Schlumberger

Company: Omimex Petroleum Inc

Well: Mailander 4-34-6-45

Field: Ballyneal

County: Phillips State: Colorado

Platform Express

Array Induction

with Linear Correlation

County: Phillips
Field: Ballyneal
Location: SWNE Sec34 T6N R45W
Well: Mailander 4-34-6-45
Company: Omimex Petroleum Inc

Location:			
SWNE Sec34 T6N R45W SHL: 481' FNL, 394' FWL	Elev.:	K.B.	3810.00 ft
		G.L.	3804.00 ft
		D.F.	3809.00 ft

Permanent Datum:	Ground Level	Elev.:	3804.00 f
Log Measured From:	Kelly Bushing	6.00 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing		

API Serial No.	Section:	Township:	Range:
05-095-06465	34	6N	45W

Logging Date			12-Nov-2014			
Run Number			ONE			
Depth Driller			2696.00 ft			
Schlumberger Depth			2695.00 ft			
Bottom Log Interval			2695.00 ft			
Top Log Interval			498.00 ft			
Casing Driller Size @ Depth			7 in @ 497.00 ft			
Casing Schlumberger			498 ft			
Bit Size			6.25 in			
Type Fluid In Hole			Water			
MUD	Density	Viscosity	9 lbm/gal	30 s		
	Fluid Loss	PH	4.8 cm3	8.5		
	Source of Sample		AIT Measured			
RM @ Meas Temp			0.18 ohm.m @ 74 degF			
RMF @ Meas Temp			0.14 ohm.m @ 74 degF			
RMC @ Meas Temp			0.27 ohm.m @ 74 degF			
Source RMF	RMC		Calculated	Calculated		
RM @ BHT	RMF @ BHT		0.15 @ 89	0.12 @ 89		
Max Recorded Temperatures			89 degF			
Circulation Stopped	Time		12-Nov-2014	17:15:00		
Logger on Bottom	Time		12-Nov-2014	20:54:10		
Unit Number	Location:		2135	Fort Morgan		
Recorded By			B Makinson			
Witnessed By			Paul Dekaye			

Disclaimer

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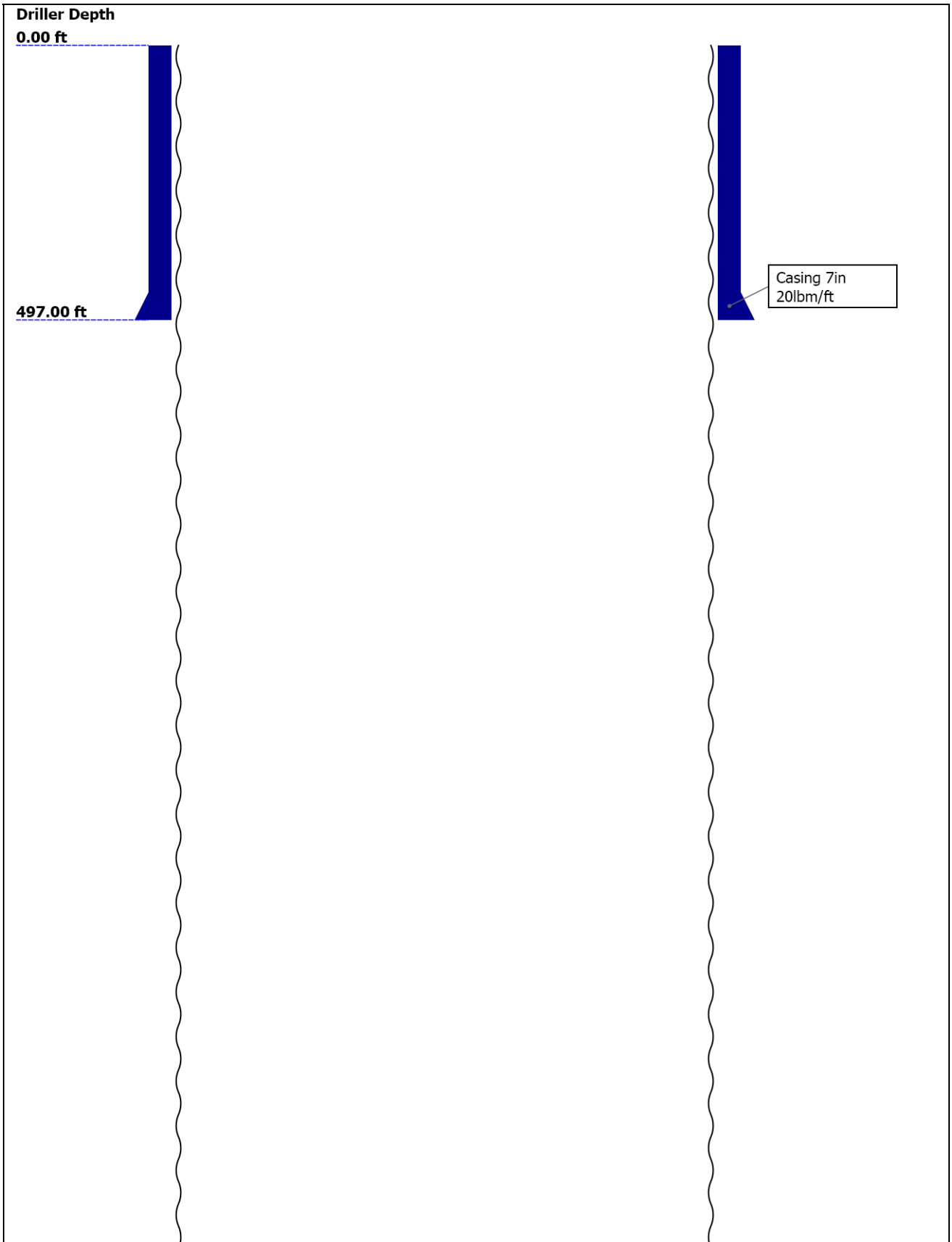
Well Sketch



Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	6.25					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	2696					
Bottom Logger (ft)	2695					
Casing						
Size (in)	7					
Weight (lbm/ft)	20					
Inner Diameter (in)	6.456					
Grade	J55					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	497					
Bottom Logger (ft)	498					

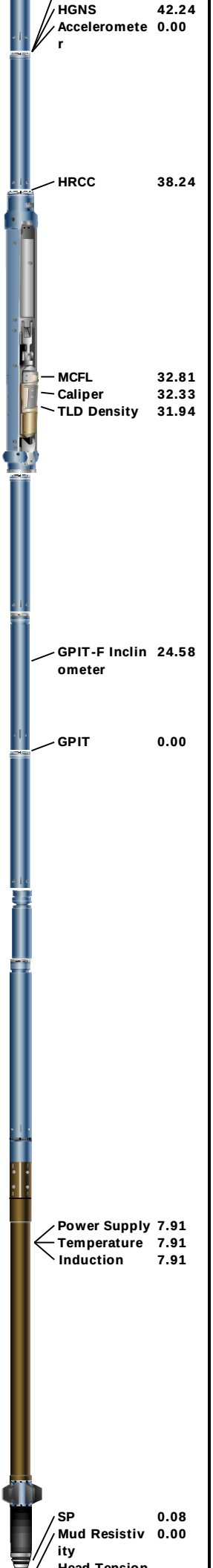
Remarks and Equipment Summary

ONE: Toolstring

Equip name	Length	MP name	Offset
LEH-QT	61.07		
LEH-QT			
EDTC-B:8328	58.15		
EDTH-B			
EDTG-A			
EDTC-B:8328			
		CTEM	54.65
		ACCZ	0.00
		HV	0.00
		Gamma Ray	52.78
		TelStatus	51.65
HGNS-H:4810	51.65	**Temperature**	51.62
HGNH			
NSR-F:5215			
NPV-N			
HGNS-H:4810			
HMCA-H			
HACCZ-H:5955			
		GR	50.91
		CNL Porosity	44.58
		HMCA	42.24

ONE: Remarks

ONE: Remarks
First run in the well.
Toolstring run as per tool sketch.
No bowspring used to eccenter HGNS as per request.
Limestone matrix, MDEN: 2.71
Neutron corrections applied: Hole size, Standoff.
Down log stretch correction: 0.26 ft.
Cement volume calculated assuming 4.5" future casing.
Caliper check in casing within 0.1" tolerance.
Mud resistivity measured from AIT AMF.
TD: 2695 ft, CSG: 498 ft.



HDRS-H 42.24
ECH-MEB
HRCC-H
HRMS-H
Short Spacing
HRGD-H:3760
Long Spacing
Backscatter
GSR-J:5471
GPV-Q

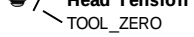
Adaptor_Head[2] 30.00

GPIT-F:770 26.00
GPIH-B:3713
GPIC-F:770
DHRU-F:799

Adaptor_Head[1] 22.00

AH-184 18.00

AIT-M:181 16.00
AMIS:181
AMRM:181



Lengths are in ft
Maximum Outer Diameter = 9.000 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Depth Summary

	ONE		
Depth Measuring Device			
Type	IDW-JA		
Serial Number	6433		
Calibration Date	23-Sep-2014		
Calibrator Serial Number			
Calibration Cable Type	7-46 PXS		
Wheel Correction 1	-3		
Wheel Correction 2	-2		
Tension Device			
Type	CMTD-B/A		
Serial Number	1919		
Calibration Date	07-Nov-2014		
Calibrator Serial Number	441345A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	13		
Calibration Peak Error	24		
Logging Cable			
Type	7-46P-XS		
Serial Number	U711057		
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type	Single		

ONE:Depth Control Parameters		Depth Control Remarks
Log Sequence	First Log In the Well	All Schlumberger depth control procedures followed.
Rig Up Length At Surface		IDW used as primary depth control.
Rig Up Length At Bottom		Z-Chart used as secondary depth control.
Rig Up Length Correction		
Stretch Correction	0.26 ft	
Tool Zero Check At Surface		

ONE

Main Pass 2" Induction

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	237.09	ft3

Software Version

Acquisition System	Version
MaxWell	4.0.9163.3000
Application Patch	Patch-SP-10767_13393-4.0.9163.3001

Computation	Description	Version
Borehole	Borehole Ensemble provides common Borehole Parameters and Channels	4.0.9213.3000

Tool Elements	Description	Software Version	Firmware Version
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9231.3000	
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9231.3000	
AMIS	Array Induction Sonde - M	4.0.9247.3000	

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[3]:Up	Up	195.28 ft	2701.05 ft	12-Nov-2014 9:16:36 PM	12-Nov-2014 9:59:34 PM	ON	0.26 ft	No

