UIC - I - __5__

C-103s

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, September 18, 2018 5:19 PM
To: Philana Thompson
Cc: Kuehling, Monica, EMNRD; Perrin, Charlie, EMNRD; Powell, Brandon, EMNRD; Griswold, Jim, EMNRD; Jones, William V, EMNRD; Ryan Merrion; Ryan Davis (rdavis@merrion.bz); Sanchez, Daniel J., EMNRD
Subject: RE: Sunco Fall off Test
Attachments: OCD C-103 Approval FOT 9-18-2018.pdf

Philana:

Please see attachment. Please notify OCD Aztec of the date and time proposed for the FOT to witness installation of bottom hole gauge(s) and at closure of valve for start of FOT monitoring.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us
"Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD and see "Publications")

From: Philana Thompson <pthompson@merrion.bz>
Sent: Wednesday, September 12, 2018 5:06 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Perrin, Charlie, EMNRD <charlie.perrin@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; Ryan Merrion <ryan@merrion.bz>
Subject: Sunco Fall off Test

Greetings,
We have amended the FOT procedure after speaking with Jim G. & Will J. in the Santa Fe office.

We understand that Carl is out of the office and have postponed the FOT until he has returned to the office and can approve the C103. We have re-scheduled the crews for the week of 10/1/18. Monica, I will contact you 48 hours prior to starting the FOT.

Thank you,
Philana

--
Philana Thompson
Regulatory Compliance
Merrion Oil & Gas Corp
cell 505-486-1171
fax 505-324-5300

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-045-28653

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Sunco Disposal

1. Type of Well: Oil Well ☐ Gas Well ☒ Other SWD Class I

8. Well Number
#1

2. Name of Operator
Agua Moss, LLC

9. OGRID Number
247130

3. Address of Operator
PO Box 600 Farmington, NM 87499

10. Pool name or Wildcat
SWD-MV

4. Well Location
Unit Letter E : 1595 feet from the North line and 1005 feet from the West line
Section 2 Township 29N Range 12W NMPM County San Juan

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
5859' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER: Fall Off Test	☒		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Agua Moss, LLC proposes to perform the annual Fall Off Test at the Sunco Disposal #1. Please see the attached detailed procedure.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Regulatory Compliance Specialist DATE 9/11/2018

Type or print name Philana Thompson E-mail address: pthompson@merrion.bz PHONE: 505-486-1171

For State Use Only

APPROVED BY: [signature] TITLE Environmental Engineer DATE 9/18/2018

Conditions of Approval (if any):
- Must achieve pseudo-steady state injection rate before valve closure.
- Must achieve at least 90 gpm injection rate.

Fall Off Test Procedure:

Prepare Well for Fall Off Test

1. Arrange for adequate injection fluid storage
2. Accumulate 3000 bbls of produced water
3. Perform MIT
4. MIRU wireline
5. RIH w/ Gauge ring to SN
6. POOH w/ Gauge ring and PU impression block (or something to run thru SN)
7. RIH tag and record fill depth
8. If no restrictions exist and fill is below the perfs continue on to FOT. Otherwise remediate problem or adjust FOT procedure before continuing.

Conduct Fall Off Test

9. POOH pick up pressure gauges
10. RIH and hang gauges off @ 4405' KB
11. Begin injection, (125 bph) 3000 bwpd, Record time
12. Inject for 50 hrs, total of 6250 bbls. Record start and stop time
    a. Ensure injection pressures have stabilized before proceeding
13. S/D injection pump and close valve @ wellhead, Record time
    a. Once surface pressure stabilizes record start time of fall off
14. Record pressure data for 164 hrs, Record start and stop time
15. POOH making gradient stops @ 4000', 3000', 2000', 1000' and surface
16. Secure well and bleed pressure off lubricator
17. R/D wireline
18. Put well back into service for normal operation.

AGUA MOSS, LLC **TEST PLAN FOR PRESSURE FALL-OFF TEST (FOT)**

Well Information			
Well:	Sunco Disposal 1	Field:	Mesaverde SWD
Location:	1595' fnl &1005' fwl S2, T29N, R12W San Juan Co. New Mexico	Elevations:	5859' GL 5872' RKB
		Depths:	4706' KB PBTD 4760' KB TD
		Engineer:	J. Ryan Davis (505.324.5335)
API:	30-045-28653	Date:	9/6/2018
Surface Casing:	8- 5/8" @ 209' KB w/ 150sx; Circ to surface	Production Casing:	5-1/2" @ 4750' KB w/ 230 sx stage 1, 515 sx stage 2, circ 25 sx to surf, DV tool @ 2244' KB
Tubulars:	2- 7/8" 6.5# EUE (Epoxy Coated) @ 4282' KB	Packer:	Arrow XL-W retrievable seal bore @ 4282' KB.
Perforations (MV)	4350-4460' KB 2 spf (2000 gals 15% HCL, Frac w/ 100,000# 20/40)		
Additional Perforations			
Perforations (MV)	None		

Version 1 : Procedure subject to change based on changing well conditions.

Proposed Test Schedule:

Date	Event	Remarks
Wednesday, September 12th 2018	Check conditions; Perform MIT and Begin injection (50 hrs)	TD, Fill, Restrictions and hang Gauges
Friday, September 14th 2018	End Injection and Begin FOT	Shut-in and monitor
Wednesday, September 21st 2017	164 hrs	Could pull gauges at 10am

Test Considerations:

V.1 The triplex pump at the facility is capable of maintaining a constant rate of 3000 bpd against the anticipated injection pressures.

V.2 The injection rate of 3600 bpd (87.5 gpm) will be sufficient to produce valid test data. (For reference: *During normal injection at 3600 bpd (8 hrs) the surface pressure build up is approx. 200 psi with a mirrored fall off over a 8 hr period.*)

V.3 The normal waste liquid will be used during the FOT due to the cost effectiveness and availability.

V.4 The total volume of fluid needed for the FOT is 6250 bbls.

a) A total of 3600 bbls will be onsite prior to starting the injection for the FOT and water will continue to be hauled to facility in the case that more fluid is needed during the injection period.

b) Lowering the injection rate will be considered if well conditions merit a change or storage of fluid becomes a constraint.

c) City water will be purchased for the FOT if it becomes necessary to make up the volume required for the test.

V.5 The gauges will be RIH and the injection period will be a minimum of 50 hrs to ensure radial flow and stabilization. A total of 15 hrs was calculated using the EPA Region 6 UIC Pressure Falloff Testing Guideline design calculations found on pg A-4. The fall off portion will be a minimum of 72 hrs justified by this being the time frame used on the previous FOT.

V.6 There will be adequate storage capacity for waste water for the duration of the FOT.

V.7 There is one offset well completed in the Point Lookout disposal formation. The McGrath #4 is a class II disposal operated by ConocoPhillips approx 1.25 miles to the north west of the Sunco #1. The well has been P&A'd, so there will not be any injection activity from offset wells during the FOT.

V.8 Crown valve is currently in-place on the Sunco #1 wellhead. The gauges will be RIH through a lubricator prior to the injection period.

V.9 A shut-in valve is located on the injection riser approx 3-feet from the wellhead. This valve can be shut quickly to reduce erratic pressure response and minimize the wellbore storage.

V.10 Prior to the FOT a gauge ring will be run through the tubing to ensure no restrictions in the tubing and slickline will also be used to tag up and determine wellbore fill. Test parameters will be adjusted accordingly or the needed the repairs will be made to remedy the situation.

V.11 Surface readout gauges will not be used in the FOT data collection due to cost and the fact Key performed the 2010 FOT with tandem memory down hole gauges with successful data collection. The gauges used will be latest available technology from Teftiller, Inc which will meet or exceed the pressure range, accuracy and resolution requirements. The gauges will be setup on auto resolution capture based on pressure change. Each gauge will be setup with a different auto resolution range to ensure all data in captured accurately.

V.12 A test log will be kept during the test and submitted with the FOT results. The log will include key events with date and times.

- Gauge ring run
- Tag depth
- Gauge activation
- Gauges on bottom
- Injection start
- Injection stop
- Well isolation
- Pressure stabilization
- End of Fall Off

V.13 Surface pressures will be recorded continuously using a chart recorder during the FOT. If any abnormal surface pressure change occurs the test validity will be questioned and the test will be aborted if deemed invalid.

V.14 The memory gauges being used for the FOT have auto resolution capability that changes the resolution based on rate of pressure change. First gauge will be configured to obtain data every 15 seconds and adjust to every one minute. The second gauge will be configured to obtain data every 30 seconds and adjust to every two minutes. Memory capacity is 35 day and 69 days respectfully. The minimum 15 second resolution was used during the 2010 FOT and proved to be acceptable. The length of the fall off portion is based on the 2016 FOT, 120 hours proved to be adequate.

V.15 The tri-plex injection pump at the facility that is normally used for injection will be used for the FOT. It is a positive displacement pump running at a constant RPM which will ensure constant injection rate during the FOT. A constant injection rate of approximately 3000 bpd will be sufficient to create a minimum of 100 psi differential between final injection pressure and shut-in pressure. The rate will be carefully monitored prior to shut down to ensure a steady state injection is maintained prior to beginning the fall-off portion of the test.

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-045-28653

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Sunco Disposal

1. Type of Well: Oil Well ☐ Gas Well ☒ Other SWD Class I

8. Well Number
#1

2. Name of Operator
Agua Moss, LLC

9. OGRID Number
247130

3. Address of Operator
PO Box 600 Farmington, NM 87499

10. Pool name or Wildcat
SWD-MV

4. Well Location
Unit Letter__E___:__1595____feet from the __North_____ line and ___1005____feet from the __West_____line
Section 2 Township 29N Range 12W NMPM County San Juan

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
5859' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER: Acid Job	☒		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Agua Moss, LLC proposes to perform an acid job on the Sunco Disposal #1 on 9/7/2018. Please see the attached detailed procedure.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Regulatory Compliance Specialist DATE 9/6/2018

Type or print name Philana Thompson E-mail address: pthompson@merrion.bz PHONE: 505-486-1171

For State Use Only

APPROVED BY: [signature] TITLE Environmental Engineer DATE 9/7/2018
Conditions of Approval (if any):

Well Information			
Well:	Sunco Disposal 1	Field:	Mesaverde SWD
Location:	1595' fnl &1005' fwl S2, T29N, R12W San Juan Co. New Mexico	Elevations:	5859' GL 5872' RKB
		Depths:	4706' KB PBTD 4760' KB TD
		Engineer:	J. Ryan Davis (505.324.5335)
API:	30-045-28653	Date:	9/7/2018
Surface Casing:	8- 5/8" @ 209' KB w/ 150sx; Circ to surface	Production Casing:	5-1/2" @ 4750' KB w/ 230 sx stage 1, 515 sx stage 2, circ 25 sx to surf, DV tool @ 2244' KB
Tubulars:	2- 7/8" 6.5# EUE (Epoxy Coated) @ 4282' KB	Packer:	Arrow XL-W retrievable seal bore @ 4282' KB.
Perforations (MV)	4350-4460' KB 2 spf (2000 gals 15% HCL, Frac w/ 100,000# 20/40)		
Additional Perforations			
Perforations (MV)	None		

Version 1 : Procedure subject to change based on changing well conditions.

Acid Clean Up Procedure:

Prepare Well for Fall Off Test

1. Check and record tbg and csg pressures
2. MIRU pump truck
3. Tie in pump truck to the tbg

Pump Acid

4. Pump 100 gallons of P150 of solvent down the tbg
5. Pump 500 gallons of 15% HCL acid down the tbg
6. Displace the acid to the top perf with approx 25 bbls of water
7. Allow the acid to soak the perfs for 2-4 hrs.
8. Put well back into service for normal operation.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, June 27, 2018 4:02 PM
To: Ryan Merrion
Cc: Ryan Davis; Sanchez, Daniel J., EMNRD; Griswold, Jim, EMNRD; Goetze, Phillip, EMNRD; Jeff Davis; Philana Thompson; Shacie Murray; Perrin, Charlie, EMNRD
Subject: RE: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

Ryan:

The New Mexico Oil Conservation Division is in receipt of the survey results and will respond soon.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
UIC Program Quality Assurance Officer
New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us
"Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD and see "Publications")

From: Ryan Merrion <ryan@merrion.bz>
Sent: Wednesday, June 27, 2018 2:36 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: Ryan Davis <rdavis@merrion.bz>; Sanchez, Daniel J., EMNRD <daniel.sanchez@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Jeff Davis <jdaguamoss@hotmail.com>; Philana Thompson <pthompson@merrion.bz>; Shacie Murray <shacie@merrion.bz>; Perrin, Charlie, EMNRD <charlie.perrin@state.nm.us>
Subject: Re: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

Carl, et al,

Philana is out of the office today, but I wanted to get the temperature survey results to you. Please see the report below:

06/22/2018

Tubing: 0 psig. Casing: 825 psig. Rig up Tefteller slickline. RIH with a spear and equalized tubing plug. Tubing pressure increased to 1475 psig. RIH with an overshot and retrieved tubing plug at 4,460'. Shut in tubing and rigged down Tefteller.

06/26/2018

Tubing: 1500 psig. Casing: 850 psig. RU BlueJet Inc wireline. RIH with base temperature log and surveyed from 700' KB to 4506' KB. Pulled logging tools up to 3,989' KB. Injected 100 bbls of water down tubing at 75 bbl/hr. Please see the following table:

Tubing (psig)	Casing (psig)	Time
1700	850	9:04 AM
1800	775	9:15 AM
1825	500	9:30 AM
1900	420	10:00 AM
1920	410	10:25 AM

Temperature at the tool depth decreased from 128 deg F to 86 deg F during injection. After injecting fluid, two log runs were made from 4200'KB to 4506'KB. The timeframe for these log intervals was 30 minutes and 1:20 minutes after injecting fluid. The final temperature survey was completed coming out of hole. Tubing was shut in and wireline rigged down. Final casing pressure was 800 psig.

Log Interpretation:

The baseline temperature survey (TEMP) shows a normal temperature gradient from surface down to the packer. Below the packer, temperature significantly decreases around the interval of injection. TEMP Pass #2 and #3 were ran 30 minutes and 1:20 minutes after injecting 100 bbls of fluid. Both temperature curves converge and maintain temperature at the perforation interval 4,350'-4,460'. Thermal warming effects take place above the injection interval as time progresses. No major anomalies off temperature gradient were noticed above the packer. From these temperature survey results, Agua Moss believes injection is still maintained within the Pt. Lookout formation. Please see attached.

Please let me know if you have any questions.

Thanks,

Ryan Merrion
Production Engineer
MERRION OIL & GAS
ryan@merrion.bz
(303) 653-2231

BLUEJET INC. PERFORATING LOGGING

TEMPERATURE SURVEY
1 7/16" DIGITAL TEMP TOOL
FINAL PRINT

Company	AGUA MOSS, LLC
Well	SUNCO DISPOSAL NO. 1
Field	FLORA VISTA MESAVERDE
County	SAN JUAN
State	N.M.

Company AGUA MOSS, LLC
Well SUNCO DISPOSAL NO. 1
Field FLORA VISTA MESAVERDE
County SAN JUAN **State** N.M.

