



**SUPERIOR**  
Black Lick, Pa.  
Mercer, Pa.  
Wooster, Oh.  
Cleveland, Ok.  
Trinidad, Co.

## SINGLE INDUCTION LOG

Company	Pioneer Natural Resources	Company	Pioneer Natural Resources
Well	Jennifer J. 21-28	Well	Jennifer J. 21-28
Field	Purgatoire River	Field	Purgatoire River
County	Las Animas	County	Las Animas
State	CO	State	CO
Location:	API # : 071-09352-00 90' FNL & 2199' FWL	Other Services	cdl
Permanent Datum	SEC 28 TWP 34S RGE 65W	Elevation	
Log Measured From	Ground level	K.B. 7147'	
Drilling Measured From	Kelly Bushing 4' Above G.L.	D.F. -----	
	Kelly Bushing	G.L. 7143'	
Date	8-4-07		
Run Number	One		
Depth Driller	1385'		
Depth Logger	1387'		
Bottom Logged Interval	1385'		
Top Log Interval	Surface Casing		
Casing Driller	8.625@499'		
Casing Logger	500'		
Bit Size	7 7/8"		
Type Fluid in Hole	Water		
Density / Viscosity	///		
pH / Fluid Loss	///		
Source of Sample	///		
Rm @ Meas. Temp	///		
Rmf @ Meas. Temp	///		
Rmc @ Meas. Temp	///		
Source of Rmf / Rmc	///		
Rm @ BHT	///		
Time Circulation Stopped	6:30 AM		
Time Logger on Bottom	9:30 AM		
Maximum Recorded Temperature	87F		
Equipment Number	T0700		
Location	Trinidad		
Recorded By	Karl Lucero		
Witnessed By	C. Brooker		

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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

Density Porosity Presented On Sandstone Matrix  
ABHV Calculated for 5 1/2 Casing.

Well Directions:

Longs Canyon past hay bails, immediate right after gate, follow to top of hill, 1st location on right.



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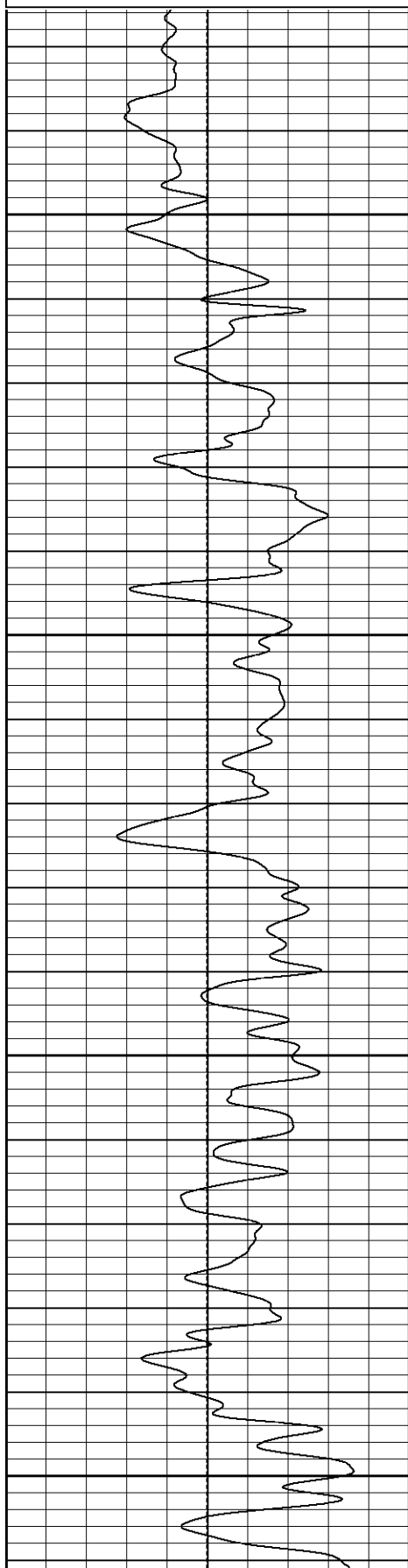
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# Main Pass

Database File: jenifer.j.db  
Dataset Pathname: pass2.3  
Presentation Format: iel  
Dataset Creation: Sat Aug 04 10:41:38 2007 by Calc Open-Cased 070508  
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	200
-100	SP (mV)	100

