

UIC - I - _____5_____

**MECHANICAL
INTEGRITY TEST
(MITs)**

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, September 25, 2019 5:01 PM
To: 'Ryan Davis'
Cc: Ryan Merrion; Philana Thompson; Kuehling, Monica, EMNRD; Griswold, Jim, EMNRD; Wade, Gabriel, EMNRD
Subject: UICI-005 UIC Class I (NH) SUNCO Well No. 1 (API# 30-045-28653) Only Commercial Disposal Well, Agua Moss, LLC: MIT 9-23-2019
Attachments: Chart Recorder Calibration Sheet 9-23-19.pdf; MIT 9-23-19.pdf; MIT A 9-23-19.pdf

Ryan, et al.:

The New Mexico Oil Conservation Division (OCD) observes the OCD witnessed MIT by Monica Kuehling on 9/23/2019 pressure differential was $\sim \pm 1\%$ on the attached MIT chart(s), which indicates the above subject injection well passed the MIT. The Bradenhead Test was also successful.

FYI: OCD MITs consist of 2-parts, the annulus MIT (IMIT) and the Bradenhead (EMIT).

Please contact me if you have questions.

Thank you for your cooperation.

From: Ryan Davis <rdavis@merrion.bz>
Sent: Wednesday, September 25, 2019 4:31 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: Ryan Merrion <ryan@merrion.bz>; Philana Thompson <pthompson@merrion.bz>; Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>
Subject: Re: [EXT] Sunco

Carl,

Here is the calibration sheet for the chart recorder used for the MIT this week on the Sunco SWD. Please let me know if you have any questions.

Thanks,

Ryan Davis

Operations Manager



(W) [505-215-3292](tel:505-215-3292)

On Tue, Sep 24, 2019 at 4:54 PM Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us> wrote:

Ok. Thank you.

From: Ryan Davis <rdavis@merrion.bz>

Sent: Tuesday, September 24, 2019 4:50 PM

To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>

Cc: Ryan Merrion <ryan@merrion.bz>; Philana Thompson <pthompson@merrion.bz>; Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>

Subject: Re: [EXT] Sunco

Carl,

Attached is the scan copy of the MIT chart. I have requested the calibration sheet and should have it tomorrow morning.

Thanks,

Ryan Davis

Operations Manager



(W) [505-215-3292](tel:505-215-3292)

On Tue, Sep 24, 2019 at 2:41 PM Philana Thompson <pthompson@merrion.bz> wrote:

Help

Philana Thompson

Merrion Oil & Gas

Sent from my iPhone

Begin forwarded message:

From: "Chavez, Carl J, EMNRD" <CarlJ.Chavez@state.nm.us>
Date: September 24, 2019 at 3:29:22 PM CDT
To: "pthompson@merrion.bz" <pthompson@merrion.bz>
Cc: "Kuehling, Monica, EMNRD" <monica.kuehling@state.nm.us>
Subject: FW: [EXT] Sunco

Philana, hi. I need to receive a copy of the calibration sheet for the chart recorder used in yesterday's MIT.

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: monica.kuehling.state <monica.kuehling.state@gmail.com>
Sent: Monday, September 23, 2019 10:48 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Subject: [EXT] Sunco

Hello carl

Bht ran

Chart from mit attached

Tagged seat nipple at 4268

Tagged fill at 4375

Monica

Sent via the Samsung Galaxy S®6 active, an AT&T 4G LTE smartphone

Chavez, Carl J, EMNRD

From: monica.kuehling.state <monica.kuehling.state@gmail.com>
Sent: Monday, September 23, 2019 10:48 AM
To: Chavez, Carl J, EMNRD
Subject: [EXT] Sunco
Attachments: 20190923_093739.jpg

Hello carl
Bht ran
Chart from mit attached

Tagged seat nipple at 4268
Tagged fill at 4375

Monica

Sent via the Samsung Galaxy S®6 active, an AT&T 4G LTE smartphone

30-045 28653

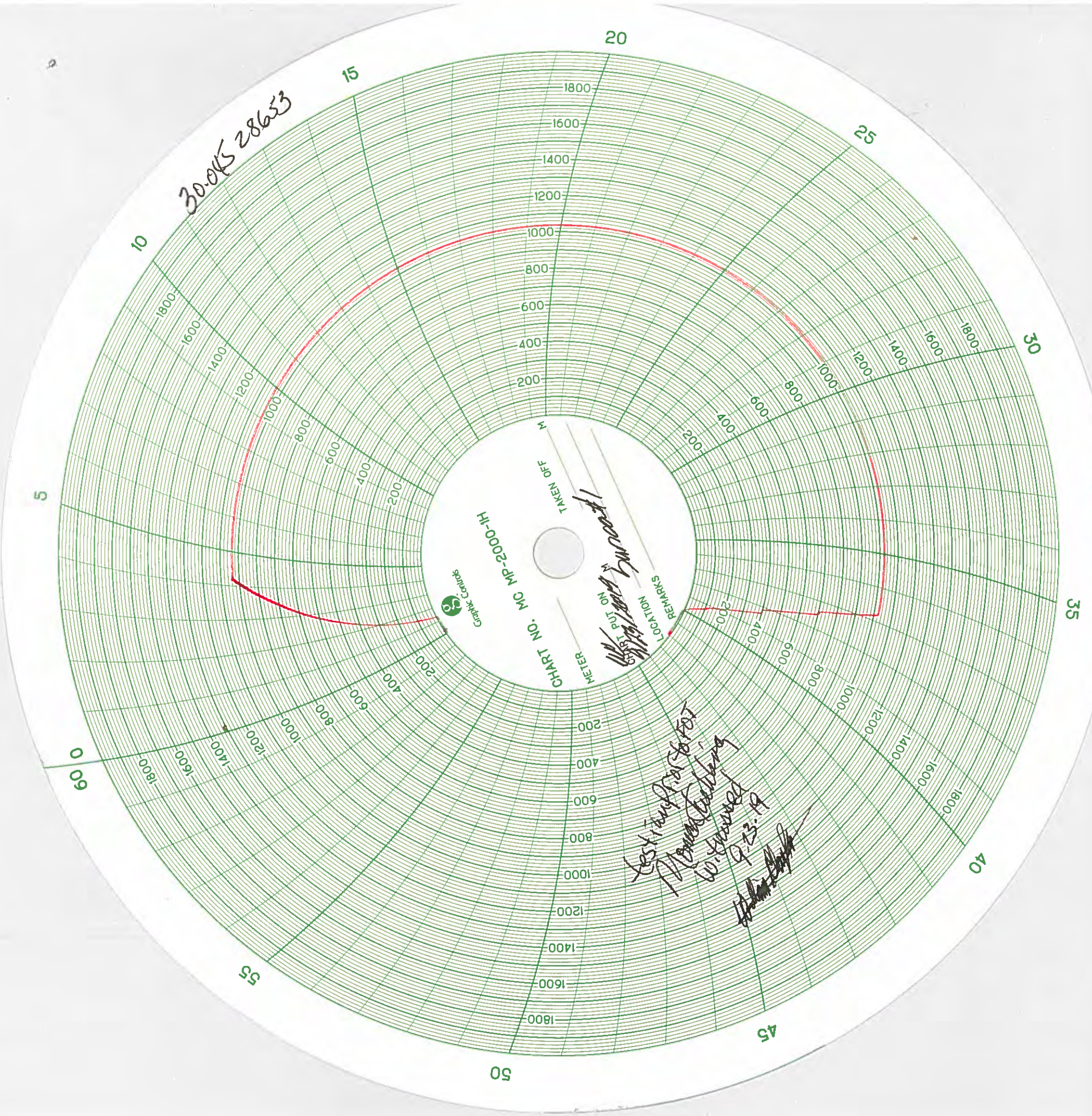
Graphic Controls
3

CHART NO. MC MP-2000-1H

METER
TAKEN OFF

1st Put ON
1st Put ON

Very Imp. for
Mon. Feb. 19
W. G. G. G.
9-23-19
H. G. G. G.



JADE SALES & SERVICE, INC.

(505) 325-6173

CONTENT AND METER REPORT

GAS

FROM

MERRION OIL + GAS

STA NO.

202A-175391

LEASE

MOG TEST METER #1

SYSTEM

LEGAL

GAS

DESCR.

TO

DATE

9/23/19

TIME

7:15 Am

EFFECTIVE

DATE

9/23/19

METER DATA

RECORDER DATA

AP CALIBRATION

TYPE CONNECTION	FLG <input type="checkbox"/> 0 <input type="checkbox"/> 1	PIPE <input type="checkbox"/> 1	FLOW COMPUTER <input type="checkbox"/>	APP D W	ATMOS D W	FOUND	LEFT
METER TUBE SIZE	▲		RECORDER S/N OR MFG	0		0.0	0.0
ORIFICE INSTALLED	▲		DIFF RANGE	2000		1990.0	2000.0
ORIFICE REMOVED	▲		STATIC RANGE	0-2000 #	1000	995.0	1000.0
ORIFICE S/N	▲		TEMP RANGE	1600		1592.5	1600.0
AV DIFF			AV STATIC	400		397.5	400.0
SAMPLE TAKEN	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	TYPE OF TEST	0		0.0	0.0
			CHECK <input checked="" type="checkbox"/>	SETTLE <input type="checkbox"/>	ORIFICE <input type="checkbox"/>		

TESTER

ARON ESTRADA

WITNESS

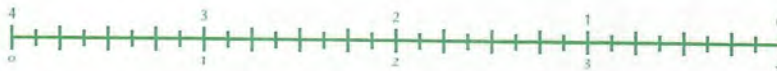
DP CALIBRATION

APP D W FOUND LEFT

REMARKS —

TEMP CALIBRATION

THERM FOUND LEFT



Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, November 29, 2018 2:39 PM
To: 'Philana Thompson'
Cc: Sanchez, Daniel J., EMNRD; Griswold, Jim, EMNRD; Goetze, Phillip, EMNRD; Kuehling, Monica, EMNRD
Subject: UICI-005 UIC Class I (NH) SUNCO Well No. 1 (API# 30-045-28653) Disposal Well Agua Moss, LLC: Reduced MIT Frequency Request
Attachments: 30045286530000_11_01_2018_12_52_15.pdf

Philana:

Approved.

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: Philana Thompson <pthompson@merrion.bz>
Sent: Wednesday, November 28, 2018 4:16 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Subject: [EXT] MIT frequency

Carl,
Based on the MITs that have been submitted since July (see attached) and that have all passed, Agua Moss, LLC would like to request to go to an annual frequency for the MITs.

Please advise how to proceed with my request?

Thank you. Philana

--

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

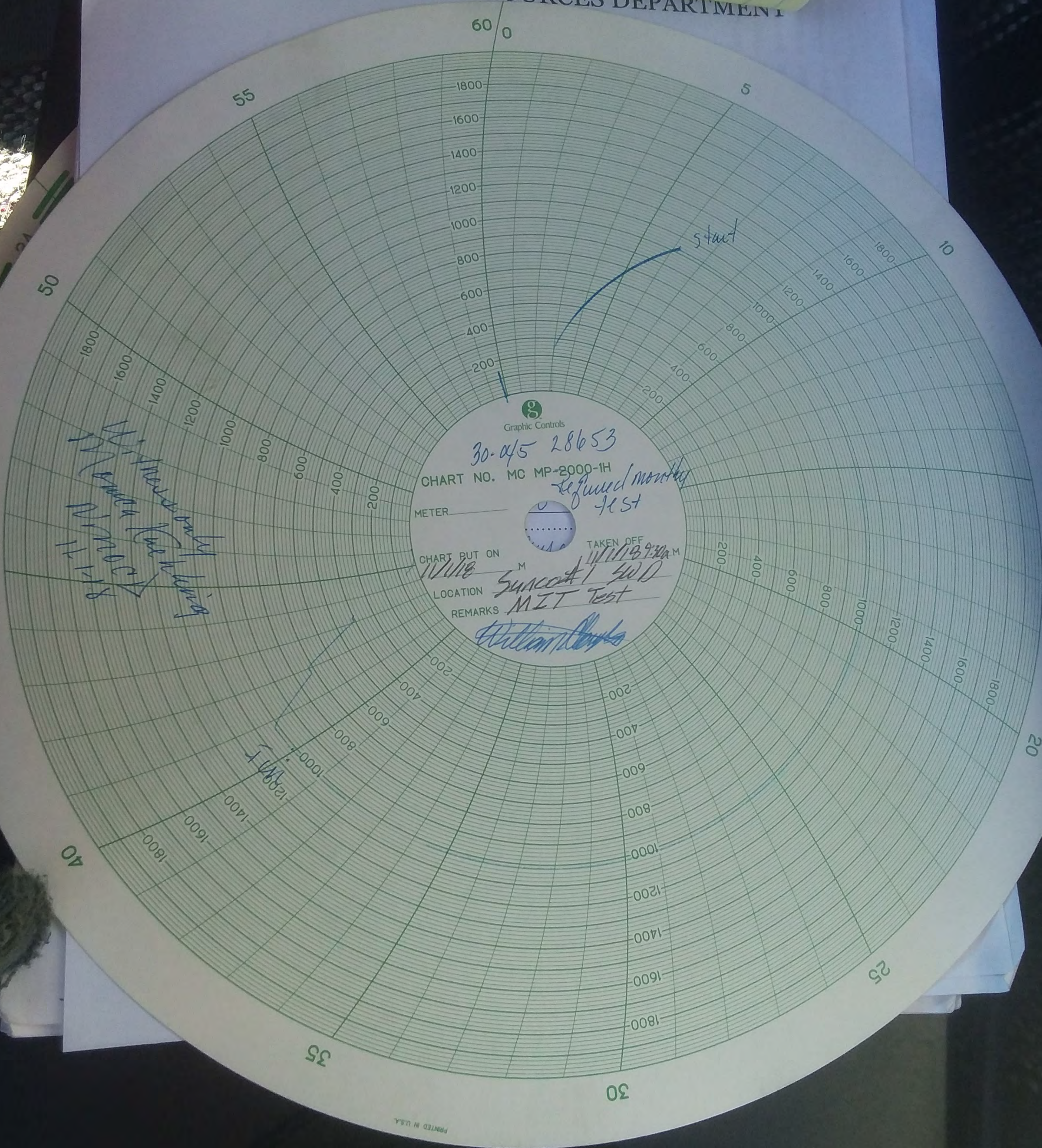
UIC - I - _____5_____

**MECHANICAL
INTEGRITY TEST
(MITs)**



NEW MEXICO
NATURAL RESOURCES DEPARTMENT

Life Cycle Sel. Cleanings
Outfalls no of



30-45 28653

CHART NO. MC MP-2000-1H

METER

Required monthly
test

CHART PUT ON

TAKEN OFF

LOCATION

REMARKS

11/11/89
Suncoast 1 SWD

MIT Test

William D. Smith
11/11/89



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OCT 25 2018 PM 01:58

MECHANICAL INTEGRITY TEST REPORT

(TA OR UIC)

Date of Test 10-3-18 Operator Agua Moss LLC API # 30-0 45-28653

Property Name Sunco Disposal Well # 1 Location: Unit 2 Sec 2 Twp 29 Rge 12

Land Type:

State
Federal
Private /
Indian

Well Type:

Water Injection
Salt Water Disposal /
Gas Injection
Producing Oil/Gas
Pressure observation

Temporarily Abandoned Well (Y/N): TA Expires:

Casing Pres. 800 Tbg. SI Pres. Max. Inj. Pres.
Bradenhead Pres. 0 Tbg. Inj. Pres.
Tubing Pres. 1300
Int. Casing Pres. NA

Pressured annulus up to 1040 psi. for 30 mins. Test passed/failed

REMARKS:

Class I - MIT prior to start of injection for fall off
-test.
Bled casing to 0 prior to MIT
BH-O- during whole test

Approval comes from Santa Fe office

By [Signature] (Operator Representative) Witness [Signature] (NMOCD)

Manager
(Position)

Revised 02-11-02

PRINTED IN U.S.A.