All depths are referenced to toolstring zero

Log

Company:Omimex Petroleum Inc Well:Mailander 4-34-6-45

ONE: Log[3]:Up:S011

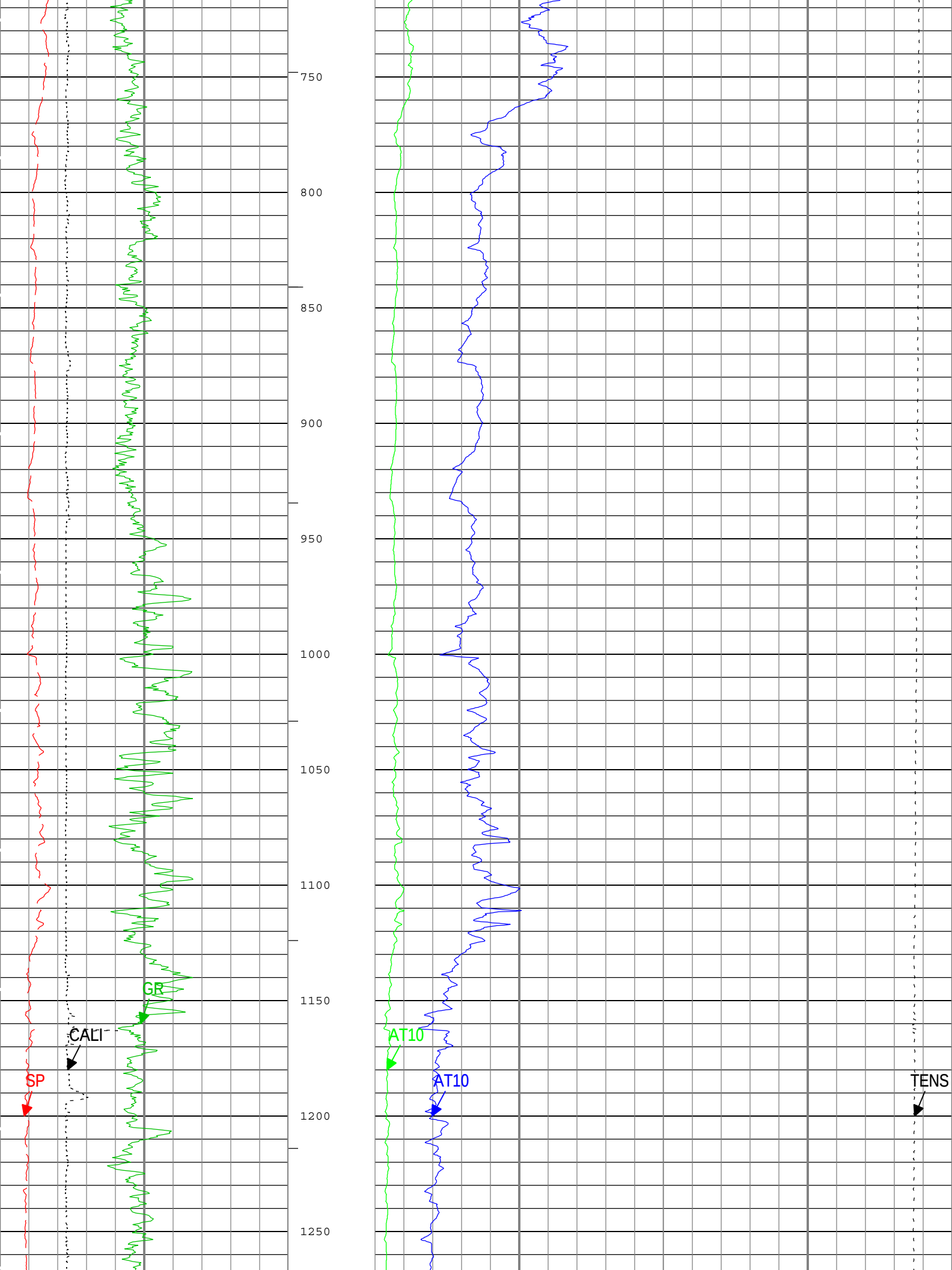
Description: AIT Basic Log Two Format: Log (Import of Kerr McGee 2in Induction) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Nov-2014 12:06:00

Channel	Source	Sampling
AT10	AIT-M:AMIS:AMIS	3in
CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR	HGNS-H:HGNS-H:HGNS-H	6in
ICV	Borehole	6in
SP	AIT-M:AMIS:AMIS	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

ICV - Integrated Cement Volume every 10.00 (ft3)

ICV - Integrated Cement Volume every 100.00 (ft3)

TIME_1900 - Time Marked every 60.00 (s)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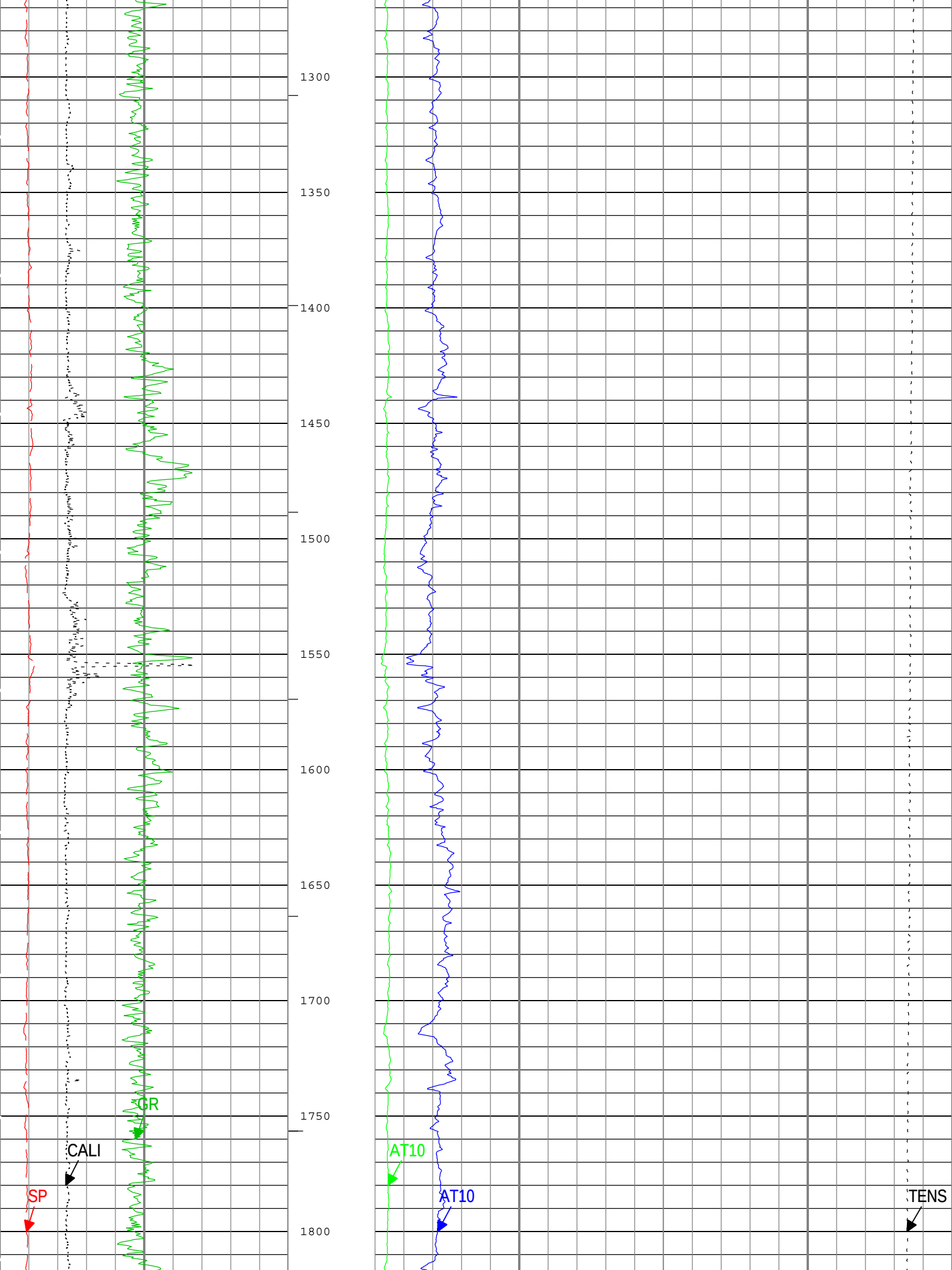
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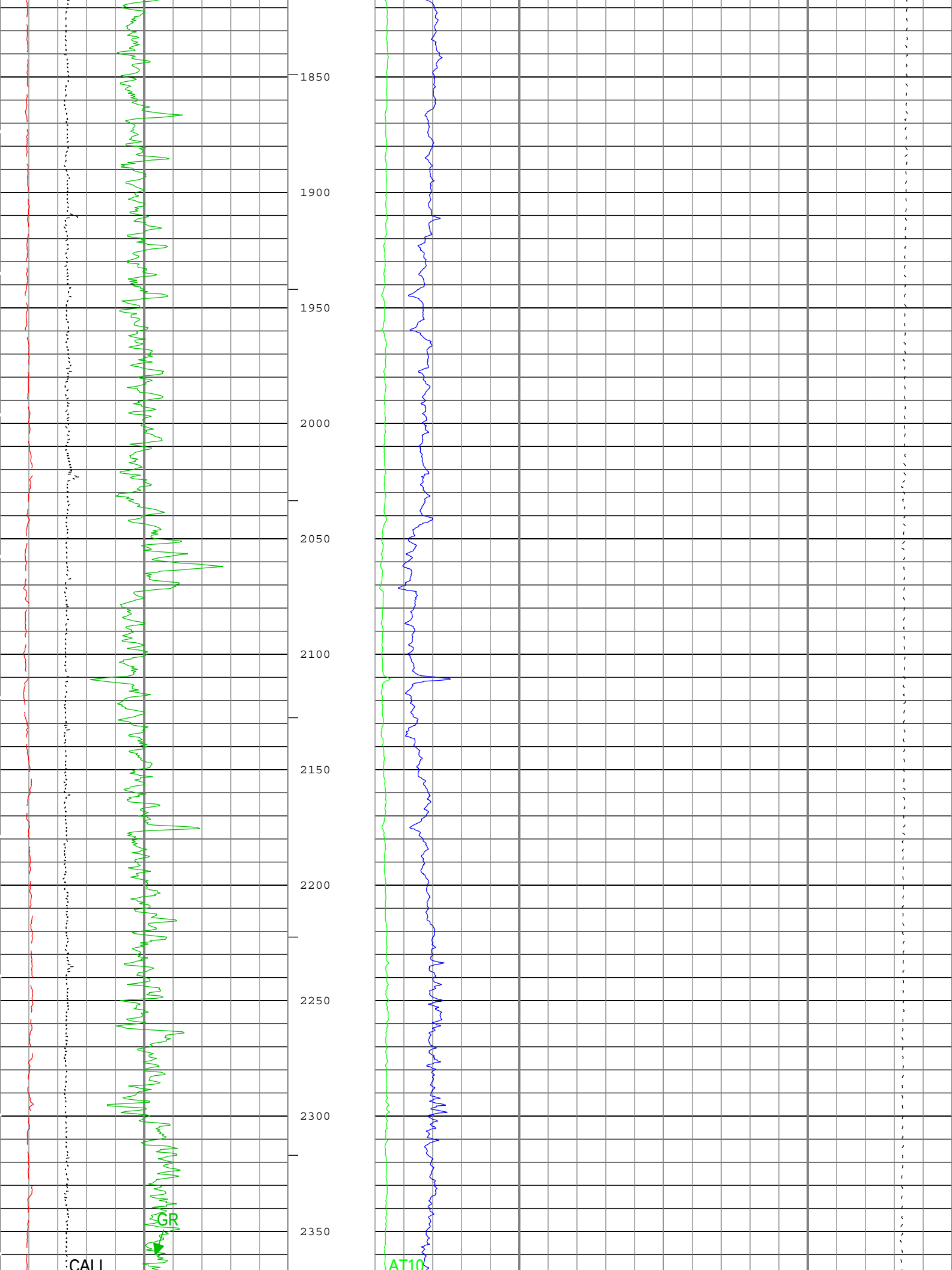
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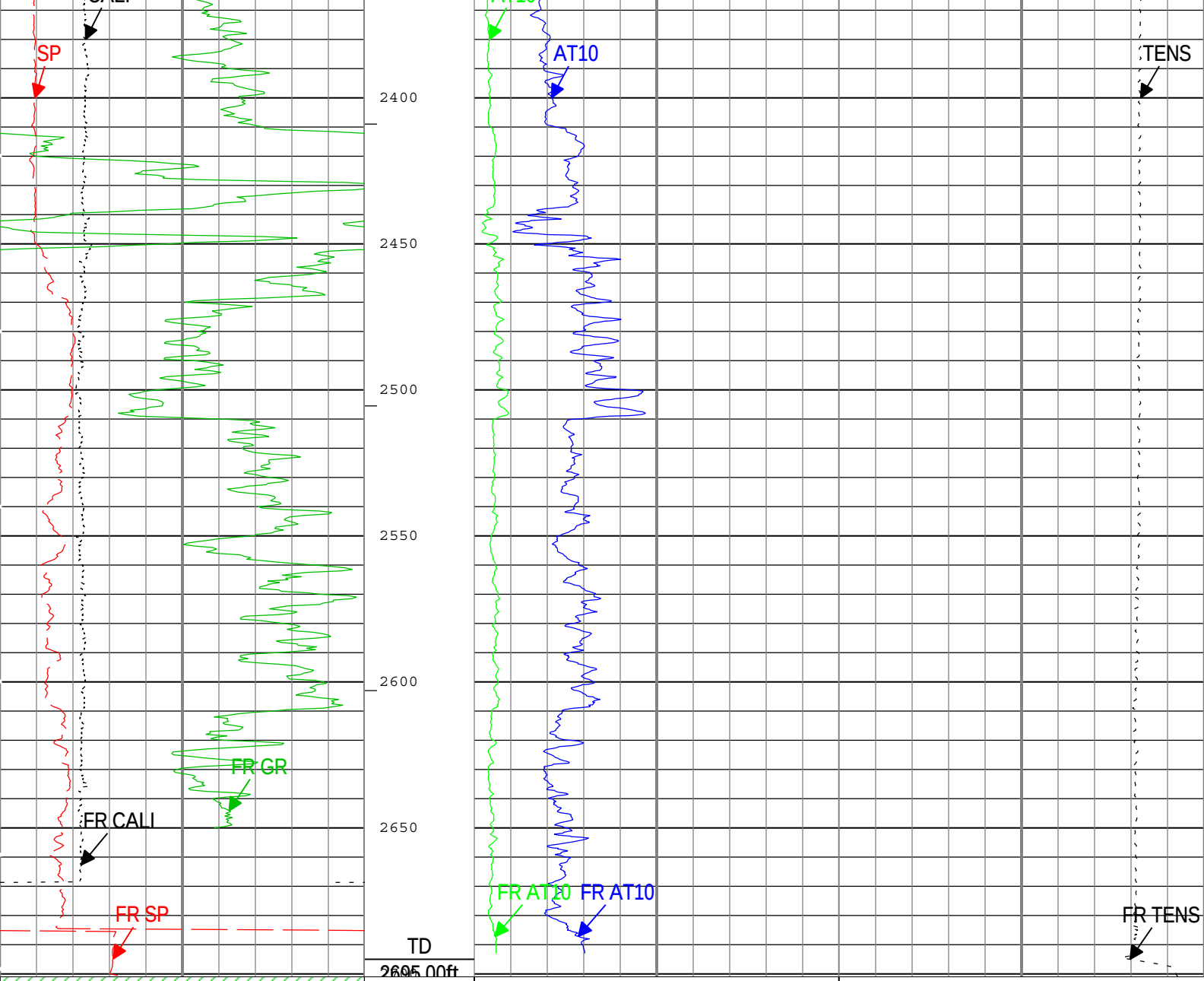