0.2	DIR (Ohm-m)	2000
0.2	SN (Ohm-m)	2000

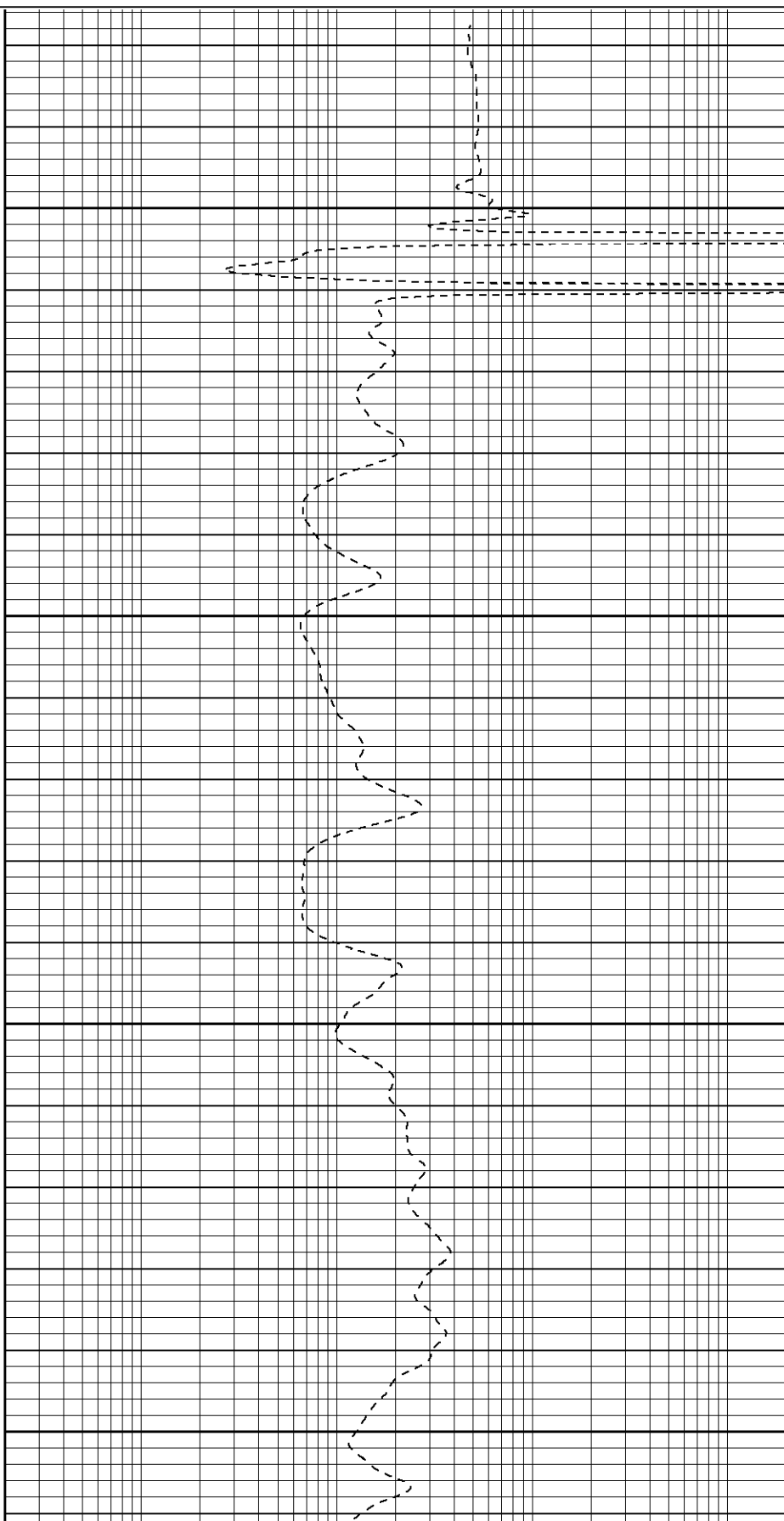


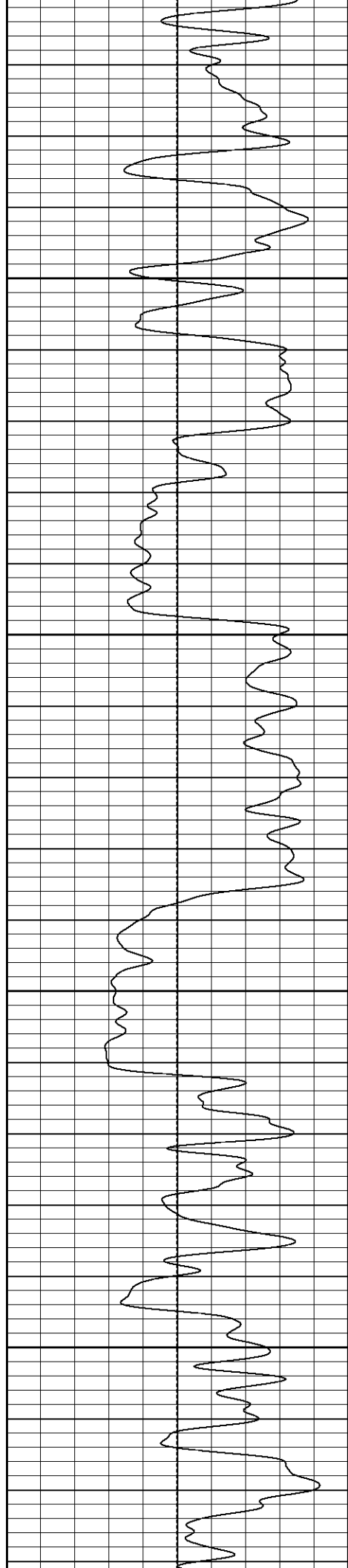
500

