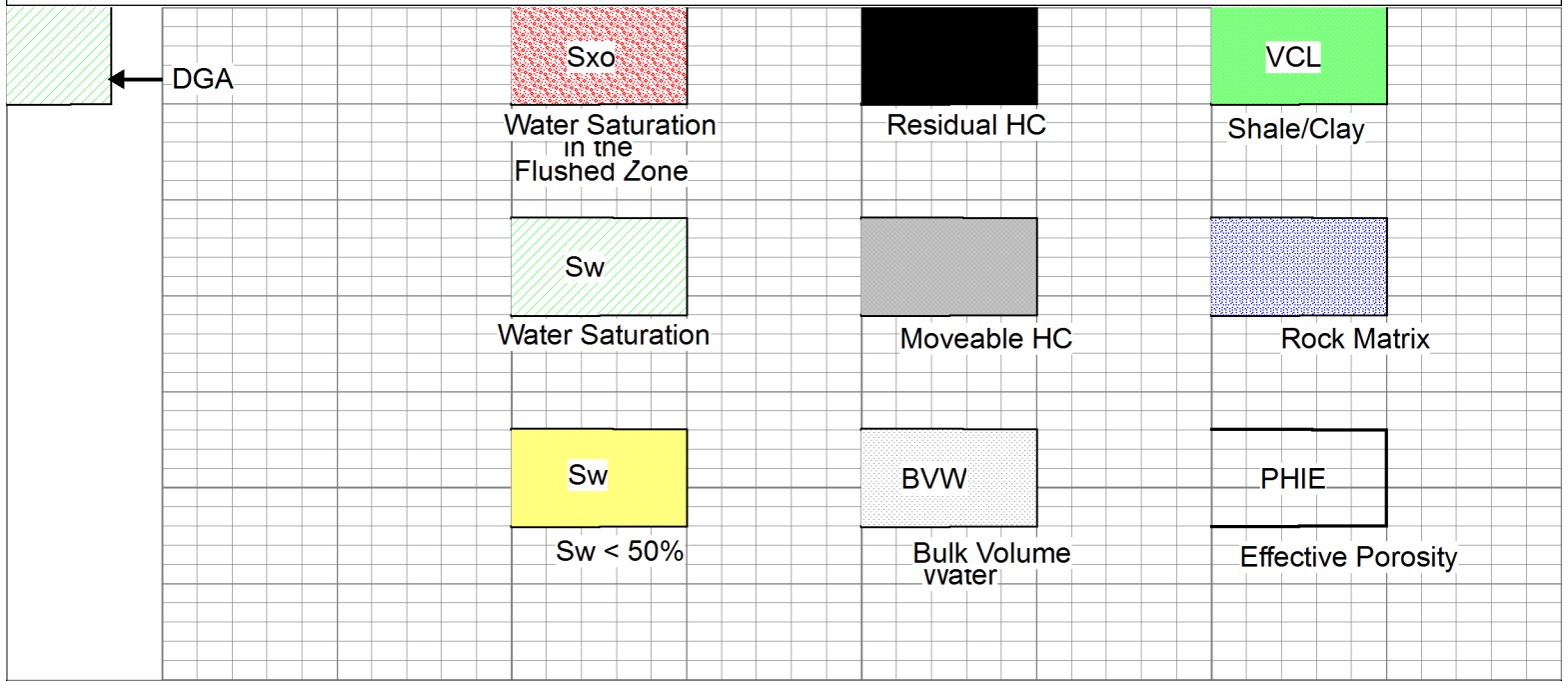
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

Thank you for using Pioneer Energy Services
www.pioneer.com
785 625 3858

Bazine, 4 South on Austin Road, 200' West, South Into

Database File: c:\warrior\data\cross plots\2wxplt.db
Dataset Pathname: litho
Presentation Format: 2wxplt



Database File: c:\warrior\data\amwar_schaben #5-24\amwarrior_schaben_5-24hd.db
 Dataset Pathname: cpi/awcpi
 Presentation Format: calc
 Dataset Creation: Sun Jun 30 15:40:45 2013
 Charted by: Depth in Feet scaled 1:240

| | | | | | | | | | | | | | |
|-----|-----|-----------|----------|----|----|---------|-----|------|--------|---|-----|------|---|
| DGA | 0 | Gamma Ray | 150 | 1 | SW | 0 | 0.3 | PHIE | 0 | 0 | VCL | 1 | |
| 2.6 | 3.1 | 6 | DCAL | 16 | 30 | PAYFLAG | 0 | 0.3 | BVW | 0 | 1 | PHIE | 0 |
| | | -150 | SPC (mV) | 0 | 1 | SXO | 0 | 0.3 | BVWSXO | 0 | | | |

