

**DUAL INDUCTION
LL3 / SP
LOG**

Company: Seacoast Utility Authority
Well: NPB-8A
Field: North Palm Beach
County: Palm Beach
State: Florida
Country: USA

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Location: Richard Road Water Treatment Plant
North Palm Beach Wellfield Expansion
SEC: J.L. Geoscientists, Inc.
TVP: RGE
ROE: RGE

AP # :
AP # :
AP # :

Other Services:
X/GK
DL/SP

Elevation: G.L.
K.B.
D.F.
G.L.

Log Measured From: G.L.
Drilling Measured From: G.L.

Date: 3-MAY-2013
Run Number: ONE
Depth (m): 205
Depth (ft): 207
Bottom Interval: 202
Top Log Interval: 7
Open Hole Size: 7.875"
Type Fluid: MUDA
Density / Viscosity: NA
Max Recorded Temp: NA
Time Lapsed on Bottom: 11:20:56/2013
Time Lapsed on Top: 13:30:56/2013
Equipment Number: MWGS-1
Recorded By: S Miller/C Miller
Witnessed By: A Guiliano (JLA)
Borehole Record: J.Friedrichs (JLA)
Kyle (AES)

Run Number: 7.875"
To: 205
Size: Weight: From: To

Core Record:
Surface String: 8"
Production String: 6"
Liner No: 2013090
vseac-8a.db
* FIELD PRINT *