Location: API # : NA
1595 FNL & 1005 FWL
SEC 2 TWP 29N RGE 12W

Permanent Datum	G.L.	Elevation	5859
Log Measured From	KB		
Drilling Measured From	KB		

Other Services	Elevation
	K.B. 5874
	D.F. 5873
	G.L. 5859

Date	6/26/2018
Run Number	1
Depth Driller	4711
Depth Logger	4506
Bottom Logged Interval	4506
Top Log Interval	3990
Open Hole Size	
Type Fluid	H20
Density / Viscosity	NA
Max. Recorded Temp.	
Estimated Cement Top	
Time Well Ready	7:45 AM
Time Logger on Bottom	9:00 AM
Equipment Number	D6 TEMP 005
Location	FRM
Recorded By	ETHAN RISLEY
Witnessed By	RYAN MERRION

Borehole Record

Run Number	Bit	From	To
ONE	12.25	0	235
	7.875	235	4760

Tubing Record

Size	Wgt/Ft	Top	Bottom

Casing Record

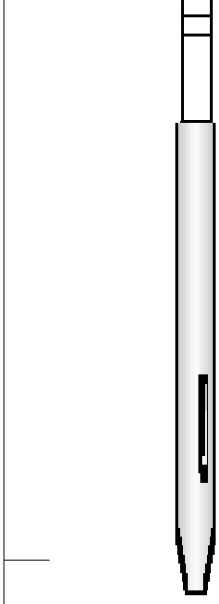
	Size	Wgt/Ft	Size	Weight	From	To
Surface String	8.625	24#			0	235
Prot. String	5.5	15.5#			235	4760
Production String						
Liner						

<<< Fold Here >>>

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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
CCL	3.00		CCL-SPCL (SPCL1)	1.35	1.69	10.00



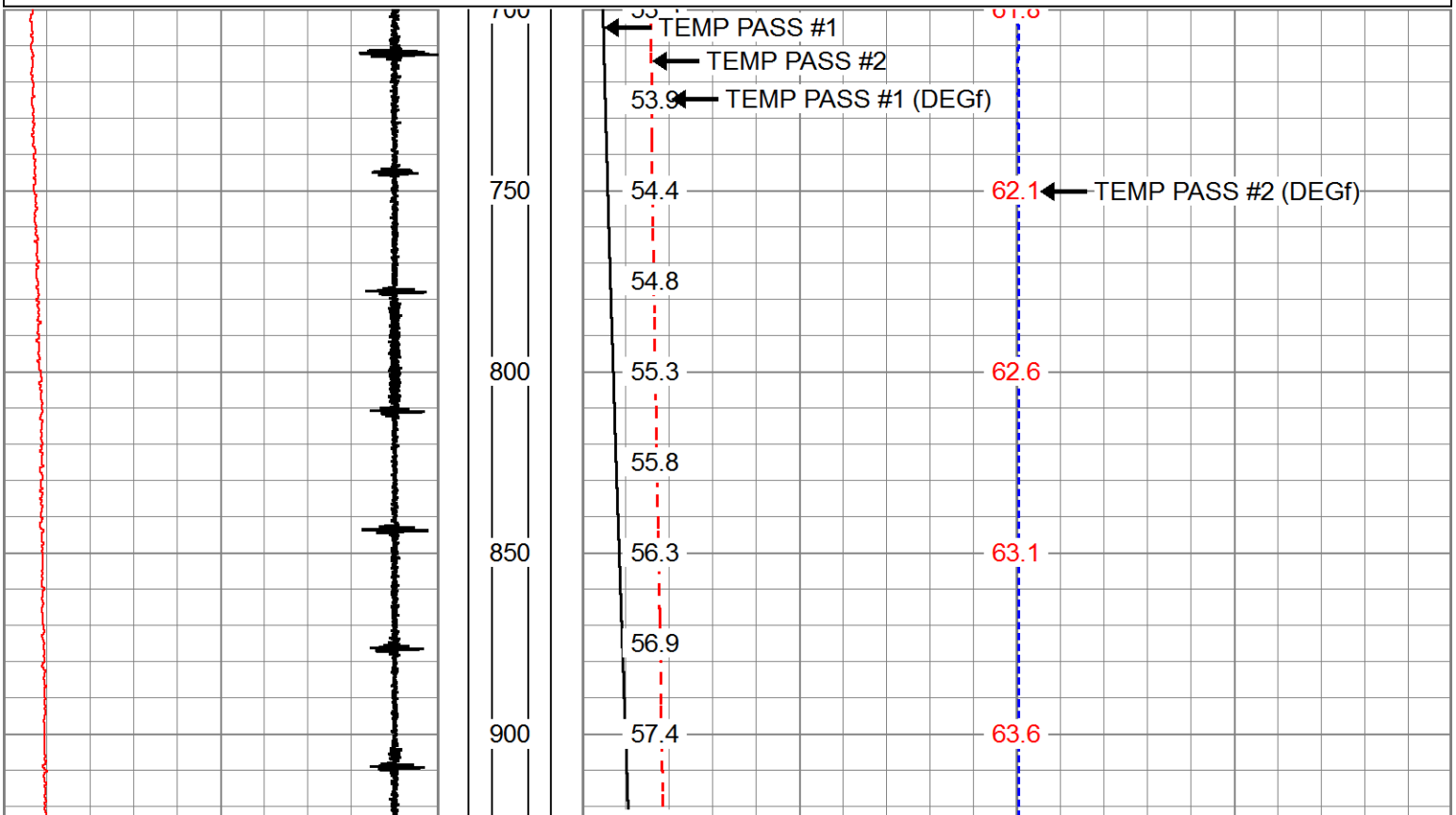
			1 11/16" Logging CCL			
			TEMP-Comprobe (FW1302-005) Comprobe Temperature Tool	2.30	1.44	4.00
TEMP	0.17					

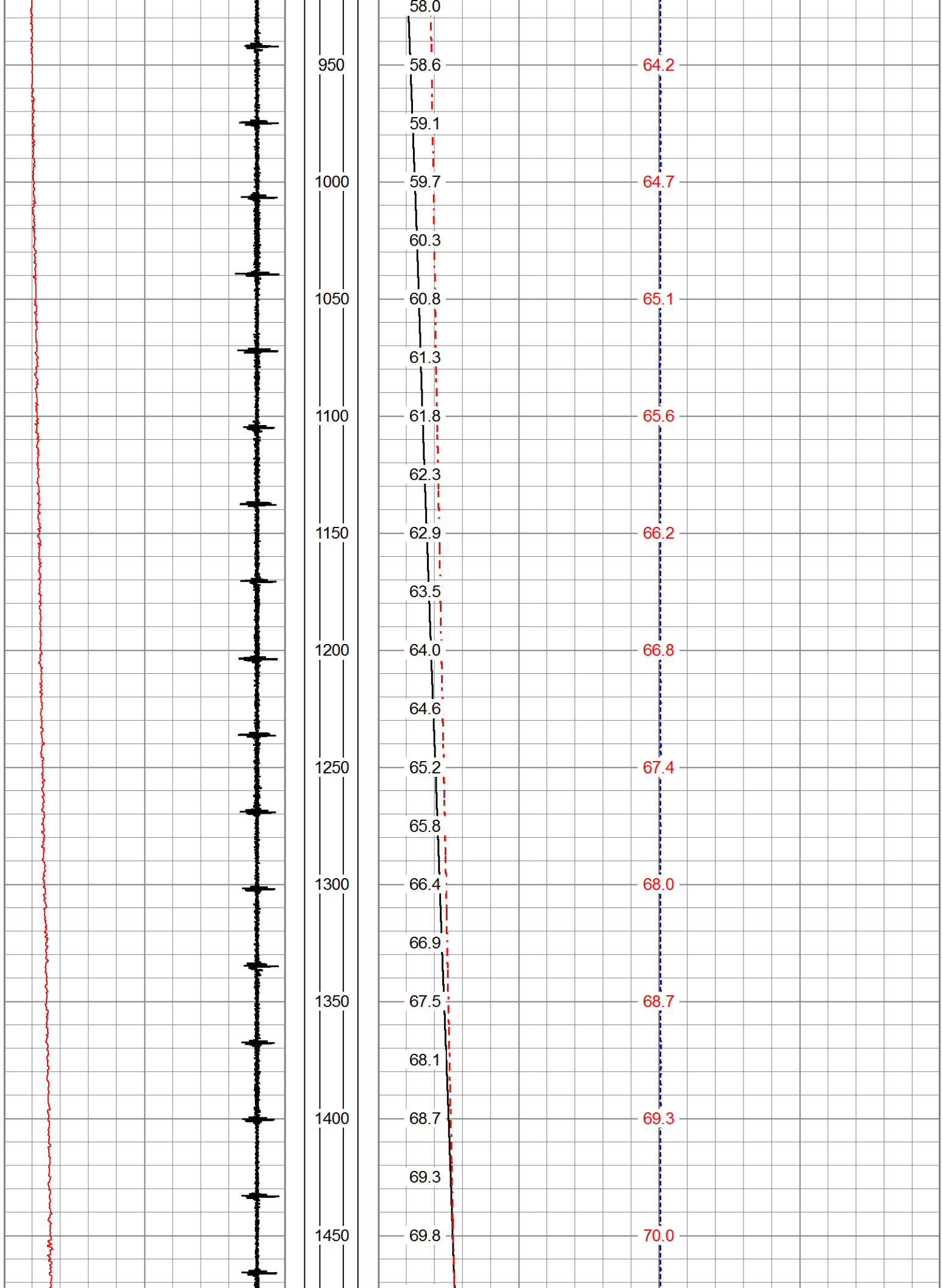
Dataset:	merrionsunco#1swdtemp.db: field/well/run1/pass2.C
Total length:	3.65 ft
Total weight:	14.00 lb
O.D.:	1.69 in

Database File	merrionsunco#1swdtemp.db
Dataset Pathname	pass2.C
Presentation Format	temp
Dataset Creation	Tue Jun 26 13:38:22 2018
Charted by	Depth in Feet scaled 1:600