550

600

650



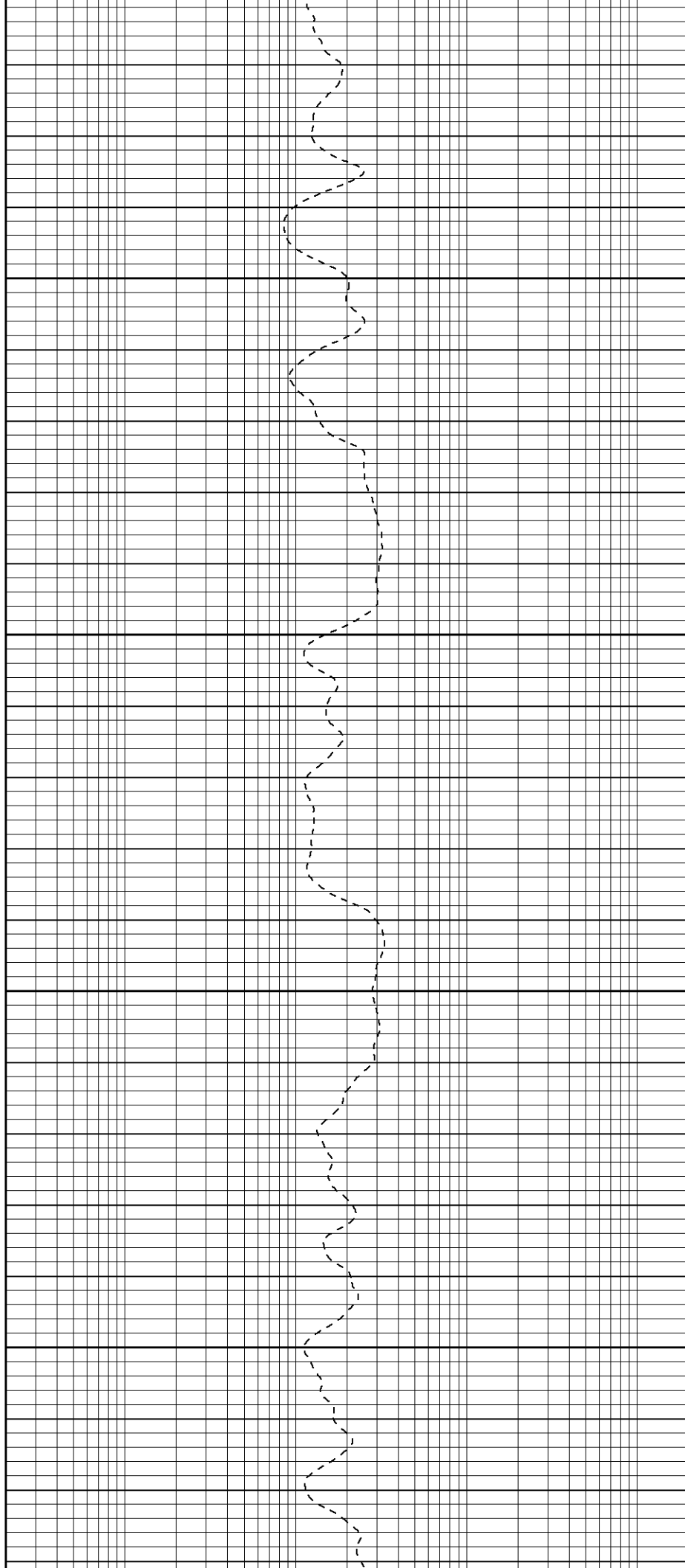


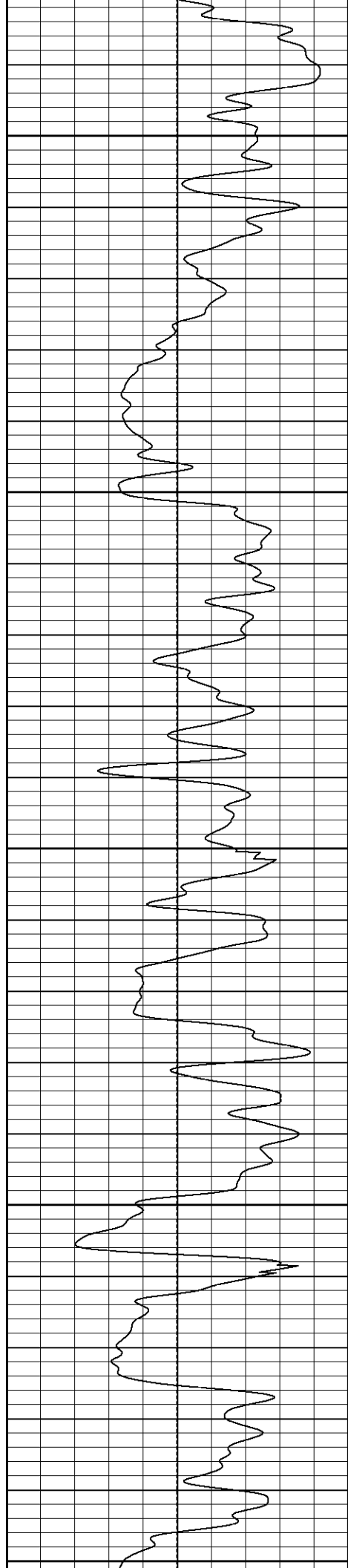
700

750

800

850