Gamma Ray Backup

Spontaneous Potential (SP) AIT-M
-160 mV 40

Caliper (CALI) HDRS-H
4 in 14

Gamma Ray (GR) HGNS-H
0 gAPI 200

Array Induction Two Foot Resistivity A10 (AT10) AIT-M
0 ohm.m 10

Array Induction Two Foot Resistivity A10 (AT10) AIT-M
0 ohm.m 50

Cable Tension (TENS)
10000 lbf 0

TIME_1900 - Time Marked every 60.00 (s)

ICV - Integrated Cement Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 10.00 (ft3)

Description: AIT Basic Log Two Format: Log (Import of Kerr McGee 2in Induction) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Nov-2014 12:06:00

Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Standoff	
ACDE	Array Induction Casing Detection Enable	AIT-M	No	
ASTA	Array Induction Tool Standoff	AIT-M	0.6	in
BARI	Barite Mud Presence Flag	Borehole	No	

BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.25	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	498	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DFD	Drilling Fluid Density	Borehole	9	lbm/gal
FCD	Future Casing (Outer) Diameter	WLSESSION	4.5	in
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	CALI	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	AMF	
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPDR	SP Drift Per Foot	AIT-M	0	mV/ft

Tool Control Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

ONE

Main Pass 5" Induction

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	237.09	ft3
IHV	Integrated Hole Volume	GCSE_UP_PASS	480.35	ft3

Software Version

Acquisition System	Version
MaxWell	4.0.9163.3000
Application Patch	Patch-SP-10767_13393-4.0.9163.3001

Computation	Description	Version
Borehole	Borehole Ensemble provides common Borehole Parameters and Channels	4.0.9213.3000

Tool Elements	Description	Software Version	Firmware Version
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9231.3000	
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9231.3000	
AMIS	Array Induction Sonde - M	4.0.9247.3000	

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[3]:Up	Up	195.28 ft	2701.05 ft	12-Nov-2014 9:16:36 PM	12-Nov-2014 9:59:34 PM	ON	0.26 ft	No

All depths are referenced to toolstring zero

Log

Company:Omimex Petroleum Inc Well:Mailander 4-34-6-45 ONE: Log[3]:Up:S011

Description: AIT Basic Log Two Format: Log (EMD 5in Induction) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Nov-2014 12:06:01

Channel	Source	Sampling
AT10	AIT-M:AMIS:AMIS	3in
AT20	AIT-M:AMIS:AMIS	3in
AT30	AIT-M:AMIS:AMIS	3in
AT60	AIT-M:AMIS:AMIS	3in
AT90	AIT-M:AMIS:AMIS	3in

CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR	HGNS-H:HGNS-H:HGNS-H	6in
ICV	Borehole	6in
IHV	Borehole	6in
SP	AIT-M:AMIS:AMIS	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

IHV - Integrated Hole Volume every 10.00 (ft3)

IHV - Integrated Hole Volume every 100.00 (ft3)

TIME_1900 - Time Marked every 60.00 (s)

ICV - Integrated Cement Volume every 10.00 (ft3)

ICV - Integrated Cement Volume every 100.00 (ft3)

Cable Tension (TENS)

10000 lbf 0

Array Induction Two Foot Resistivity A10 (AT10) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A20 (AT20) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A30 (AT30) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A60 (AT60) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A90 (AT90) AIT-M