9	CCL	-1
0	LTEN (lb)	1700

50	TEMP (degF)	200
-5	DTMP (degF)	5
50	TEM2 (degF)	200

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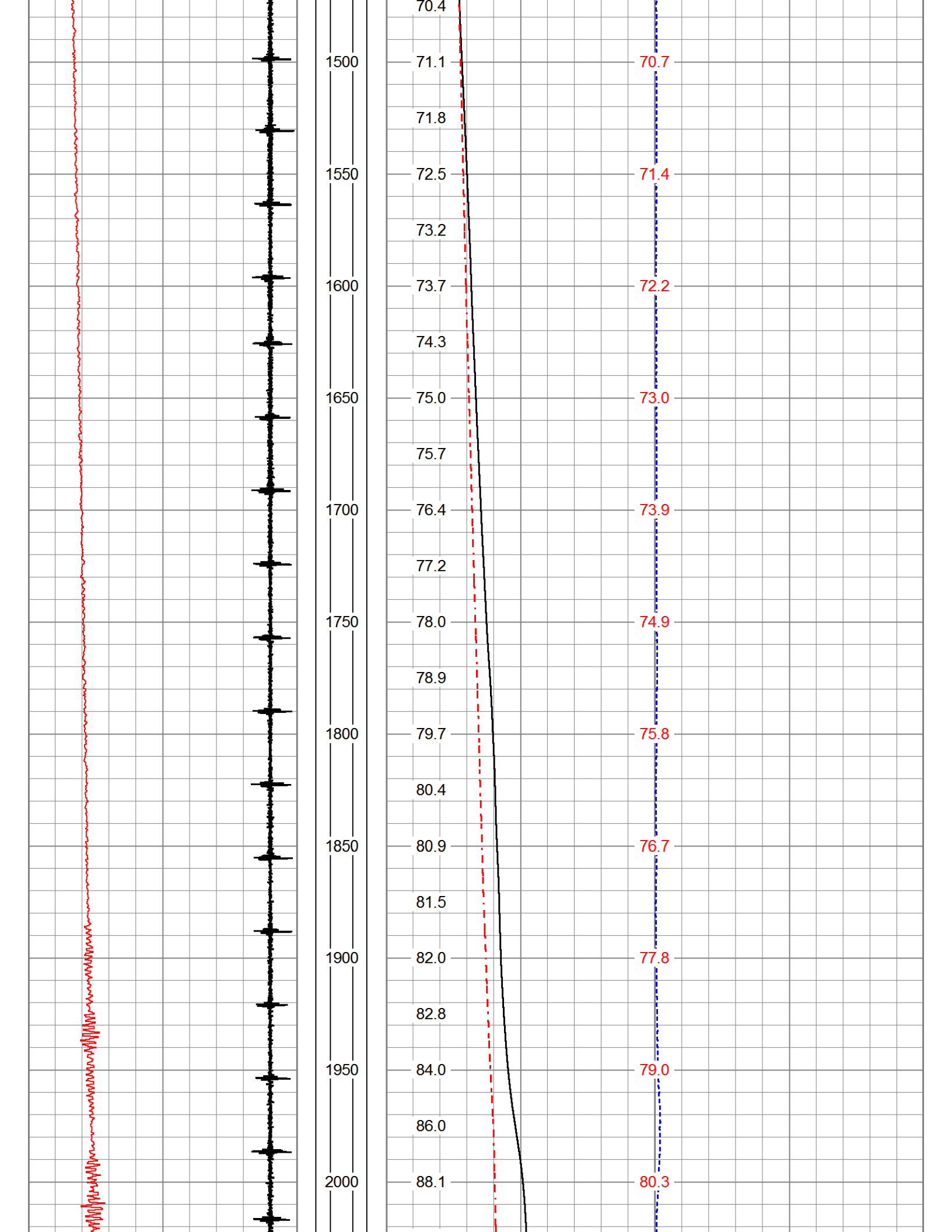
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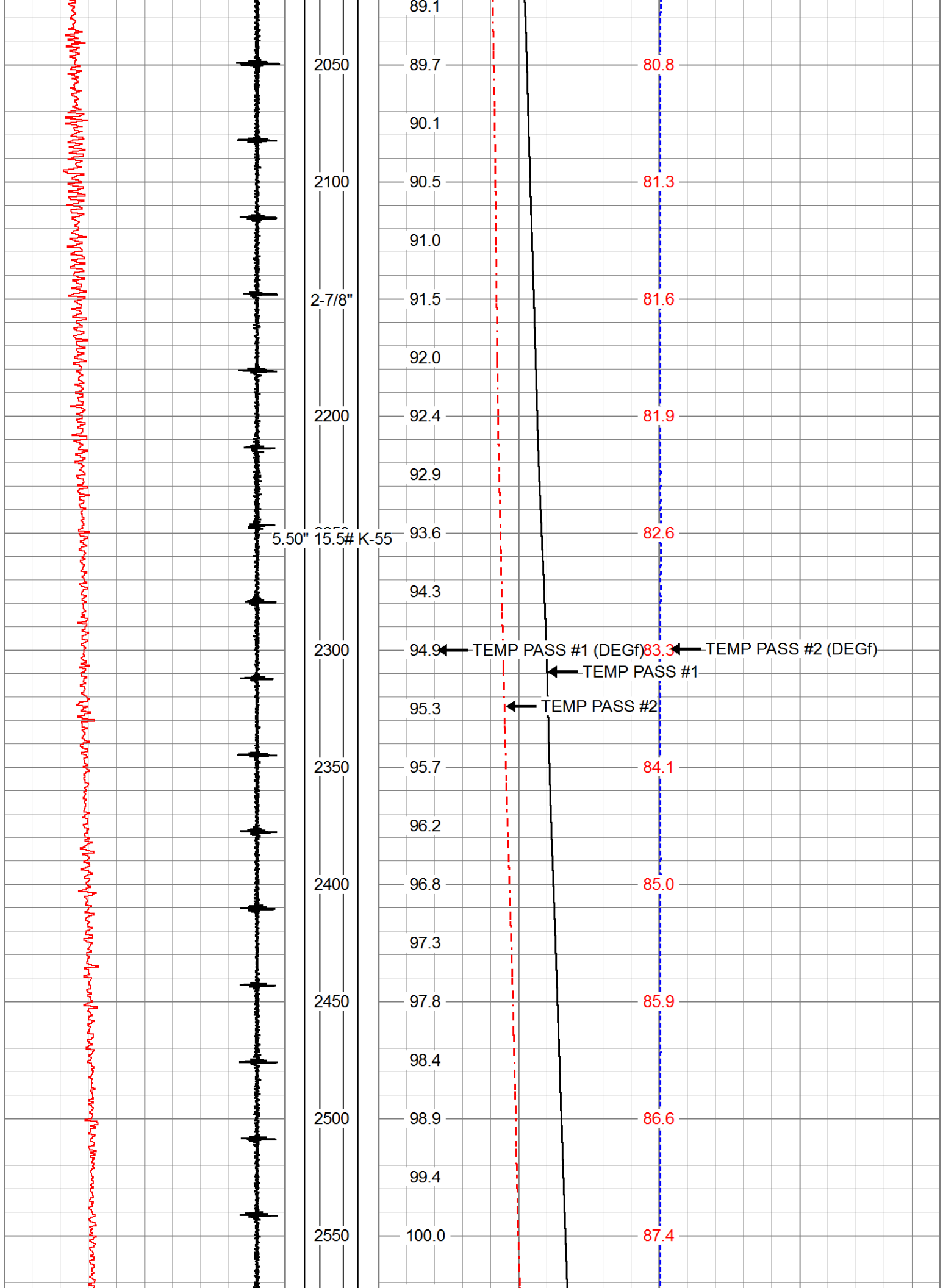
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93.6
82.6
94.3
2300
94.9
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83.3
TEMP PASS #2 (DEGf)
TEMP PASS #1
95.3
TEMP PASS #2
2350
95.7
84.1
96.2
2400
96.8
85.0
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85.9
98.4
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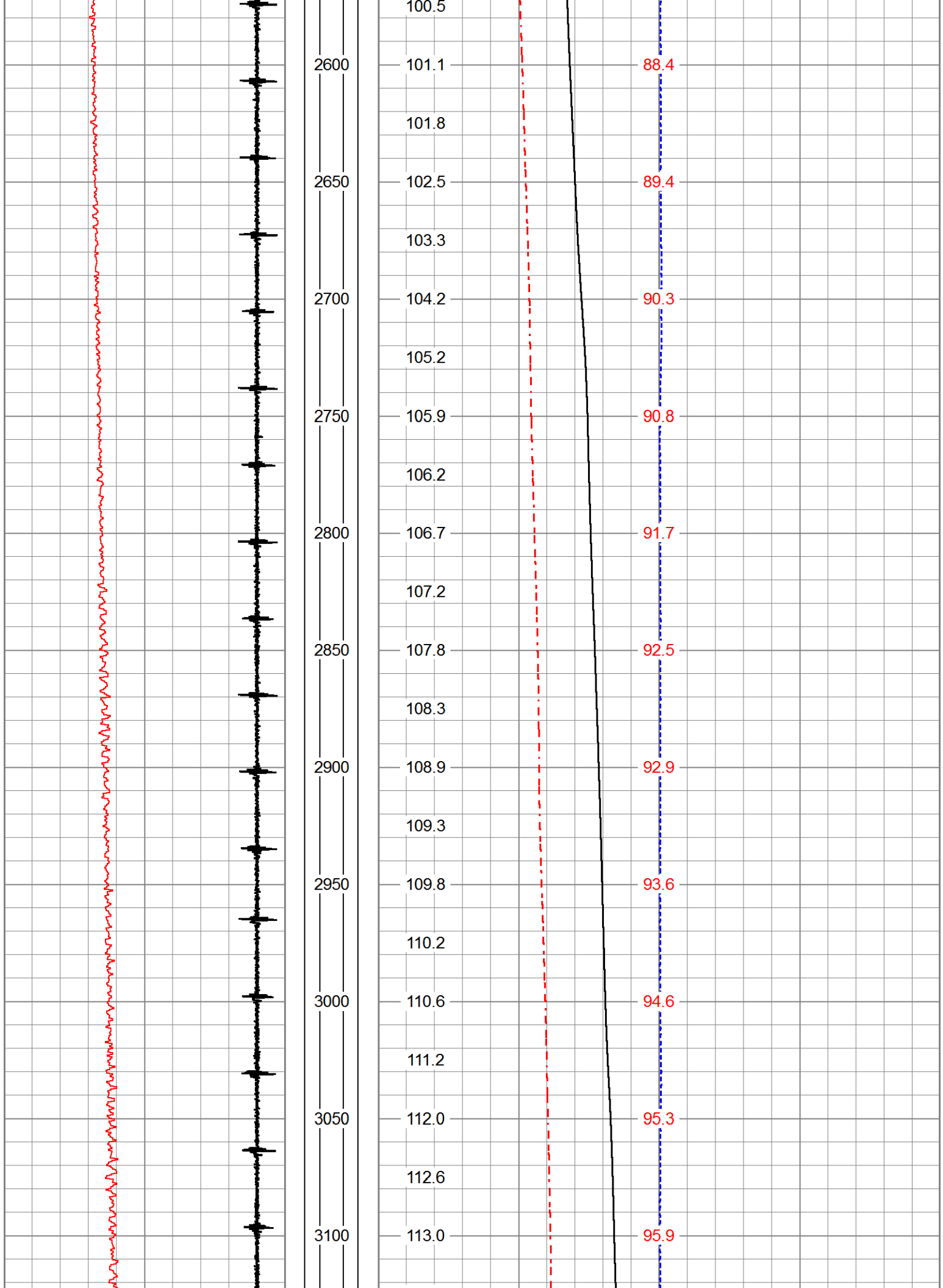
99.4
2550
100.0
87.4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105.9
90.8
106.2
2800
106.7
91.7
107.2
2850
107.8
92.5
108.3
2900
108.9
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109.8
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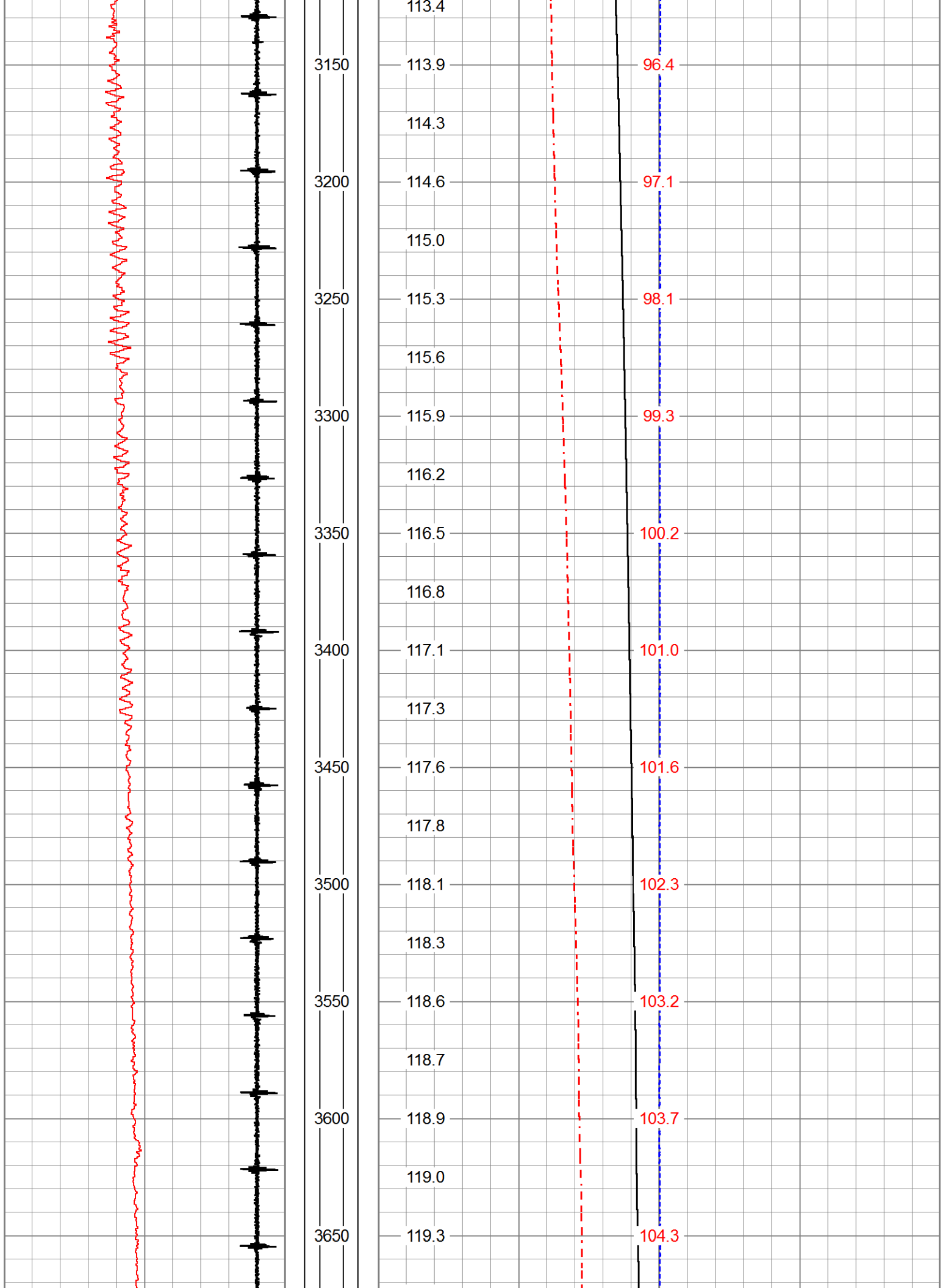
95.9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3200
3250
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3550
3600
3650
113.4
113.9
114.3
114.6
115.0
115.3
115.6
115.9
116.2
116.5
116.8
117.1
117.3
117.6
117.8
118.1
118.3
118.6
118.7
118.9
119.0
119.3
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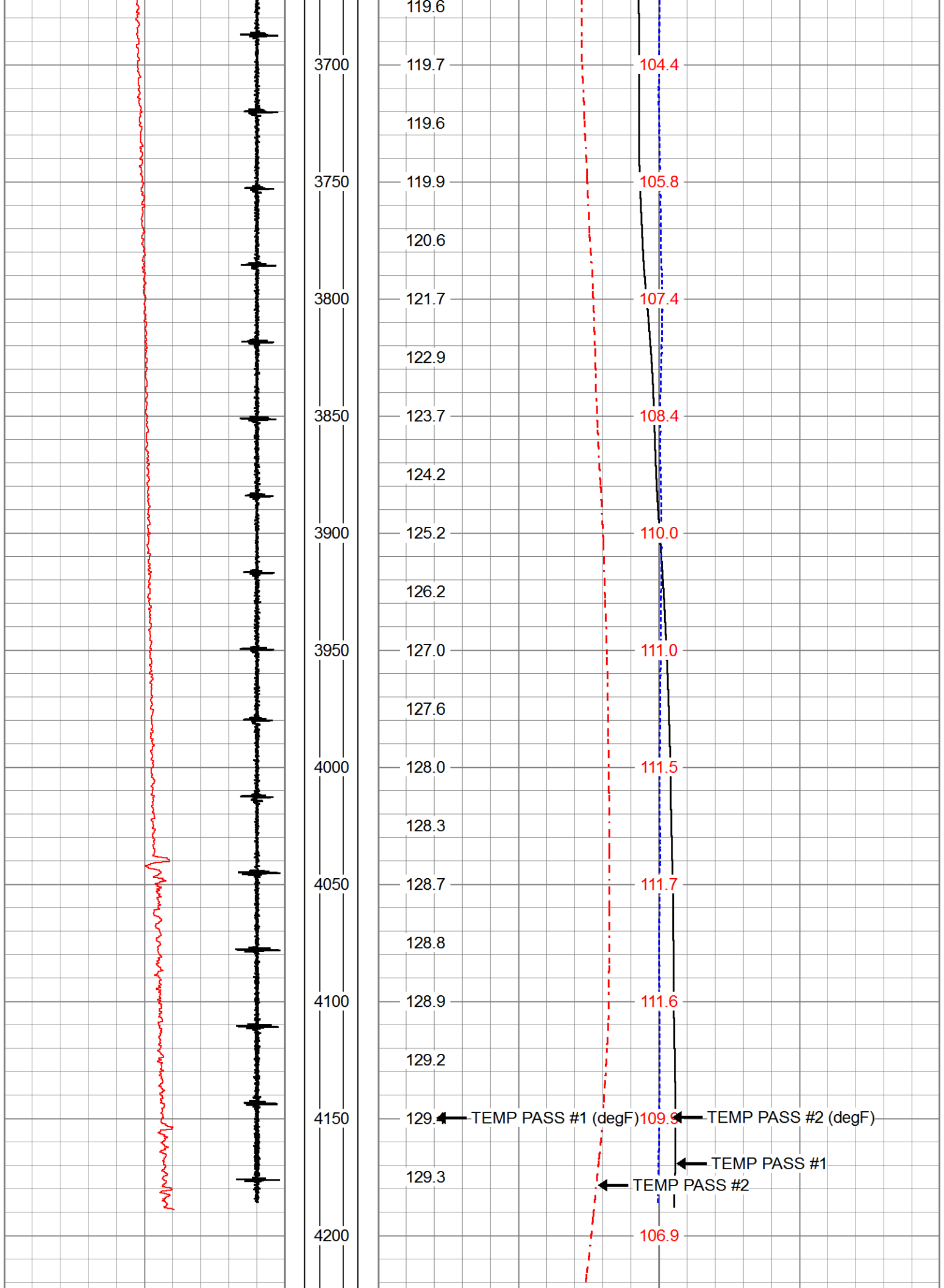
97.1
98.1
99.3
100.2
101.0
101.6
102.3
103.2
103.7
104.3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3900
3950
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4100
4150
4200
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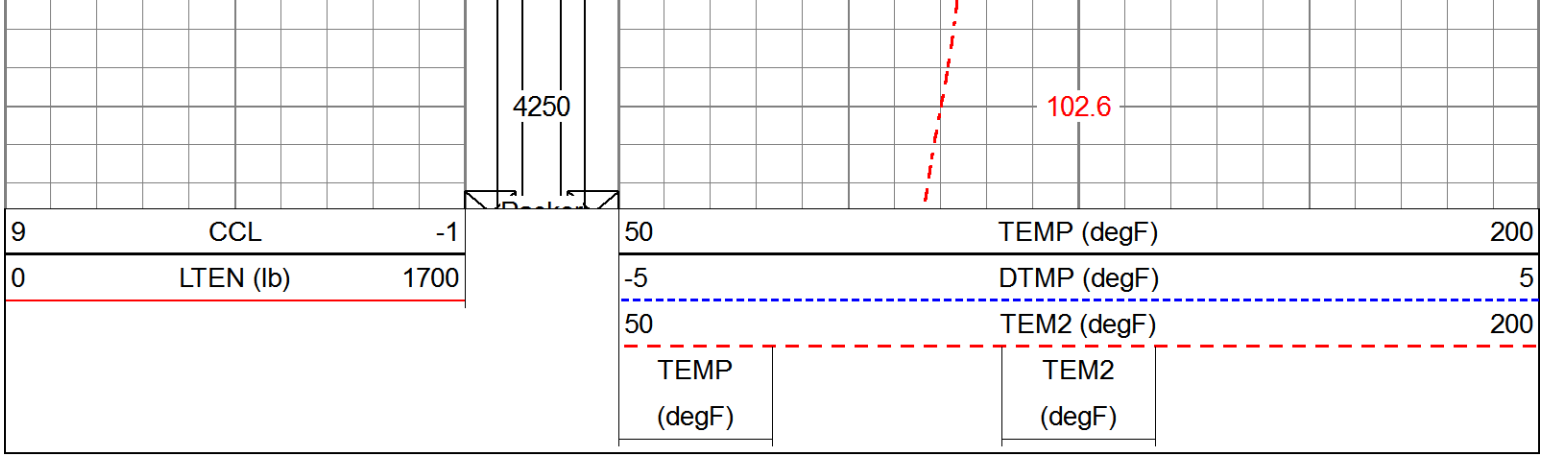
119.7
104.4
119.6
119.9
105.8
120.6
121.7
107.4
122.9
123.7
108.4
124.2
125.2
110.0
126.2
127.0
111.0
127.6
128.0
111.5
128.3
128.7
111.7
128.8
128.9
111.6
129.2
129.4
TEMP PASS #1 (degF)
109.9
TEMP PASS #2 (degF)
TEMP PASS #1
129.3
TEMP PASS #2
106.9



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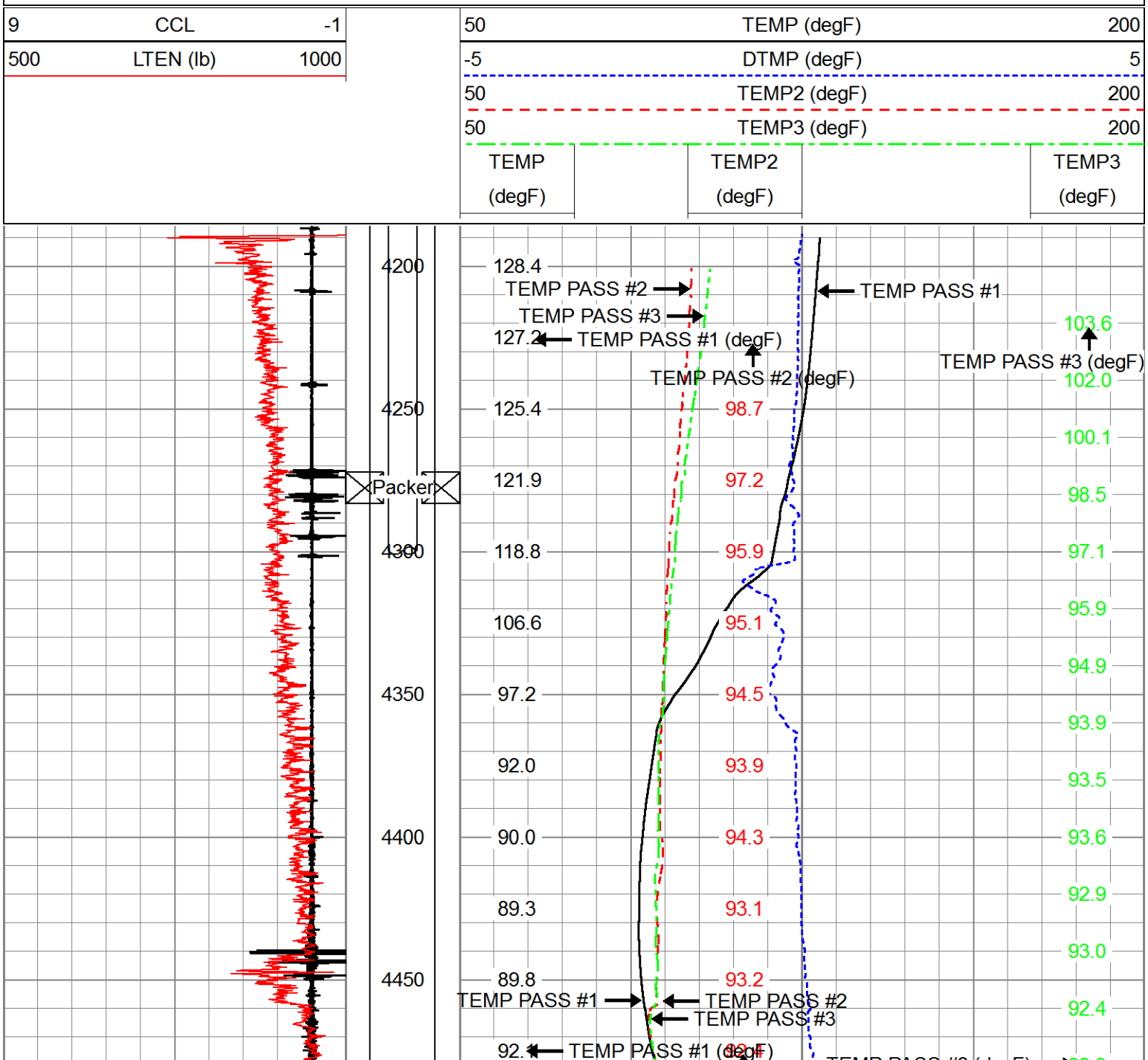
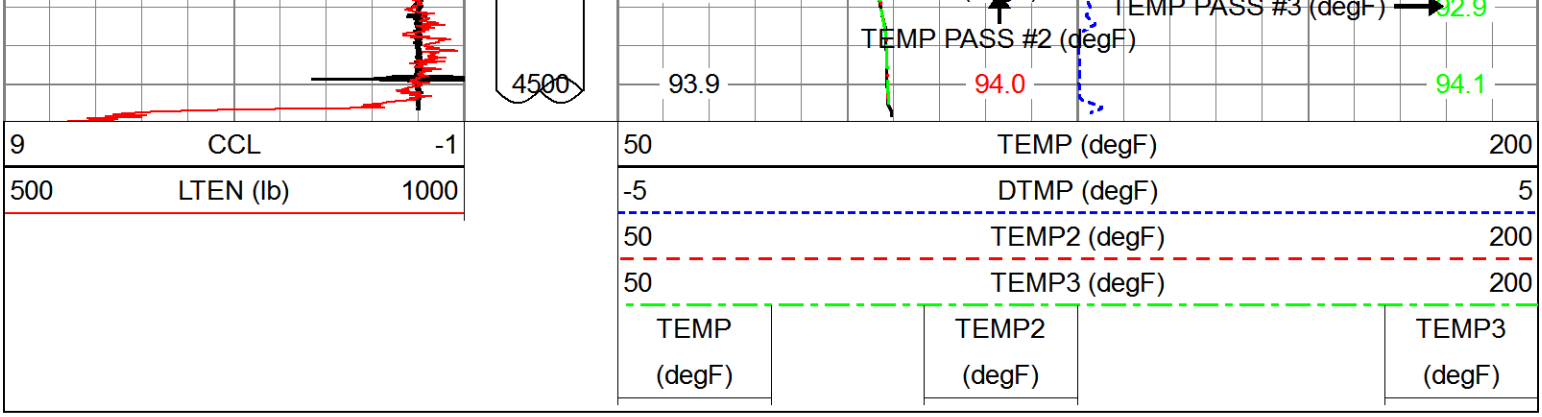
Charted by	Depth in Feet scaled 1:600





