



PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No.

15-017-20921-00-00

Company Range Oil Company, Inc.

Well Madden 'A' Unit #2

Field Panther Ranch SW

County Chase State Kansas

Location 250' FNL & 2260' FWL

Sec: 31 Twp: 19S Rge: 6E

Permanent Datum Ground Level Elevation 1453

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

Drilling Measured From Kelly Bushing Elevation
K.B. 1459
D.F. 1453
G.L. 1453

Date 4/17/2015

Run Number One

Type Log CNL / CDL

Depth Driller 2280

Depth Logger 2278

Bottom Logged Interval 2257

Top Logged Interval 550

Type Fluid In Hole Chemical

Salinity, PPM CL 1250

Density 9.3

Level Full

Max. Rec. Temp. F 99

Operating Rig Time 2 Hours

Equipment -- Location 91 Hays

Recorded By D. Schmidt

Witnessed By Ken Wallace

Borehole Record Casing Record

Run No	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	209	8.625	24#	00	209
2	7.875	209	2280				

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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.

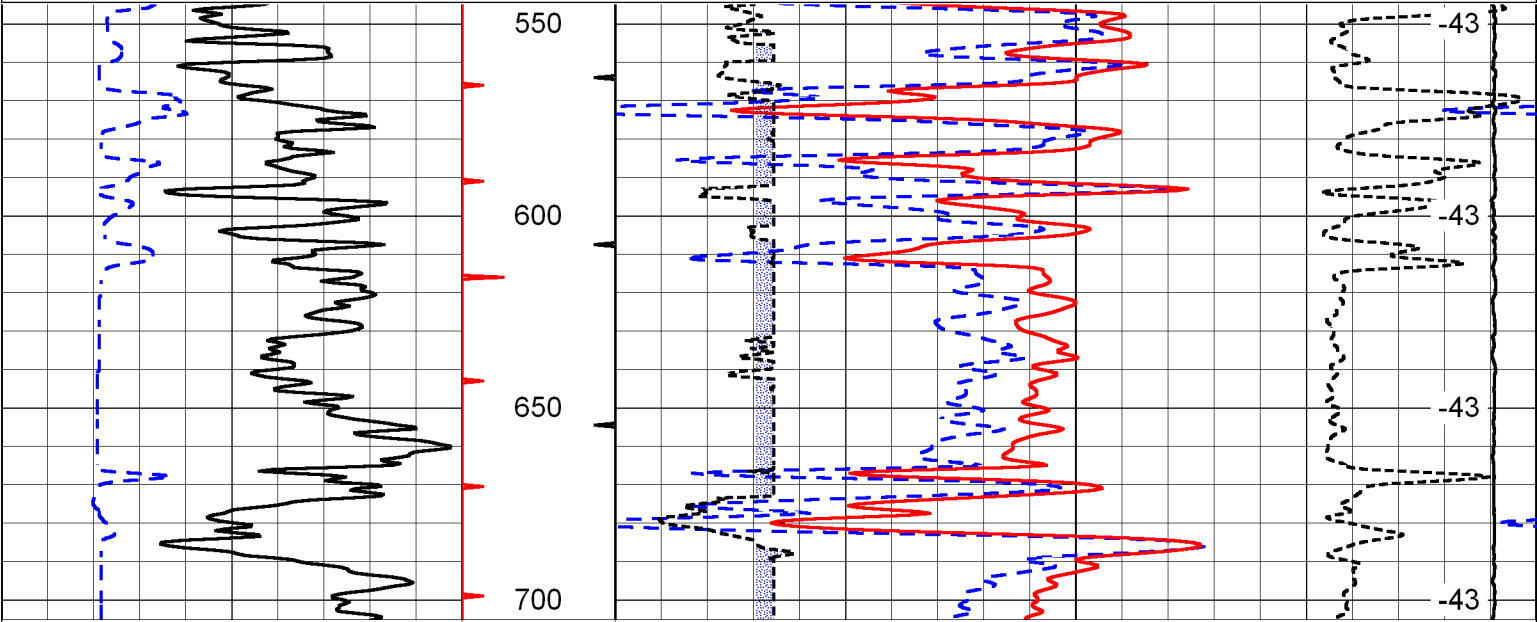
Comments

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Marion,
East to Hwy 150 & Hwy 77 junction, 8 1/4 East,
South and East into