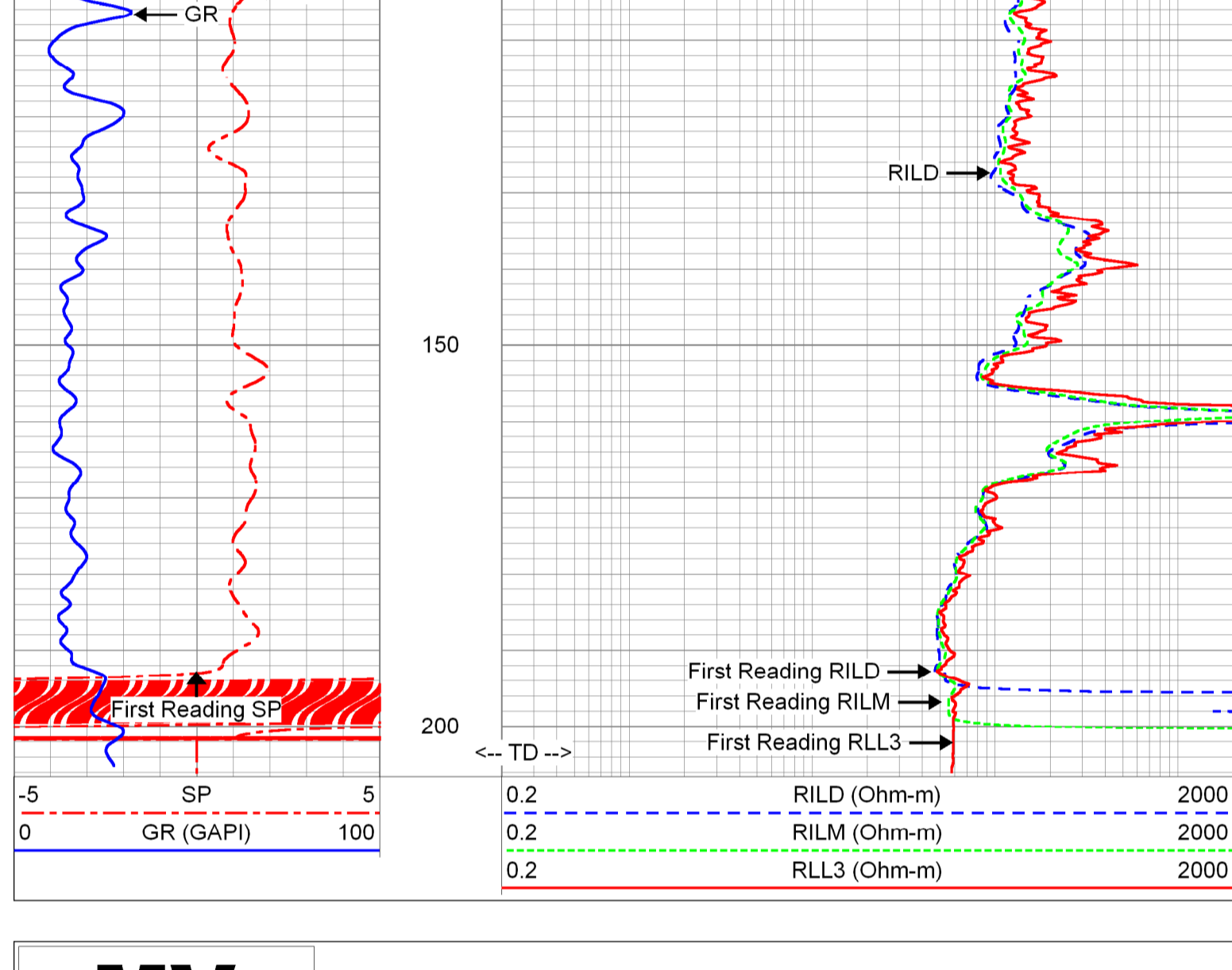
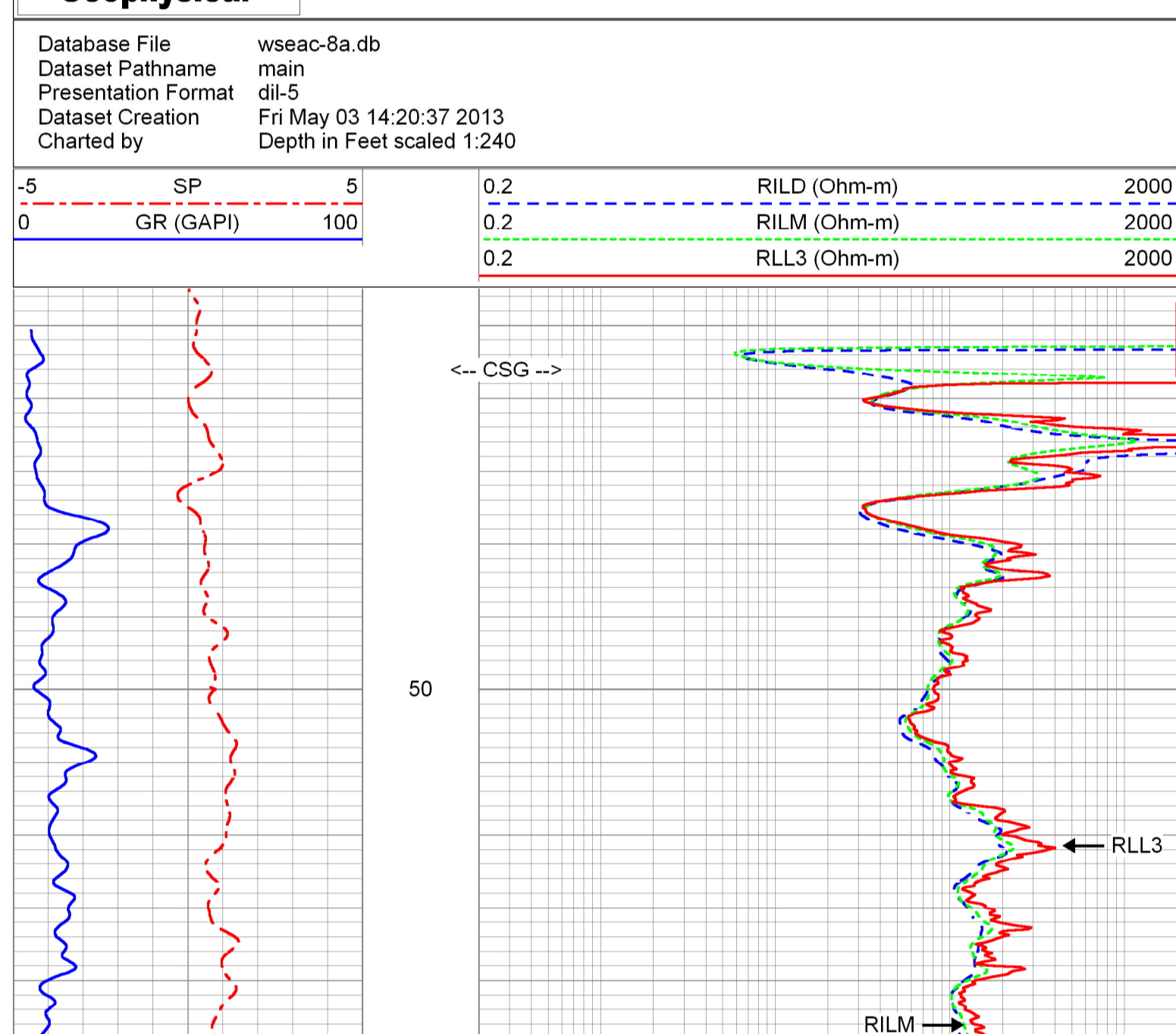