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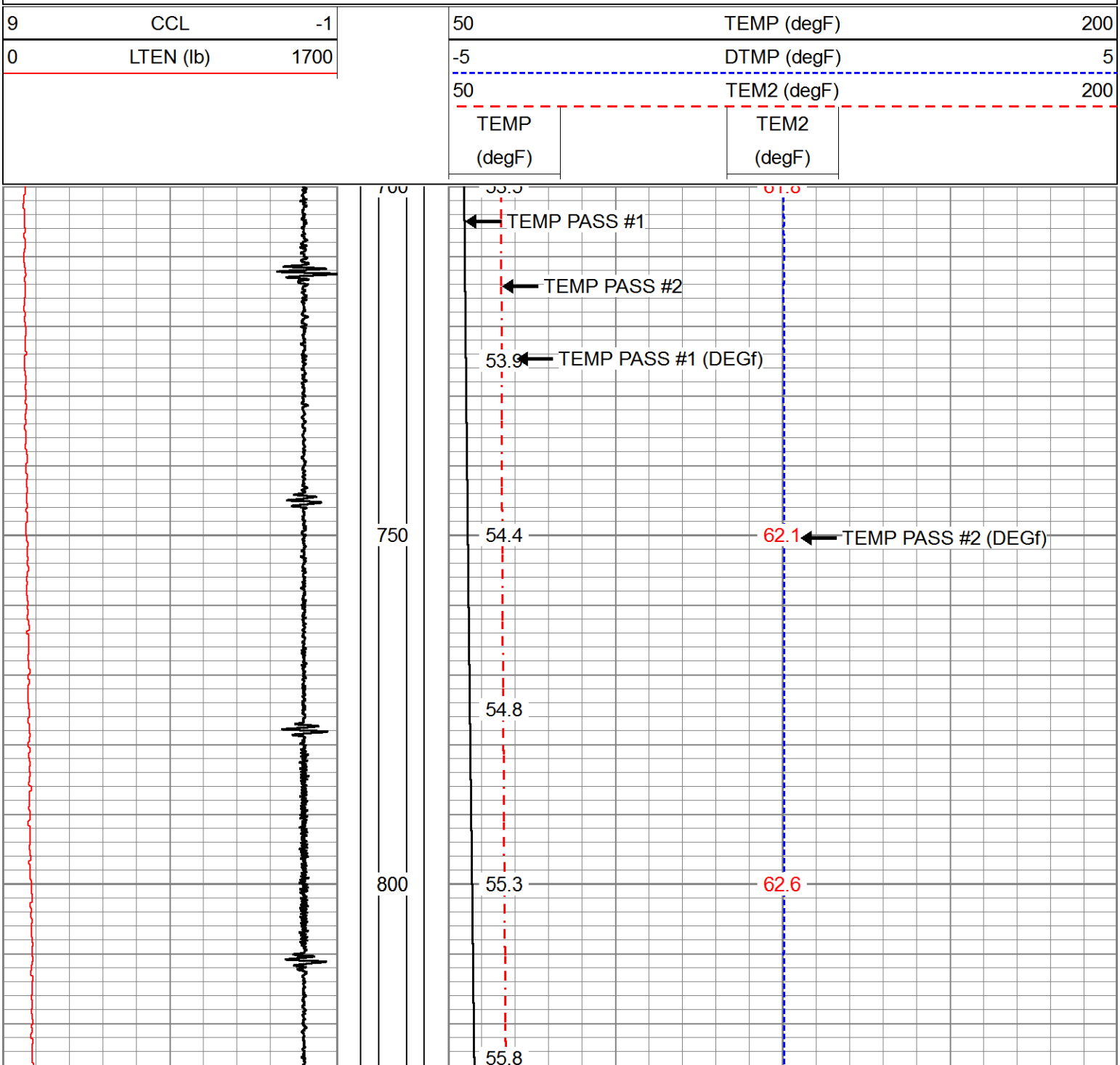
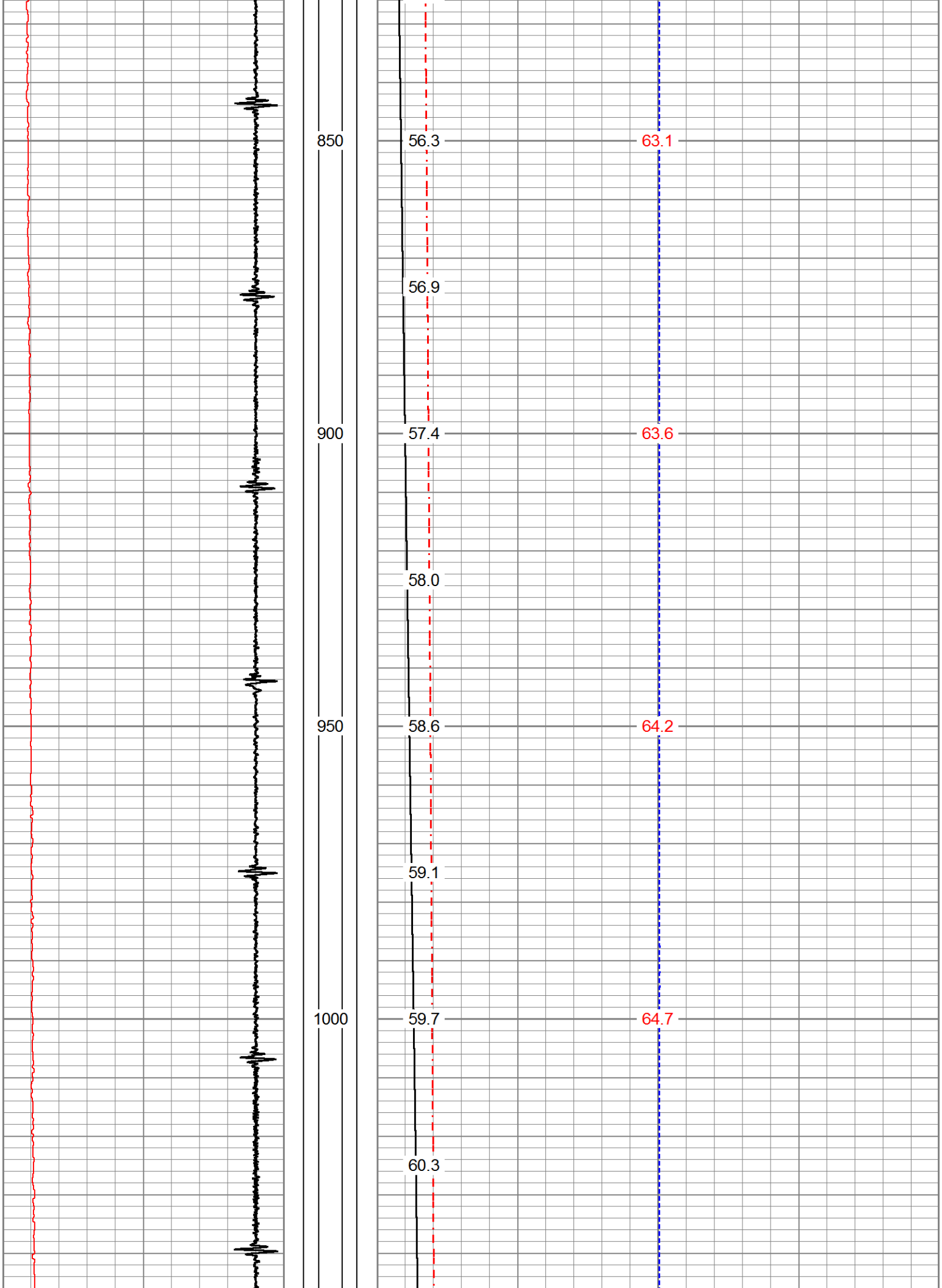
Charted by	Depth in Feet scaled 1:240