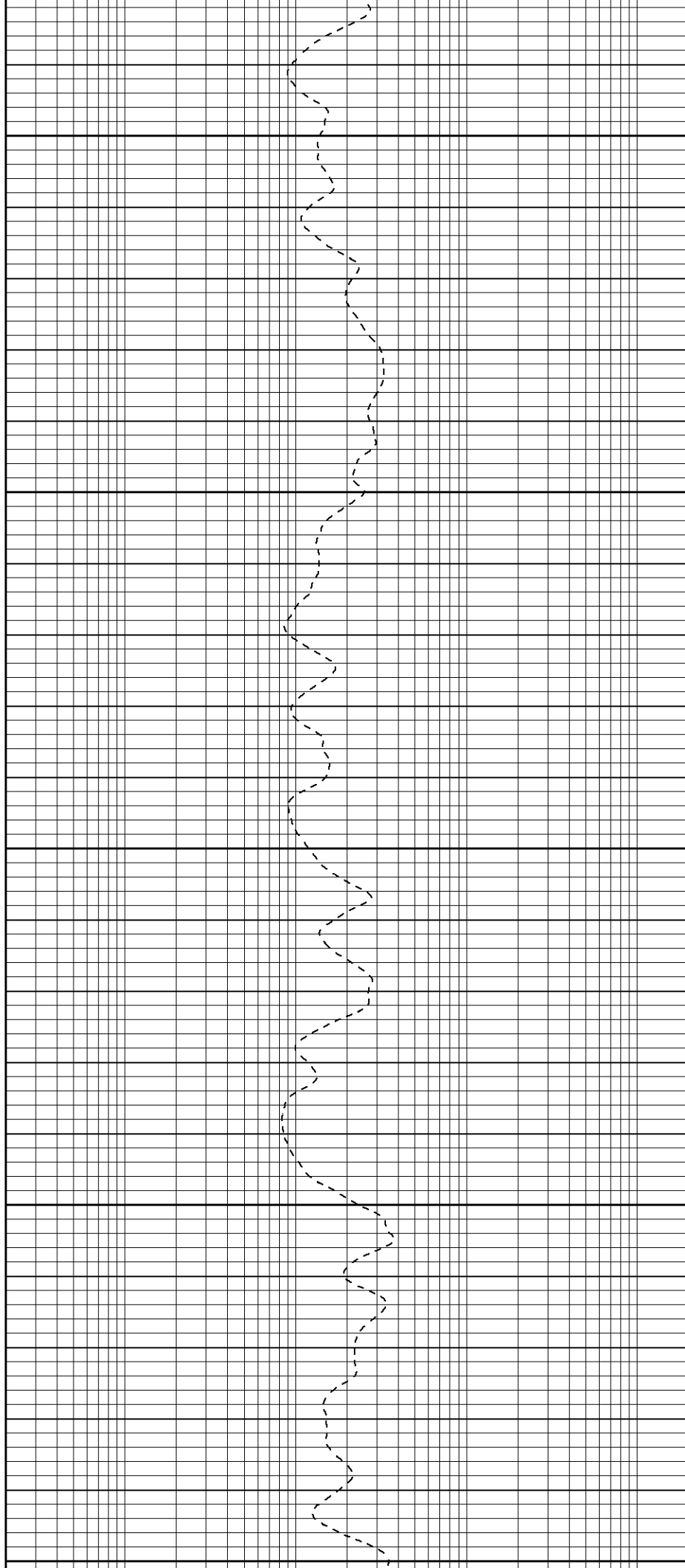
900

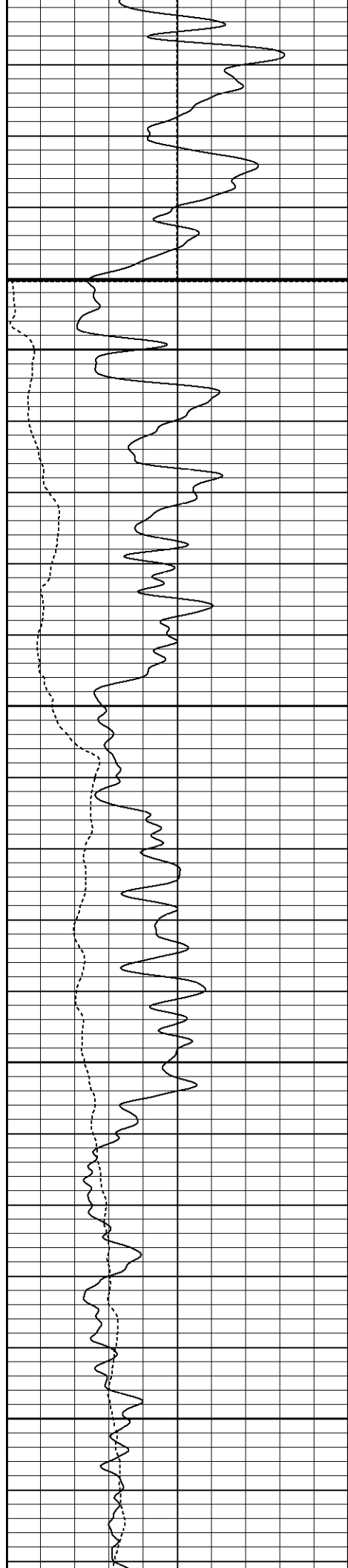
950

1000

1050

1100





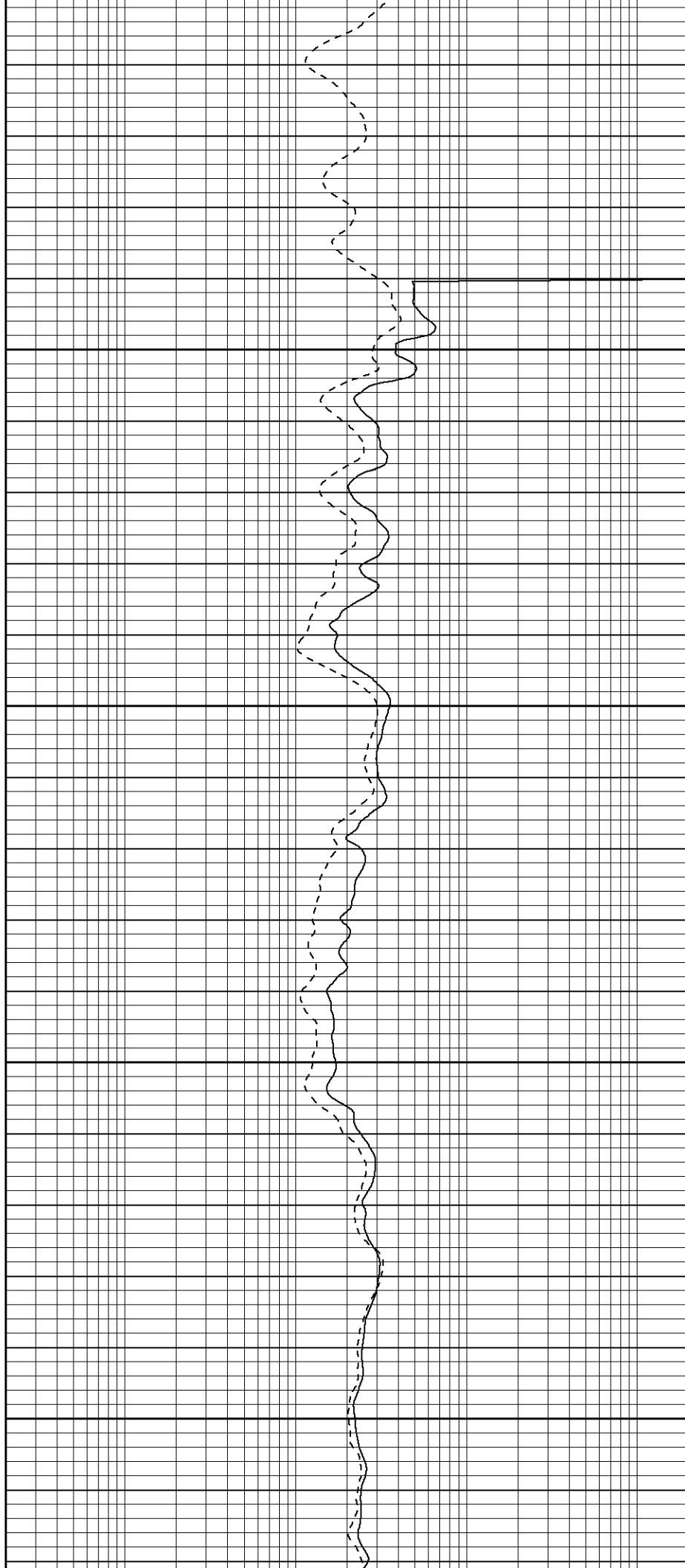