0.2 ohm.m 2000

Gamma Ray Backup

Spontaneous Potential (SP) AIT-M

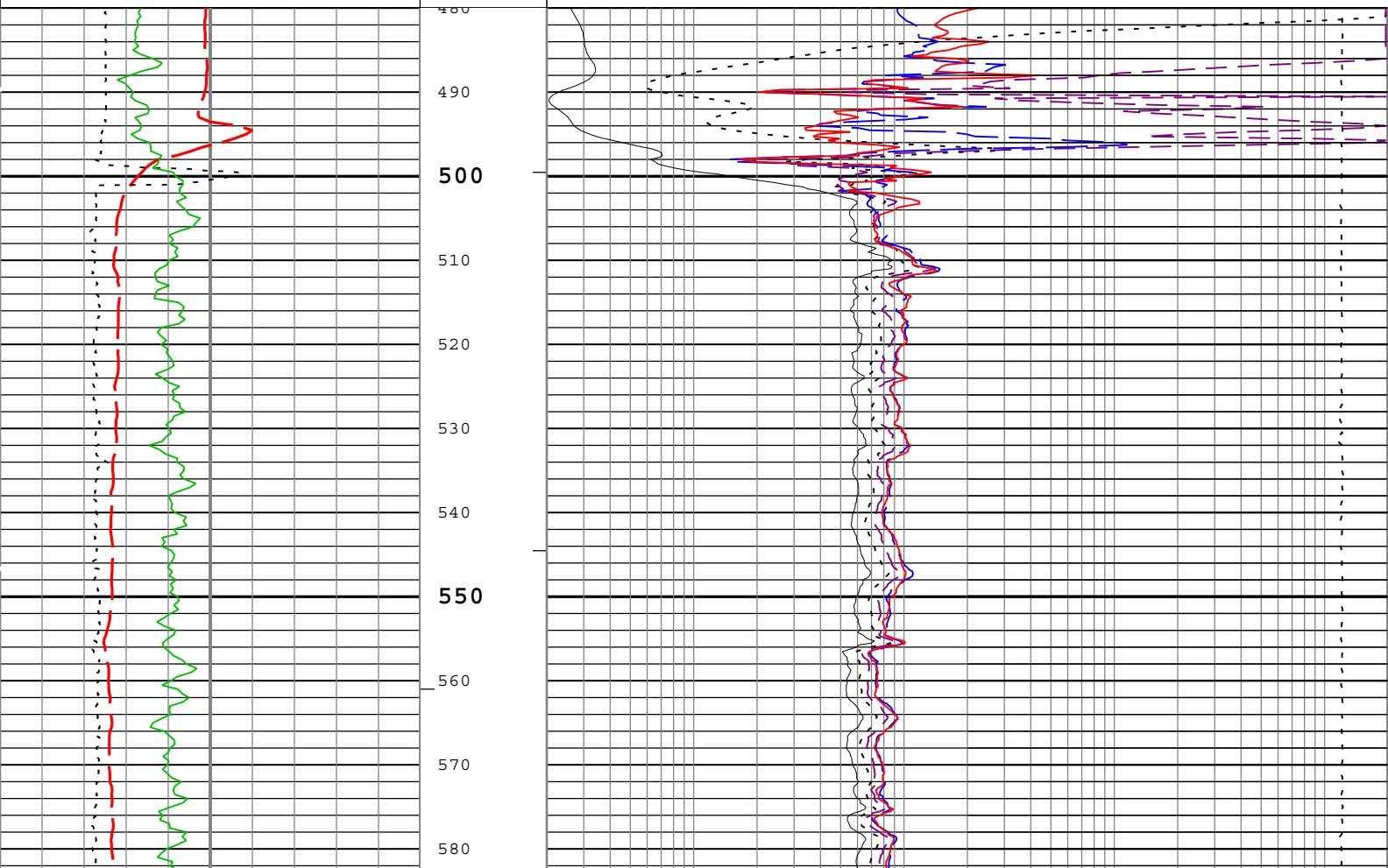
-100 mV 200

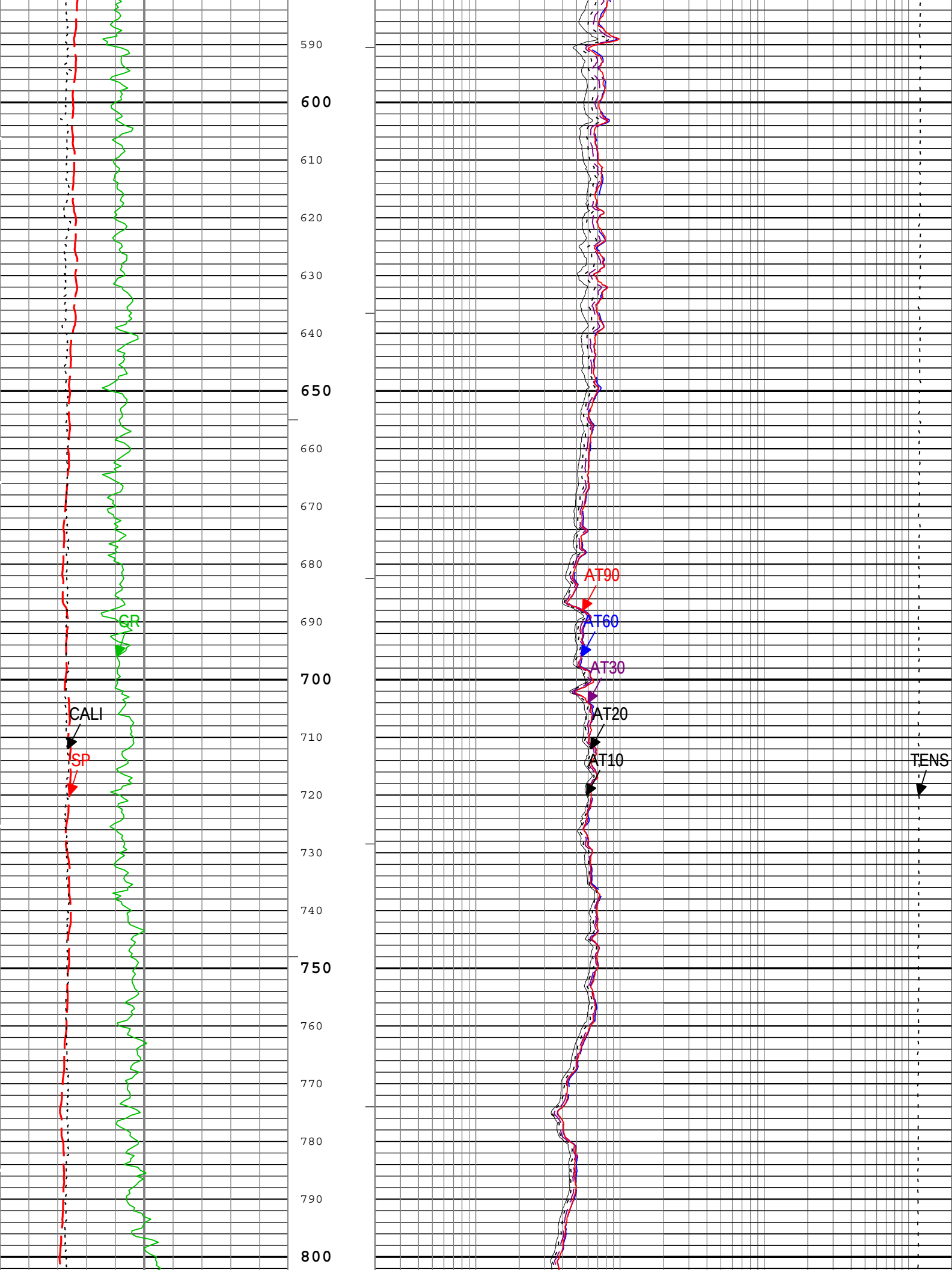
Caliper (CALI) HDRS-H

4 in 14

Gamma Ray (GR) HGNS-H

0 gAPI 200

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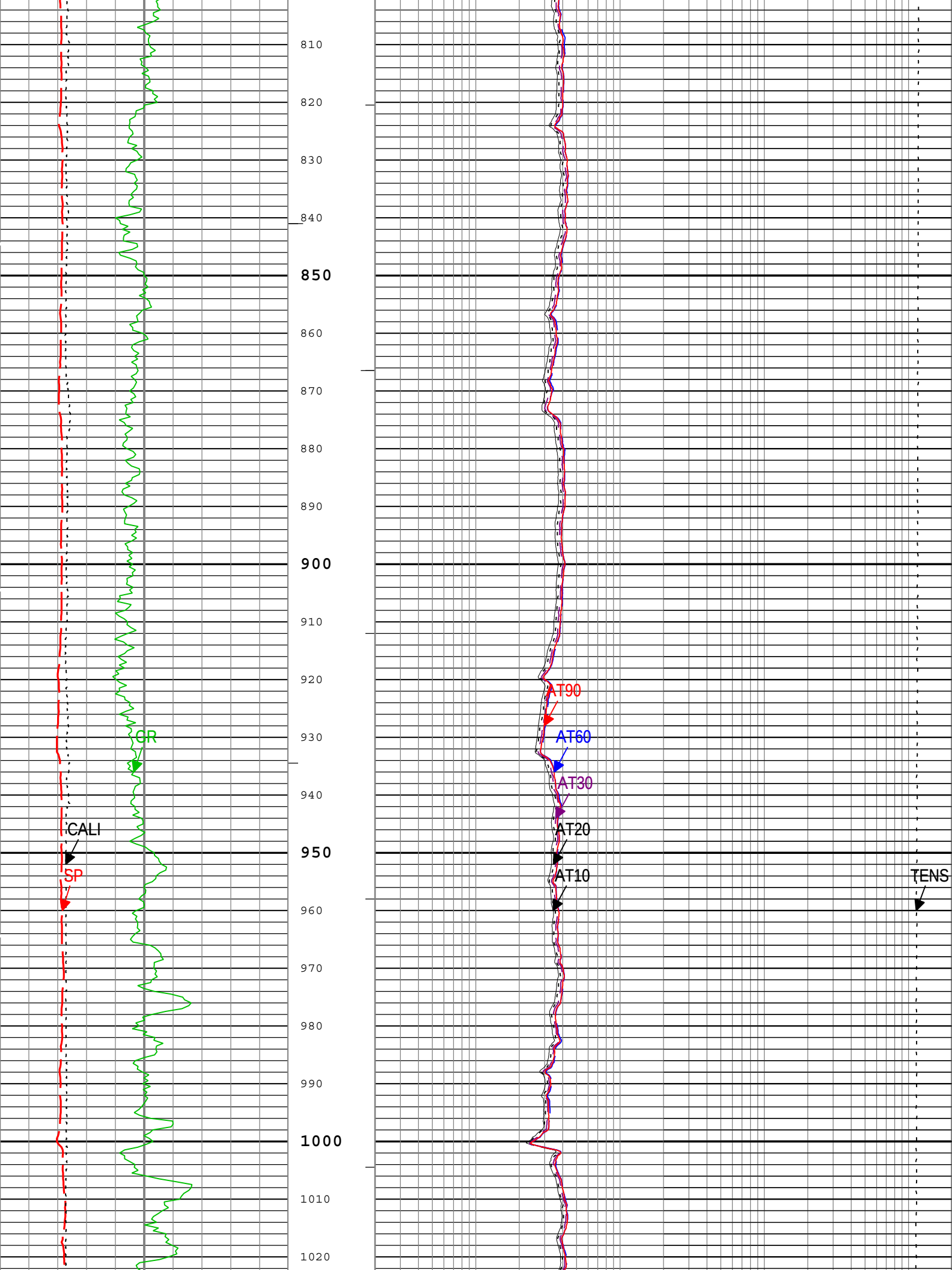