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56.3
63.1
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950
58.6
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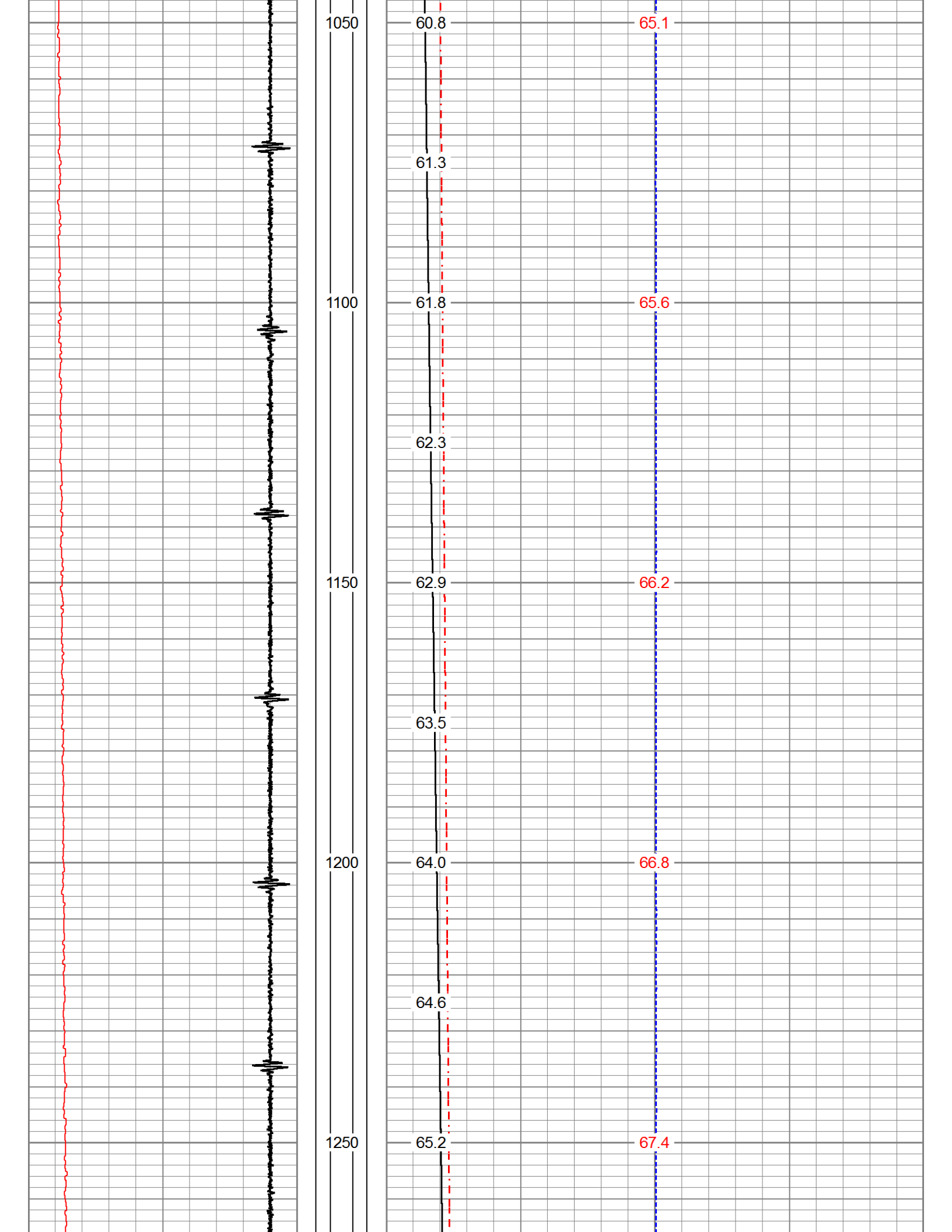
59.1
1000
59.7
64.7
60.3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65.1
61.3
1100
61.8
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1150
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66.8
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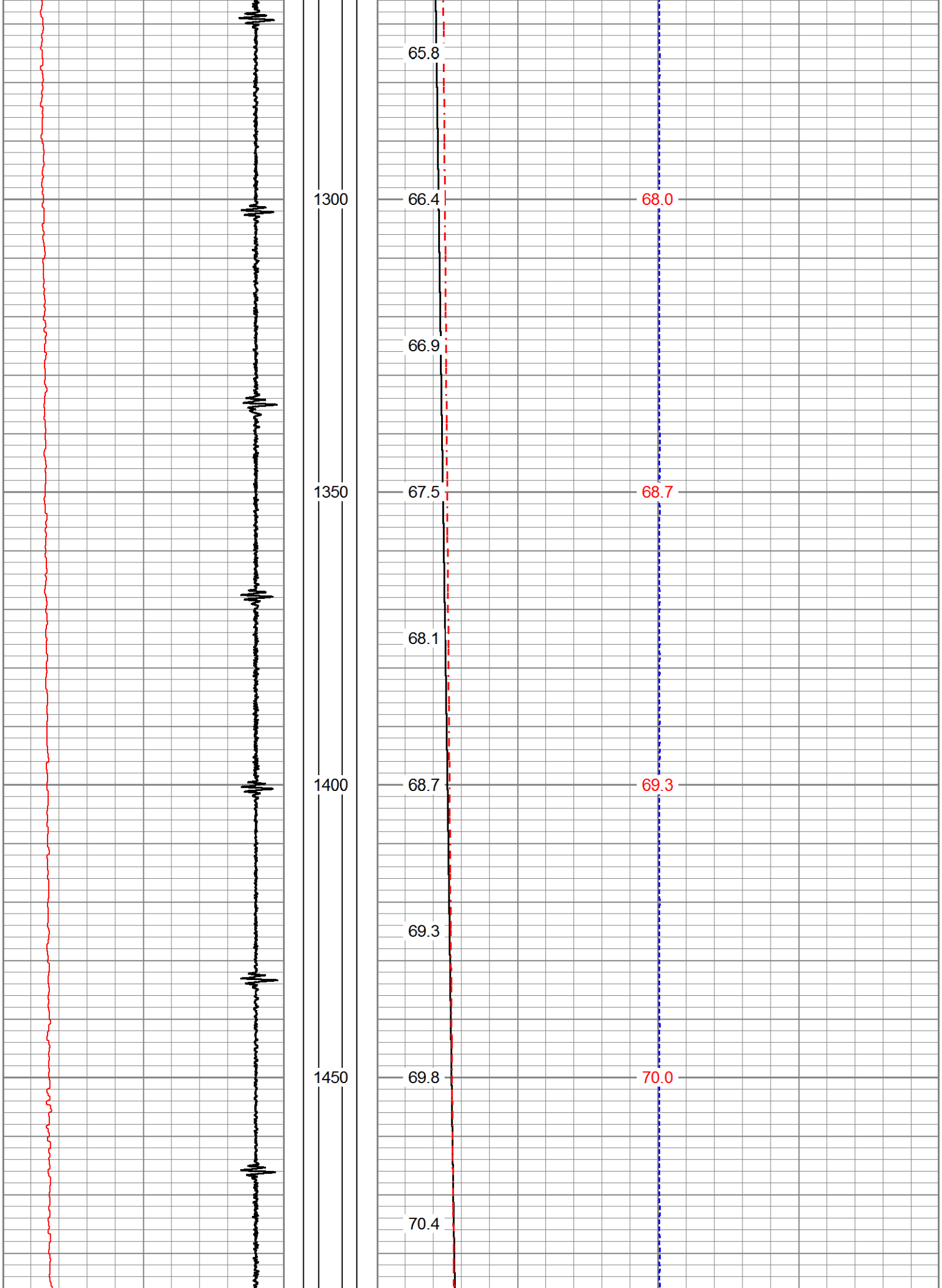
1250
65.2
67.4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1300
66.4
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1350
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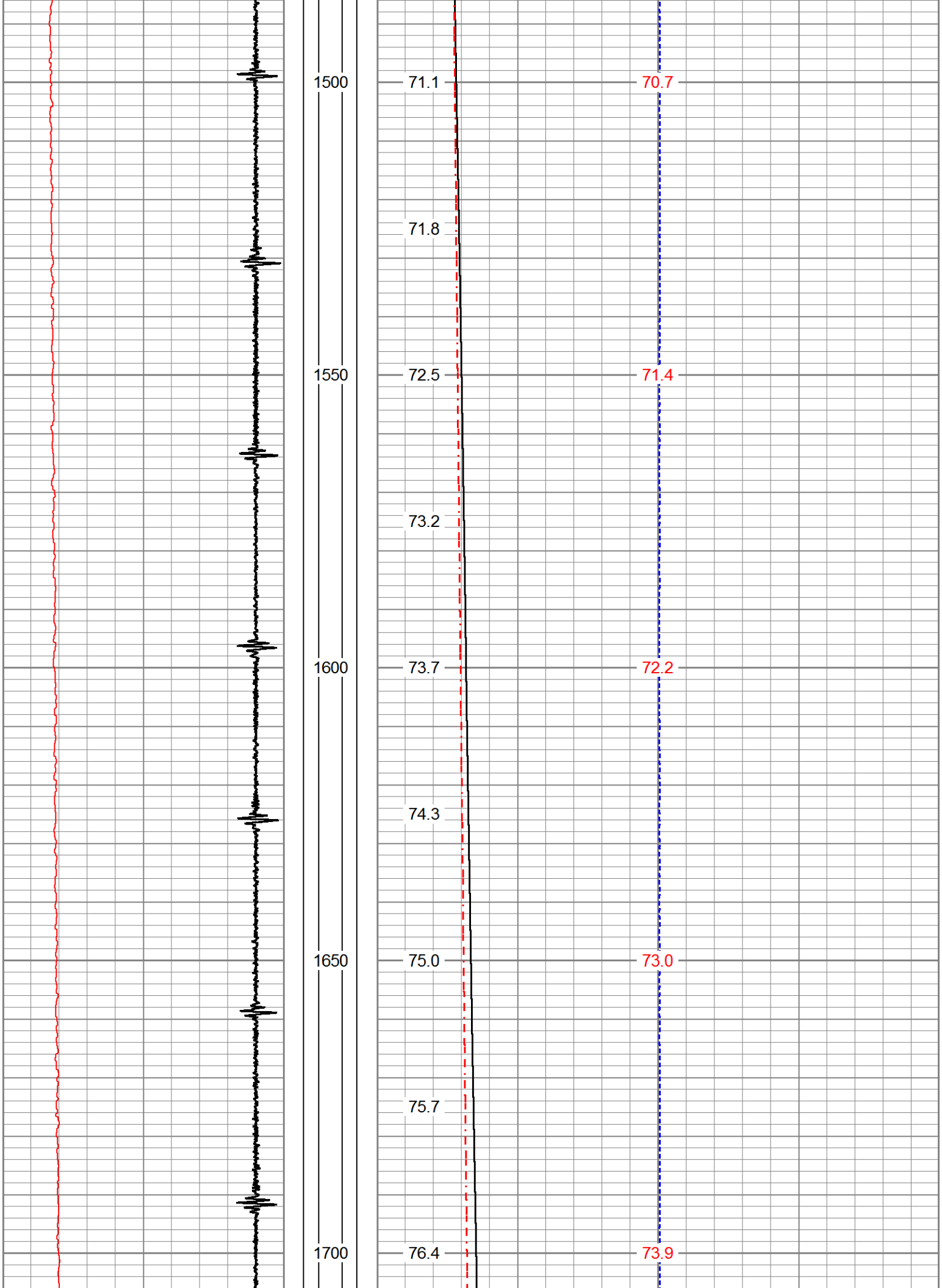
68.7
68.1
1400
68.7
69.3
69.3
1450
69.8
70.0
70.4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71.1
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1550
72.5
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73.0
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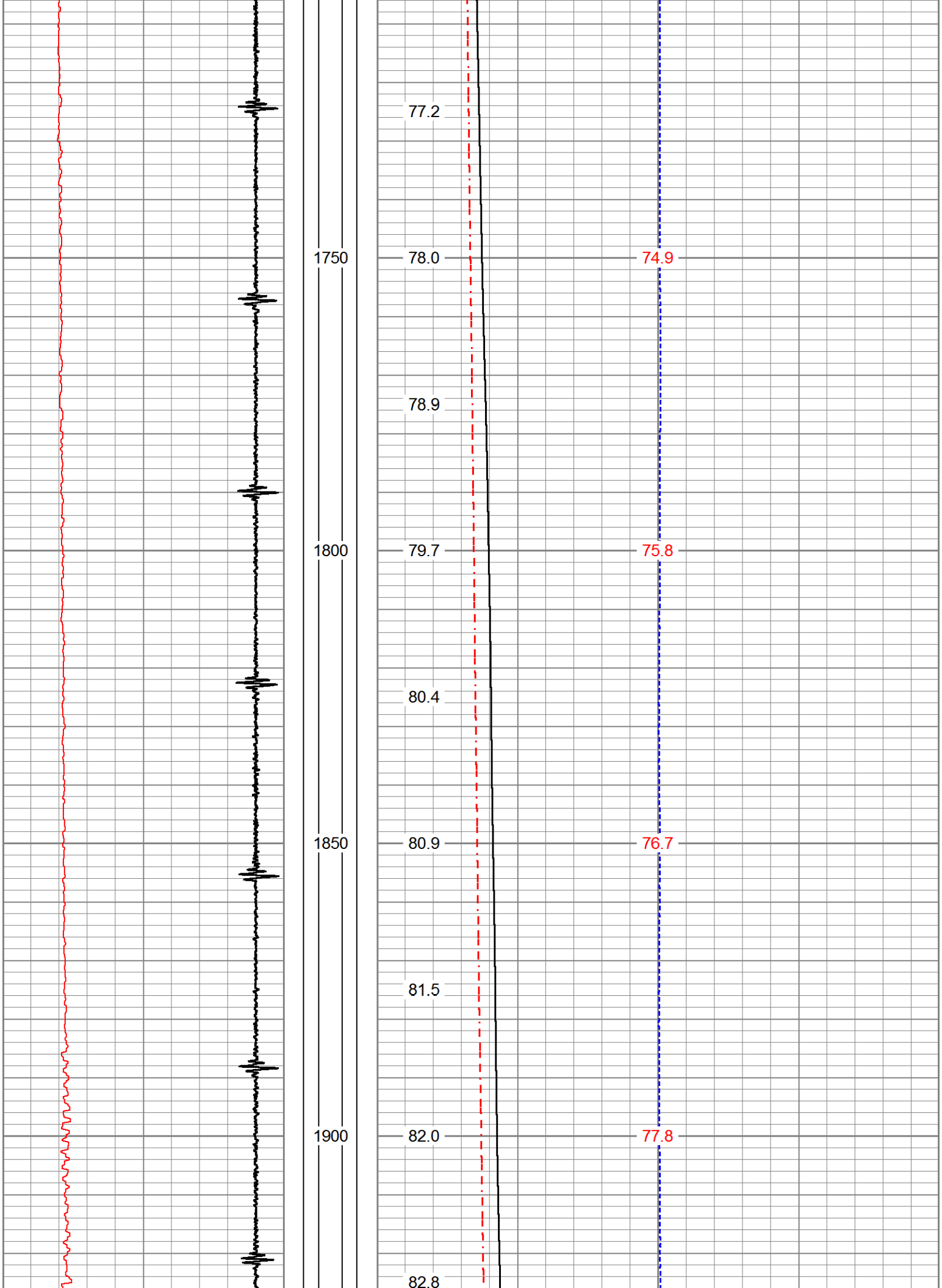
1700
76.4
73.9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76.7
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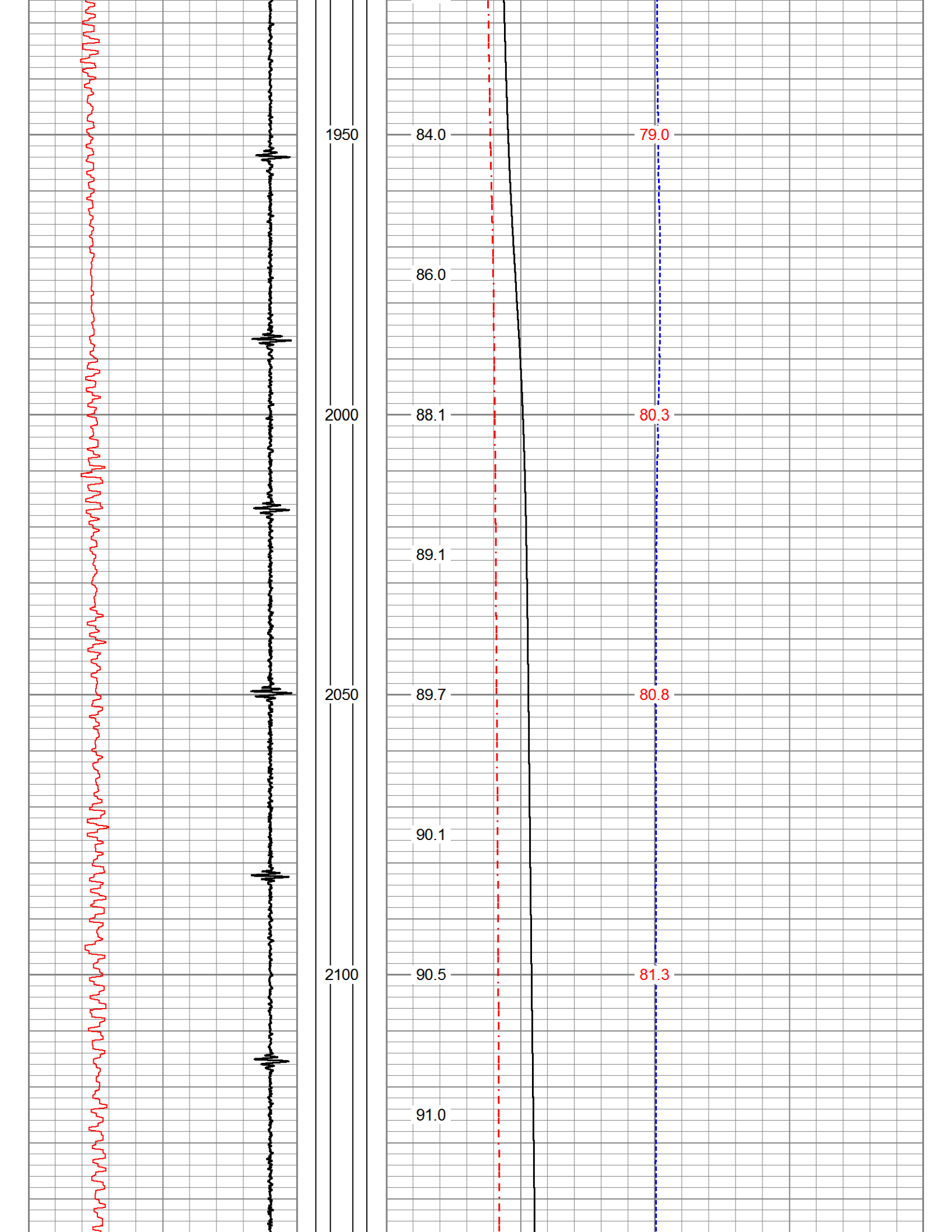
1900
82.0
77.8
82.8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2050
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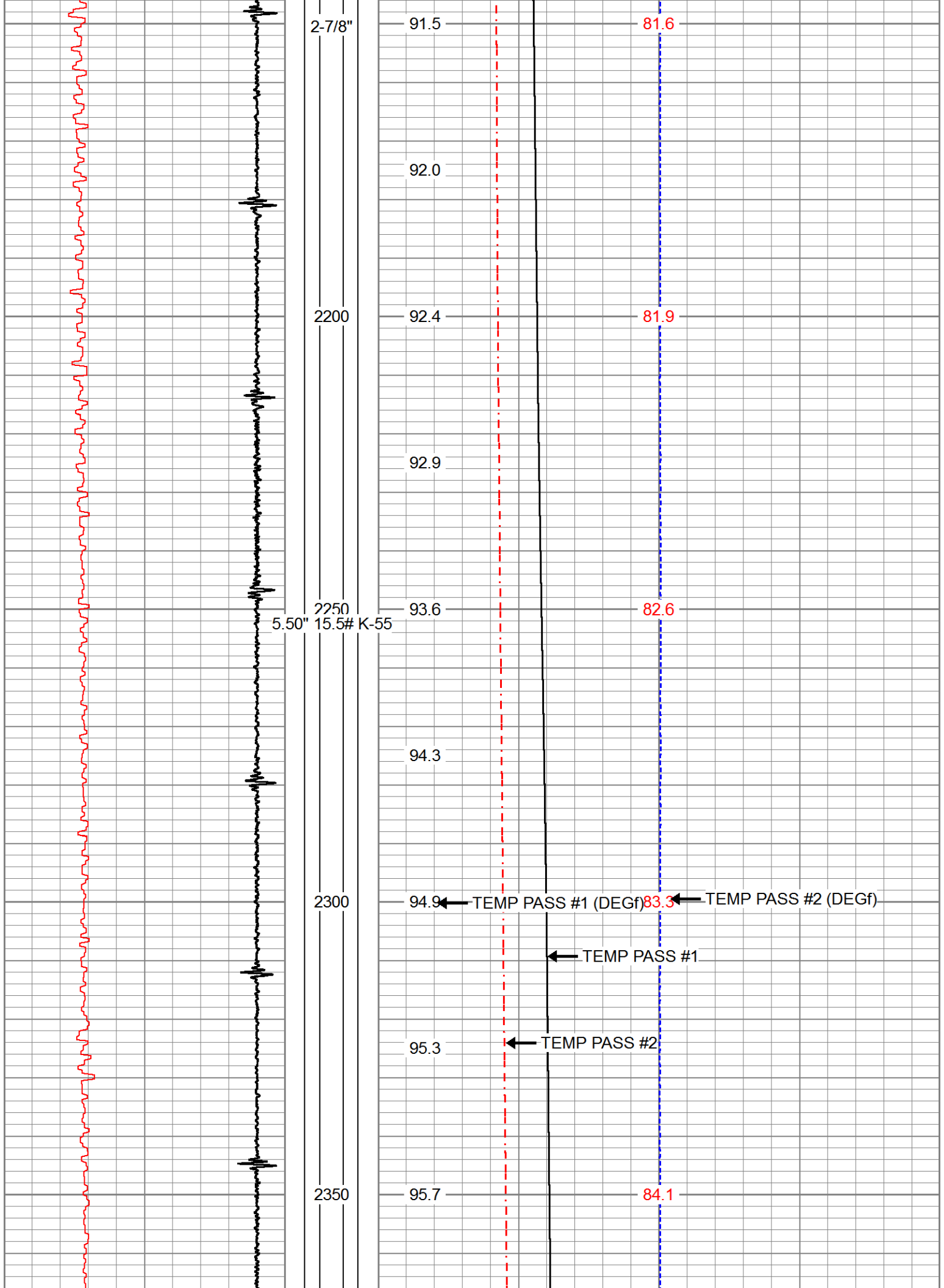
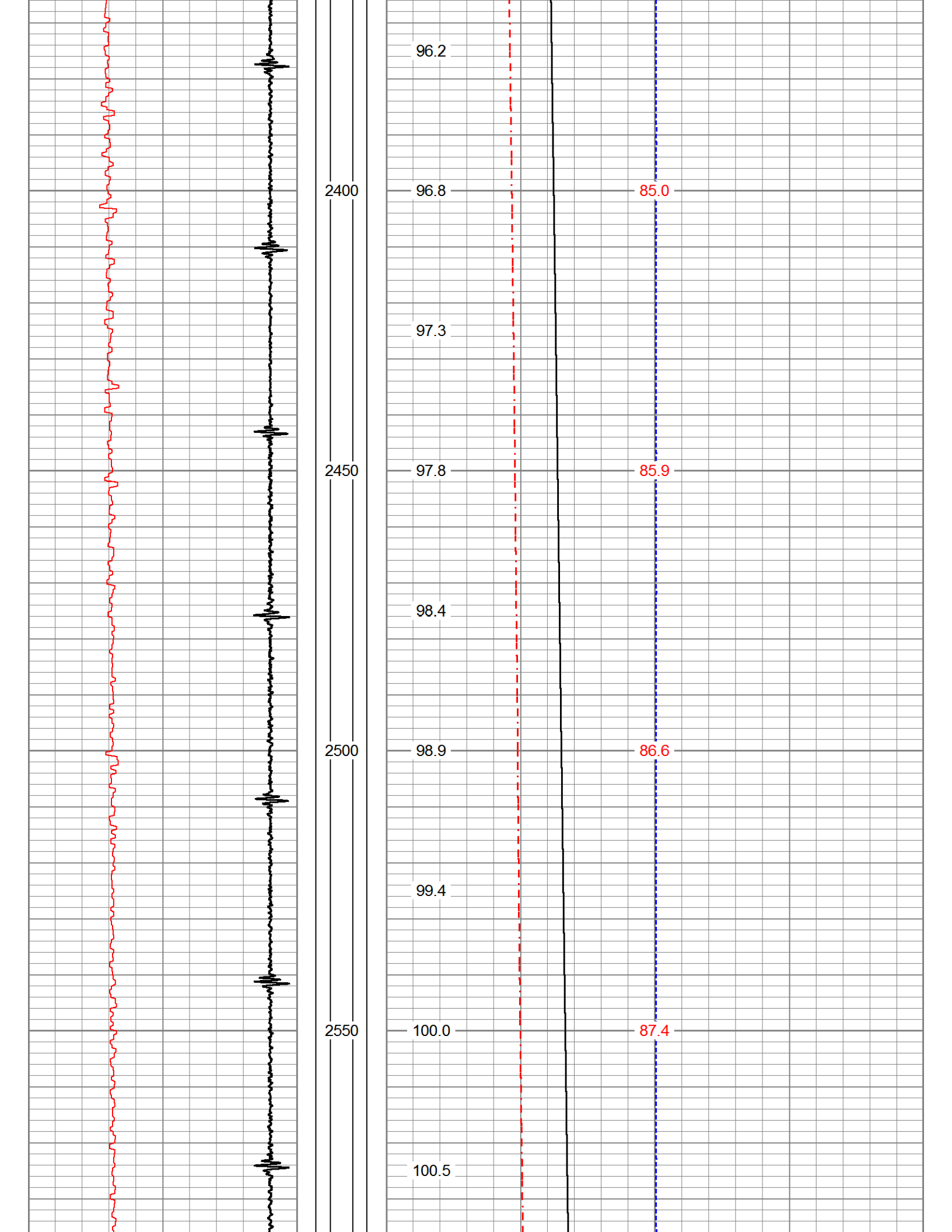
90.1
2100
90.5
81.3
91.0