Fluid Level

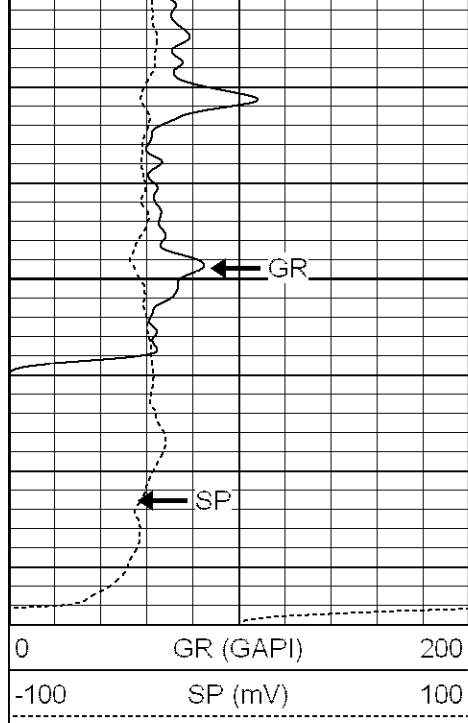
1150

1200

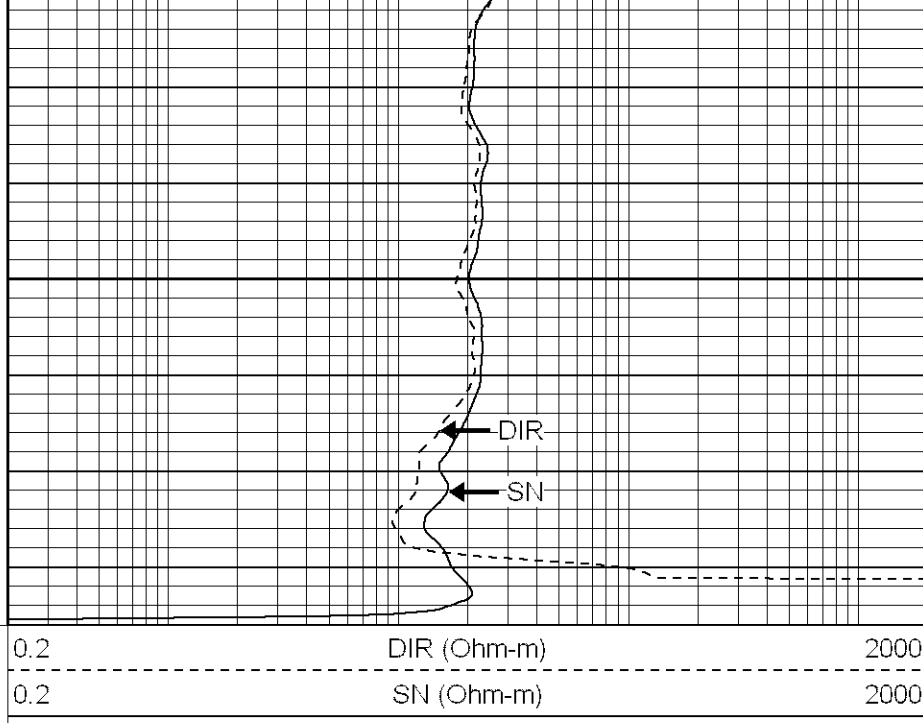
1250

1300