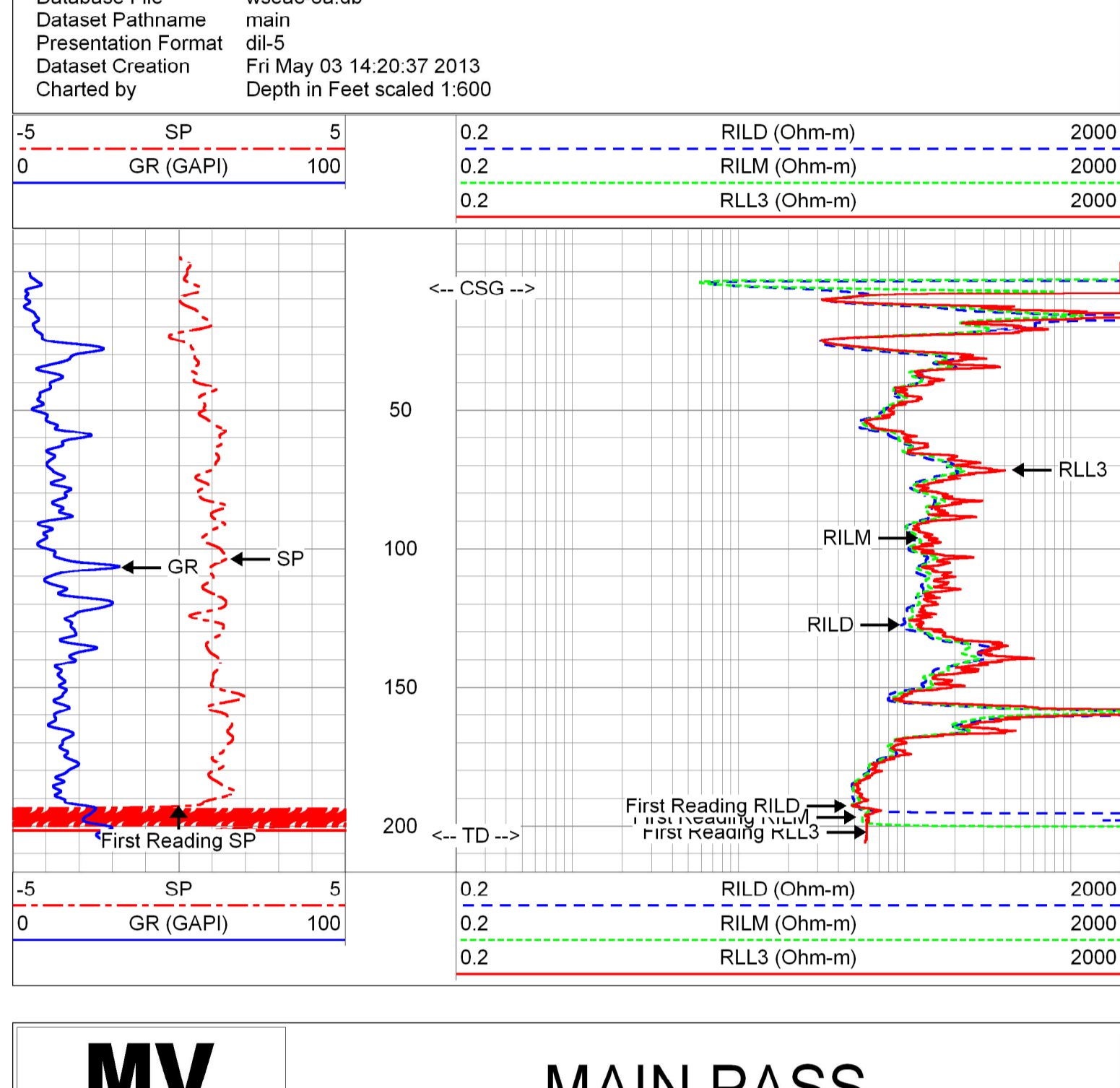
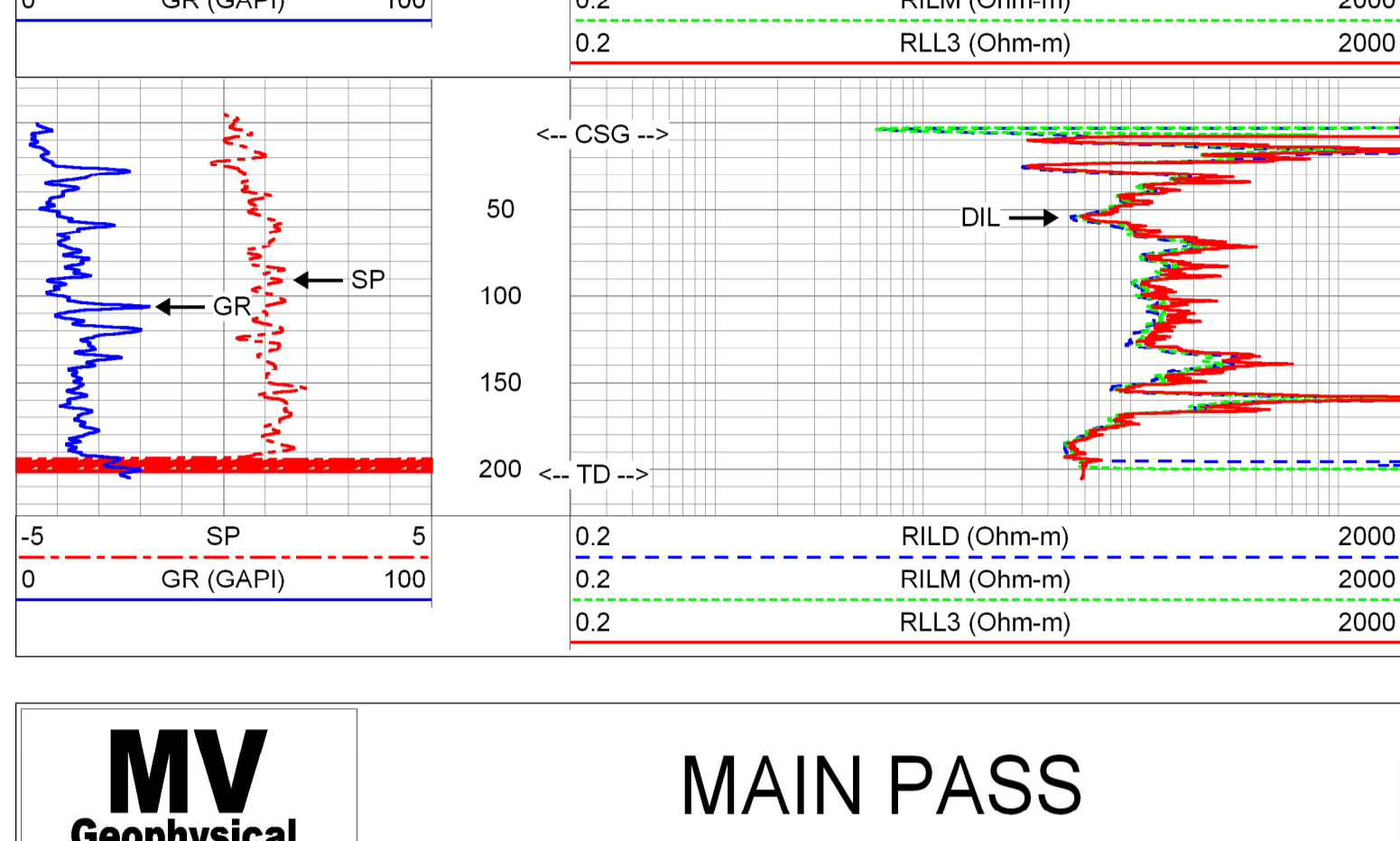
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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.