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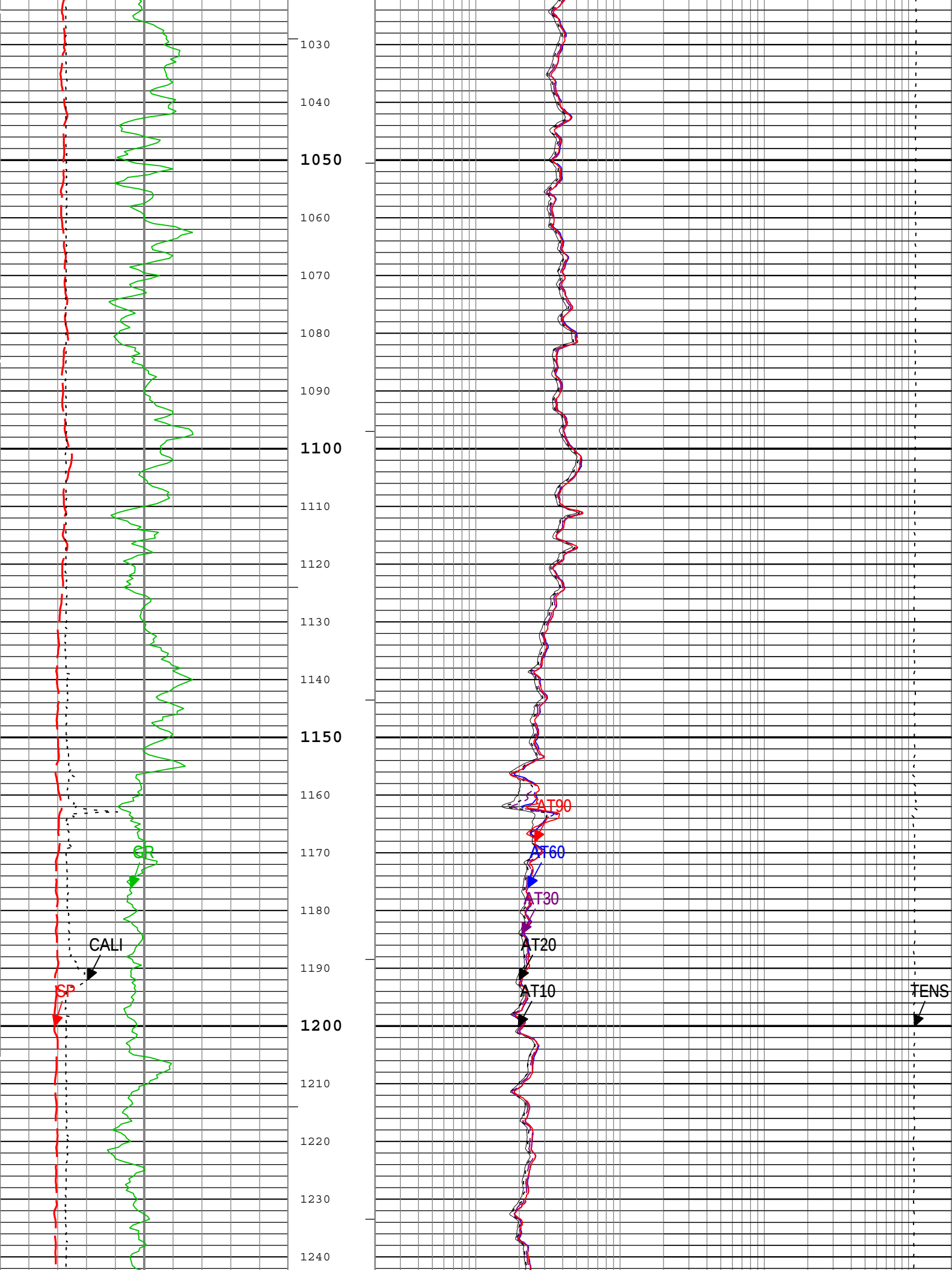
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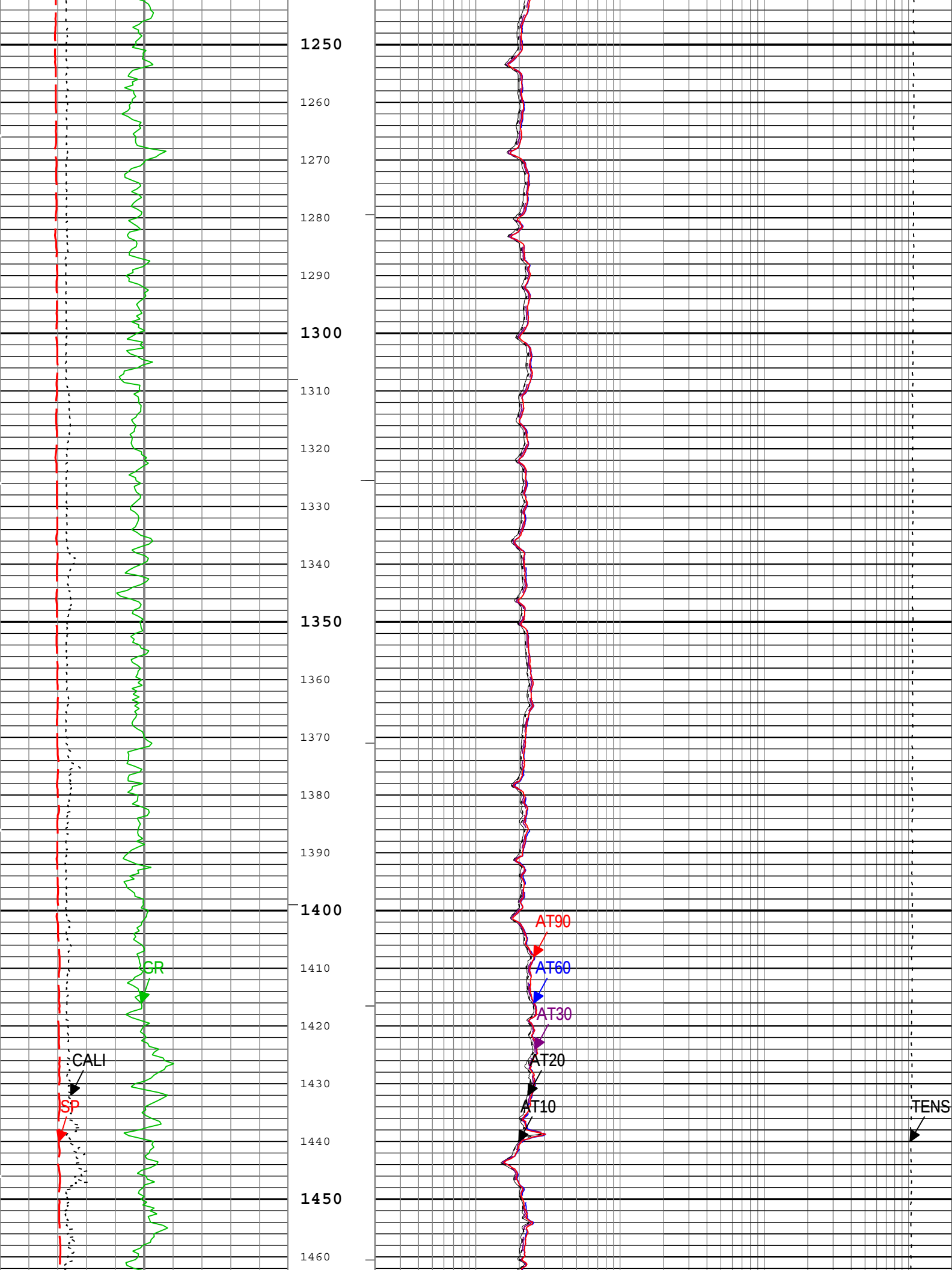
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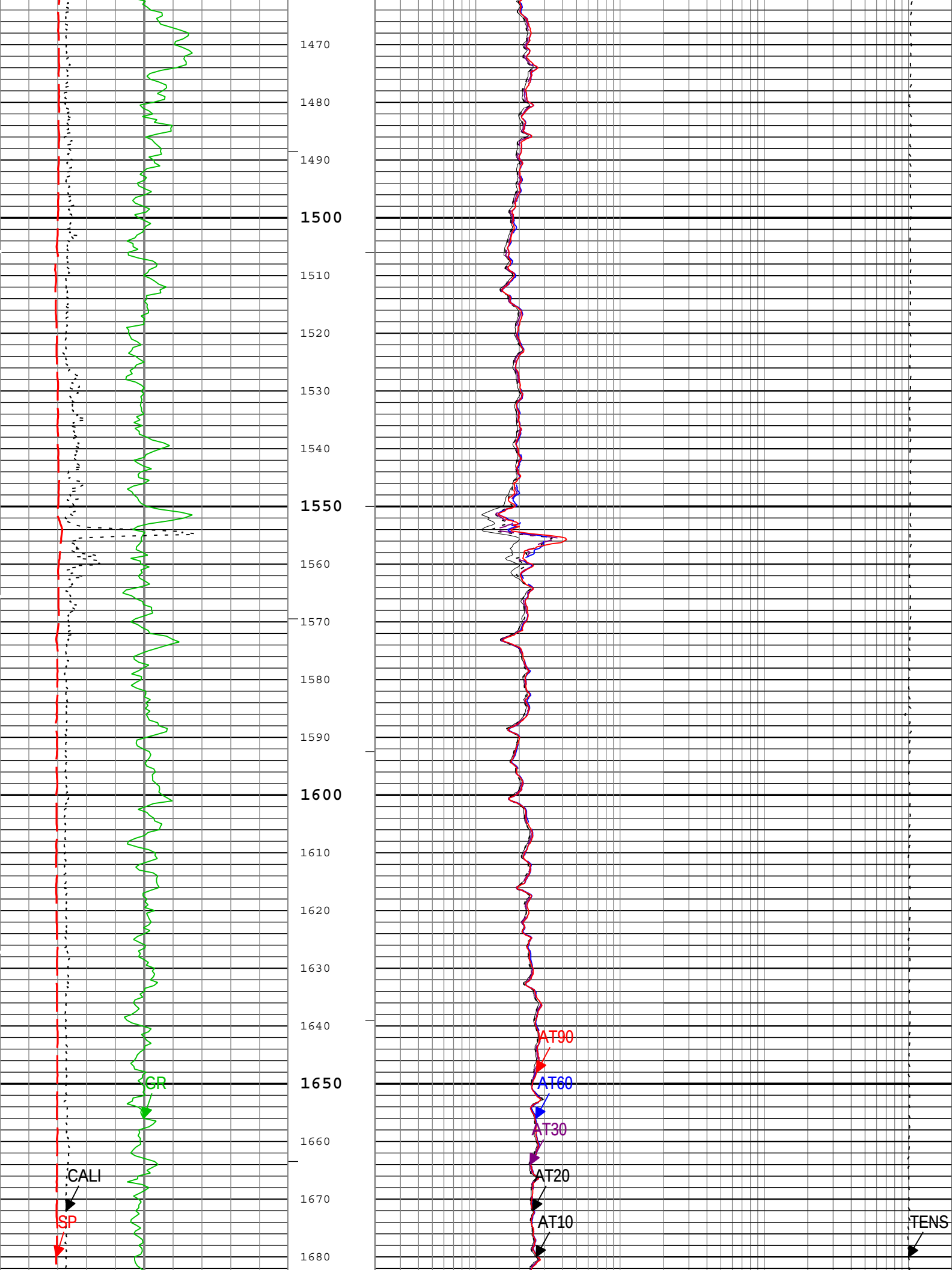
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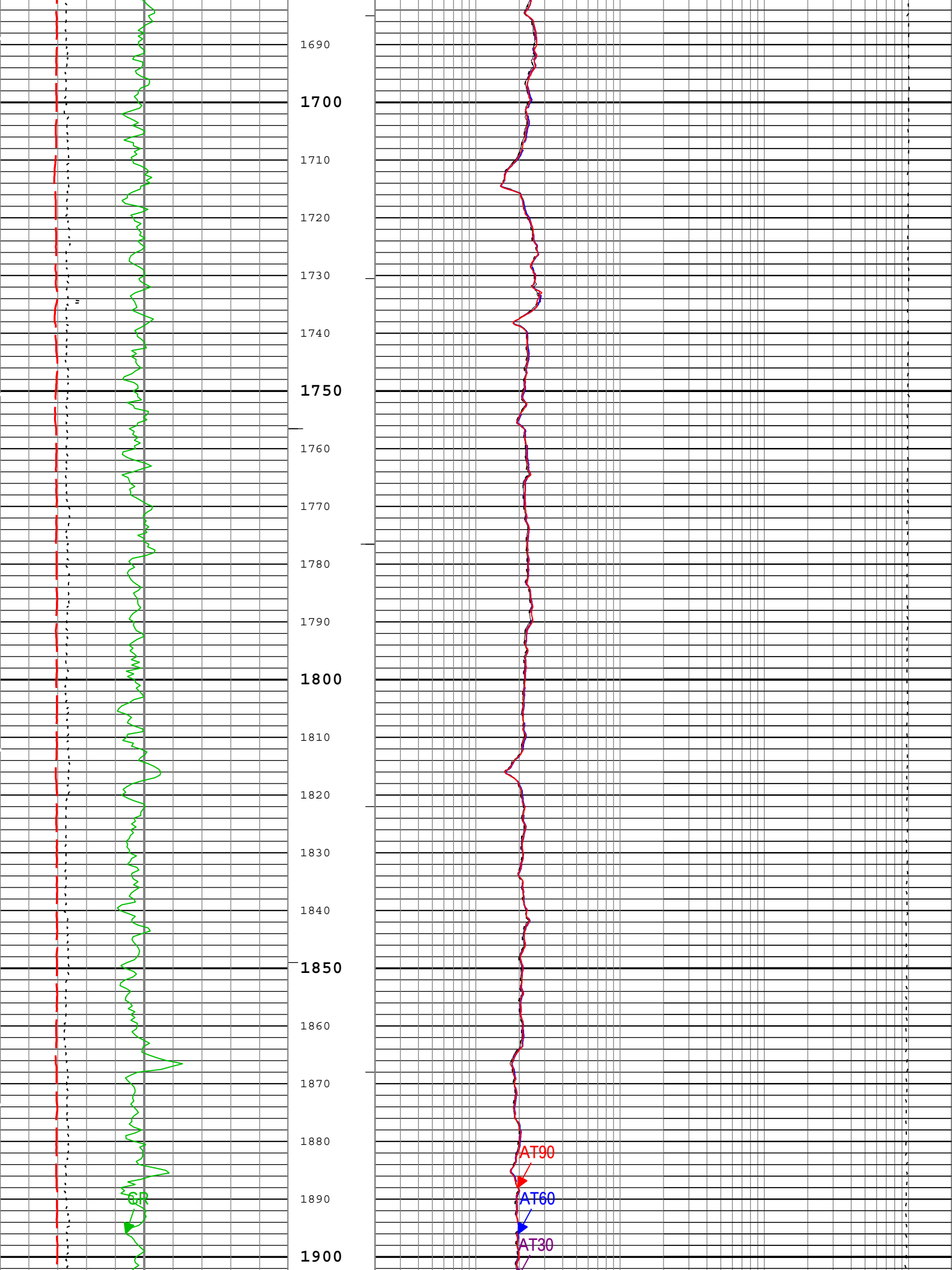