2-7/8"
91.5
81.6
92.0
2200
92.4
81.9
92.9
2250
93.6
82.6
5.50" 15.5# K-55
94.3
2300
94.9
TEMP PASS #1 (DEGf)
83.3
TEMP PASS #2 (DEGf)
TEMP PASS #1
95.3
TEMP PASS #2
2350
95.7
84.1


96.2
2400
96.8
85.0
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99.4
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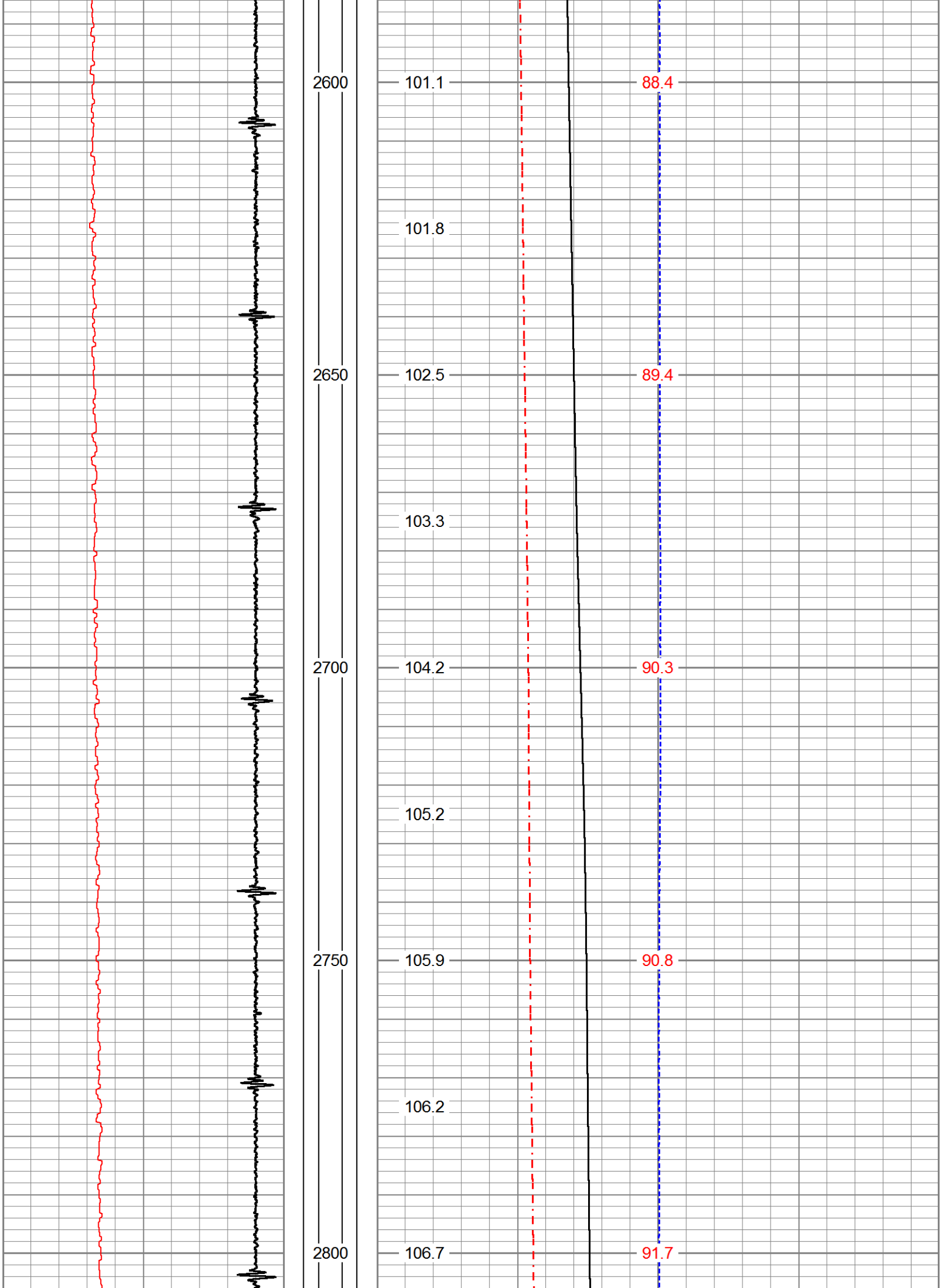
87.4
100.5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105.9
90.8
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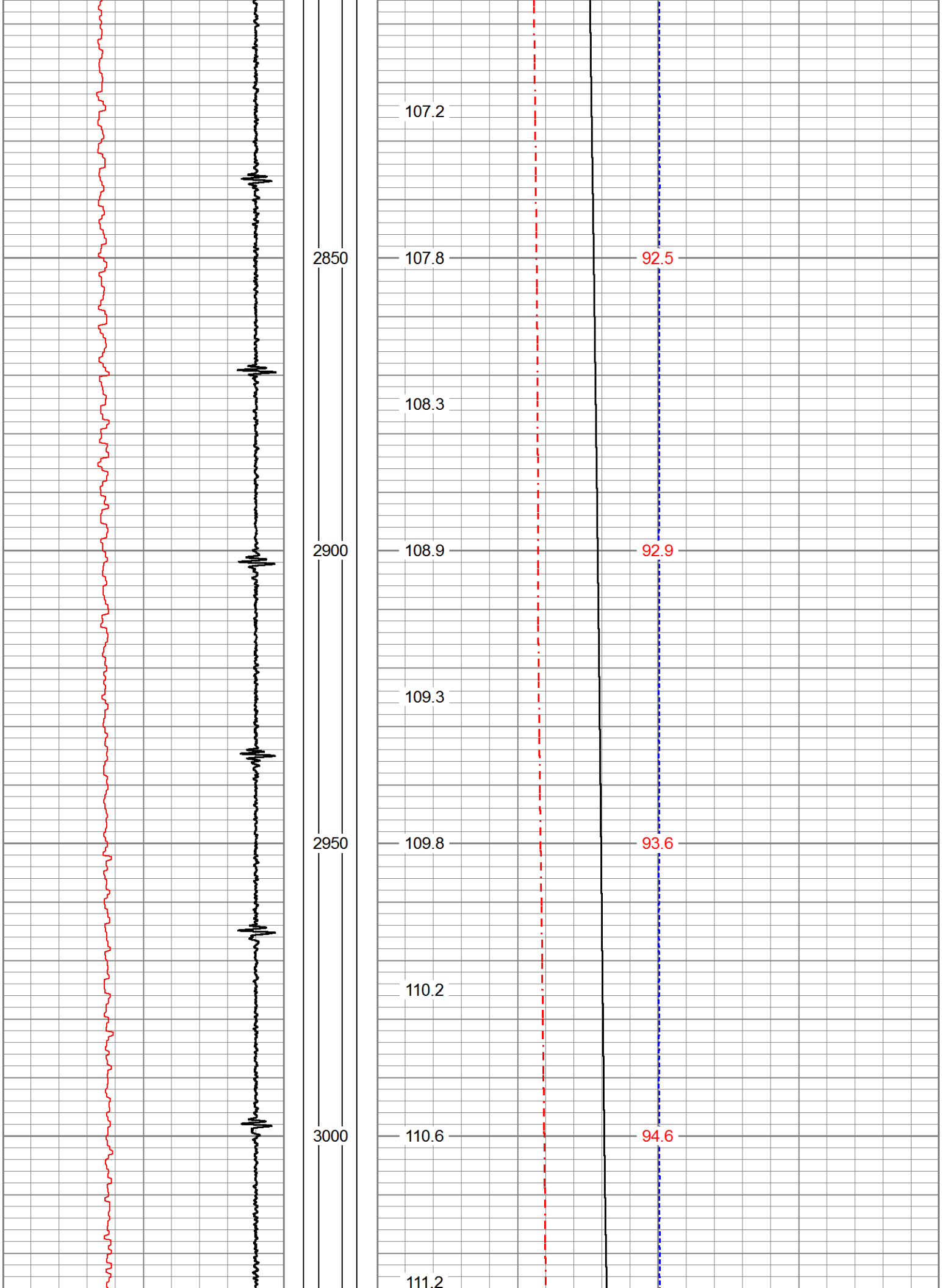
2800
106.7
91.7


107.2
2850
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108.9
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2950
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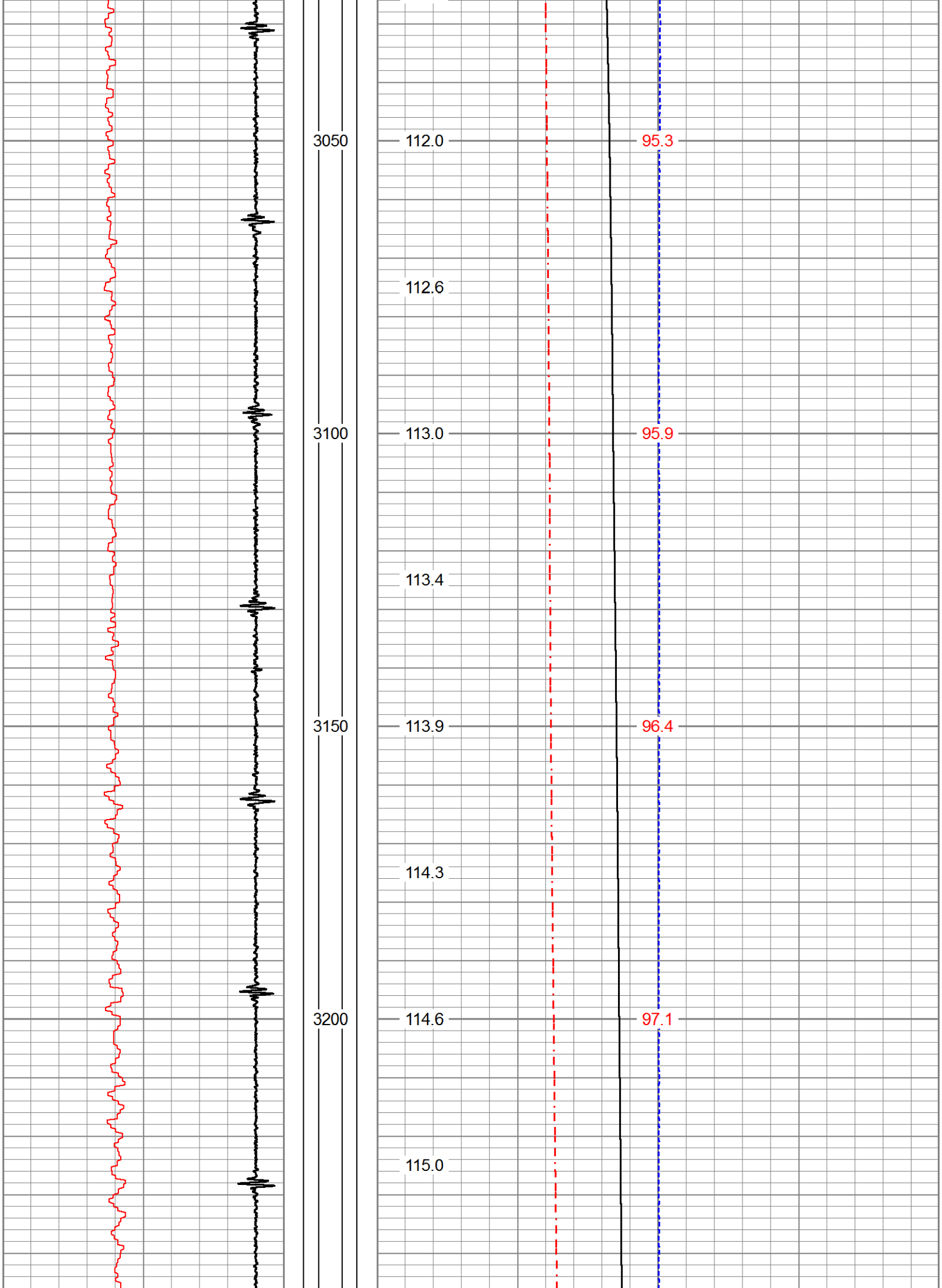
93.6
110.2
3000
110.6
94.6
111.2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114.3
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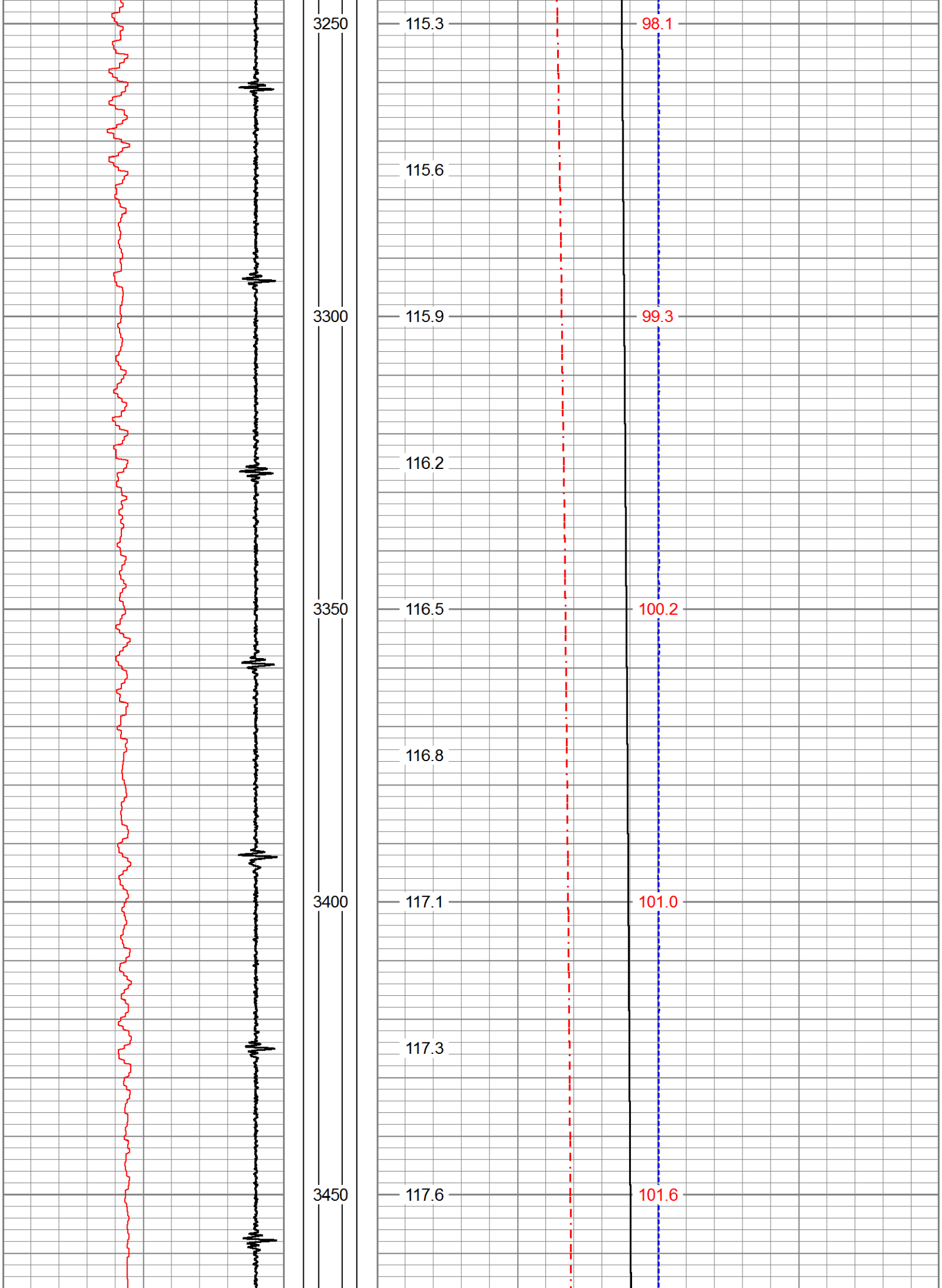
114.6
97.1
115.0