30-045-286

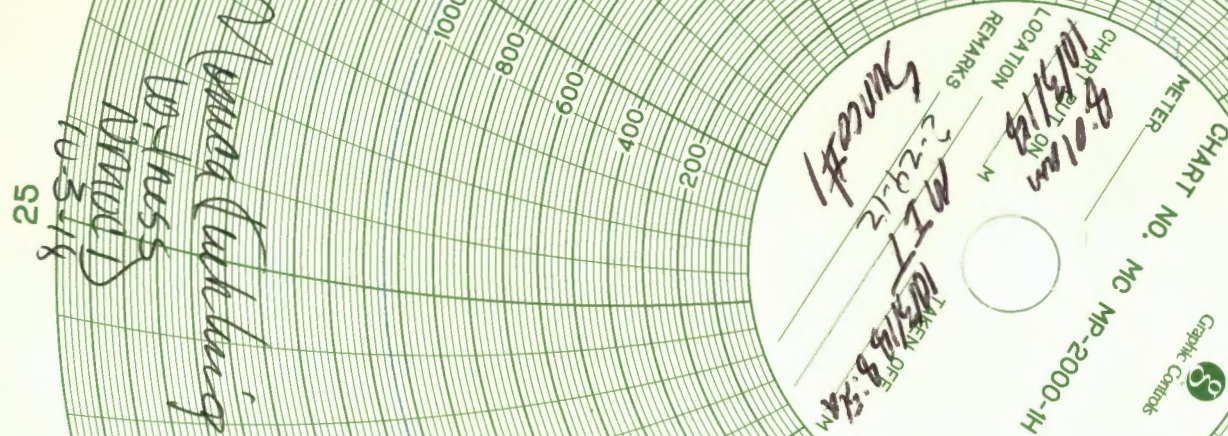
Almond Publishing

20

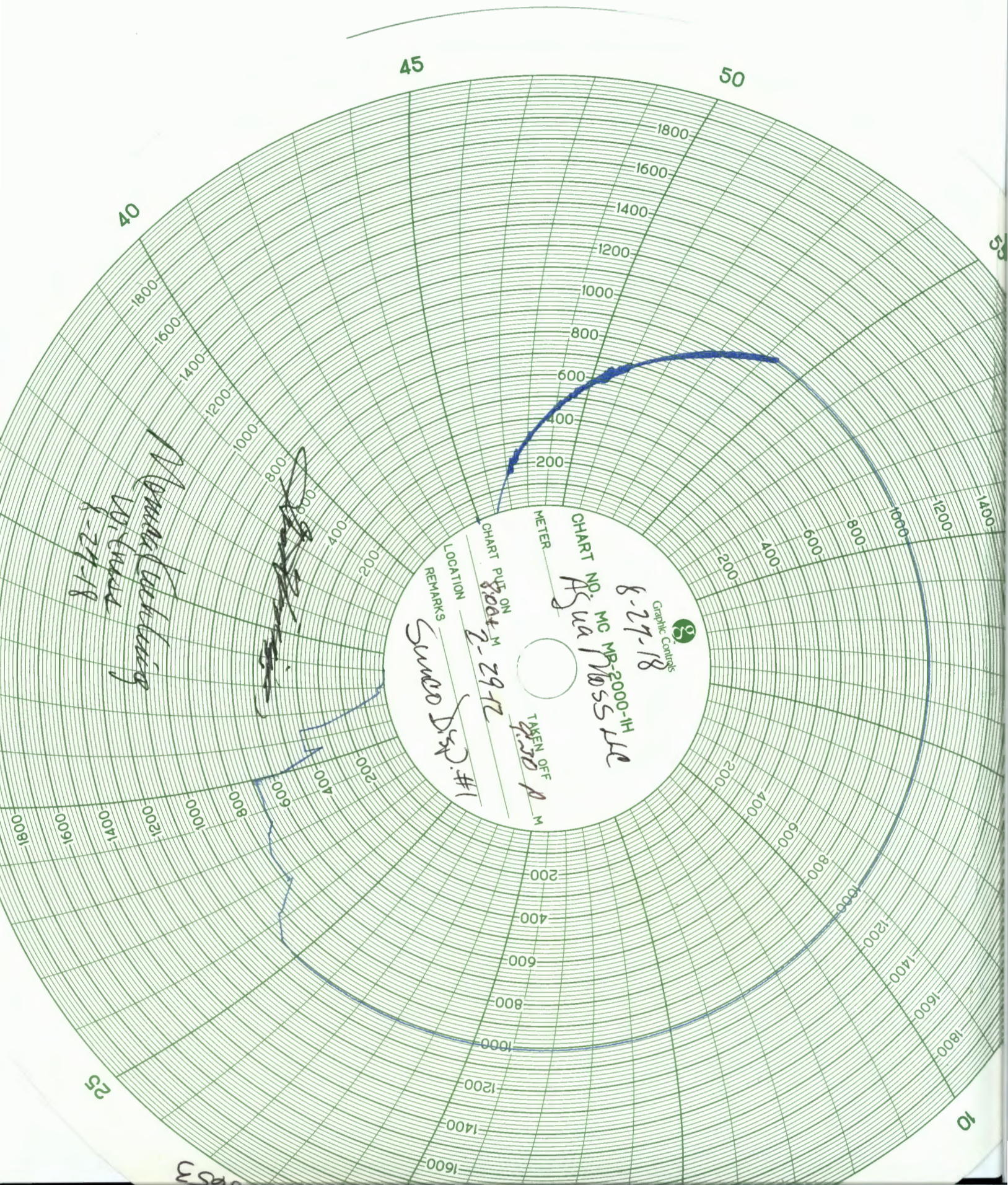
15

01

5



52



45

50

40

ASua Moss LE
8-27-18

Graphic Controls

CHART NO. 8-27-18
MC MB-2000-1H
ASua Moss LE
TAKEN OFF 4:30 P M
CHART PUT ON 8:04 M
LOCATION Suedo Div. #1
REMARKS

30

10

20

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, July 26, 2018 3:08 PM
To: 'Philana Thompson'; Ryan Davis (rdavis@merrion.bz); Ryan Merrion (ryan@merrion.bz)
Cc: Sanchez, Daniel J., EMNRD; Goetze, Phillip, EMNRD; Griswold, Jim, EMNRD; Powell, Brandon, EMNRD; Kuehling, Monica, EMNRD
Subject: UICI-005 UIC Class I (NH) SUNCO Well No. 1 (API# 30-045-28653) Disposal Well Agua Moss, LLC MIT Chart 7-26-2018
Attachments: 2018-07-26 Sunco MIT Packet.pdf

Philana, et al.:

The New Mexico Oil Conservation Division (OCD) has completed its review of the above subject well Static Annulus MIT conducted this morning.

OCD hereby **approves** the MIT.

Agua Moss, LLC may **resume** operations at its earliest convenience.

Thank you for your cooperation in this matter.

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: Philana Thompson <pthompson@merrion.bz>
Sent: Thursday, July 26, 2018 11:30 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Subject: Fwd: Sunco MIT Chart

Philana Thompson
Merrion Oil & Gas
Sent from my iPhone

Begin forwarded message:

From: Shacie Murray <shacie@merrion.bz>
Date: July 26, 2018 at 11:14:54 AM MDT

To: Philana Thompson <pthompson@merrion.bz>

Subject: Sunco MIT Chart

Attached.

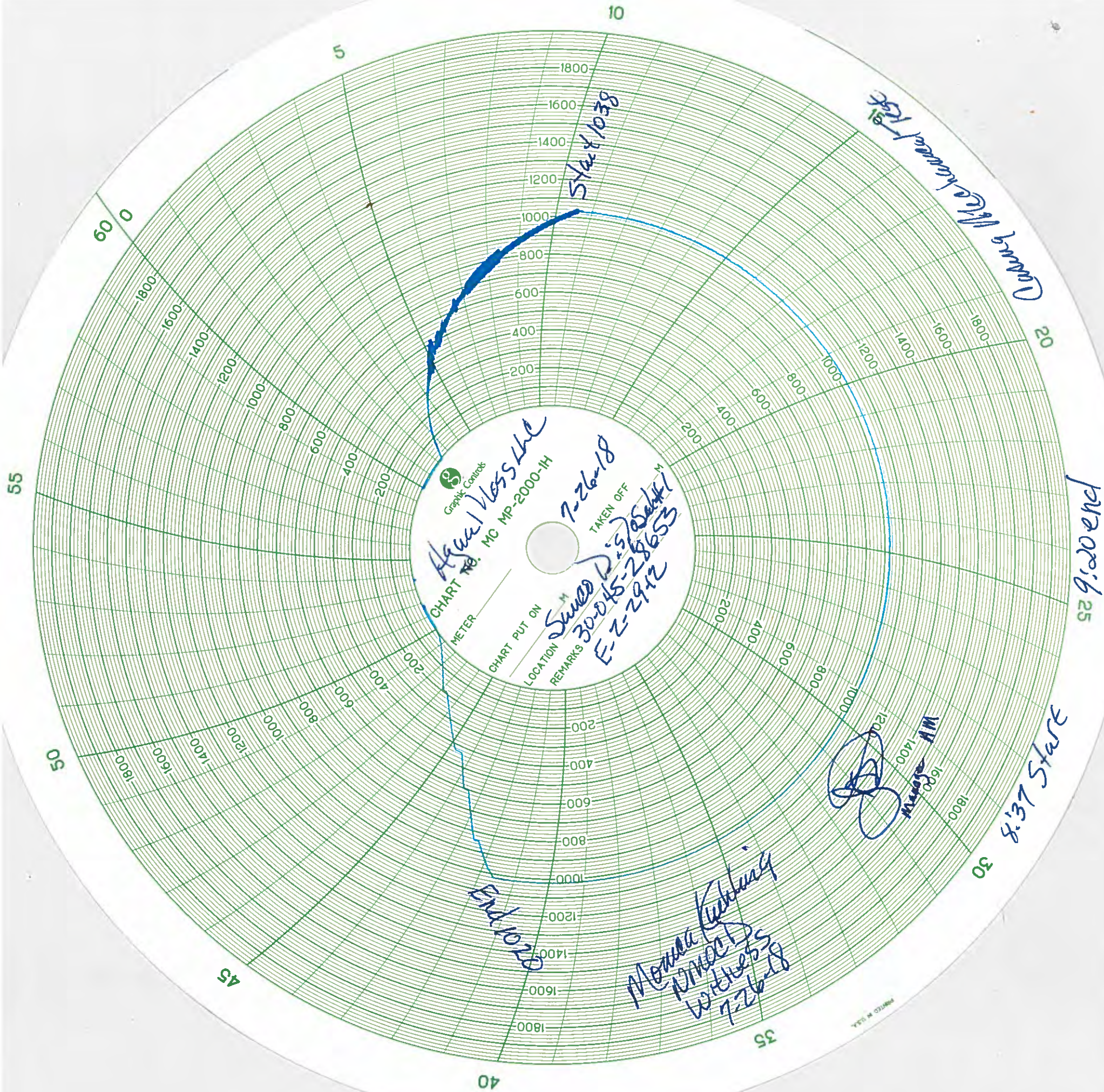
Shacie Murray

Merrion Oil & Gas

Production Engineer

(505) 330-7605

shacie@merrion.bz



JADE SALES & SERVICE, INC.

(505) 325-6173

CONTENT AND METER REPORT

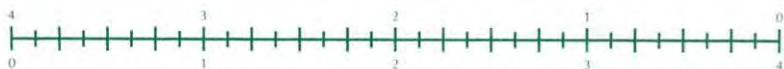
GAS FROM _____ STA NO. _____

LEASE MERRION OIL & GAS SYSTEM _____

LEGAL DESCR. _____ GAS TO _____

DATE OF TEST 7/25/18 TIME OF TEST 0800 EFFECTIVE DATE 7/25/18

METER DATA			RECORDER DATA			AP CALIBRATION			
TYPE CONNECTION	FLG <input type="checkbox"/> O <input type="checkbox"/> I	PIPE <input type="checkbox"/> I	FLOW COMPUTER <input type="checkbox"/>			APP D W	ATMOS D W	FOUND	LEFT
METER TUBE SIZE	<u>▲</u>		RECORDER S/N OR MFG.	<u>BARTON</u>	<u>0</u>				<u>0</u>
ORIFICE INSTALLED	<u>▲</u>		DIFF <u>SN-202A-175391</u>	<u>400</u>					<u>400</u>
ORIFICE REMOVED	<u>▲</u>		STATIC RANGE	<u>2000 #</u>	<u>1000</u>				<u>1000</u>
ORIFICE S/N	<u>▲</u>		TEMP RANGE		<u>1600</u>				<u>1600</u>
AV DIFF			AV STATIC		<u>2000</u>				<u>2000</u>
SAMPLE TAKEN	YES <input type="checkbox"/> NO <input type="checkbox"/>		TYPE OF TEST	CHECK <input type="checkbox"/> SETTLE <input type="checkbox"/> ORIFICE <input type="checkbox"/>	<u>0</u>				<u>0</u>
TESTER <u>AARON ESTRADA</u>						SCH #	DP CALIBRATION		
							APP D W	FOUND	LEFT
WITNESS _____									
REMARKS —									
<u>BARTON - 1-PEN-2000#</u>									
<u>RECORDER.</u>									
<u>TEST SOURCE: BETA</u>									
<u>0-3000 # SN: 3247007</u>									
<u>CERTIFICATION DATE: 3/26/18</u>									



Calibration Data

Range	: 0 to 3000 PSIG (HP Transducer)
Stated Accuracy	: +/- 0.025% of Full Scale