Database File	range_madden 'a' unit #2\range_madden a unit 2hd.db
Dataset Pathname	dil\rastkml
Presentation Format	cdl
Dataset Creation	Fri Apr 17 05:01:34 2015
Charted by	Depth in Feet scaled 1:600

0	Gamma Ray	150
6	Caliper (in)	16

30	Compensated Density				-10
2	Bulk Density				3
15000	Line Tension				0
2.625	DGA	3.425	-0.25	Correction	0.25
LSPD					



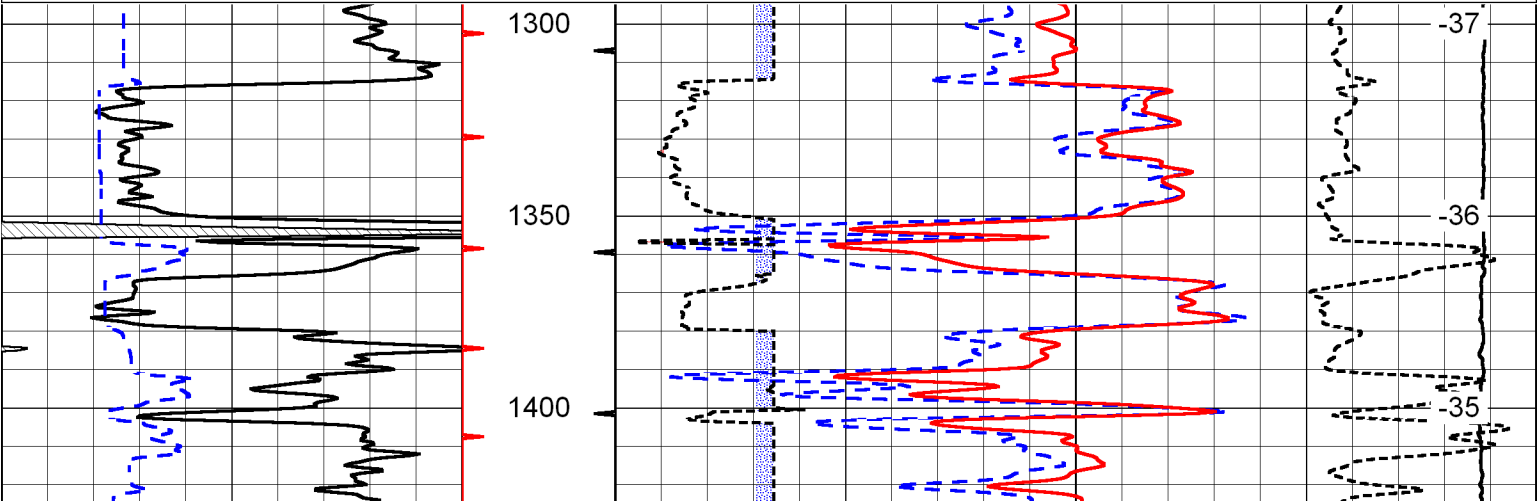
0	Gamma Ray	150
6	Caliper (in)	16

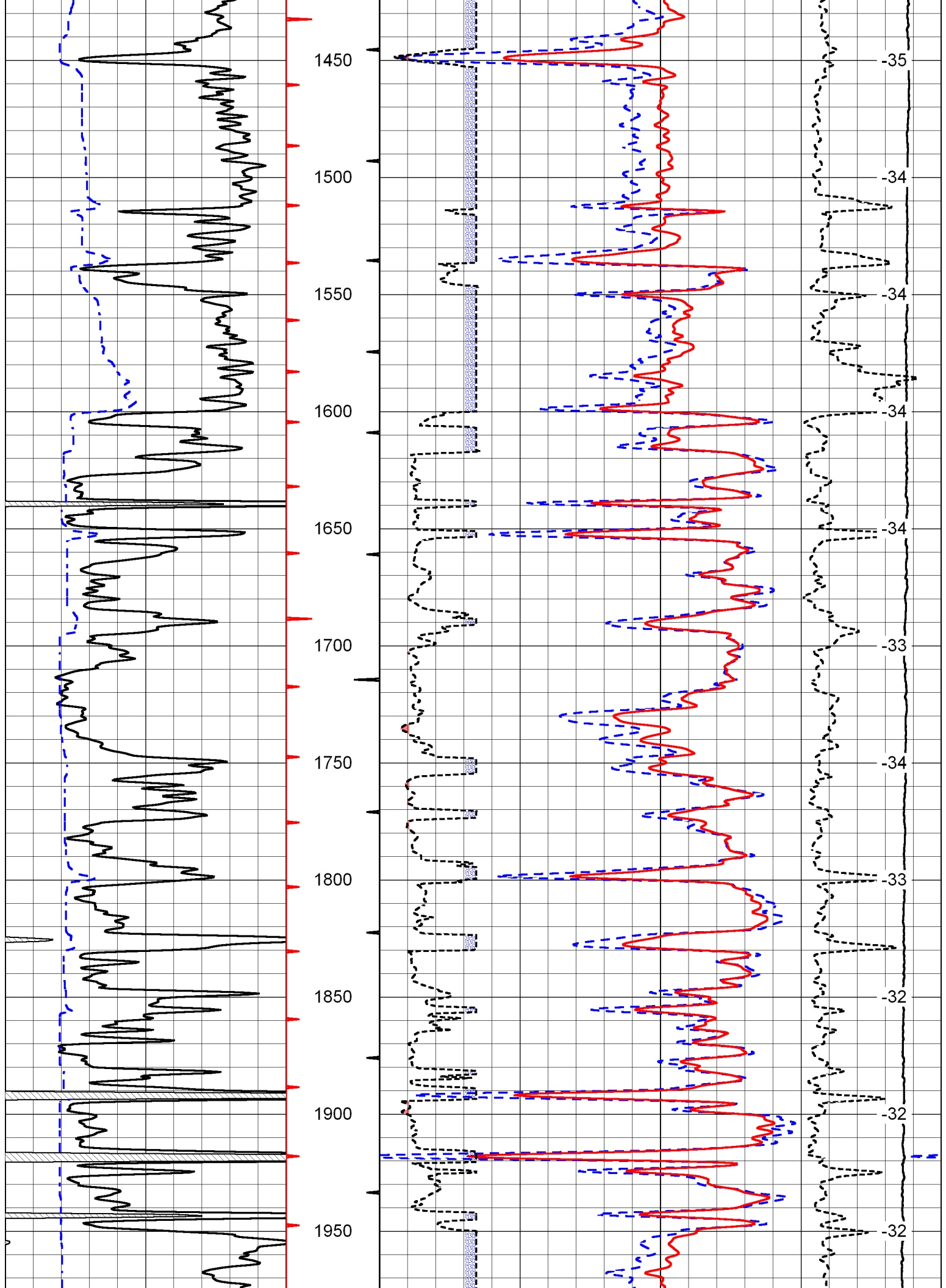
30	Compensated Density				-10
2	Bulk Density				3
15000	Line Tension				0
2.625	DGA	3.425	-0.25	Correction	0.25
LSPD					