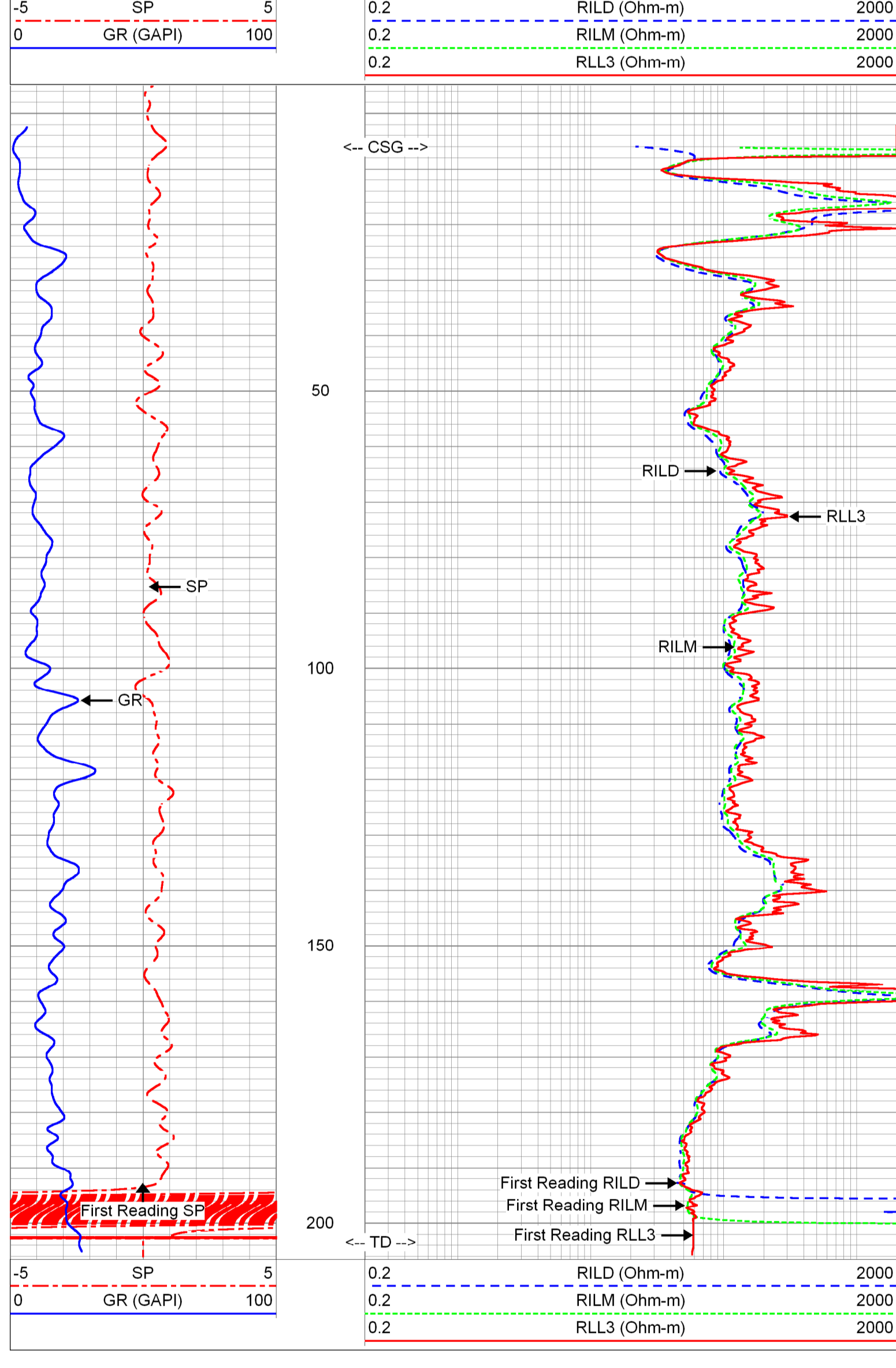
Comments

Rm=7.254 ohm-m @ 87.2 degF

Drilling Contractors: Wells & Water Systems, Inc.
and American Drilling Services, Inc.



REPEAT SECTION



Calibration Report

Database File: vseac-8a.db
Dataset Pathname: pass8
Dataset Creation: Fri May 03 13:56:10 2013

Dual Induction Calibration Report

Serial-Model: 5390-R
Surface Cal Performed: Wed Apr 21 11:17:23 2010
Downhole Cal Performed: Wed Apr 21 11:04:55 2010
After Survey Verification Performed: Wed Apr 21 11:04:55 2010

Surface Calibration

Loop:	Readings		References	Results	
	Air	Loop		m	b
Deep	0.050	0.645	0.000	400.000	672.269
Medium	0.018	0.735	0.000	464.000	647.120

Internal:

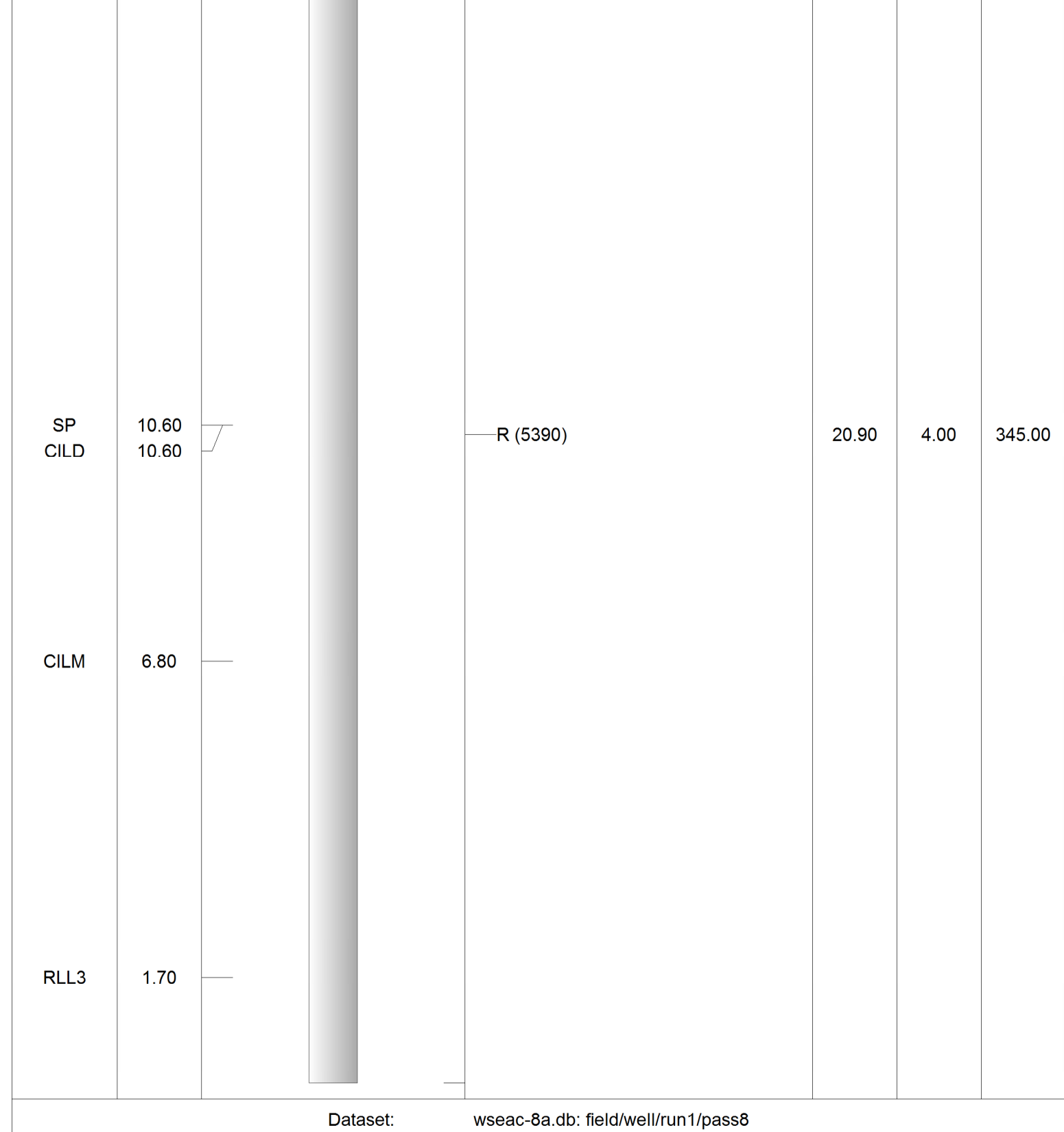
Deep	Medium	Readings		References	Results	
		Zero	Cal		m	b
0.011	0.041	0.000	400.000	634.921	-6.984	
0.005	0.739	0.000	464.000	632.408	-3.370	

Downhole Calibration

Internal:	Readings		References	Results	
	Zero	Cal		m	b
Deep	-43.158	78.288	-42.562	77.983	0.993
Medium	-9.475	466.701	-8.097	466.698	0.997
Shallow	2.516	0.025	494.500	2.000	197.689

After Survey Verification

Internal:	Readings		Targets	Results	
	Zero	Cal		m'	b'
Deep	0.000	0.000	-43.158	78.288	0.993
Medium	0.000	0.000	-9.475	466.701	0.997
Shallow	0.000	0.000	494.500	2.000	1.000

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
SP	10.60		R (5390)	20.90	4.00	345.00
CILD	10.60					
CILM	6.80					
RLL3	1.70					

Dataset: vseac-8a.db: field/well/run1/pass8
Total length: 20.90 ft
Total weight: 345.00 lb
O.D.: 4.00 in

MV Geophysical

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Well: NPB-8A
Field: North Palm Beach
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State: Florida
Country: USA