Standard	: PM600-A20M
Serial No.	: 3247007

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	0.00	0.0	Left, As Found	-0.4	0.4
2	3000.00	2999.6	Left, As Found	2999.2	3000.8
3	2700.00	2699.7	Left, As Found	2699.2	2700.8
4	2400.00	2399.7	Left, As Found	2399.2	2400.8
5	2100.00	2099.7	Left, As Found	2099.2	2100.8
6	1800.00	1799.9	Left, As Found	1799.2	1800.8
7	1500.00	1500.0	Left, As Found	1499.2	1500.8
8	1200.00	1199.9	Left, As Found	1199.2	1200.8
9	900.00	900.0	Left, As Found	899.2	900.8
10	600.00	600.0	Left, As Found	599.2	600.8
11	300.00	300.0	Left, As Found	299.2	300.8
12	0.00	0.0	Left, As Found	-0.4	0.4

Range	: 0 to 30 Volts DC
Stated Accuracy	: +/- 0.015% of Reading + 0.002V

Standard	: M3001
Serial No.	: 9499092

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	0.000	0.000	Left, As Found	-0.002	0.002
2	15.000	15.000	Left, As Found	14.996	15.004
3	30.000	30.000	Left, As Found	29.993	30.007

Range	: 4 to 20 mA DC Current
Stated Accuracy	: +/- 0.015% of Reading + 0.002mA

Standard	: M3001
Serial No.	: 9499092

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	4.000	FAILED	Left, As Found	3.997	4.003
2	12.000	FAILED	Left, As Found	11.996	12.004
3	20.000	FAILED	Left, As Found	19.995	20.005

Range	: 25° Fahrenheit to 200° Fahrenheit
Stated Accuracy	: +/- 0.2° F (0.1°C)

Standard	: RTD-100
Serial No.	: 2915

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	25.00	*24.71	25.05	24.80	25.20
2	100.00	*99.6	100.04	99.80	100.20
3	200.00	*199.45	200.03	199.80	200.20

* Indicates "Out of Tolerance"

MESA

MEASUREMENT

Certificate of Calibration

13197

Page 1 of 2

Customer Information

Jade Sales & Service
5240 Hwy 64
Farmington, NM 87401

Tech: Adrian Velarde
PO #: TBD
Account #: JSS-115

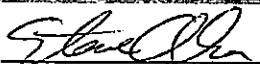
Instrument Identification

Description: Digital Pressure Calibrator
Manufacture: Beta Calibrators
Accuracy: Manufacturer's Specifications

Model: 321
Serial #: 9622076

Certification Information

Reason For Service: Maintenance of Accuracy
Type Of Calibration: Pneumatic Gauge
As Found Condition: Out of Tolerance (RTD)
As Left Condition: In Tolerance (All)
Procedure: Mfr's 100055-3

Attested By: 
Technician: Steve Olsen
Cal Date: 26-Mar-2018
Cal Due: 26-Mar-2019
Temperature: 23 +/- 3.0° C
Relative Humidity: 20% - 60%

Technician Remarks: Previous calibration by JM Test on 08/25/2015

This instrument has been calibrated using standards with accuracies traceable to the National Institute of Standards and Technology, derived from natural physical constants, derived from ratio measurements, or compared consensus standards.

MESA MEASUREMENT's calibrations, as applicable, are performed in compliance with the requirements of ANSI/NCCL Z540-1-1994, ISO 10012-1 & ISO/IEC 17025 Quality Standards.

The results contained herein relate only to the item calibrated. Calibration due dates appearing on the Certificate of Calibration and label are determined by the client for administrative purposes and do not imply continued conformance to specification.

Calibration Data

Range	: 0 to 800 In.H ₂ O @ 60° Fahrenheit
Stated Accuracy	: +/- 0.025% of Full Scale

Standard	: PM600-G200K
Serial No.:	3231005

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	0.000	0.00	0.00	-0.05	0.05
2	800.000	800.12	800.12	799.80	800.20
3	720.000	720.13	720.13	719.80	720.20
4	640.000	640.09	640.08	639.80	640.20
5	560.000	560.09	560.08	559.80	560.20
6	480.000	480.06	480.06	479.80	480.20
7	400.000	400.06	400.05	399.80	400.20
8	320.000	320.04	320.03	319.80	320.20
9	240.000	240.02	240.01	239.80	240.20
10	160.000	160.02	160.00	159.80	160.20
11	80.000	80.02	80.00	79.80	80.20
12	0.000	0.04	0.02	-0.05	0.05

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, July 12, 2018 4:58 PM
To: Ryan Merrion (ryan@merrion.bz); Ryan Davis (rdavis@merrion.bz); 'pthompson@merrion.bz'
Cc: Sanchez, Daniel J., EMNRD; Griswold, Jim, EMNRD; Goetze, Phillip, EMNRD; Powell, Brandon, EMNRD; Kuehling, Monica, EMNRD
Subject: UIC Class I (NH) SUNCO Well No. 1 (API# 30-045-28653) Disposal Well (UICI-005) C-103 Form Dated by Operator 6/14/2018 and Approved by OCD with Conditions June 21, 2018

Ladies and Gentlemen:

The New Mexico Oil Conservation Division (OCD) has received and reviewed all requested information associated with the above subject temperature survey run by Blue Jet, Inc. on June 26, 2018.

OCD concurs with Merrion Oil & Gas (Operator) and Blue Jet, Inc.'s Temperature Survey (survey) findings and conclusions, which confirm fluid injection is into the Pt. Lookout Formation. The survey did not detect any anomalous temperature fluxes above the injection zone beyond an established temperature gradient during four temperature survey runs.

OCD hereby directs the Operator to comply with the remainder of the OCD approved C-103 Form with Conditions from June 21, 2018.

Please contact Monica Kuehling (Aztec District Office) to schedule the witnessing of the first and consecutive (contingent of availability) Annulus Pressure Tests (30 min.) under static well conditions. Monica will communicate on the chart recorder (include copy of chart recorder calibration sheet with calibration performed less than 3 months from date of MIT), clock speed (function of chart time), spring (spring weight is a function of test pressure), and chart (4-hr. or less) with chart test information (i.e., test type, date, start pressure, end pressure, and witness signatures).

Upon conclusion of the MIT, and within 5 business days, the original MIT chart shall be sent to Carl Chavez (CarlJ.Chavez@state.nm.us) in Santa Fe with a copy to OCD Aztec in order for OCD Santa Fe to issue the final "pass/fail" (Generally +/-10% Pressure Differential) determination.

OCD thanks everyone involved for their cooperation and professionalism in this matter.

Please contact me if you have questions.

Respectfully,

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: Tuesday, July 10, 2018 3:42 PM

To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>

Subject: Fwd: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

Ryan Merrion

Production Engineer



ryan@merrion.bz

(303) 653-2231

----- Forwarded message -----

From: Danny Seip <dseip@bluejetinc.com>

Date: Tue, Jul 3, 2018 at 12:58 PM

Subject: RE: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

To: Ryan Merrion <ryan@merrion.bz>, Ryan Davis <rdavis@merrion.bz>, daniel.sanchez@state.nm.us, Jim.Griswold@state.nm.us, Phillip.Goetze@state.nm.us, Jeff Davis <jdaguamoss@hotmail.com>, Philana Thompson <pthompson@merrion.bz>, Shacie Murray <shacie@merrion.bz>, charlie.perrin@state.nm.us

Cc: dseip@bluejetinc.com

Hello All,

06/26/2018,

RU Wireline, Crane and Grease injection system- Tubing: 1500 psig. Casing: 850 psig. RIH will 1-7/16" Digital Temp tool and CCL logging from 700' to T.D. (4509') BASE TEMP LOG. The base log showed a natural gradient from 700' to the packer. Just below the packer a significant decrease in temp through the zone of injection. Temp tool was then placed at 4200' while 100 bbls of fluid was pumped waiting for 1:20 minutes after pumping the 1st down pass (TEMP PASS 1) was logged, 4200-4509' recording lower temperatures from 4200- 4509 approximately 29 degrees. After a down time of 30 minutes the 2nd down pass (TEMP PASS 2) was recorded from 4200-4509, at 4200 the temperature had increased about 4 degrees from pass 1 at 4270' the temperatures of both pass we the same temperature indicating fluid entry into the zone of interest due to the slow recovery of temperature over time. we then logged from 4509' to 65' confirming after a time of 2-1/2 hrs the all temperature's above the Pt. Lookout had return to natural gradient.

With all of this information at hand it definitely confirms fluid injection into the Pt. Lookout formation.

Thank you,

Danny L. Seip

President / CEO

Blue Jet, Inc.

[700 East Murray Dr.](#)

[Farmington, New Mexico, 87401](#)

Cell: 505-320-0172

Off: 505-325-5584

Email: dseip@bluejetinc.com

From: Ryan Merrion [mailto:ryan@merrion.bz]

Sent: Tuesday, July 03, 2018 12:08 PM

To: Danny Seip

Subject: Fwd: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

Danny,

As per the NMOCD's request, can you please provide your observations and conclusions for the Sunco 1 temperature survey.

Thanks,

Ryan Merrion

Production Engineer



ryan@merrion.bz

(303) 653-2231

----- Forwarded message -----

From: **Chavez, Carl J, EMNRD** <CarlJ.Chavez@state.nm.us>

Date: Tue, Jul 3, 2018 at 11:58 AM

Subject: RE: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

To: Ryan Merrion <ryan@merrion.bz>

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>

Ryan, et al.:

The New Mexico Oil Conservation Division UIC Director Daniel Sanchez is requiring a third-party review of the temperature log with observations with conclusions by Blue Jet™.

Please submit at your earliest convenience.

Thank you for your cooperation in this matter.

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 Merrion <ryan@merrion.bz>

Sent: Tuesday, July 3, 2018 11:45 AM

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

Please see the attached logs which show the temperature survey above 700'.

Thanks,

Ryan Merrion

Production Engineer



ryan@merrion.bz

(303) 653-2231

On Wed, Jun 27, 2018 at 4:01 PM, Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us> wrote:

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



ryan@merrion.bz

(303) 653-2231



Virus-free. www.avg.com



**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	
Permanent Datum		1595 FNL & 1005 FWL	
Log Measured From		SEC 2 TWP 29N RGE 12W	
Drilling Measured From		G.L. Elevation 5859	
Other Services		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		H2O	
Type Fluid		H2O	
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	
Run Number		ONE	
Bit		12.25	
From		0	
To		235	
Size		4760	
Weight			
From			
To			
Casing Record		Size	
Surface String		8.625	
Prot. String		5.5	
Production String			
Liner			

<<< Fold Here >>>

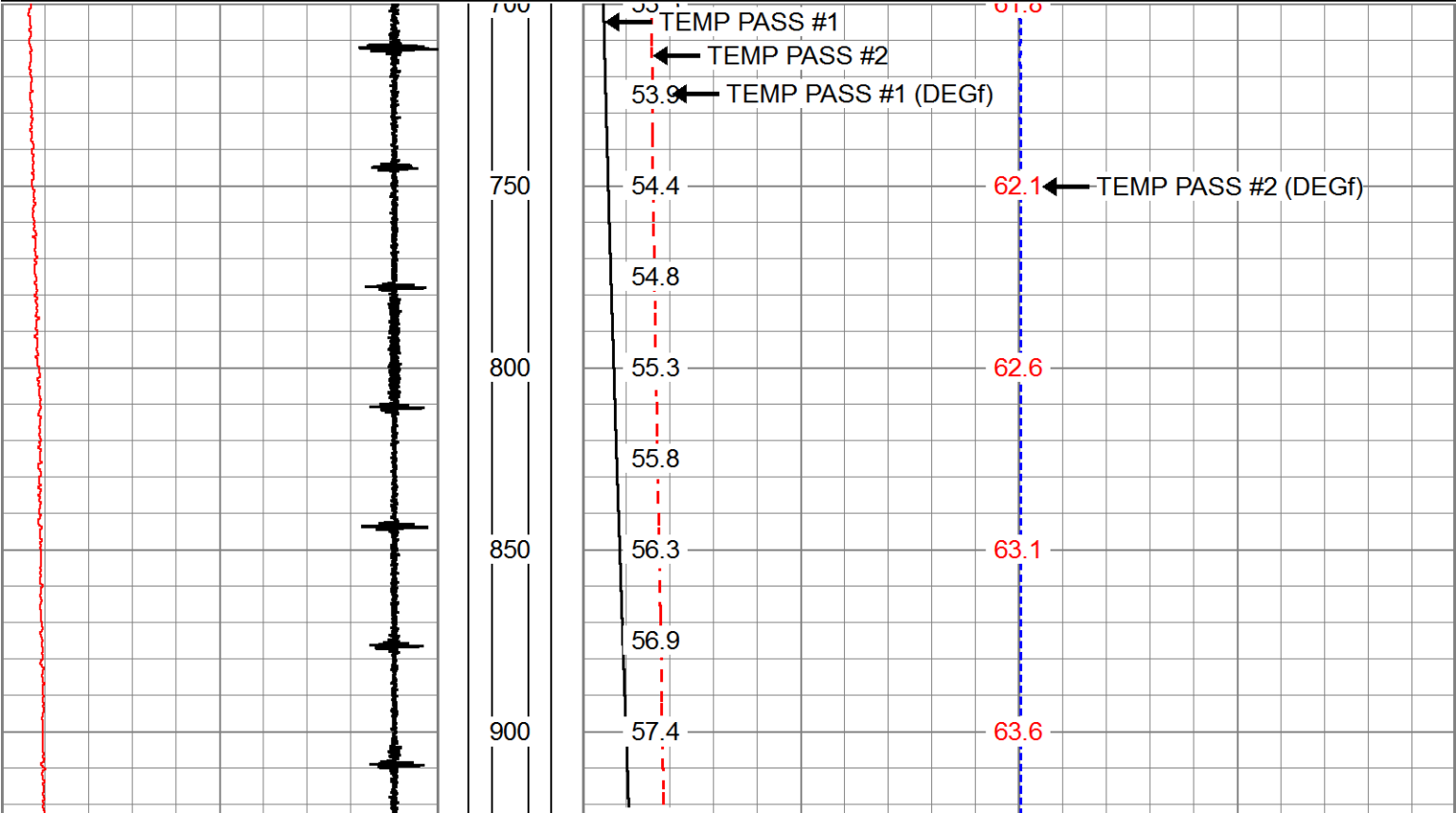
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