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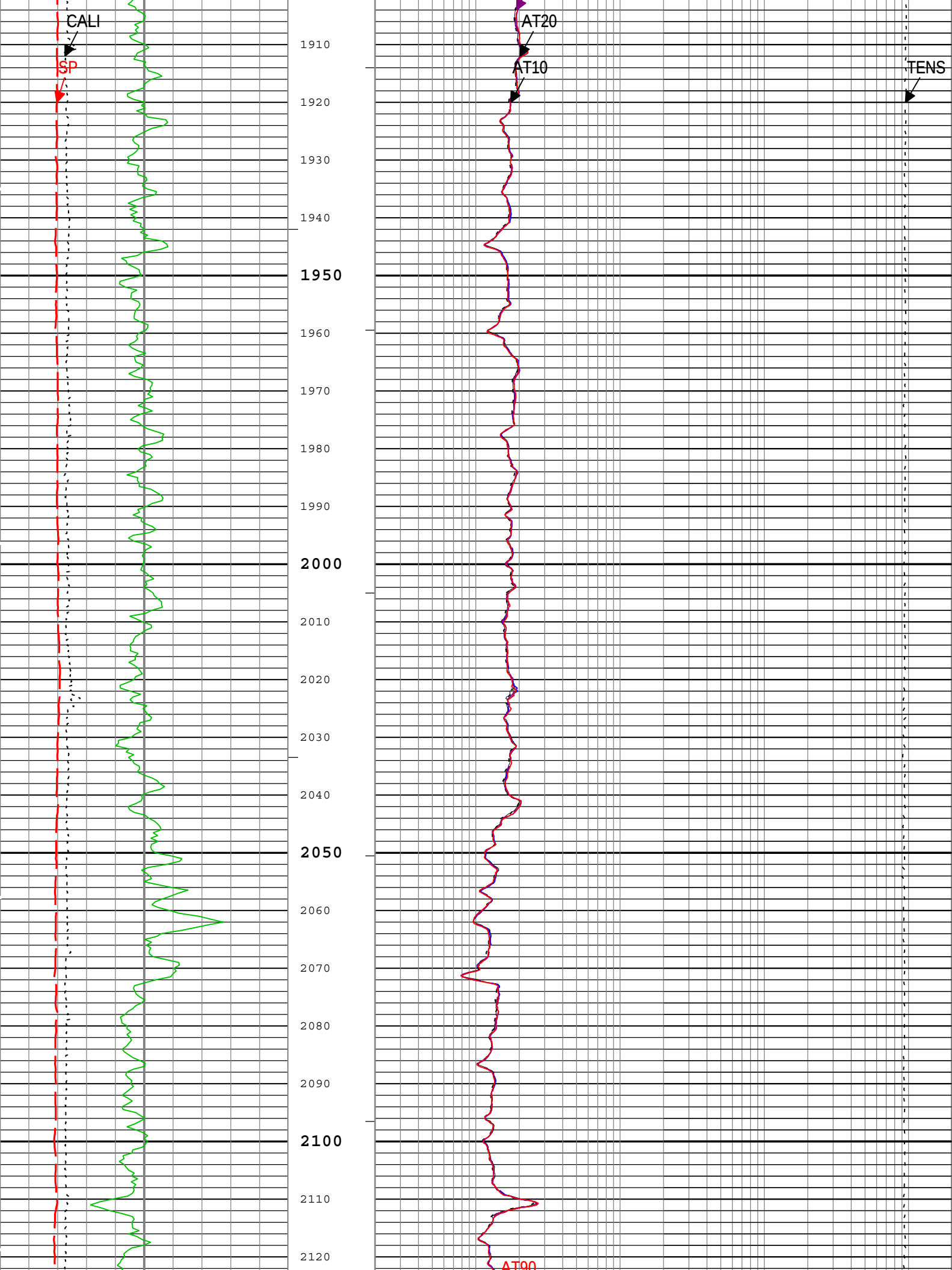
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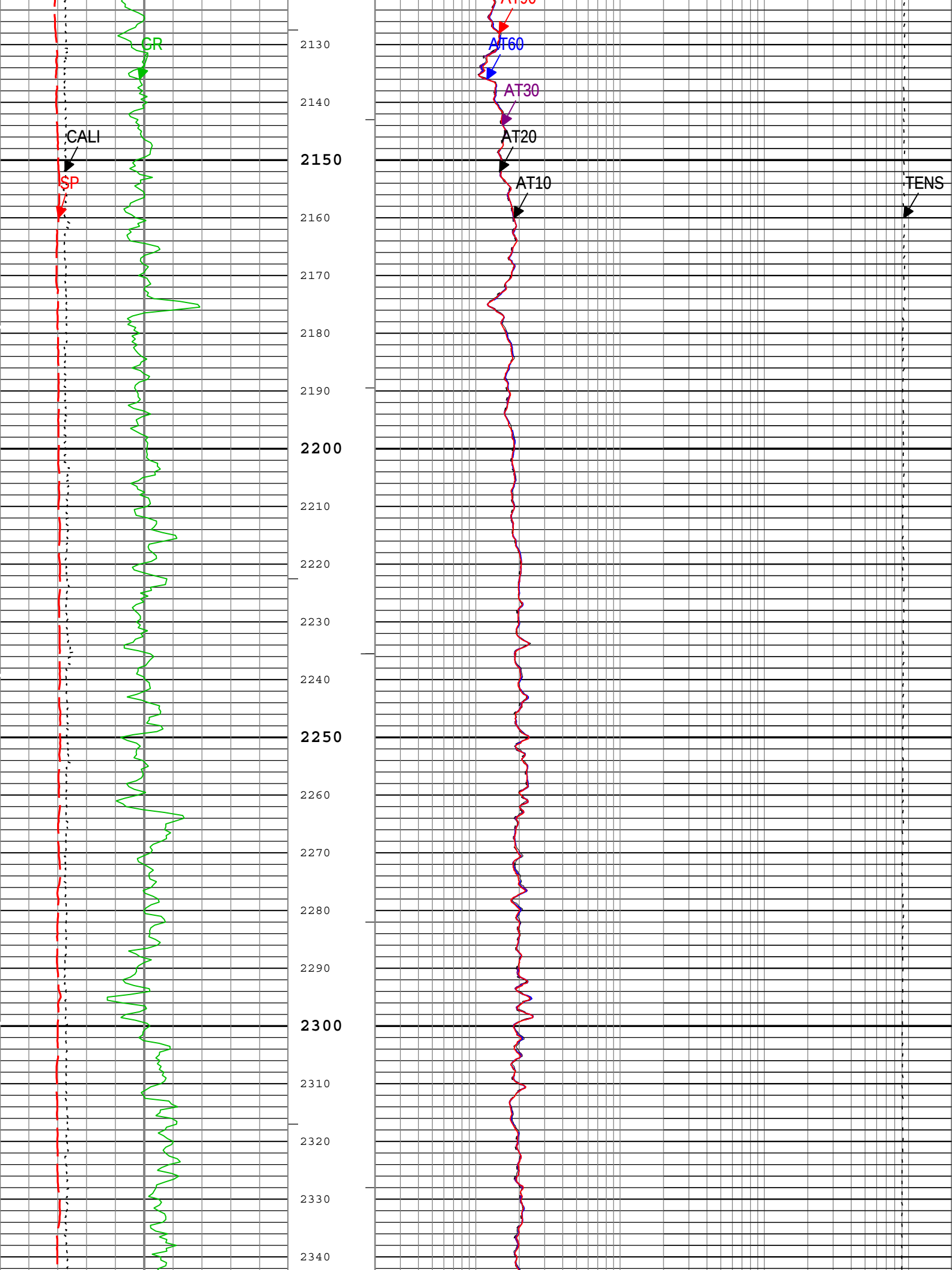
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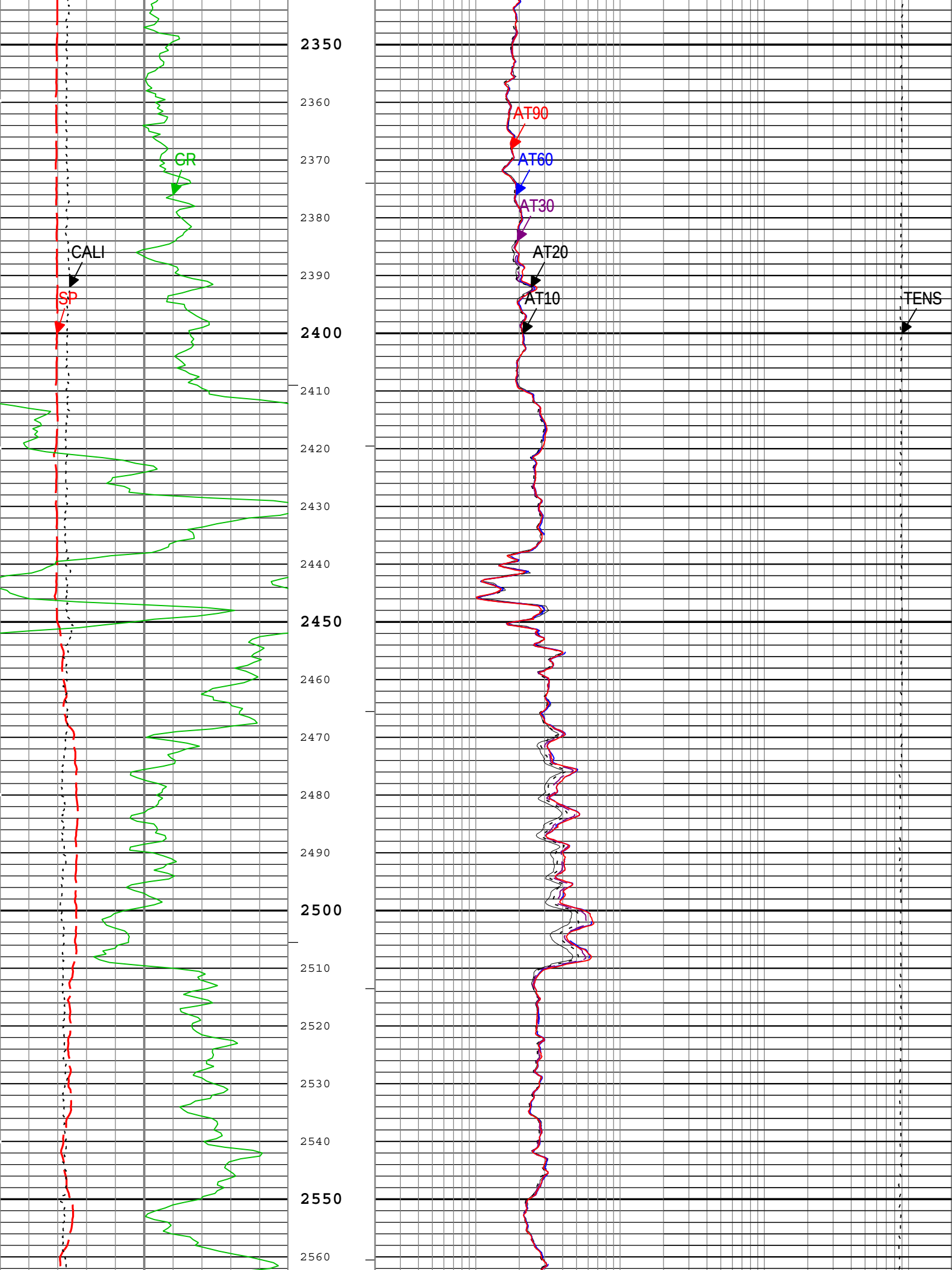
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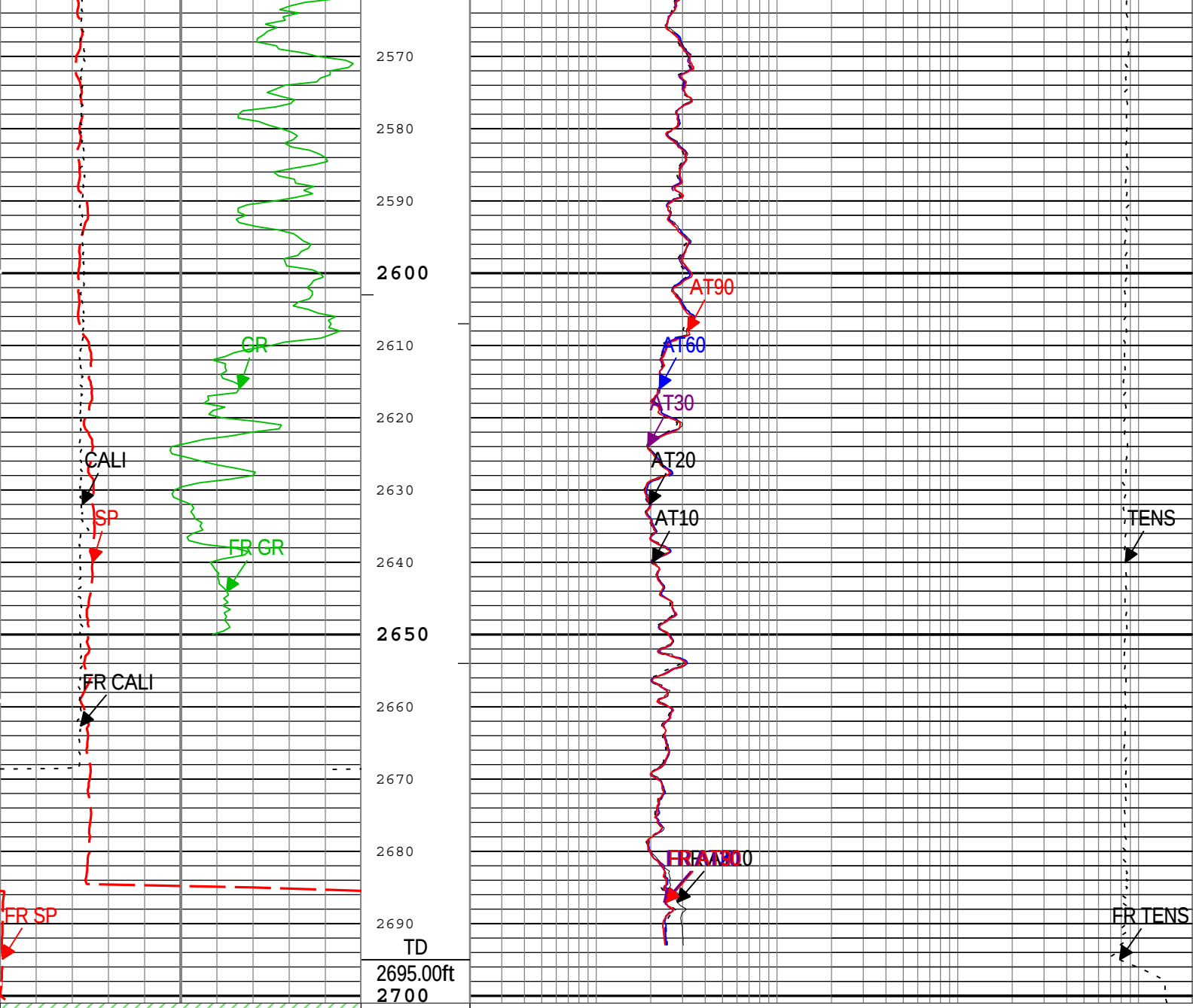


