



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-179-21348-00-00

Company Dan Haffner

Well Haffner #4-18

Field Haffner Southwest

County Sheridan State Kansas

Location SW NW SE SW
690' FSL / 1600' FWL

Other Services
DIL/MEL

Sec: 18 Twp: 9S Rge: 27W

Permanent Datum Ground Level Elevation 2766
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 2774
D.F. 2766
G.L. 2766

Date 1/19/2014

Run Number One

Type Log CNL / CDL

Depth Driller 4200

Depth Logger 4196

Bottom Logged Interval 4175

Top Logged Interval 3675

Type Fluid In Hole Chemical

Salinity, PPM CL 900

Density 9.3

Level Full

Max. Rec. Temp. F 118

Operating Rig Time 4 Hours

Equipment -- Location 15 Days

Recorded By R. Barnhart

Witnessed By Richard Bell

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

One 12.25

00

277

8.625

23#

00

277

Two 7.875

277

TD

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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.

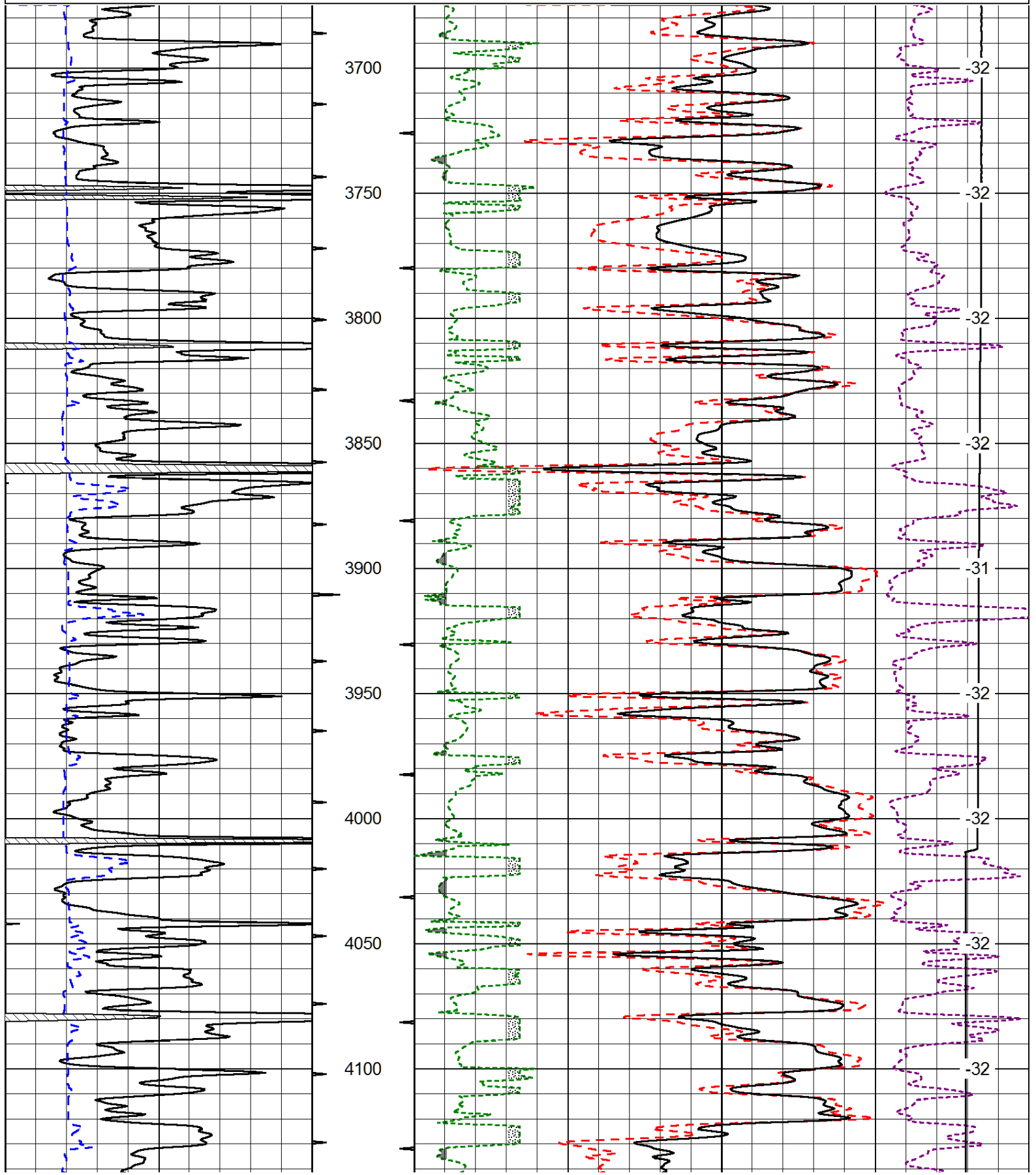
Comments

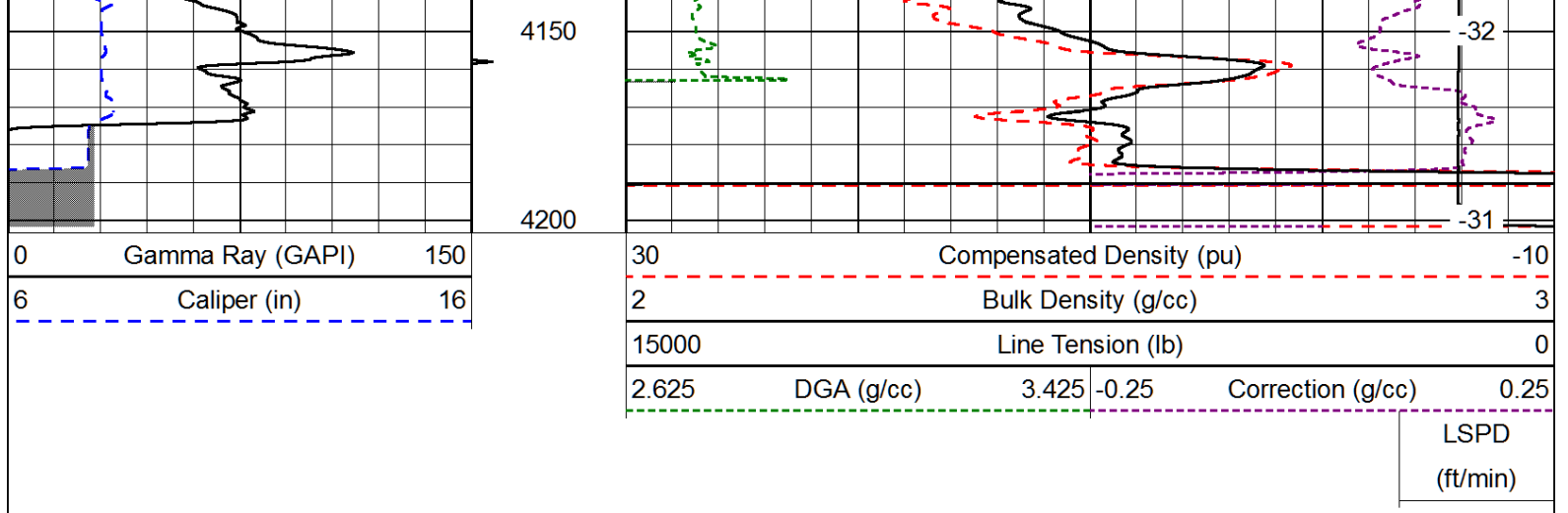
Thank you for using Log-Tech, Inc.
(785) 625-3858

Grainfield, KS:
Grainfield Exit: N to Rd. 406, 4E, N into

Database File: haffner_haffnehd.db
Dataset Pathname: dil/hafmain
Presentation Format: cdl
Dataset Creation: Sun Jan 19 11:53:20 2014
Charted by: Depth in Feet scaled 1:600

Charted by: _____ Depth in Feet scaled 1:600					
0	Gamma Ray (GAPI)	150	30	Compensated Density (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			15000	Line Tension (lb)	0
			2.625	DGA (g/cc)	3.425
			-0.25	Correction (g/cc)	0.25
			LSPD (ft/min)		





Database File: haffner_haffnehd.db
Dataset Pathname: dil/hafmain
Presentation Format: cndlspec
Dataset Creation: Sun Jan 19 11:53:20 2014
Charted by: Depth in Feet scaled 1:240