1350

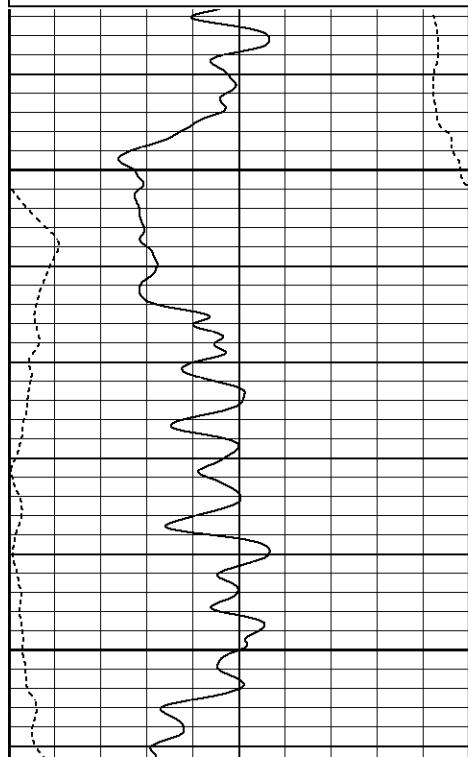
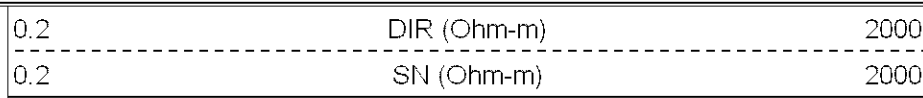
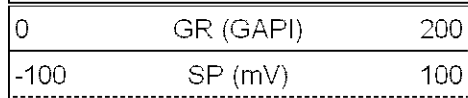