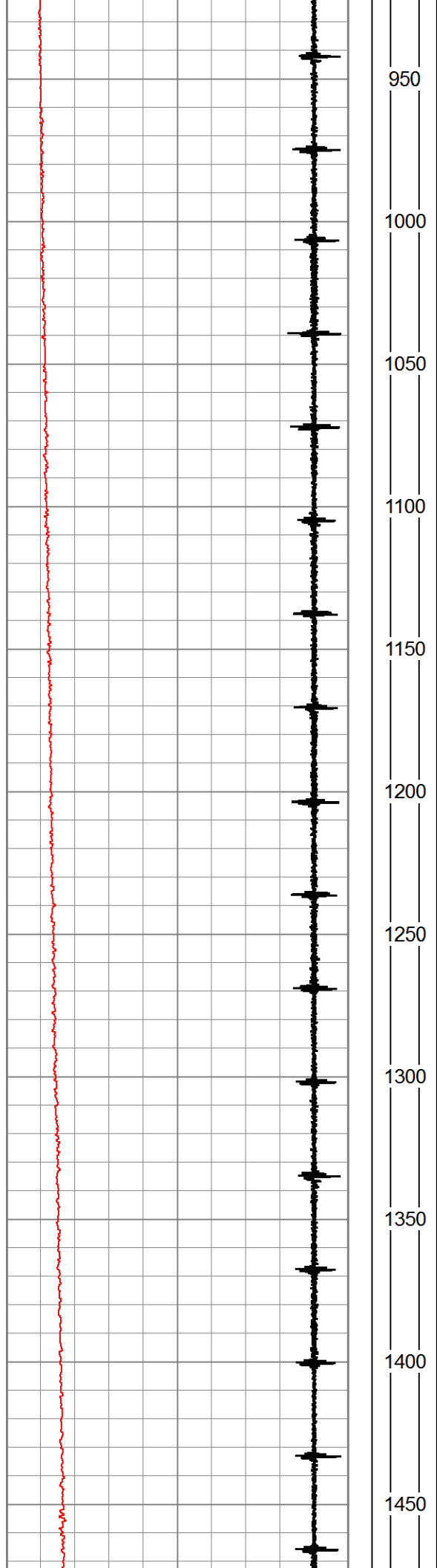
Comments

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

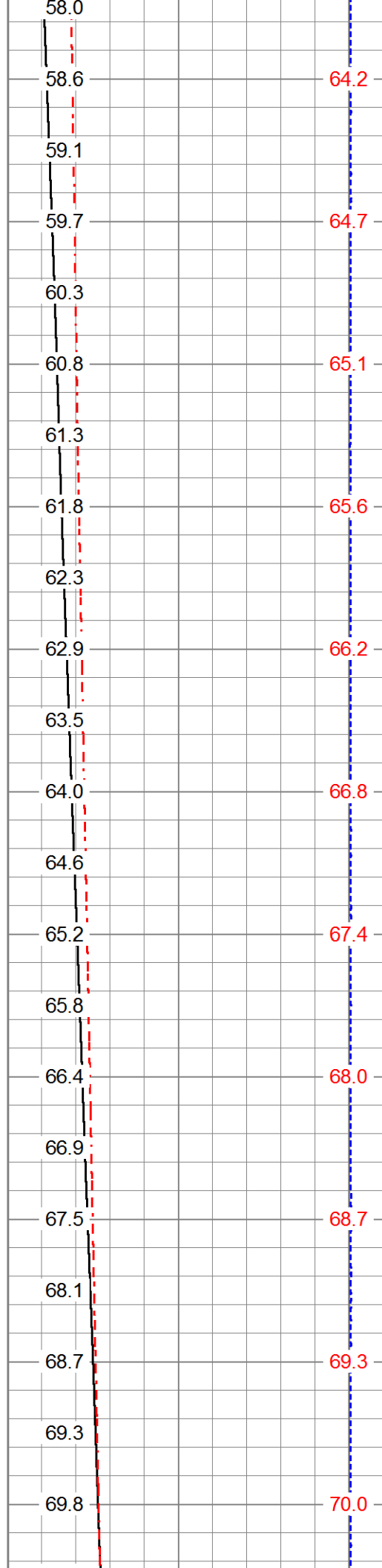
				1 11/16" Logging CCL			
				TEMP-Comprobe (FW1302-005) Comprobe Temperature Tool	2.30	1.44	4.00
TEMP	0.17						
Dataset: merrionsunco#1swdtemp.db: field/well/run1/pass2.C Total length: 3.65 ft Total weight: 14.00 lb O.D.: 1.69 in							

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	50	TEMP (degF)		200
0	LTEN (lb)	1700	-5	DTMP (degF)		5
			50	TEM2 (degF)		200
			TEMP	TEM2		
			(degF)	(degF)		



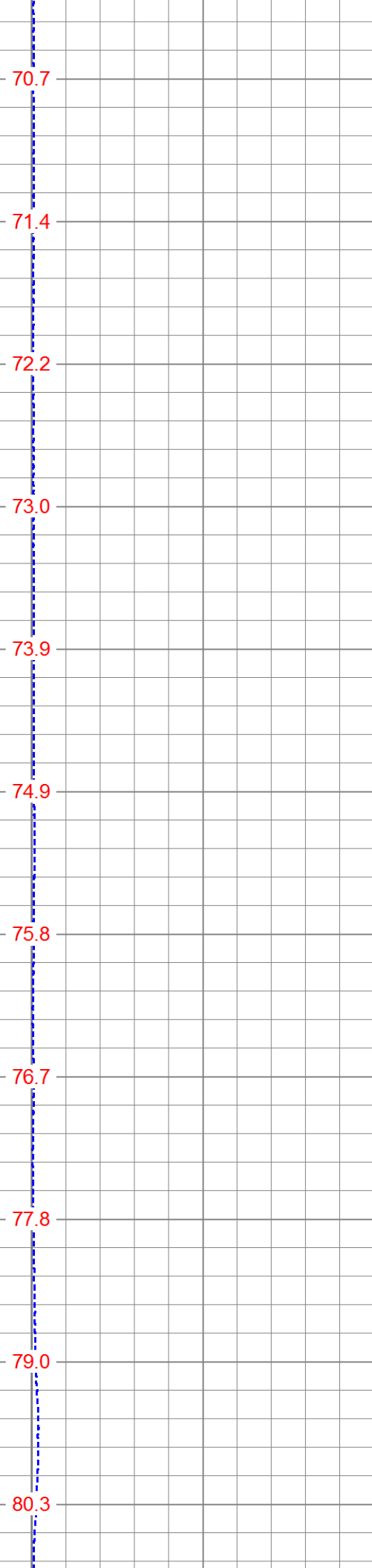
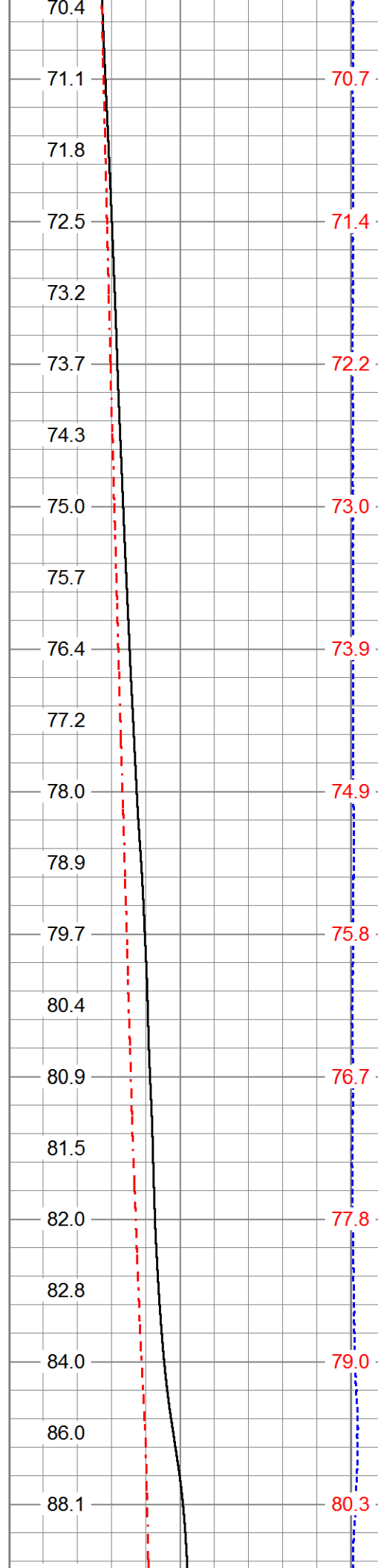
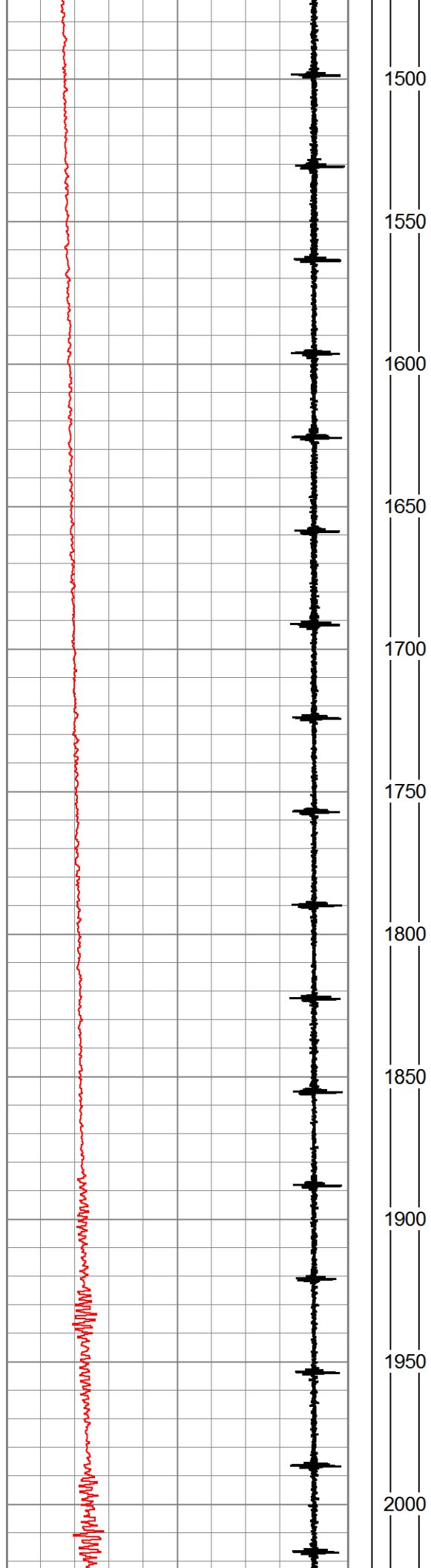


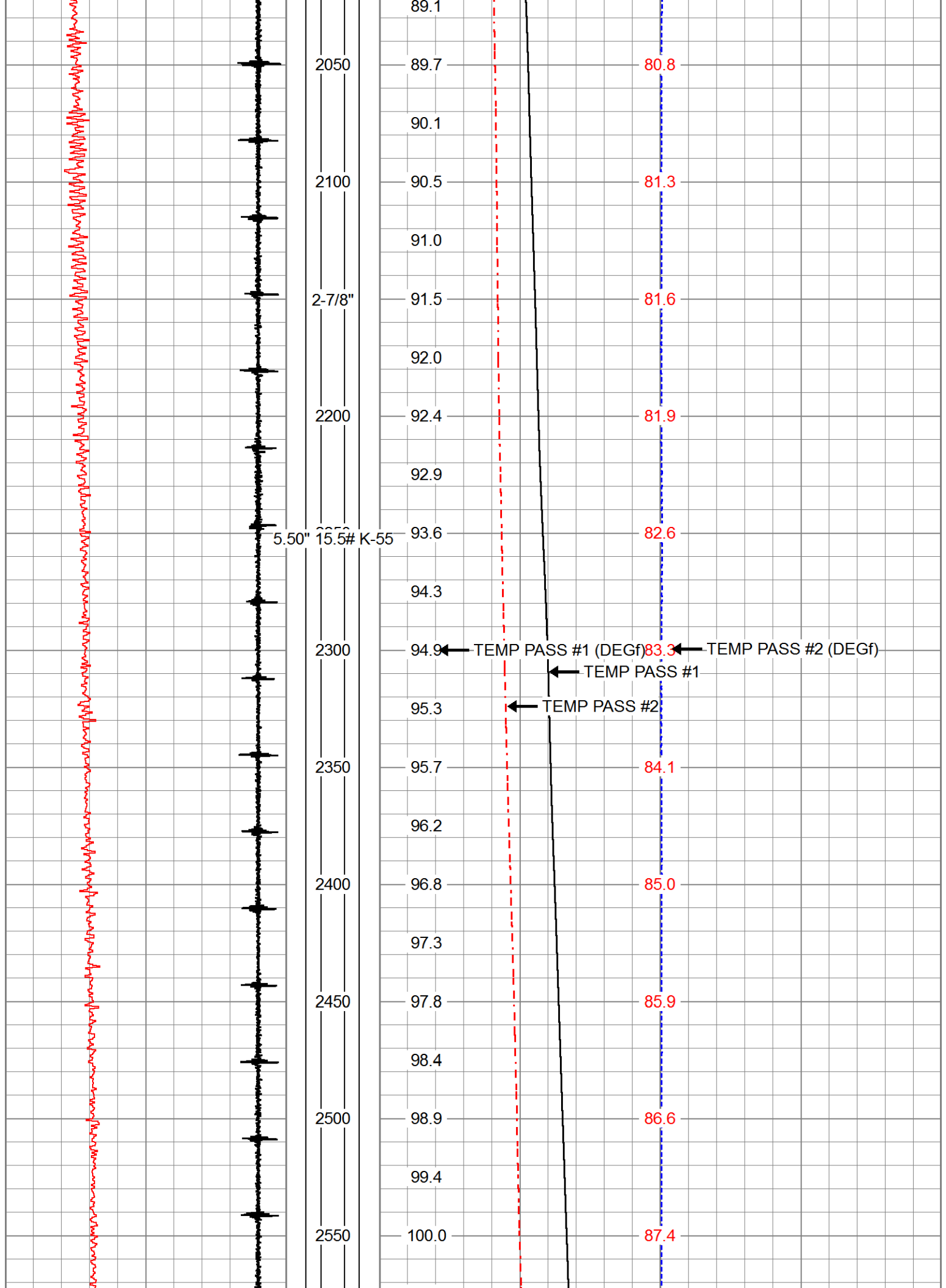
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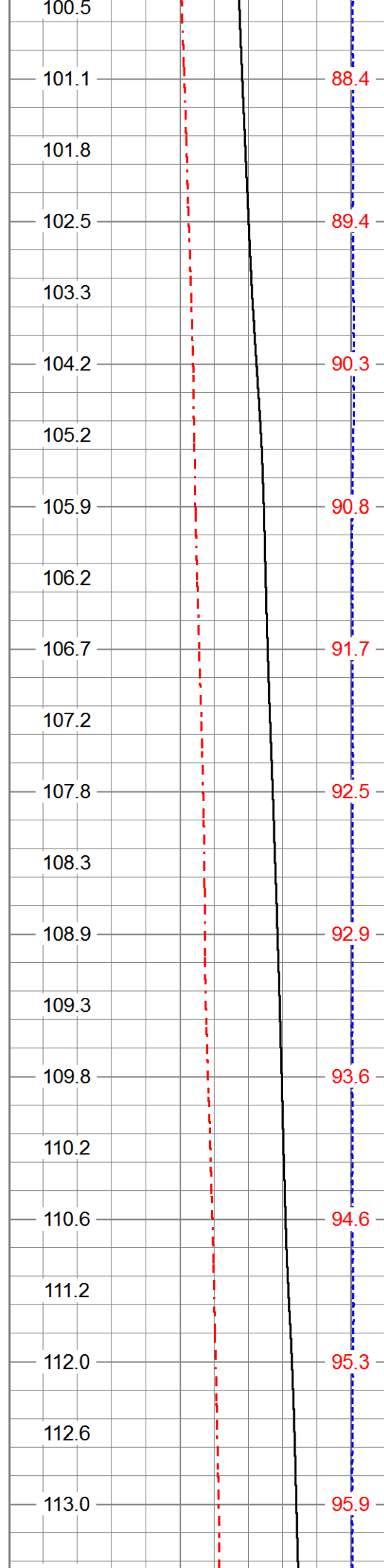
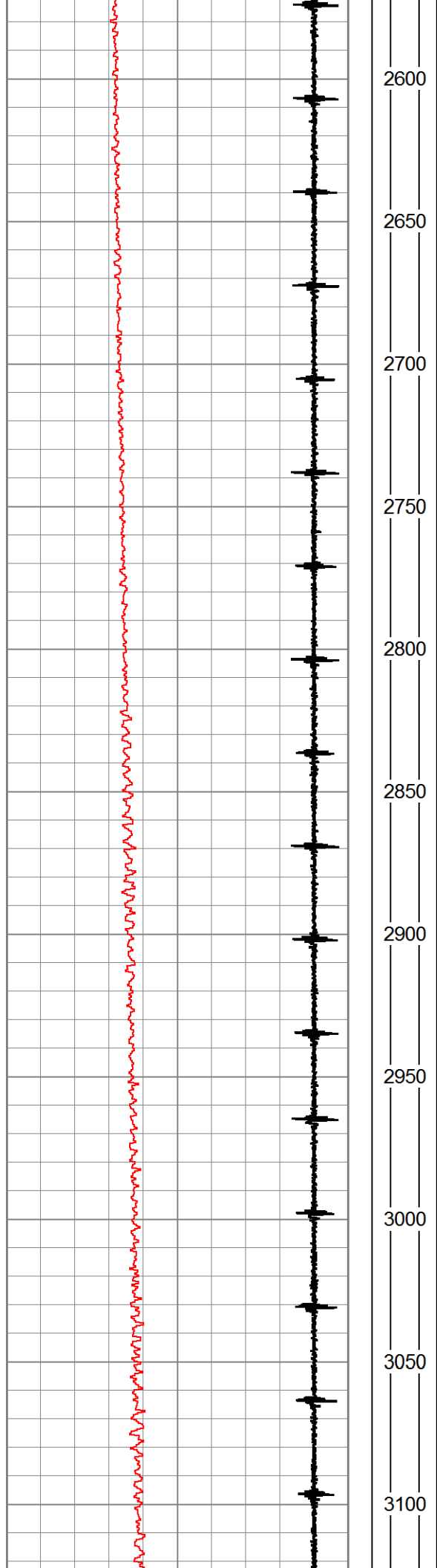