Gamma Ray Backup

Spontaneous Potential (SP) AIT-M

-100 mV 200

Caliper (CALI) HDRS-H

4 in 14

Gamma Ray (GR) HGNS-H

0 gAPI 200

Array Induction Two Foot Resistivity A10 (AT10) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A20 (AT20) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A30 (AT30) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A60 (AT60) AIT-M

0.2 ohm.m 2000

Array Induction Two Foot Resistivity A90 (AT90) AIT-M

0.2 ohm.m 2000

Cable Tension (TENS)

10000 lbf 0

ICV - Integrated Cement Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 10.00 (ft3)

TIME_1900 - Time Marked every 60.00 (s)

IHV - Integrated Hole Volume every 100.00 (ft3)

IHV - Integrated Hole Volume every 10.00 (ft3)

Description: AIT Basic Log Two Format: Log (EMD 5in Induction) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Nov-2014 12:06:01

Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
ABHM	Array Induction Borehole Correction Mode	AIT-M	Compute Standoff	
ACDE	Array Induction Casing Detection Enable	AIT-M	No	
ASTA	Array Induction Tool Standoff	AIT-M	0.6	in
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.25	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	498	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DFD	Drilling Fluid Density	Borehole	9	lbm/gal
FCD	Future Casing (Outer) Diameter	WLSESSION	4.5	in
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	CALI	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	AMF	
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPDR	SP Drift Per Foot	AIT-M	0	mV/ft

Tool Control Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

ONE

Induction Repeat Analysis

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[2]:Up	Up	2229.81 ft	2703.28 ft	12-Nov-2014 8:54:11 PM	12-Nov-2014 9:03:11 PM	ON	0.13 ft	No
ONE	Log[3]:Up	Up	195.28 ft	2701.05 ft	12-Nov-2014 9:16:36 PM	12-Nov-2014 9:59:34 PM	ON	0.26 ft	No

All depths are referenced to toolstring zero

Log

Company:Omimex Petroleum Inc Well:Mailander 4-34-6-45 ONE: Log[2]:Up:S011

Description: AIT Basic Log Two Format: EMD 5in Induction RA Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Nov-2014 12:06:02

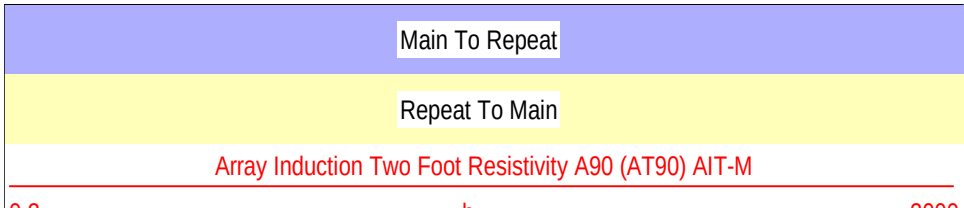
IHV - Integrated Hole Volume every 10.00 (ft3)

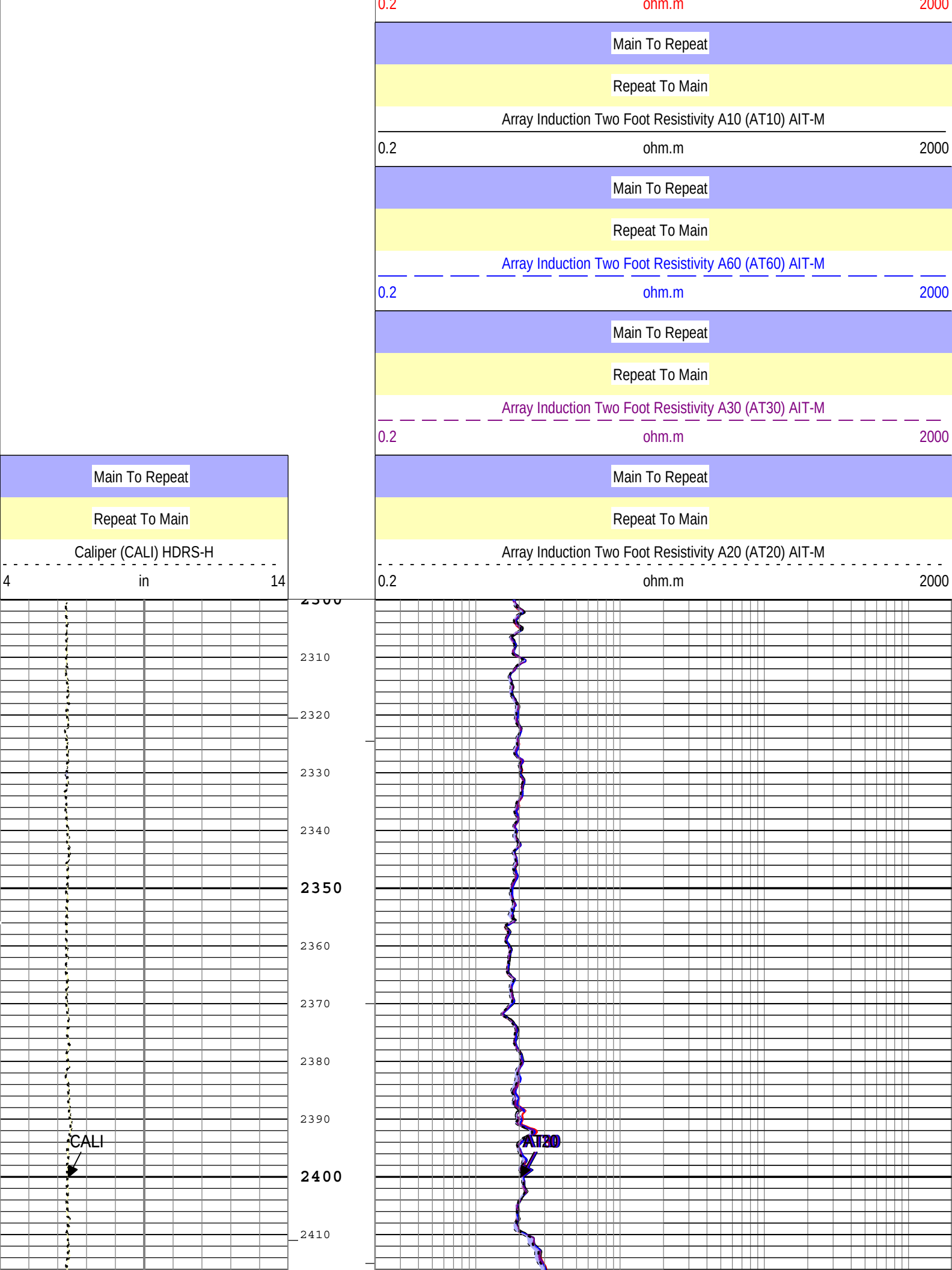
IHV - Integrated Hole Volume every 100.00 (ft3)

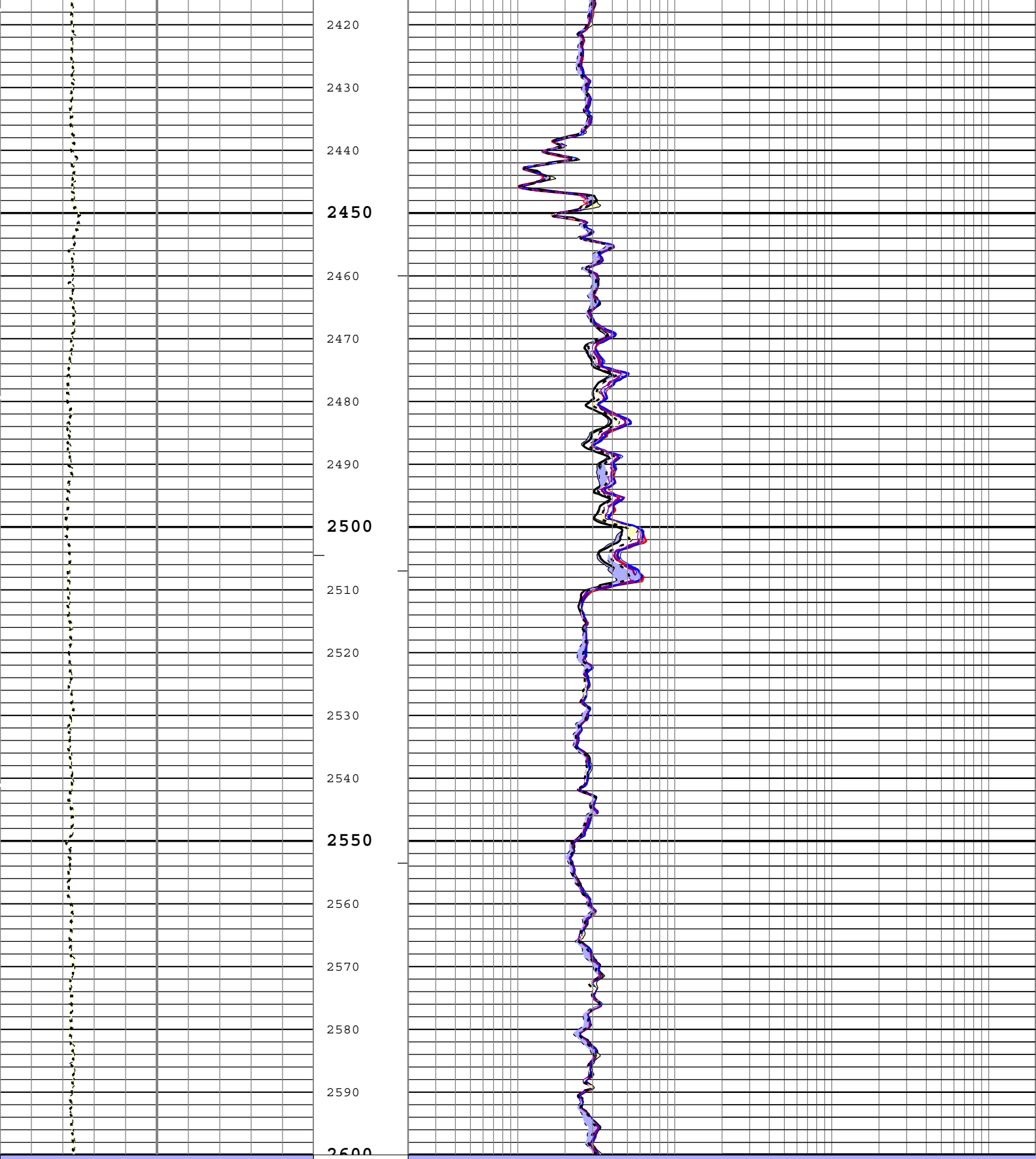
TIME_1900 - Time Marked every 60.00 (s)