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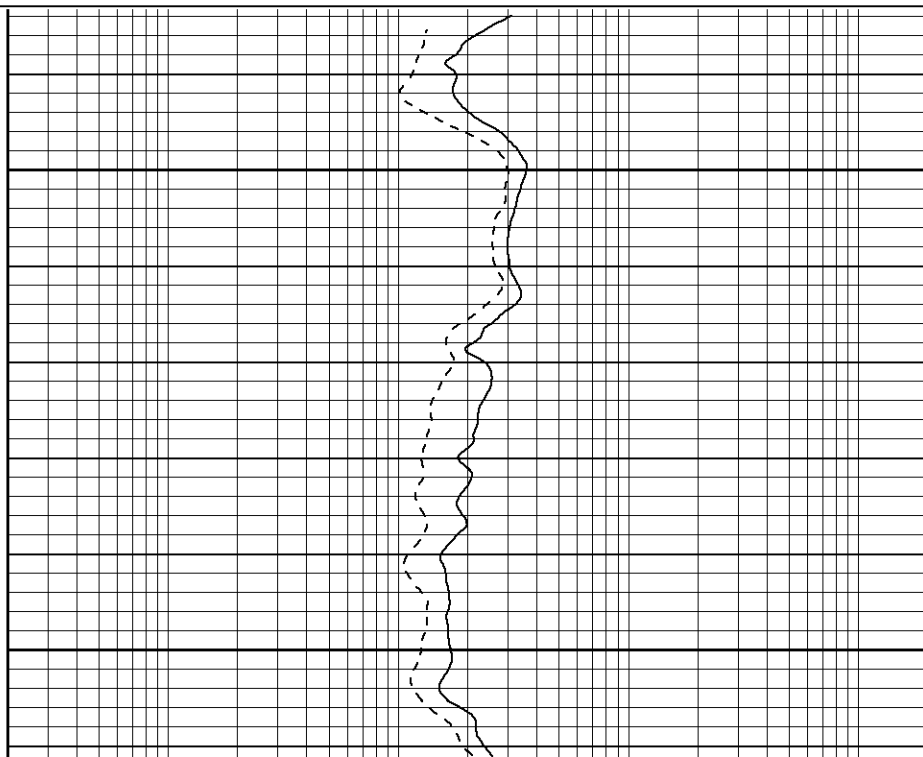
# Repeat Pass

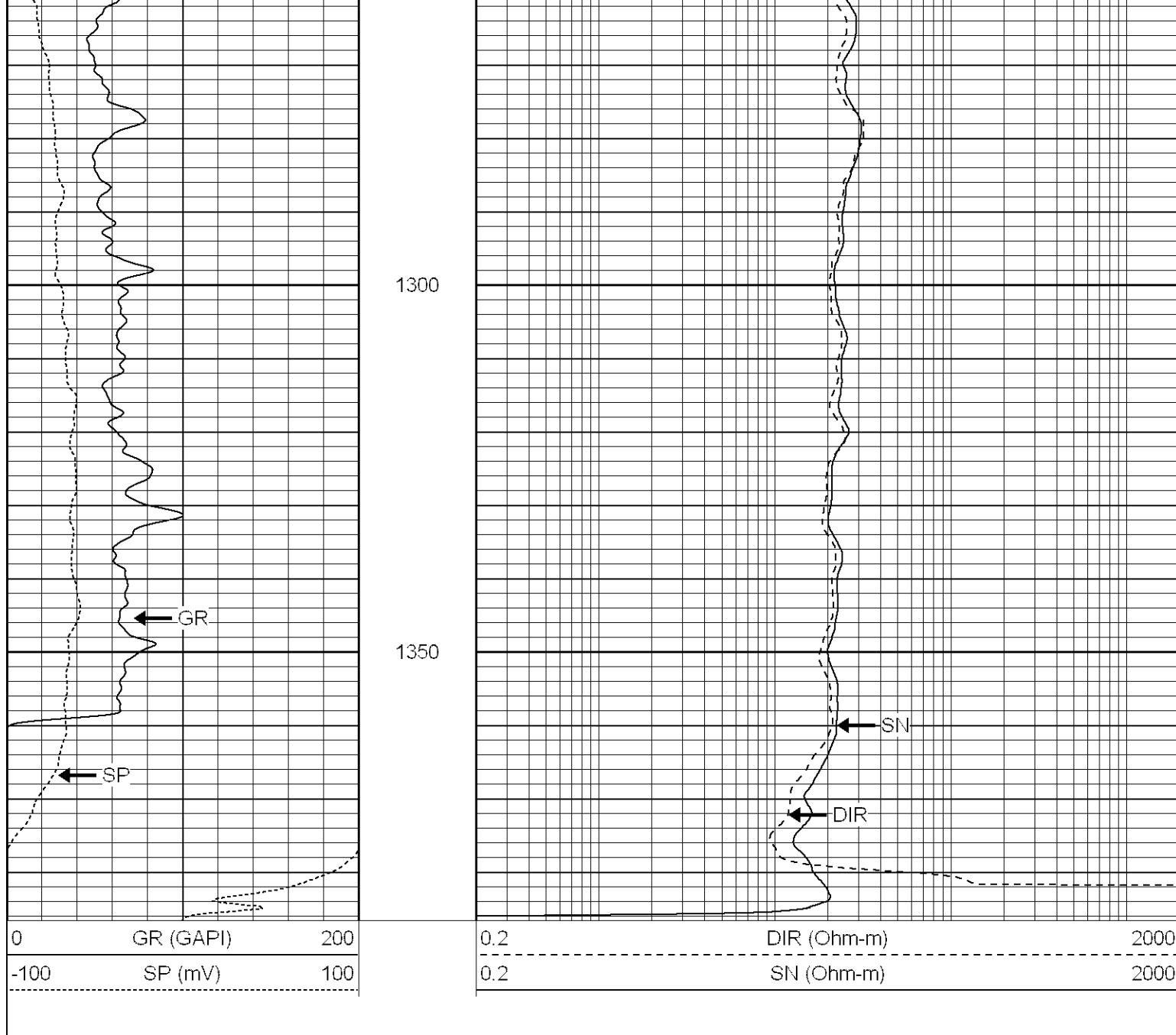
Database File: jenifer j.db  
Dataset Pathname: pass1.3  
Presentation Format: iel  
Dataset Creation: Sat Aug 04 10:13:32 2007 by Calc Open-Cased 070508  
Charted by: Depth in Feet scaled 1:240