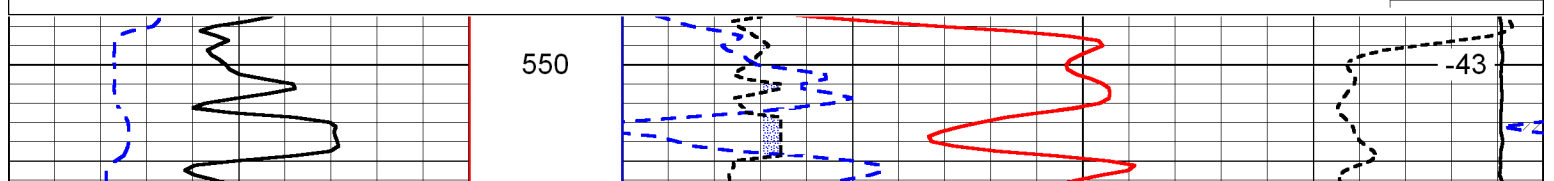
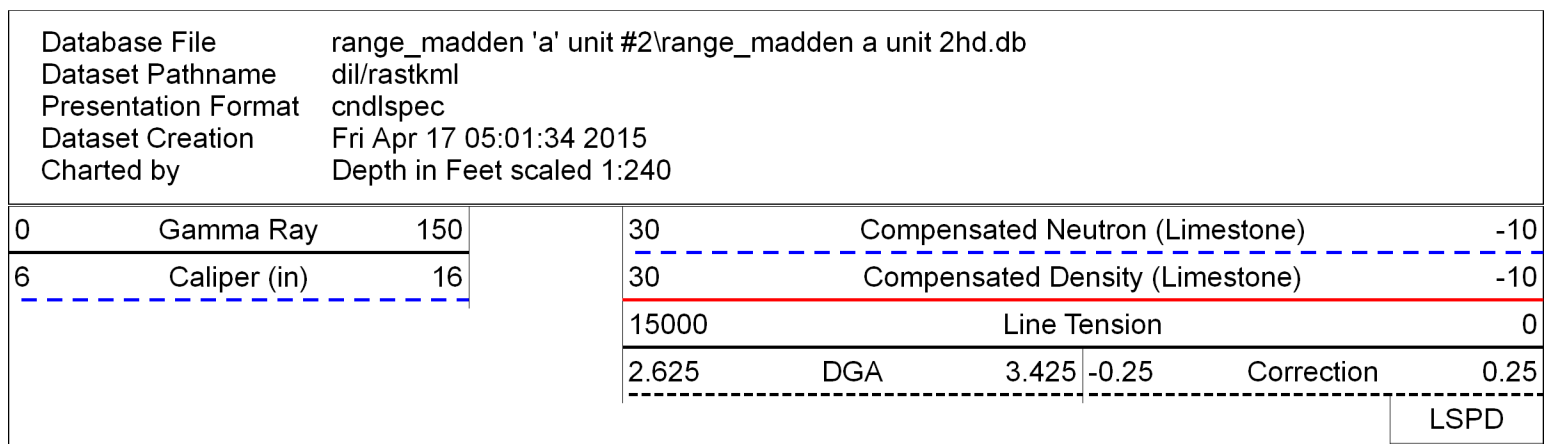
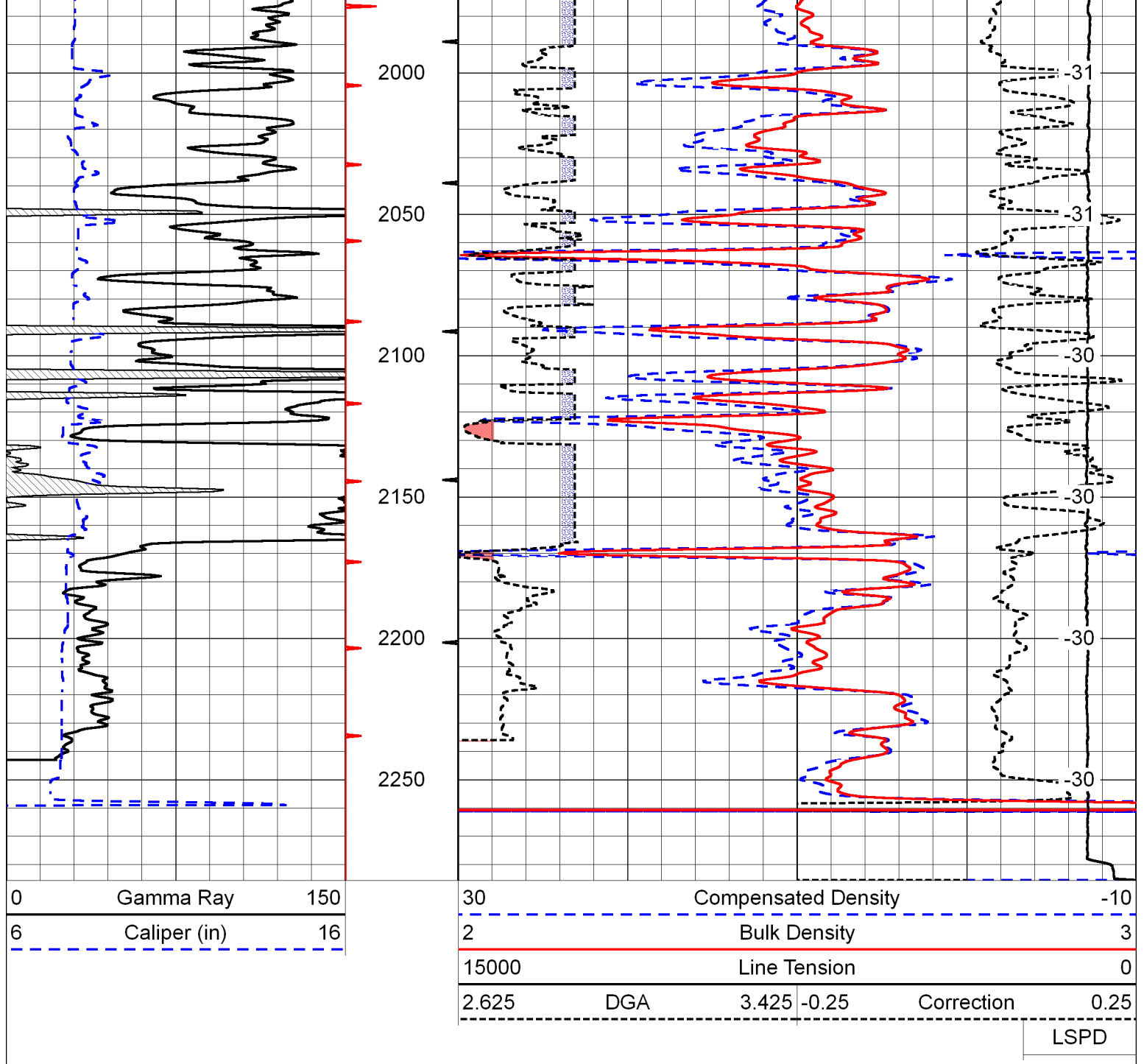
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Dataset Pathname	dil/rastkml				
Presentation Format	cdl				
Dataset Creation	Fri Apr 17 05:01:34 2015				
Charted by	Depth in Feet scaled 1:600				