3250
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100.2
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101.0
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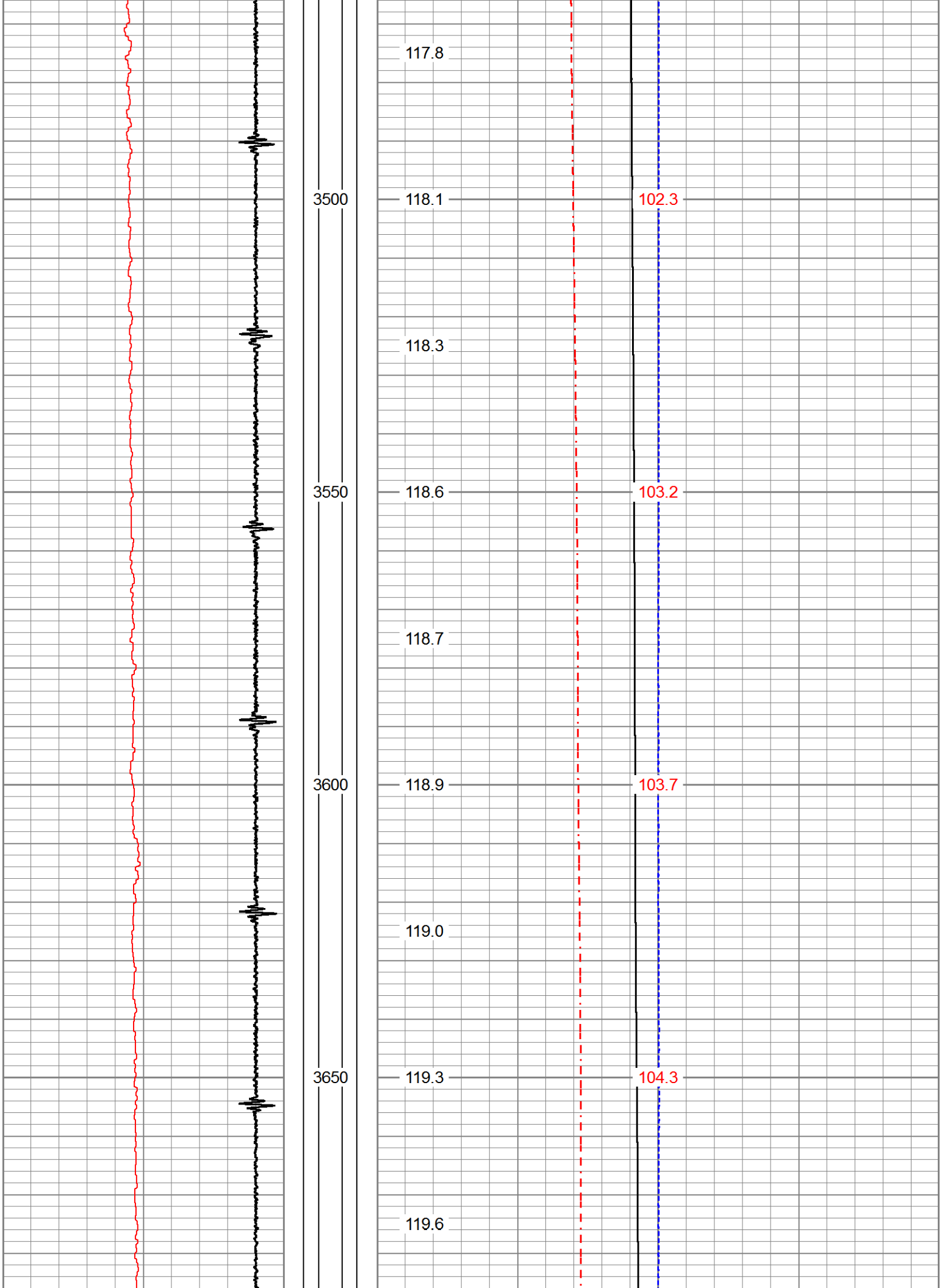
117.6
101.6


117.8
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103.2
118.7
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103.7
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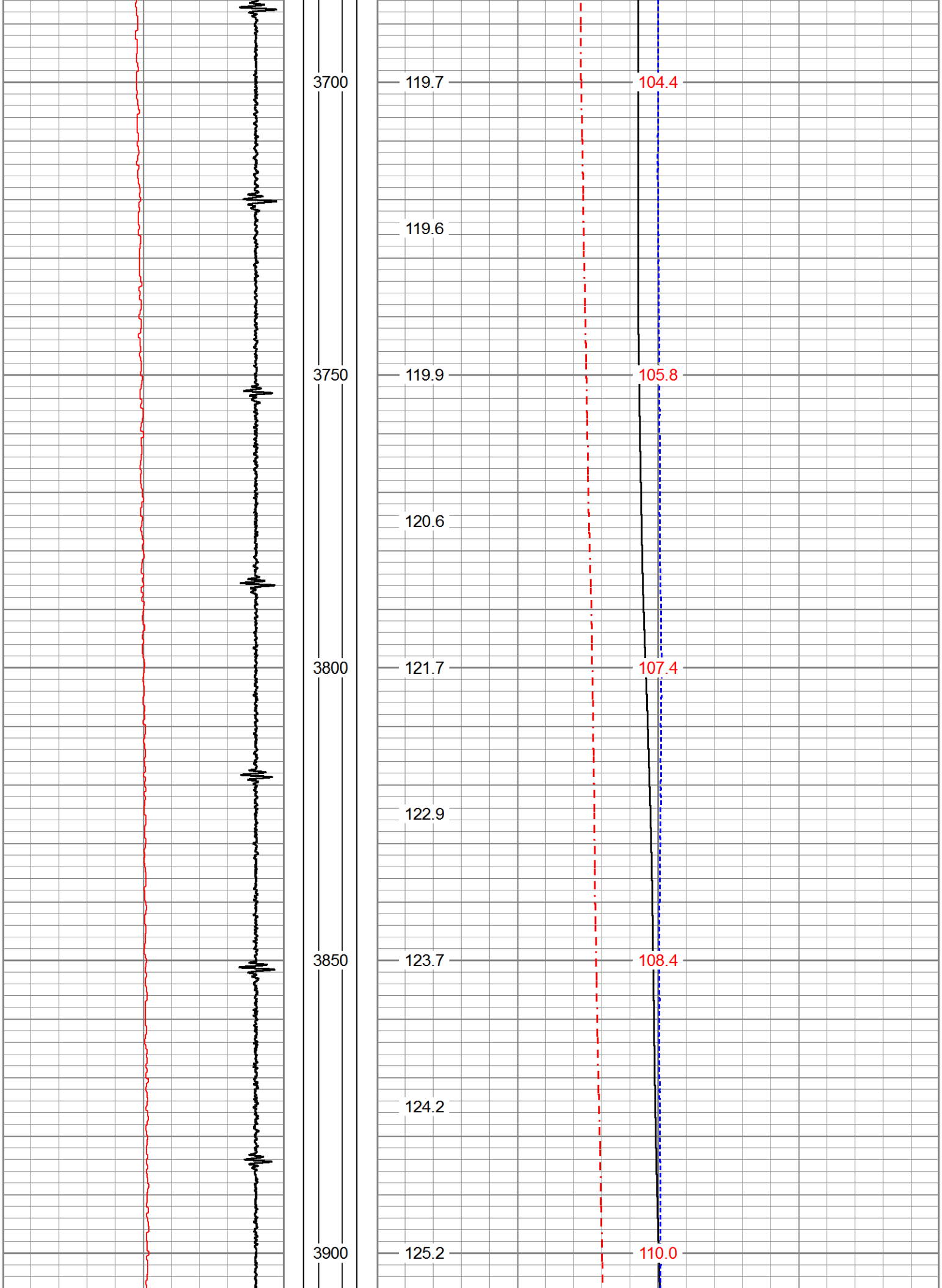
119.3
104.3
119.6


3700
119.7
104.4
119.6
3750
119.9
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121.7
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123.7
108.4
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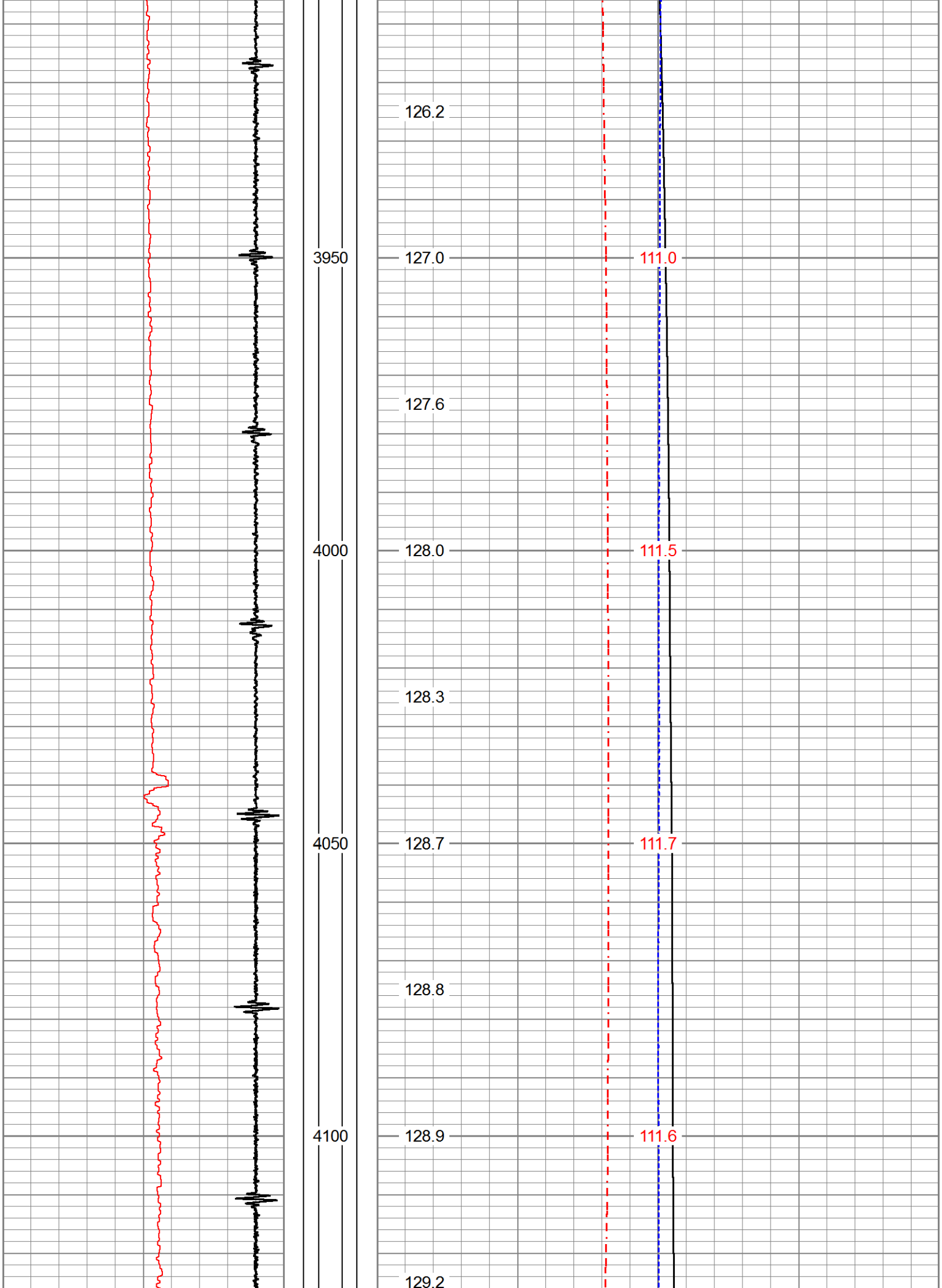
3900
125.2
110.0


126.2
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111.0
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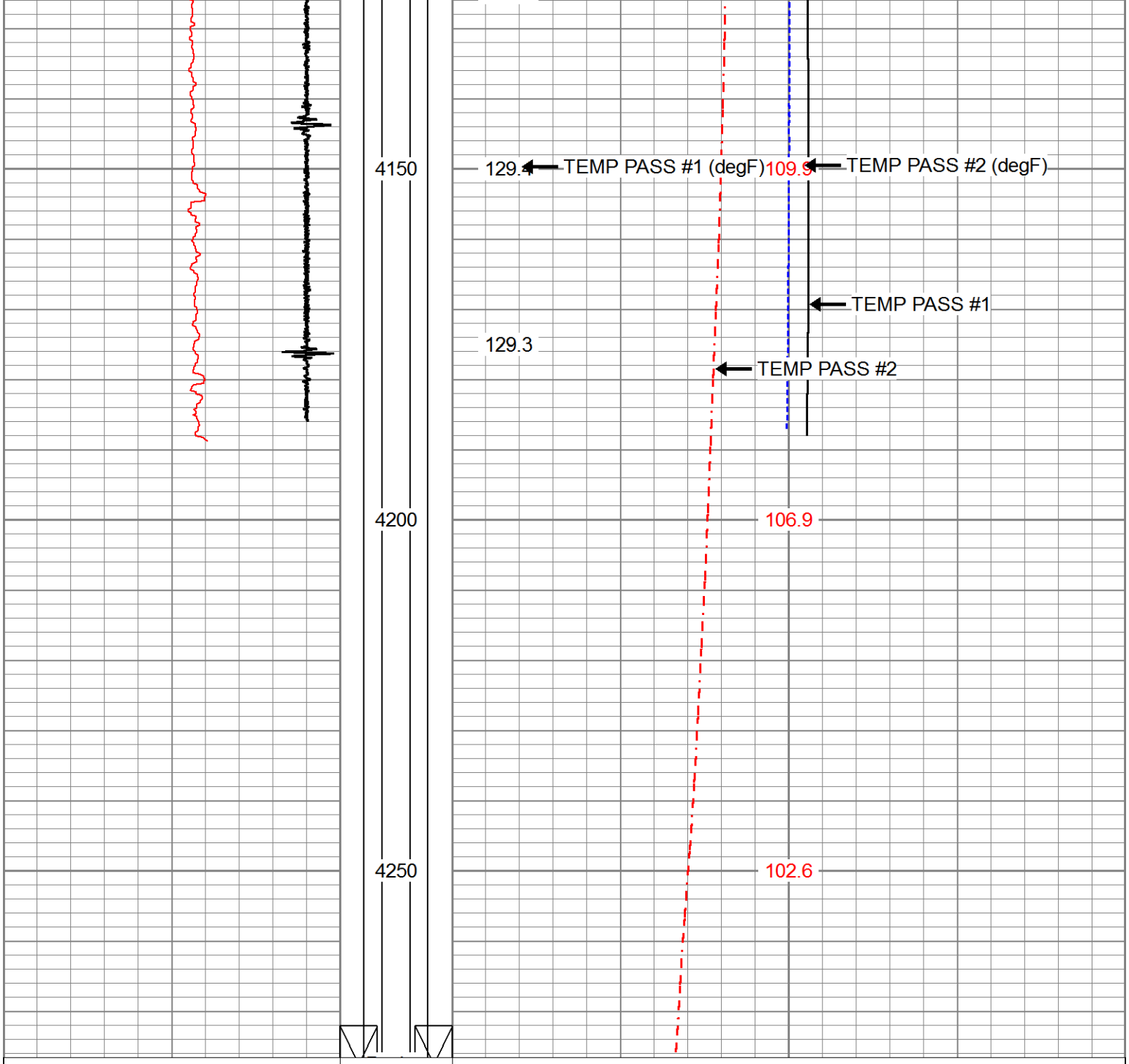
128.9
111.6
129.2