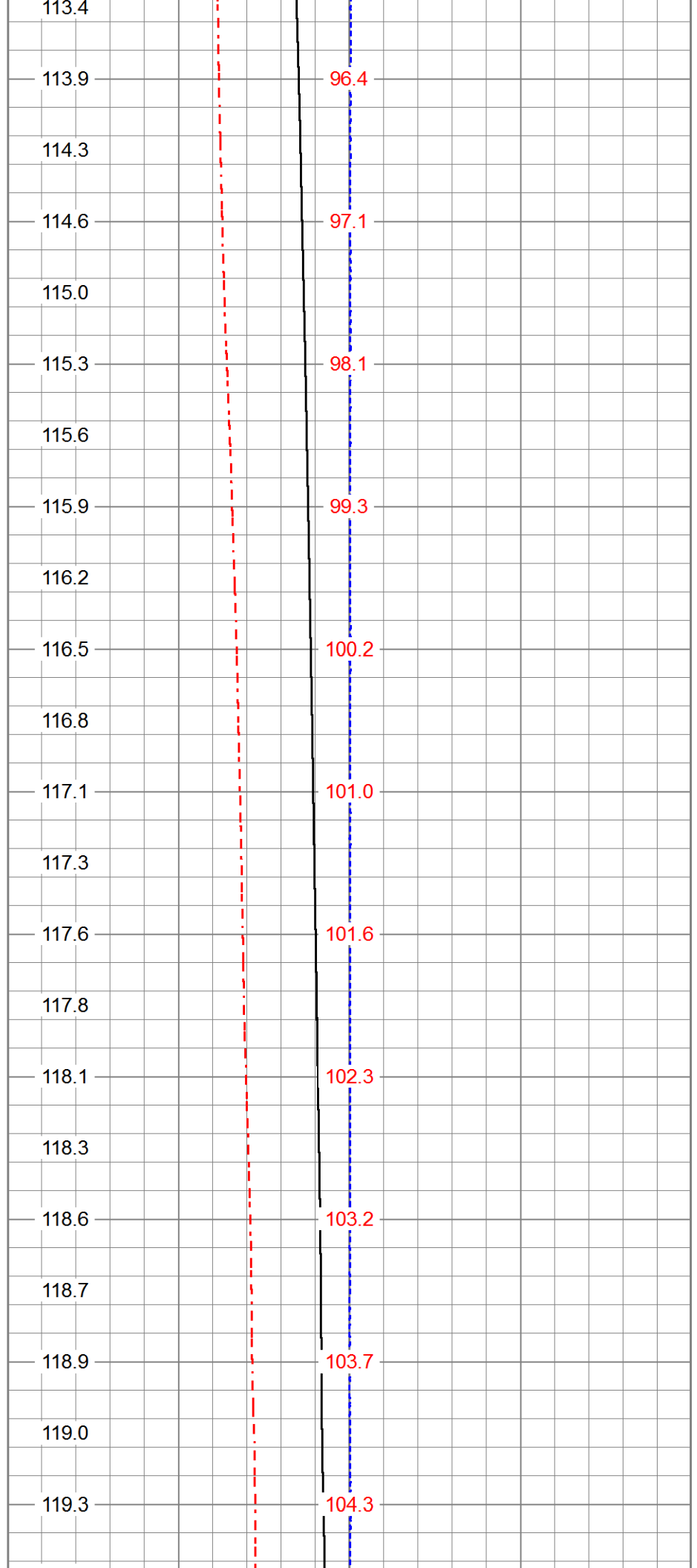
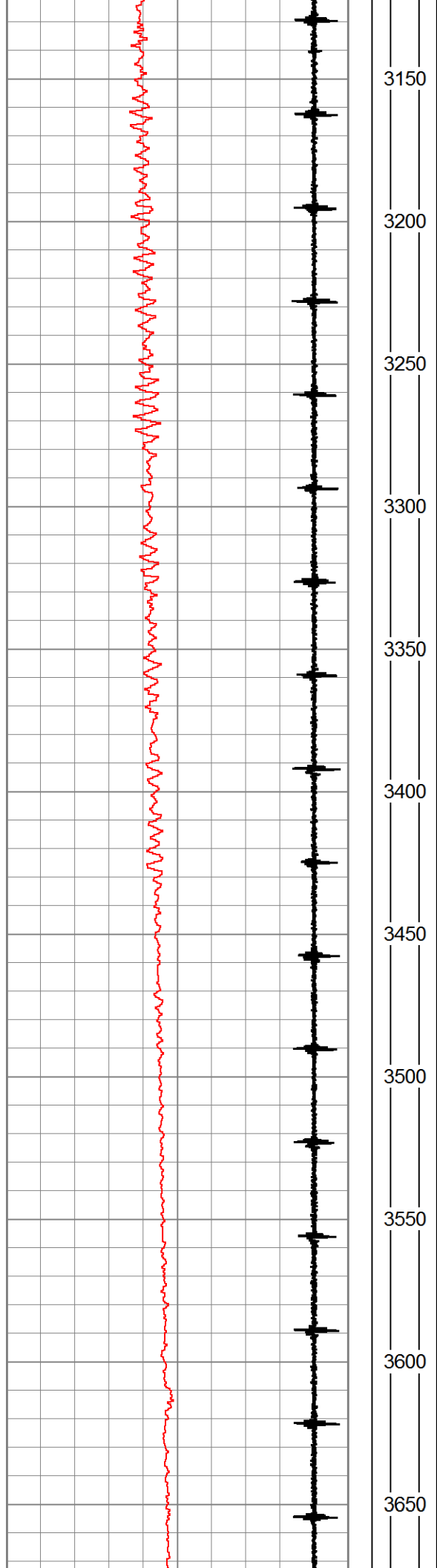
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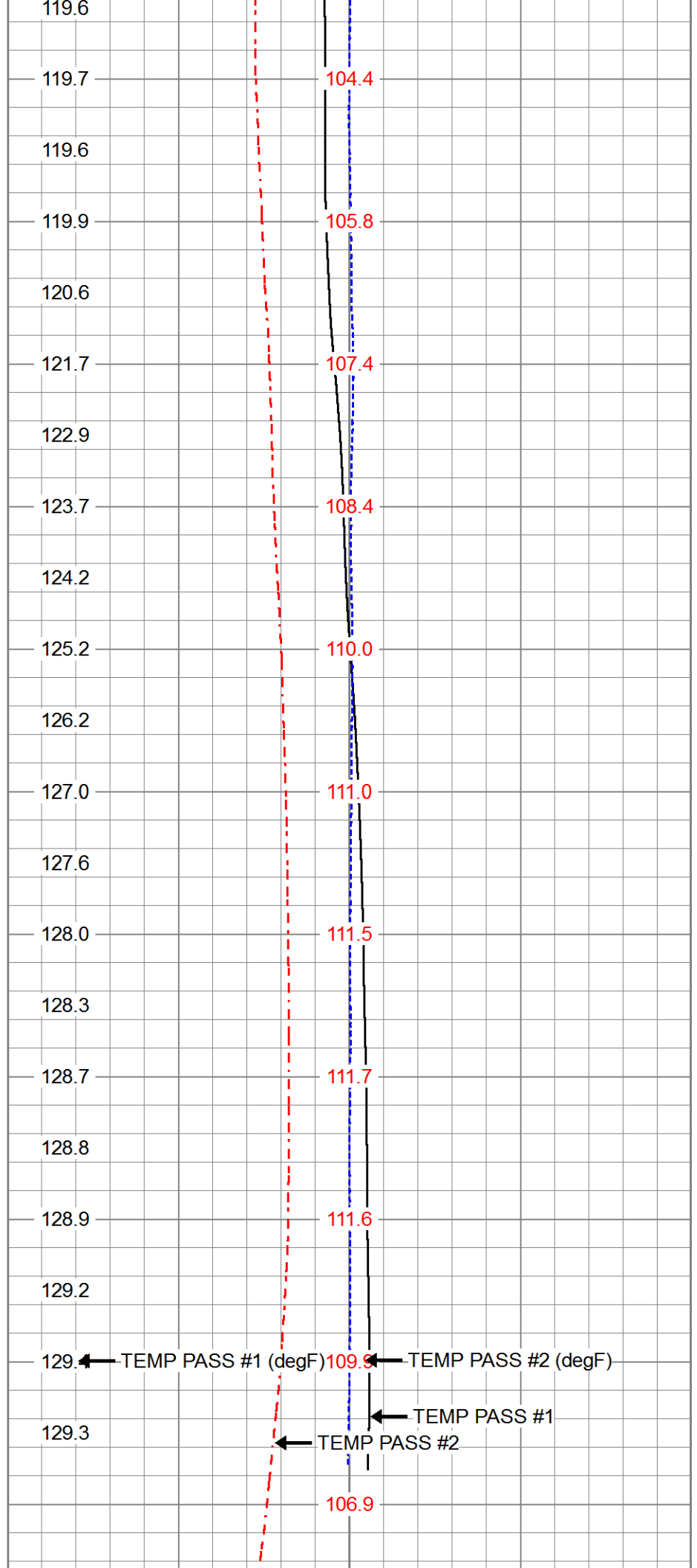
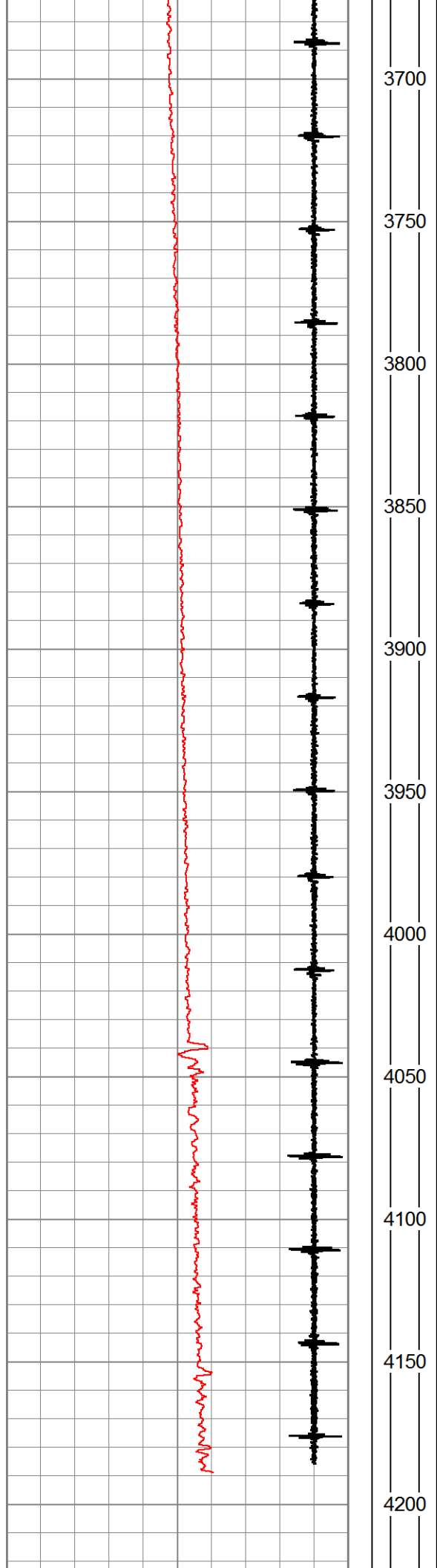
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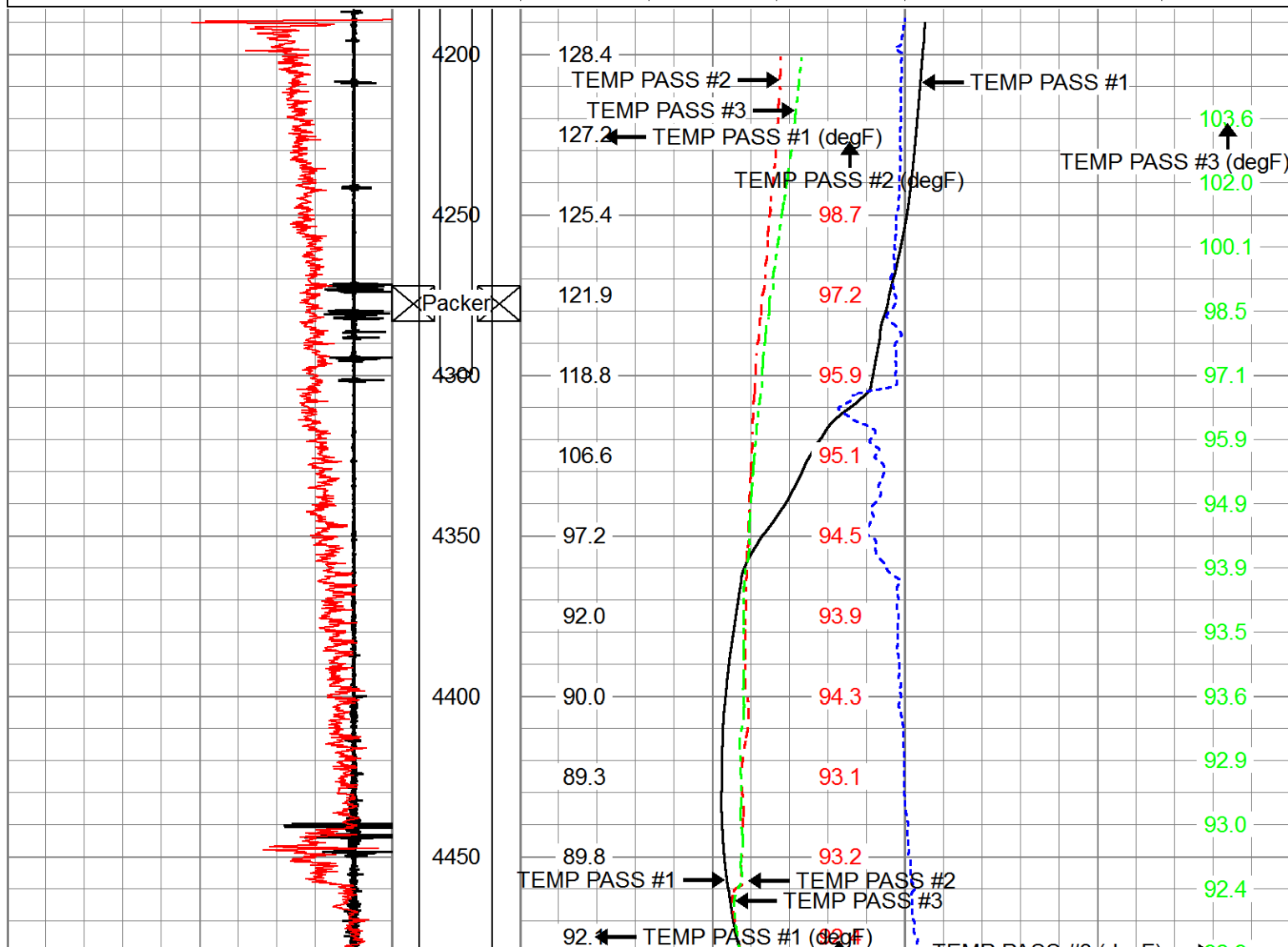
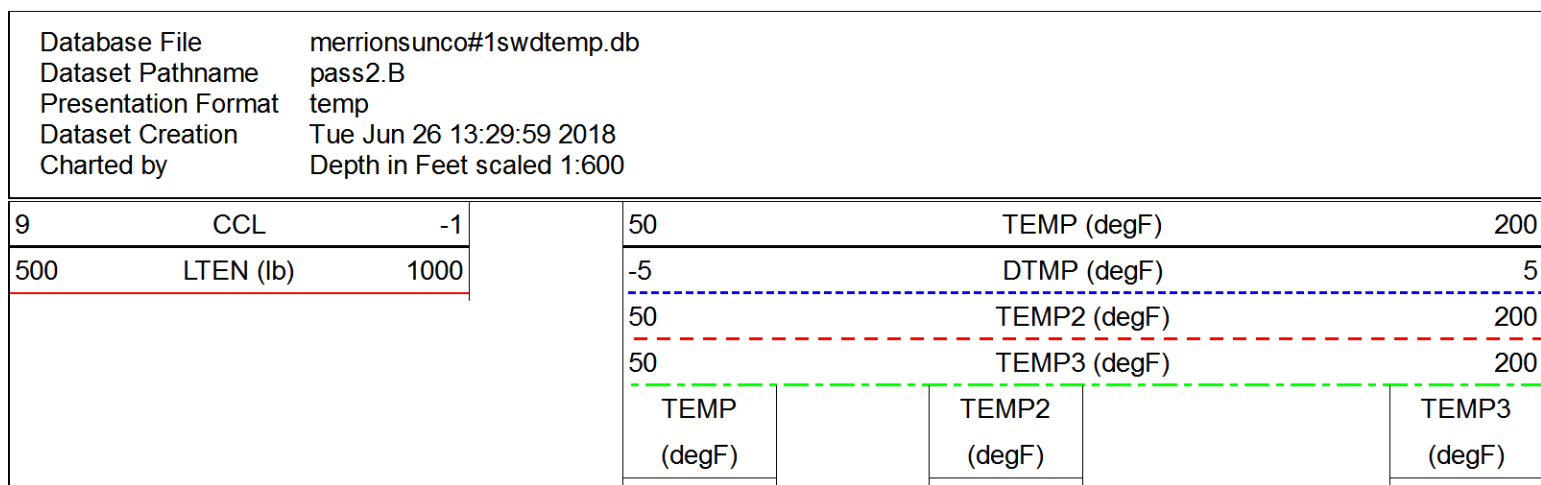
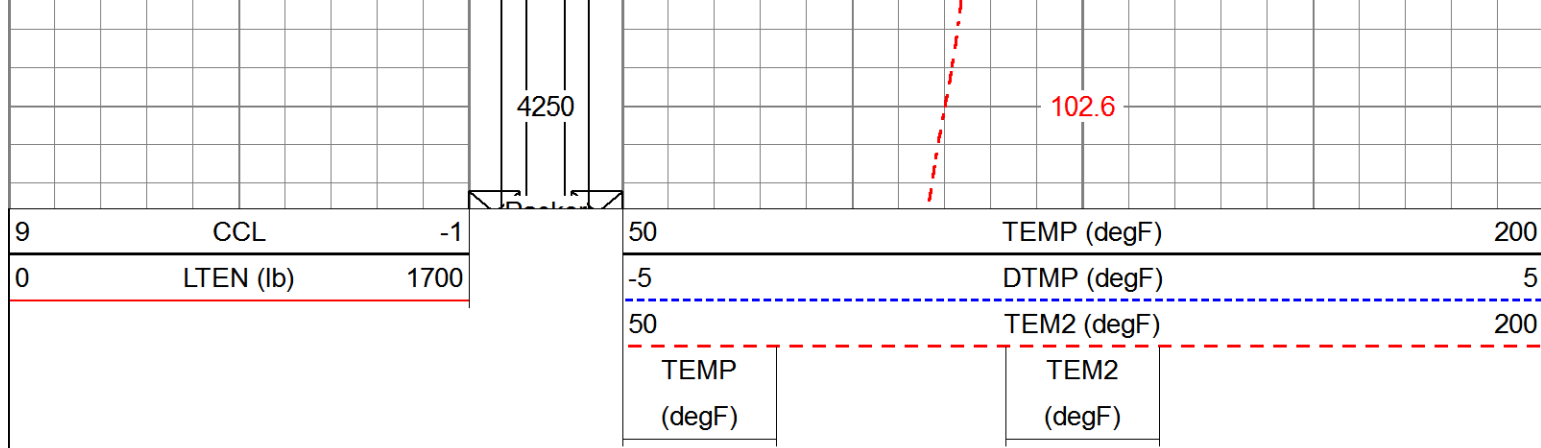