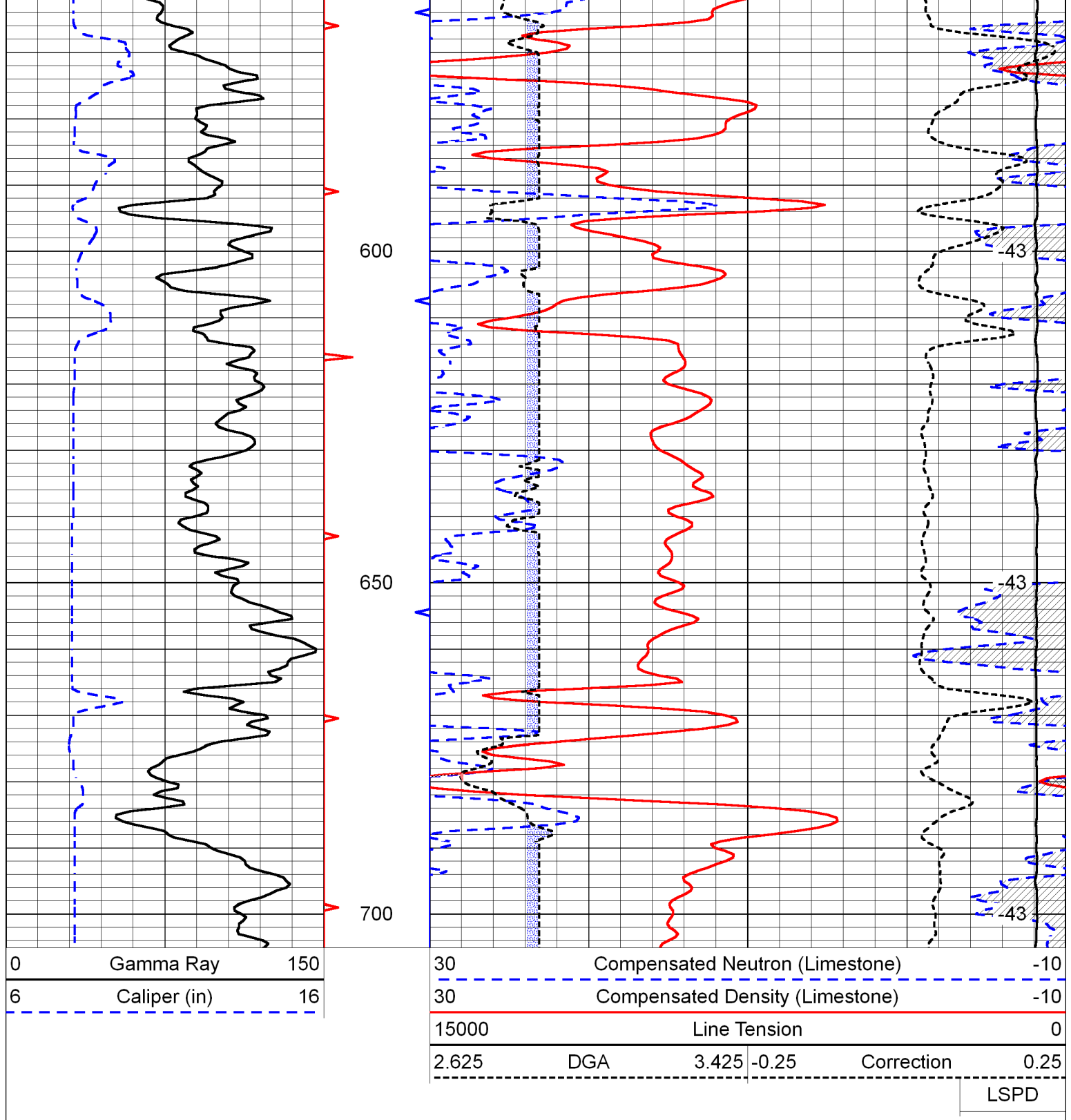
0	Gamma Ray	150
6	Caliper (in)	16

30	Compensated Density				-10
2	Bulk Density				3
15000	Line Tension				0
2.625	DGA	3.425	-0.25	Correction	0.25
LSPD					









Database File	range_madden 'a' unit #2\range_madden a unit 2hd.db				
Dataset Pathname	dil/rastkml				
Presentation Format	cndlspec				
Dataset Creation	Fri Apr 17 05:01:34 2015				
Charted by	Depth in Feet scaled 1:240				
0	Gamma Ray	150	30	Compensated Neutron (Limestone)	-10
6	Caliper (in)	16	30	Compensated Density (Limestone)	-10
					15000
					Line Tension
					0
2.625	DGA	3.425	-0.25	Correction	0.25
					LSPD