ICV - Integrated Cement Volume every 10.00 (ft3)

ICV - Integrated Cement Volume every 100.00 (ft3)




0.2
ohm.m
2000
Main To Repeat
Repeat To Main
Array Induction Two Foot Resistivity A10 (AT10) AIT-M
0.2
ohm.m
2000
Main To Repeat
Repeat To Main
Array Induction Two Foot Resistivity A60 (AT60) AIT-M
0.2
ohm.m
2000
Main To Repeat
Repeat To Main
Array Induction Two Foot Resistivity A30 (AT30) AIT-M
0.2
ohm.m
2000
Main To Repeat
Repeat To Main
Caliper (CALI) HDRS-H
4
in
14
Main To Repeat
Repeat To Main
Array Induction Two Foot Resistivity A20 (AT20) AIT-M
0.2
ohm.m
2000
2300
2310
2320
2330
2340
2350
2360
2370
2380
2390
2400
2410
CALI
AT20



Main To Repeat

Repeat To Main

Caliper (CALI) HDRS-H

4 in 14

Main To Repeat

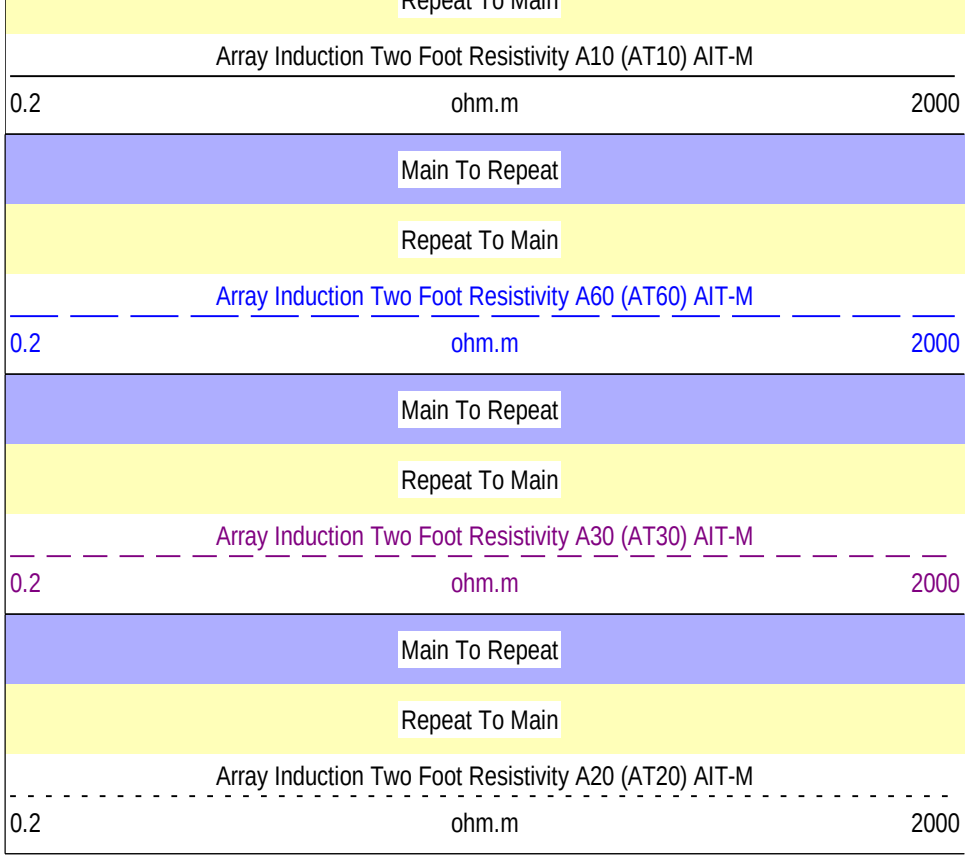
Repeat To Main

Array Induction Two Foot Resistivity A90 (AT90) AIT-M

0.2 ohm.m 2000

Main To Repeat

Repeat To Main



ICV - Integrated Cement Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 10.00 (ft3)

TIME_1900 - Time Marked every 60.00 (s)

IHV - Integrated Hole Volume every 100.00 (ft3)

IHV - Integrated Hole Volume every 10.00 (ft3)

Description: AIT Basic Log Two Format: EMD 5in Induction RA Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Nov-2014 12:06:02

Calibration Report

AIT-M (Array Induction Tool - M) Calibration - Run ONE

Primary Equipment :

File code for AIT-MA Sonde Tool Element	AMIS	181

Auxiliary Equipment :

File code for AIT Bottom Nose Tool Element	AMRM	181

AIT Sonde Calibration - Test Loop Gain

Master (EEPROM): 23:01:59 22-Sep-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Test Loop Gain - 0		Master	1.000	0.950	1.041	1.050
Test Loop Phase - 0	deg	Master	0	-3.000	1.805	3.000
Test Loop Gain - 1		Master	1.000	0.950	1.017	1.050
Test Loop Phase - 1	deg	Master	0	-3.000	0.902	3.000
Test Loop Gain - 2		Master	1.000	0.950	1.017	1.050
Test Loop Phase - 2	deg	Master	0	-3.000	0.392	3.000
Test Loop Gain - 3		Master	1.000	0.950	1.016	1.050
Test Loop Phase - 3	deg	Master	0	-3.000	0.089	3.000
Test Loop Gain - 4		Master	1.000	0.950	1.009	1.050
Test Loop Phase - 4	deg	Master	0	-3.000	0.141	3.000
Test Loop Gain - 5		Master	1.000	0.950	0.991	1.050
Test Loop Phase - 5	deg	Master	0	-3.000	-0.110	3.000
Test Loop Gain - 6		Master	1.000	0.950	0.998	1.050
Test Loop Phase - 6	deg	Master	0	-3.000	0.235	3.000
Test Loop Gain - 7		Master	1.000	0.950	1.010	1.050
Test Loop Phase - 7	deg	Master	0	-3.000	-0.080	3.000

AIT Sonde Calibration - Sonde Error Correction

Master (EEPROM): 23:01:59 22-Sep-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-113.093	119.000
Sonde Error Correction Quad - 0		Master	-----	-2250.000	114.931	2250.000
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	157.599	204.000
Sonde Error Correction Quad - 1		Master	-----	-625.000	-170.942	625.000
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	115.105	156.000
Sonde Error Correction Quad - 2		Master	-----	-350.000	-99.364	350.000
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	49.447	89.000
Sonde Error Correction Quad - 3		Master	-----	-250.000	2.279	250.000
Sonde Error Correction Real - 4	mS/m	Master	-----	15.000	26.217	35.000
Sonde Error Correction Quad - 4		Master	-----	-63.000	-3.708	63.000
Sonde Error Correction Real - 5	mS/m	Master	-----	4.000	10.870	24.000
Sonde Error Correction Quad - 5		Master	-----	-50.000	21.802	50.000
Sonde Error Correction Real - 6	mS/m	Master	-----	5.000	9.914	15.000
Sonde Error Correction Quad - 6		Master	-----	-30.000	2.857	30.000
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-1.286	5.000
Sonde Error Correction Quad - 7		Master	-----	-30.000	1.530	30.000

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM): 23:01:59 22-Sep-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Coarse Gain		Master	1.000	0.800	0.847	1.200
Fine Gain		Master	1.000	0.800	0.846	1.200

AIT Electronics Check - Thru Calibration Check

Master (EEPROM): 23:01:59 22-Sep-2014 Before (Measured): 10:57:10 12-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Thru Cal Mag - 0	V	Master	-----	0.366	0.575	0.854
		Before	-----	0.366	0.575	0.854
		Before-Master	-----	-----	0.000	-----
Thru Cal Phase - 0	deg	Master	-----	137.000	-169.442	-103.000
		Before	-----	137.000	-167.318	-103.000
		Before-Master	-----	-----	2.124	-----
Thru Cal Mag - 1	V	Master	-----	0.762	1.178	1.778
		Before	-----	0.762	1.178	1.778
		Before-Master	-----	-----	0.000	-----
Thru Cal Phase - 1	deg	Master	-----	136.000	-170.544	-104.000
		Before	-----	136.000	-168.418	-104.000
		Before-Master	-----	-----	2.126	-----
Thru Cal Mag - 2	V	Master	-----	0.372	0.584	0.868
		Before	-----	0.372	0.585	0.868
		Before-Master	-----	-----	0.001	-----
Thru Cal Phase - 2	deg	Master	-----	132.000	-174.186	-108.000
		Before	-----	132.000	-172.060	-108.000
		Before-Master	-----	-----	2.126	-----
Thru Cal Mag - 3	V	Master	-----	0.420	0.660	0.980
		Before	-----	0.420	0.660	0.980
		Before-Master	-----	-----	0.000	-----
Thru Cal Phase - 3	deg	Master	-----	131.000	-174.965	-109.000
		Before	-----	131.000	-172.837	-109.000
		Before-Master	-----	-----	2.128	-----
Thru Cal Mag - 4	V	Master	-----	0.804	1.233	1.876
		Before	-----	0.804	1.233	1.876
		Before-Master	-----	-----	0.000	-----
Thru Cal Phase - 4	deg	Master	-----	125.000	178.761	-115.000
		Before	-----	125.000	-179.101	-115.000
		Before-Master	-----	-----	-357.862	-----
Thru Cal Mag - 5	V	Master	-----	1.176	1.795	2.744
		Before	-----	1.176	1.795	2.744
		Before-Master	-----	-----	0.000	-----
Thru Cal Phase - 5	deg	Master	-----	122.000	177.104	-118.000
		Before	-----	122.000	179.246	-118.000
		Before-Master	-----	-----	2.142	-----
Thru Cal Mag - 6	V	Master	-----	1.176	1.794	2.744
		Before	-----	1.176	1.795	2.744
		Before-Master	-----	-----	0.001	-----

Thru Cal Phase - 6	deg	Master	-----	121.000	177.111	-119.000	
		Before	-----	121.000	179.253	-119.000	
		Before-Master	-----	-----	2.142	-----	
Thru Cal Mag - 7	V	Master	-----	0.846	1.294	1.974	
		Before	-----	0.846	1.295	1.974	
		Before-Master	-----	-----	0.001	-----	
Thru Cal Phase - 7	deg	Master	-----	115.000	176.348	-125.000	
		Before	-----	115.000	178.542	-125.000	
		Before-Master	-----	-----	2.194	-----	
SPA Zero	mV	Master		-50.000	0.145	50.000	
		Before		-50.000	0.142	50.000	
		Before-Master	-----	-----	-0.003	-----	
SPA Plus	mV	Master		941.000	992.483	1040.000	
		Before		941.000	992.329	1040.000	
		Before-Master	-----	-----	-0.154	-----	
Temperature Zero	V	Master		-0.050	0.000	0.050	
		Before		-0.050	0.000	0.050	
		Before-Master	-----	-----	0.000	-----	
Temperature Plus	V	Master		0.870	0.919	0.960	
		Before		0.870	0.919	0.960	
		Before-Master	-----	-----	0.000	-----	

Company:	Omimex Petroleum Inc
Well:	Mailander 4-34-6-45
Field:	Ballyneal
County:	Phillips
State:	Colorado

Schlumberger

Platform Express
Array Induction
with Linear Correlation