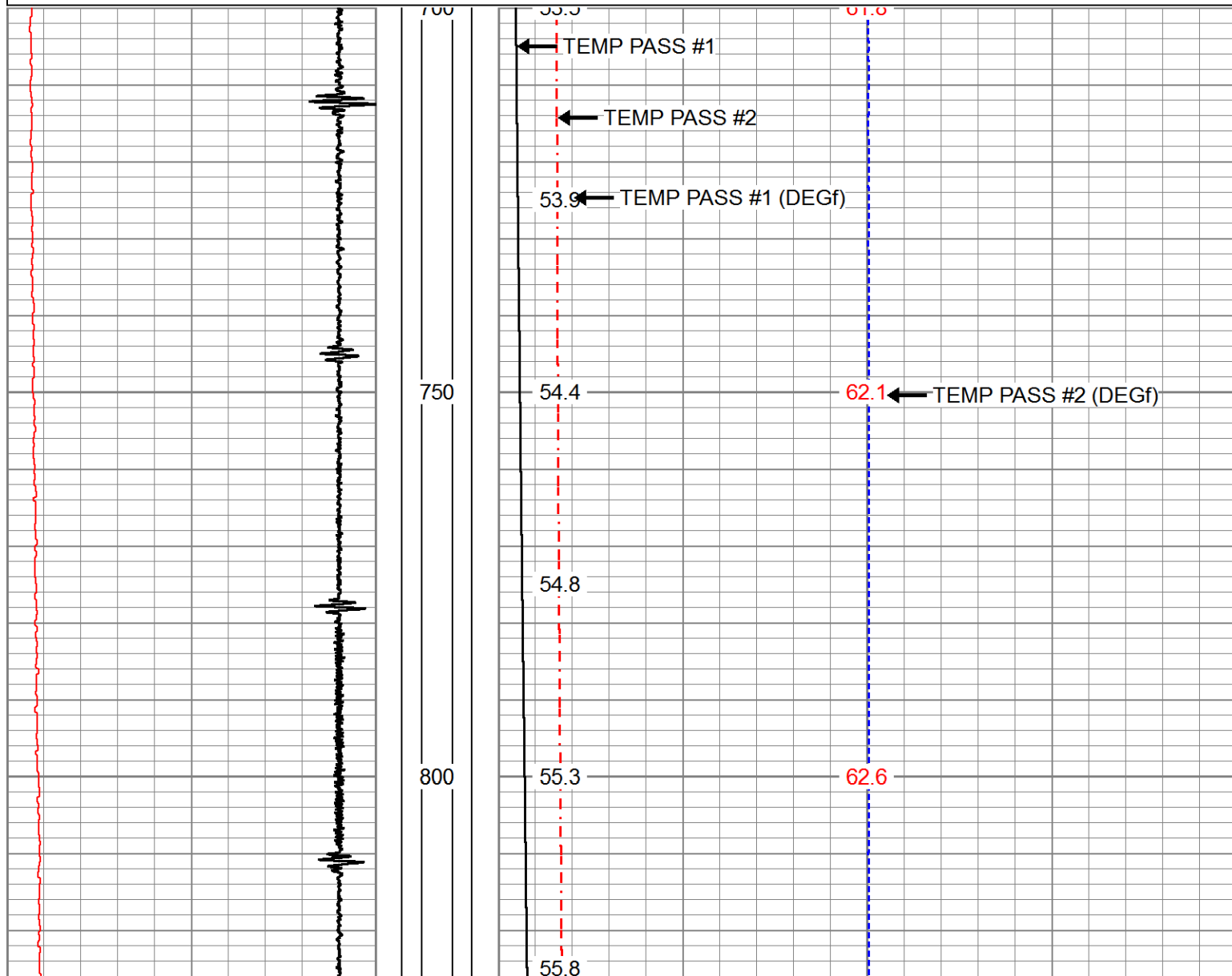
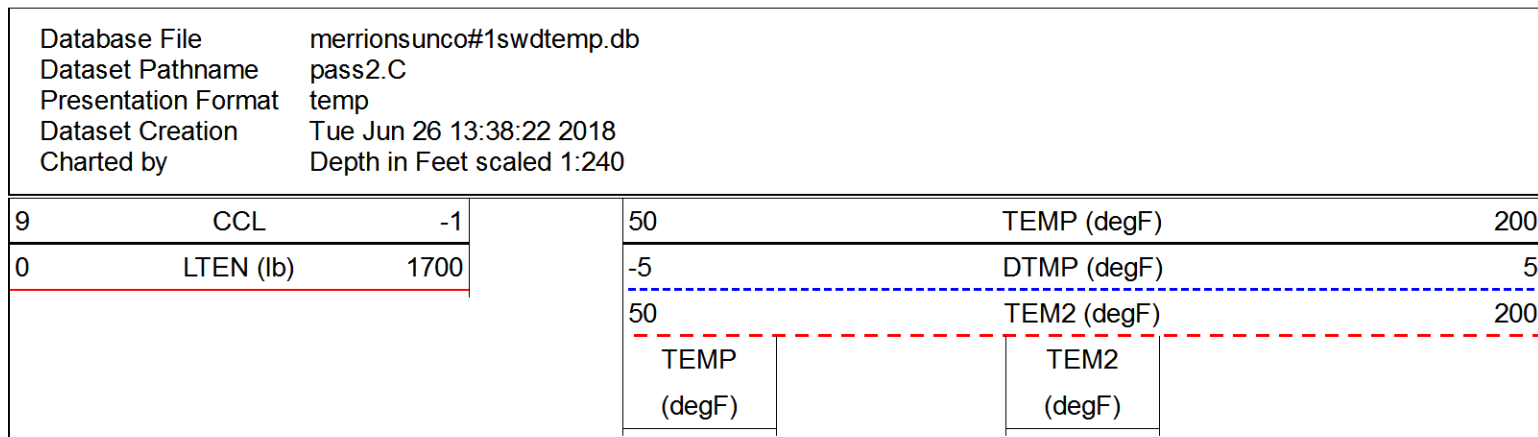
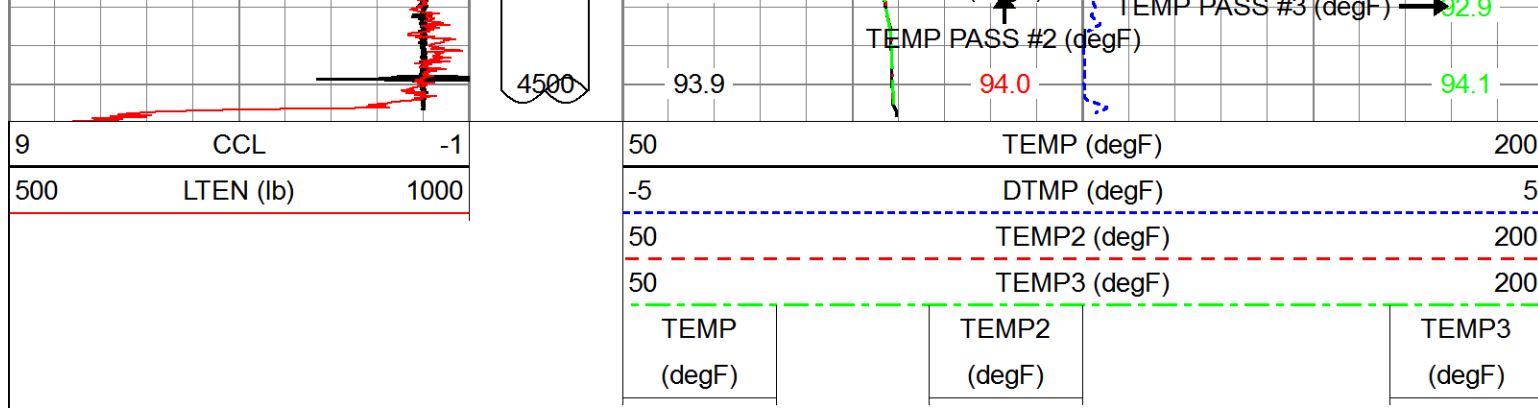


