

PSI

PHOENIX SURVEYS, INC.

Cement Bond Log

Gamma Ray - CCL - VDL

Company

Rosetta Resources Operating, LP

Well

Zion 05-16

Field

Vernon

County

Yuma

State

Colorado

Location:

759 FSL & 933 FEL
SEC 5 TWP 1S RGE 44W
Permanent Datum Ground Level Elevation 3944
Log Measured From Kelly Bussing
Drilling Measured From
Date Run Number 22-Apr-2010
Depth Logger 2370
Bottom Logged Interval 2505
Top Log Interval 1340
Open Hole Size 8.125"
Estimated Cement Top 1340
Density / Viscosity
Max. Recorded Temp. 112 DEGF
Time Well Read From N/A
Equipment Number
Recorded By Sam Hopper
Witnessed By Rick King

Other Services

MAST
PERF
Elevation
K.E. 3956
D.F. 3955
G.L. 3944

API # :

05-125-11631-00

Casing Record

Surface String

Production String

Liner

Size

4.5"

Weight

10.5 lb/ft

Top

Bottom

2570

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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

Depth Ref to PSI Tripple Combo Log dated 19-Feb-2010.
Run CBL from TD to 200' above cement top.
Perforate 2318-2328 @ 4 SPF, 10' NET, 40 Shots,
using Titan 19gm, 0.40"EHD, 40.89"PENE, 120deg phasing.
API# 05-125-11631-00
Thank you for using Phoenix Surveys!!

| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|---|-------------|-----------|--|----------|---------|---------|
| | | | STNDRD Standard Cable Head | 1.00 | 1.69 | 1.00 |
| | | | SDSCENT Centralizer | 2.87 | 2.75 | 24.00 |
| WVF3 | 12.04 | | CBL-Probe (050215) | 8.75 | 2.75 | 93.00 |
| WVF5 | 11.04 | | | | | |
| | | | SDSCENT Centralizer | 2.87 | 2.75 | 24.00 |
| CCL | 3.63 | | GR_CCL-SDS (SDSSEMO) GR/CCL (050-GR275-001) | 4.92 | 2.75 | 60.00 |
| GR | 0.90 | | | | | |
| Dataset: rosetta_zion_05-16.db: field/well/run1/pass2 Total Length: 20.41 ft Total Weight: 202.00 lb O.D.: 2.75 in | | | | | | |

Database File: rosetta_zion_05-16.db
Dataset Pathname: pass2
Presentation Format: cbl_dr
Dataset Creation: Thu Apr 22 13:11:24 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1.240

324

Travel Time (usec)

225

9

CCL

-1

0

GR (GAPI)

250

0

Amplified Amplitude (mV)

20

200

Variable Density

1200

0

Amplitude (mV)

100

Gamma Ray

Amplified Amplitude

Amplitude

Est. Top of Cement

Flag Joint

Total Depth @ 2505'

Travel Time

324 Travel Time (usec) 225

9 CCL -1

0 GR (GAPI) 250

0 Amplified Amplitude (mV) 20 200 Variable Density 1200

0 Amplitude (mV) 100