9	CCL	-1
0	LTEN (lb)	1700

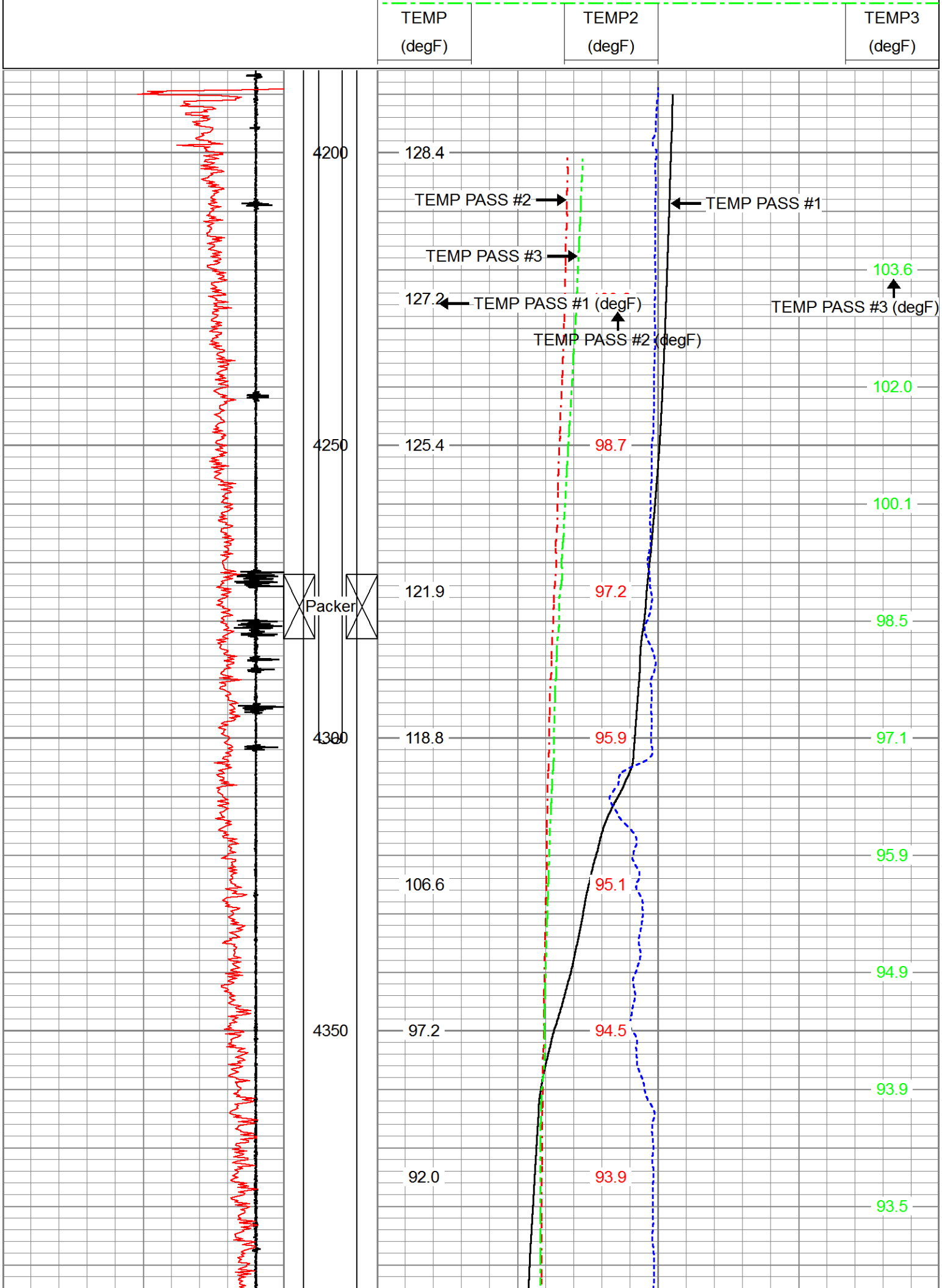
50	TEMP (degF)	200
-5	DTMP (degF)	5
50	TEM2 (degF)	200

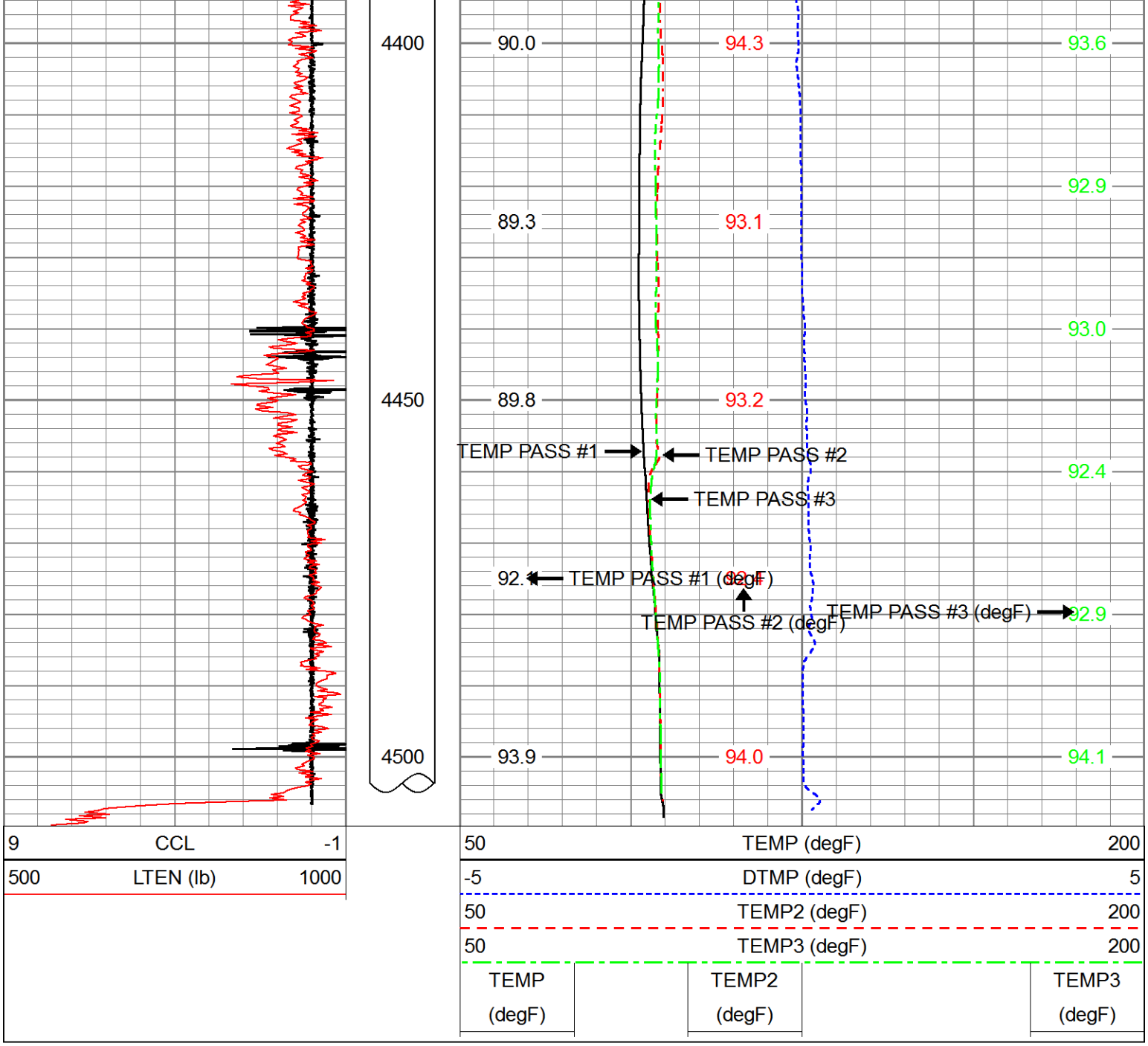
TEMP (degF) TEM2 (degF)

Database File	merrionsunco#1swdtemp.db
Dataset Pathname	pass2.B
Presentation Format	temp
Dataset Creation	Tue Jun 26 13:29:59 2018
Charted by	Depth in Feet scaled 1:240

9	CCL	-1
500	LTEN (lb)	1000

50	TEMP (degF)	200
-5	DTMP (degF)	5
50	TEMP2 (degF)	200
50	TEMP3 (degF)	200


TEMP
(degF)
TEMP2
(degF)
TEMP3
(degF)
4200
4250
4300
4350
128.4
125.4
121.9
118.8
106.6
97.2
92.0
TEMP PASS #2
TEMP PASS #1
TEMP PASS #3
127.2
TEMP PASS #1 (degF)
TEMP PASS #2 (degF)
98.7
97.2
95.9
95.1
94.5
93.9
103.6
TEMP PASS #3 (degF)
102.0
100.1
98.5
97.1
95.9
94.9
93.9
93.5
Packer



Calibration Report

Database File	merrionsunco#1swdtemp.db
Dataset Pathname	pass2.C
Dataset Creation	Tue Jun 26 13:38:22 2018

Temperature Calibration Report

Serial Number:	FW1302-005
Tool Model:	Comprobe
Performed:	Thu Aug 25 10:11:23 2016

Point #	Reading		Reference	
1	723.97	cps	70.00	degF
2	1134.76	cps	118.00	degF
3	1726.70	cps	174.00	degF
4		cps		degF
5		cps		degF
6		cps		degF
7		cps		degF
8		cps		degF

9	cps	degF
10	cps	degF

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, June 21, 2018 2:08 PM
To: Ryan Davis
Cc: Sanchez, Daniel J., EMNRD; Griswold, Jim, EMNRD; Goetze, Phillip, EMNRD; Jeff Davis; Philana Thompson; Ryan Merrion; Shacie Murray; Griswold, Jim, EMNRD; Perrin, Charlie, EMNRD
Subject: RE: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018
Attachments: OCD C-103 Temp Survey Approval with Conditions 6-21-2018.pdf

Ryan, et al.:

Good afternoon.

Please find attached the New Mexico Oil Conservation Division (OCD) approval with stipulated condition to your message with attached C-103 submittal below.

OCD needs to review the temperature survey and respond to the operator in advance of any operation of the well. OCD will work to expedite the results of the temperature survey and recommend that you transmit the results via Acrobat Reader™ to assist in this effort.

OCD- Santa Fe will process the form into the OCD API record and UICI-5 record.

Please contact me if you have questions. Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us
"Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD and see "Publications")

From: Ryan Davis <rdavis@merrion.bz>
Sent: Tuesday, June 19, 2018 10:23 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: Sanchez, Daniel J., EMNRD <daniel.sanchez@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Jeff Davis <jdaguamoss@hotmail.com>; Philana Thompson <pthompson@merrion.bz>; Ryan Merrion <ryan@merrion.bz>; Shacie Murray <shacie@merrion.bz>
Subject: Re: Agua Moss Sunco Well Mtg.

Carl,

I received the calendar invite for a meeting on the Sunco Facility but it appears to be in the past. Did you intend the date to be 06/21?

While you were out of the office the Agua Moss folks (Jeff Davis, Ryan Merrion, Philana Thompson, Shacie Murrary and myself) had a conference call with Daniel Sanchez, Jim Griswold and Phillip Goetze on June 13th. Based on the discussion on the phone, we submitted an NOI to the district office with a copy sent to Santa Fe as well. Attached is the NOI submitted. If you would like to discuss the NOI we would be glad to do so.

Thanks,

Ryan Davis

Operations Manager

MERRION OIL & GAS

(W) 505-215-3292

On Tue, Jun 19, 2018 at 9:54 AM, Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us> wrote:

Tentative Date and Time for Telephone Communication Call.

Link to OCD Admin. Record (UICI-5)

See MIT Variation from Ryan Davis (Merrion Oil)

Tentative Agenda

1. Introd.
2. Well Discussion (Discussion of Well Diagram, Problem and Trouble Shooting)
3. Ryan Davis MIT Variant Test for Disposal Well to Allow Continued Operation of Commercial Class I (NH) Disposal Well San Juan Co.
4. Well Issues
5. Path Forward
6. Miscel.
7. End

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-045-28653	
5. Indicate Type of Lease STATE ☐ FEE ☒	
6. State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD Class I	7. Lease Name or Unit Agreement Name Sunco Disposal
	8. Well Number 1
2. Name of Operator Agua Moss, LLC	9. OGRID Number 247130
3. Address of Operator PO Box 600 Farmington, NM 87499	10. Pool name or Wildcat SWD MV
4. Well Location Unit Letter E : 1595 feet from the North line and 1005 feet from the West line Section 2 Township 29N Range 12W NMPM County San Juan	
	11. Elevation (*Show whether DR, RKB, RT, GR, etc.*) 5859' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☒	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Agua Moss LLC proposes to conduct a temperature survey as an additional verification of mechanical integrity on the Sunco #1. The NMOCD will be notified 24 hrs prior to executing the following procedure:

1. Rig up slickline and retrieve the tubing plug set at 4,278' KB.
2. Rig down slickline
3. Rig up wireline
4. Run a temperature survey down to the Pt. Lookout injection interval and log from 4,460' KB to surface
5. Inject a minimum of 100 bbls down the well until annulus pressure stabilizes indicating temperature stabilization
6. Run another temperature survey from 4,460' KB to surface
7. Rig down wireline
8. Using the results from the temperature surveys, identify any anomalies outside the normal temperature gradient and demonstrate that injection is contained within the Pt. Lookout formation
9. Provide these temperature survey results to the NMOCD.
10. Once test results are verified, return the well to injection

During normal disposal operations, casing pressure will be monitored to verify that the loss of annulus fluid is not occurring. A minimum casing pressure of 100 psig will also be maintained as a precautionary measure. Agua Moss also will perform monthly annulus pressure tests at 1000 psig to verify sustained annulus integrity. Disposal operations will discontinue if there is a substantial variation from the normal casing pressure trend or in the event that casing pressure falls below 100 psig.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Regulatory Compliance Specalist DATE 6/14/2018

Type or print name Philana Thompson E-mail address: pthompson@merrion.bz PHONE: 505-486-1171

For State Use Only

APPROVED BY: Carl J. Chavez TITLE Environmental Engineer DATE 6/21/2018

Conditions of Approval (if any):

- provide temperature survey results to OCD-SF with operator's conclusion(s) and any recommendations based on survey results for OCD-SF approval, approval w/ conditions or disapproval.

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-045-28653

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Sunco Disposal

1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD Class I

8. Well Number
1

2. Name of Operator
Agua Moss, LLC

9. OGRID Number
247130

3. Address of Operator
PO Box 600 Farmington, NM 87499

10. Pool name or Wildcat
SWD MV

4. Well Location
Unit Letter E : 1595 feet from the North line and 1005 feet from the West line
Section 2 Township 29N Range 12W NMPM County San Juan

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
5859' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☒	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Agua Moss LLC proposes to conduct a temperature survey as an additional verification of mechanical integrity on the Sunco #1. The NMOCD will be notified 24 hrs prior to executing the following procedure:

1. Rig up slickline and retrieve the tubing plug set at 4,278' KB.
2. Rig down slickline
3. Rig up wireline
4. Run a temperature survey down to the Pt. Lookout injection interval and log from 4,460' KB to surface
5. Inject a minimum of 100 bbls down the well until annulus pressure stabilizes indicating temperature stabilization
6. Run another temperature survey from 4,460' KB to surface
7. Rig down wireline
8. Using the results from the temperature surveys, identify any anomalies outside the normal temperature gradient and demonstrate that injection is contained within the Pt. Lookout formation
9. Provide these temperature survey results to the NMOCD.
10. Once test results are verified, return the well to injection

During normal disposal operations, casing pressure will be monitored to verify that the loss of annulus fluid is not occurring. A minimum casing pressure of 100 psig will also be maintained as a precautionary measure. Agua Moss also will perform monthly annulus pressure tests at 1000 psig to verify sustained annulus integrity. Disposal operations will discontinue if there is a substantial variation from the normal casing pressure trend or in the event that casing pressure falls below 100 psig.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Regulatory Compliance Specalist DATE 6/14/2018

Type or print name Philana Thompson E-mail address: pthompson@merrion.bz PHONE: 505-486-1171

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any):