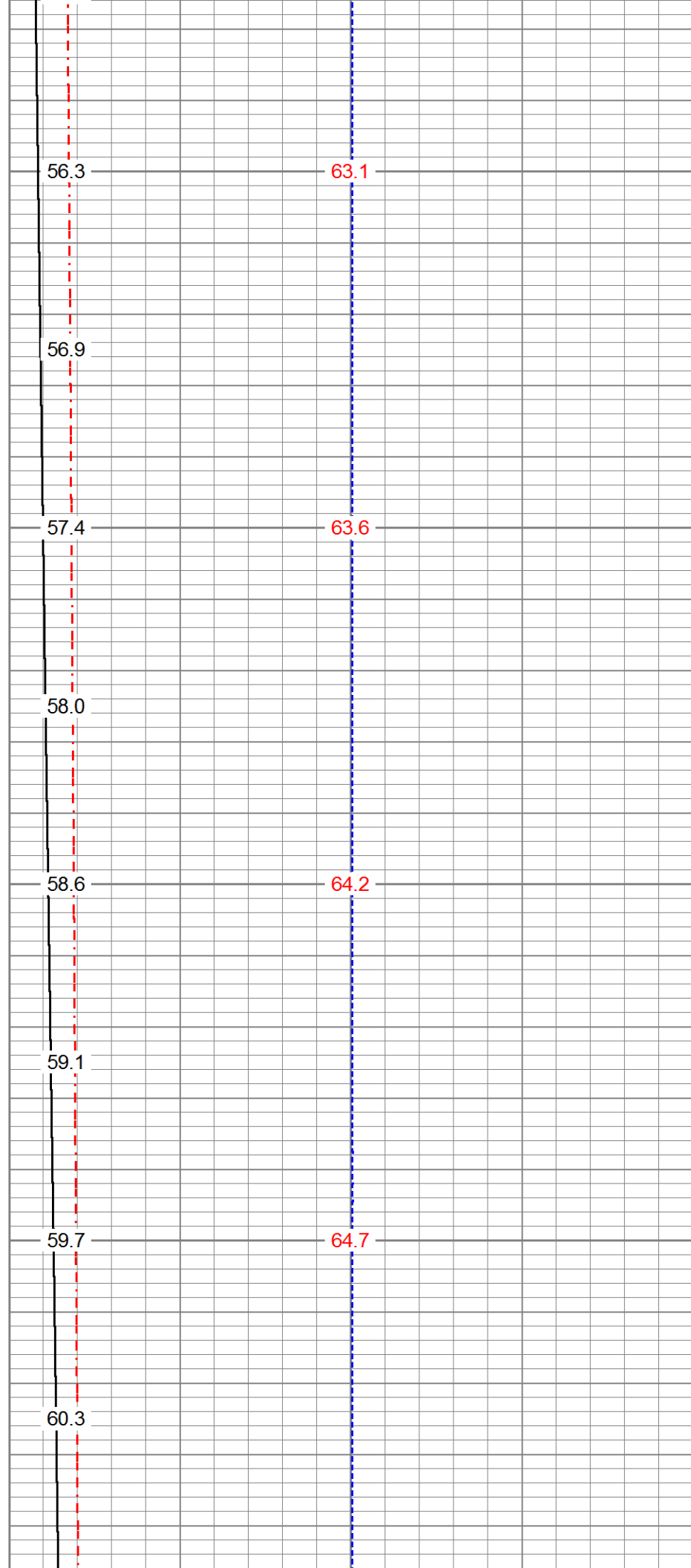
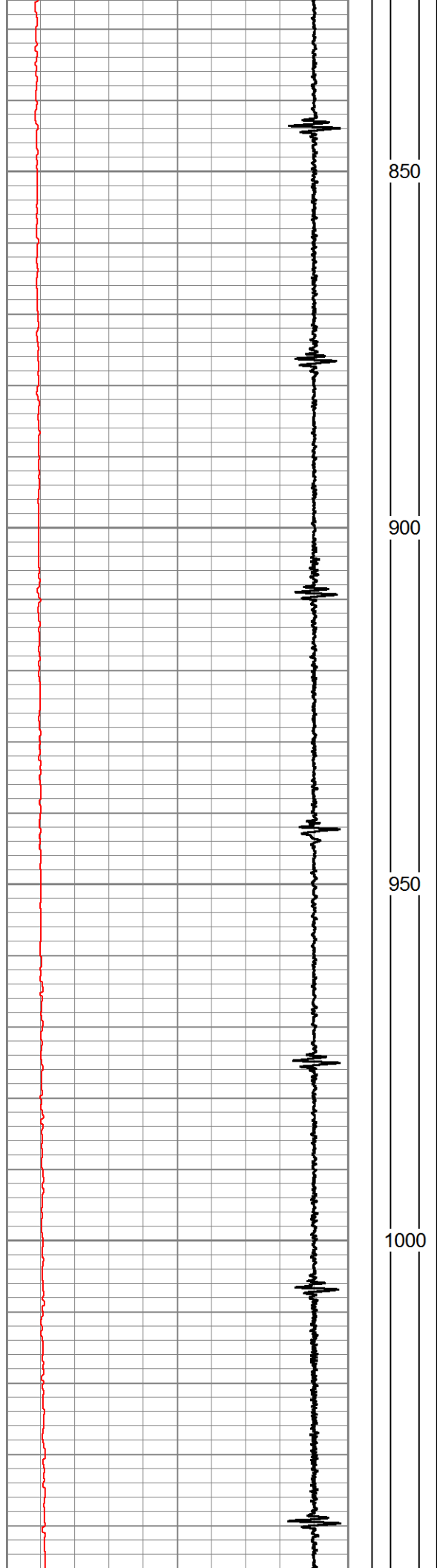