1200

1250





### Calibration Report

Database File: jenifer.j.db  
 Dataset Pathname: pass1  
 Dataset Creation: Sat Aug 04 09:45:07 2007 by Log Open-Cased 070508

### Induction Tool Calibration Report

Serial Number: 120  
 Tool Model: G  
 Downhole Cal Performed: Mon Jun 25 14:25:39 2007  
 Surface Cal Performed: Mon Jun 25 14:15:52 2007

Surface Calibration:	Air	Loop	
Conductivity Reference:	0.000	450.000	mmho
Conductivity Reading:	0.006	0.643	V
Internal Reference:	Zero	Cal	
Conductivity Reference:	0.000	500.000	mmho
Conductivity Reading:	0.005	0.643	V

Downhole Calibration:	Internal Zero	Internal Cal	
Conductivity Reference:	-1.169	450.246	mmho
Conductivity Reading:	-1.191	449.948	V
Serial Number:	120	2000	Ohm-m

Short Normal Reference:		0.000	20.000	Ohm-m
Short Normal Reading:		0.023	0.198	V
Results:	Gain		Offset	
	Loop Conductivity:		706.768	
	Downhole Correction:		-4.469	
	Short Normal Resistivity:		1.001	
		113.797	0.022	
			-2.586	

Temperature Calibration Report
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Serial Number:		2099T		
Tool Model:		CDLP		
Performed:		Fri Aug 03 09:17:48 2007		
		Reference	Reading	
Low Reference:		55.00 degF	3.15	V
High Reference:		160.00 degF	5.35	V
Gain:		47.73		
Offset:		-95.34		
Delta Spacing		1		

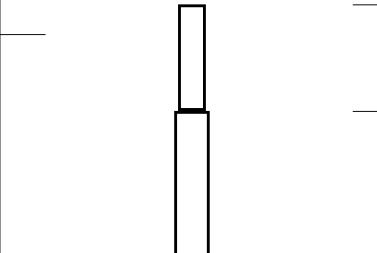
Compensated Density Calibration Report
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Serial-Model:		2099-NG		
Source / Verifier:		csv-n20 / blocks		
Master Calibration Performed:		Fri Aug 03 09:16:39 2007		

Master Calibration				
		Density	Far Detector	Near Detector
Magnesium		1.710 g/cc	1056.38	446.27 cps
Aluminum		2.590 g/cc	225.55	293.63 cps
		Spine Angle = 74.83		Density/Spine Ratio = 0.550
		Size	Reading	
Small Ring		7.85 in	2.05	V
Large Ring		14.00 in	3.12	V

Gamma Ray Calibration Report
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Serial Number:		2000		
Tool Model:		P2000		
Performed:		Mon Jul 09 14:11:13 2007		
Calibrator Value:		200.0	GAPI	
Background Reading:		54.0	cps	
Calibrator Reading:		219.0	cps	
Sensitivity:		0.2700	GAPI/cps	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	27.45		GR-P2000 (2000)	3.50	3.25	40.00
			GR-P2000 (2000)	3.50	3.25	40.00