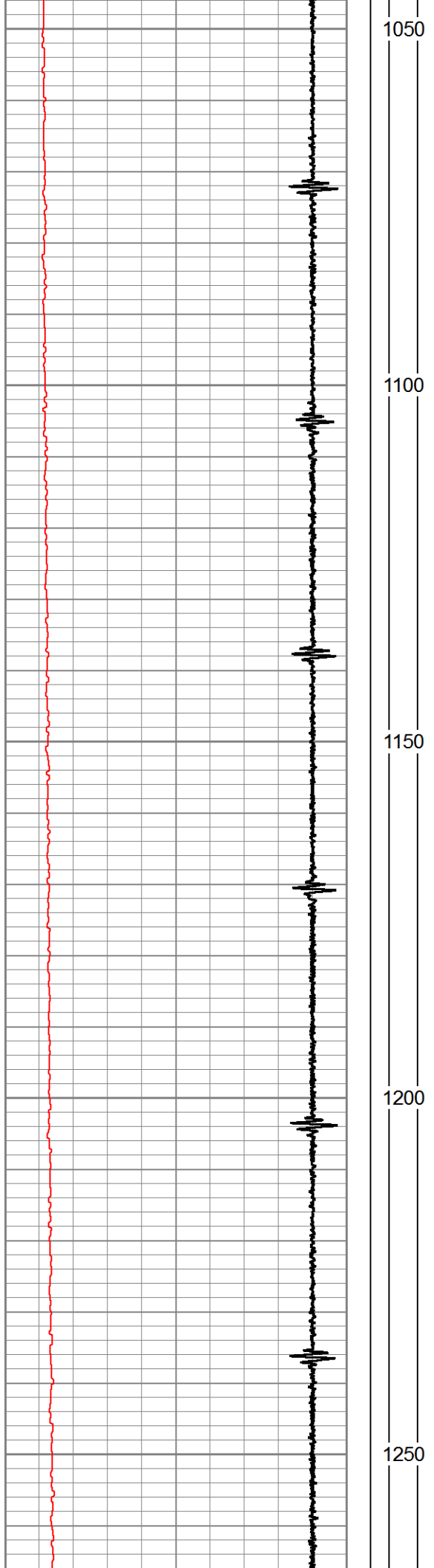












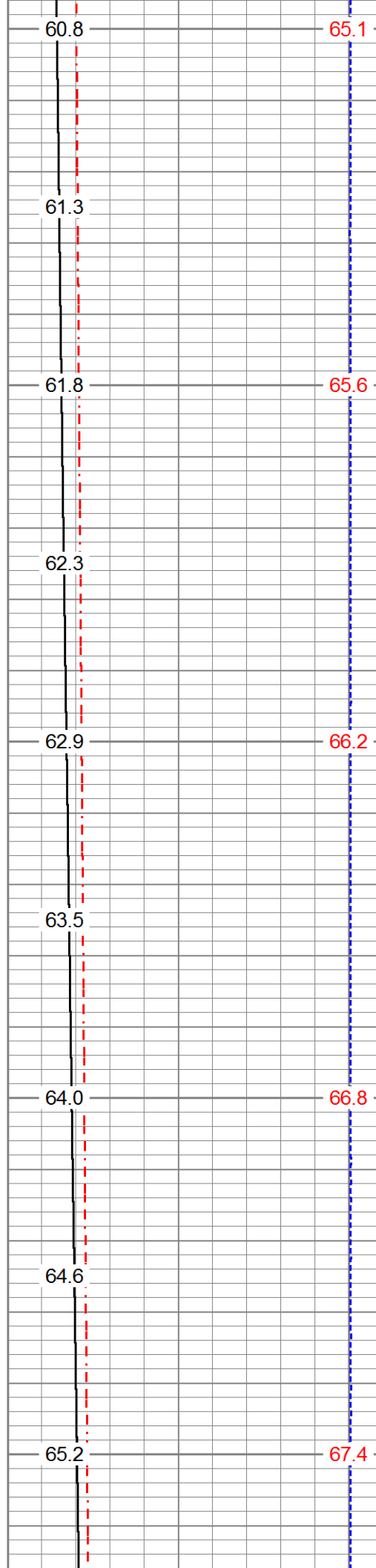
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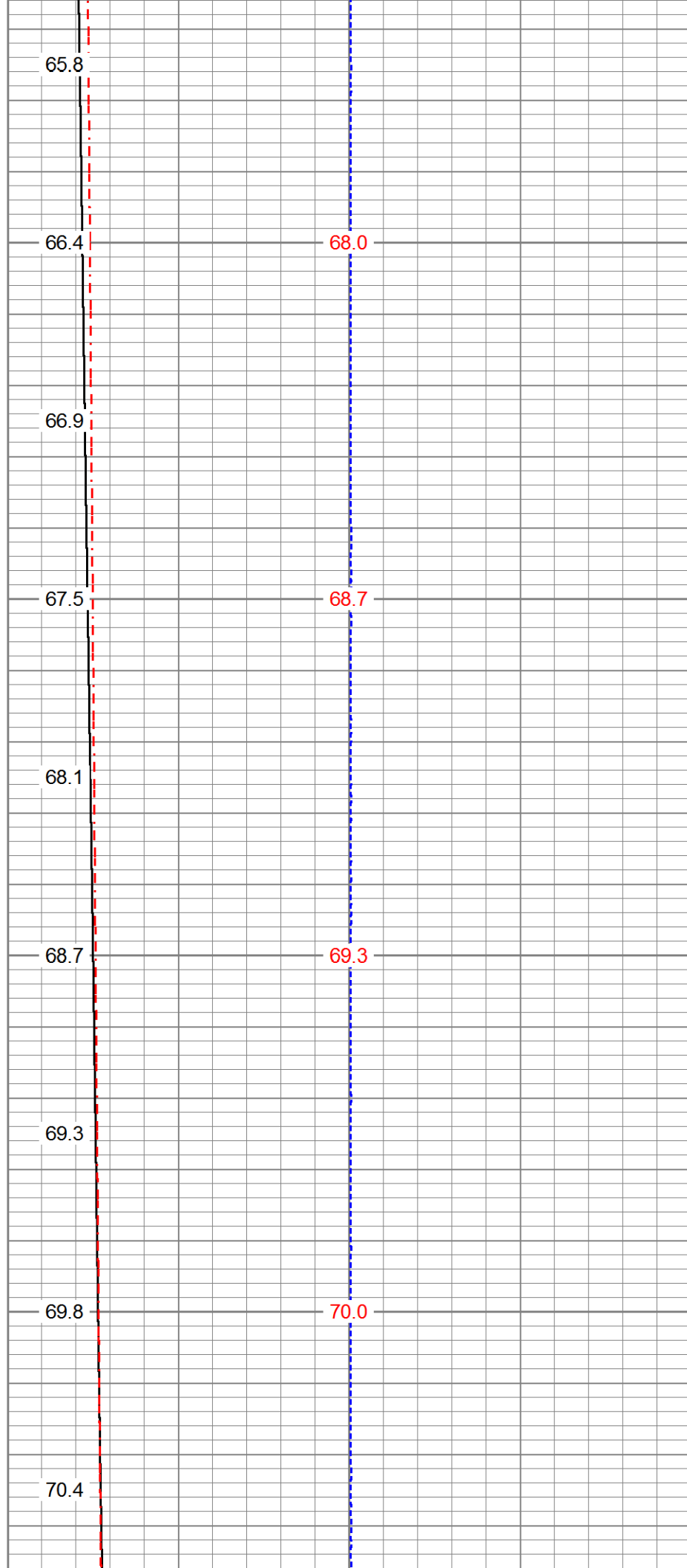
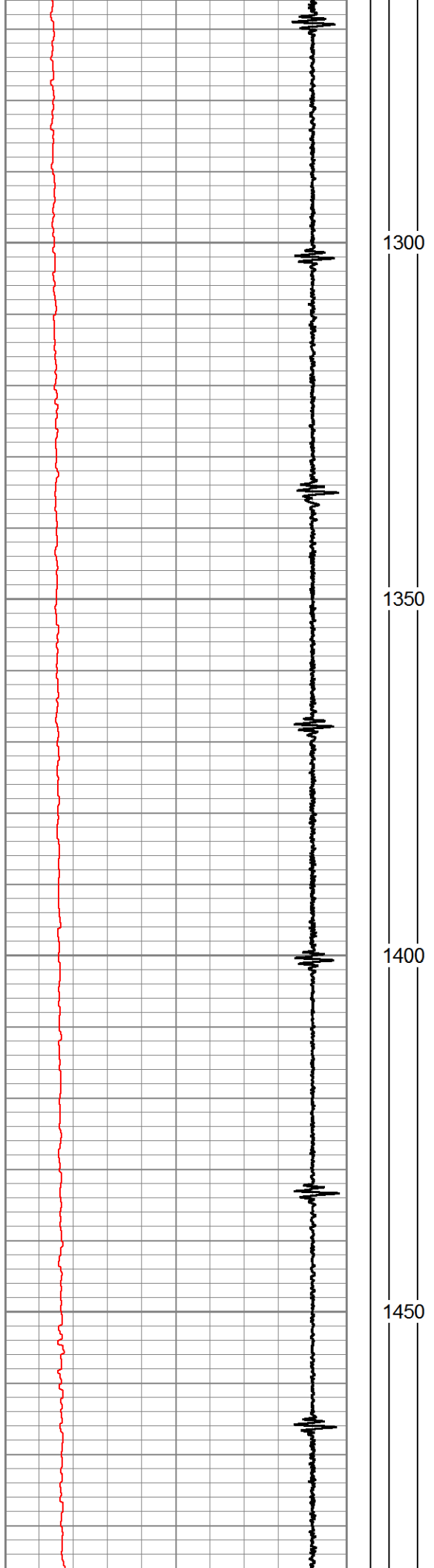
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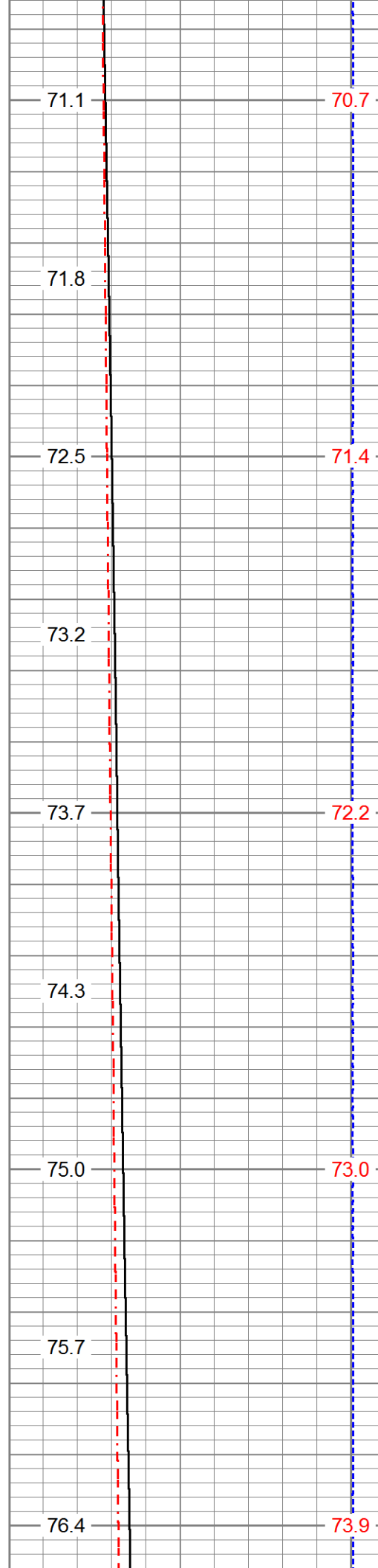
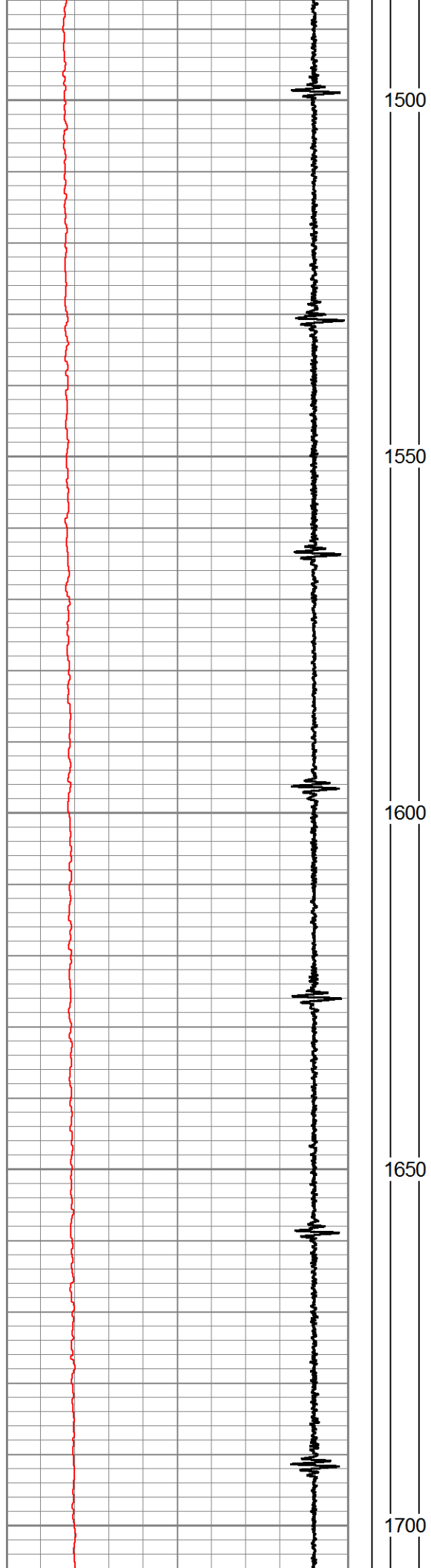
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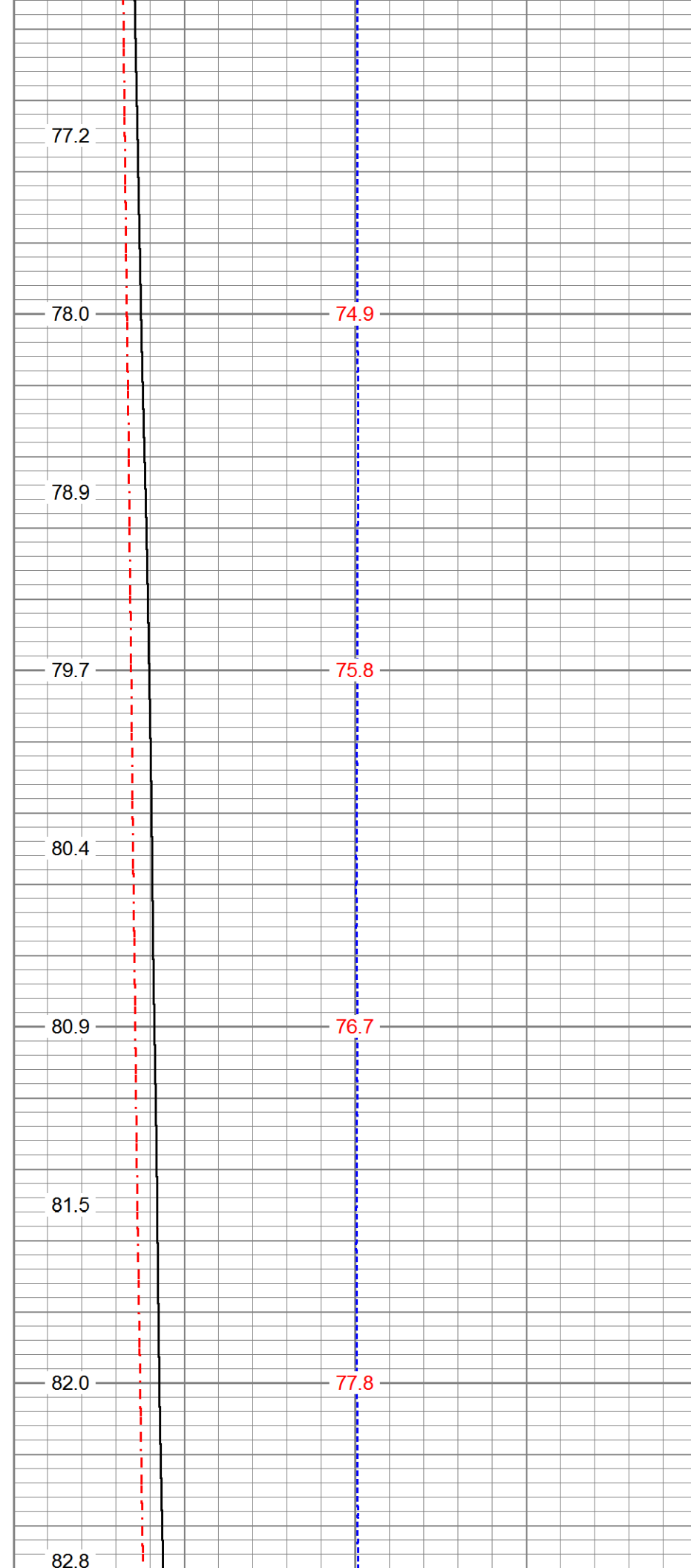
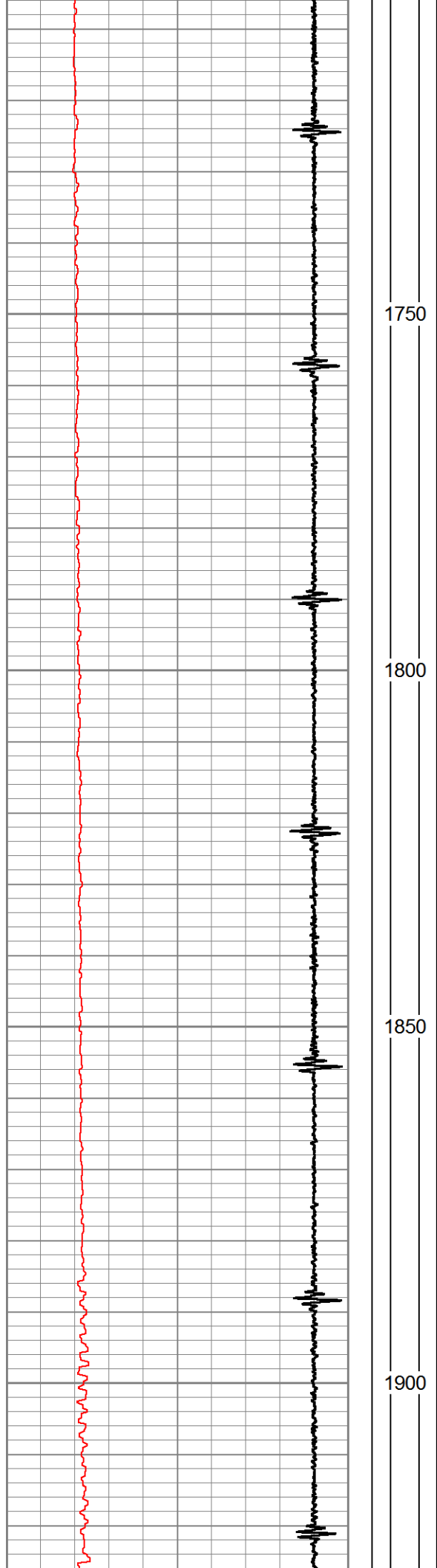
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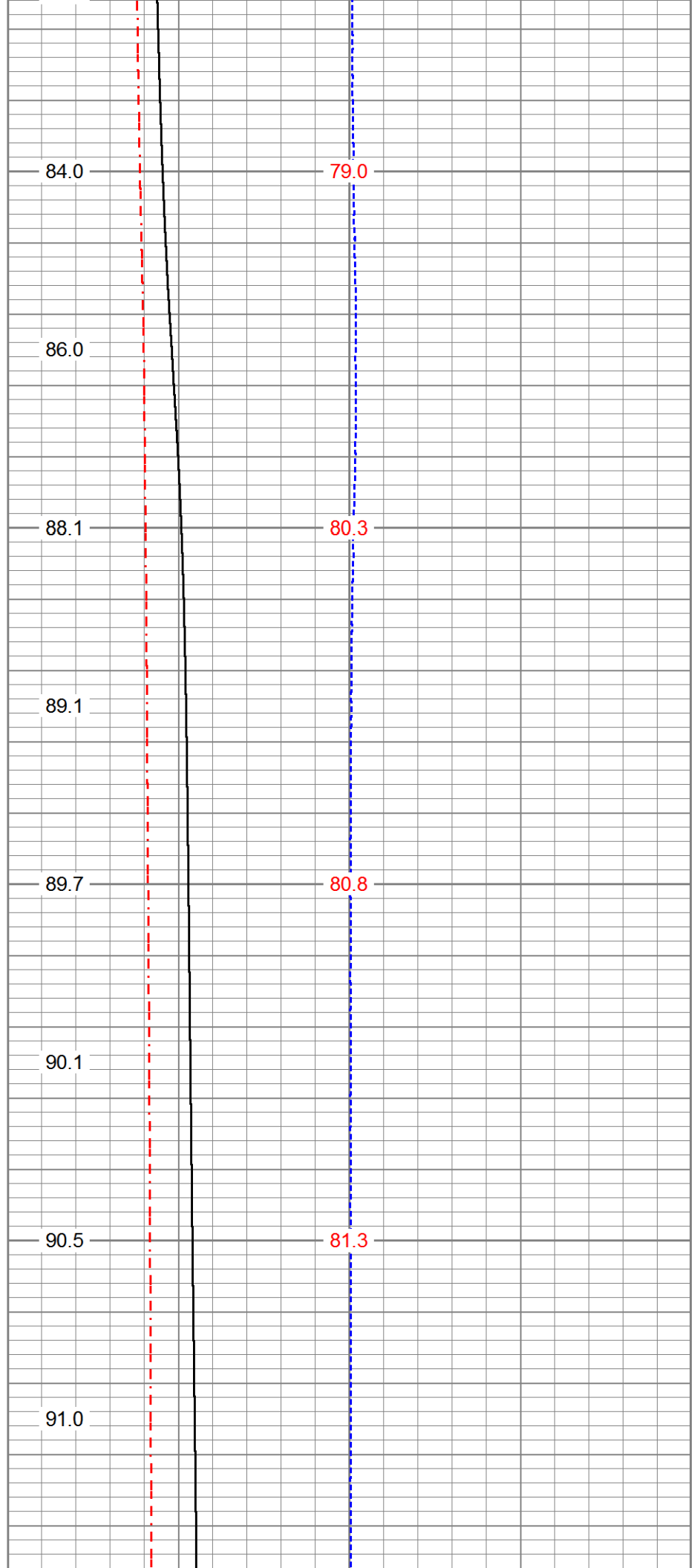
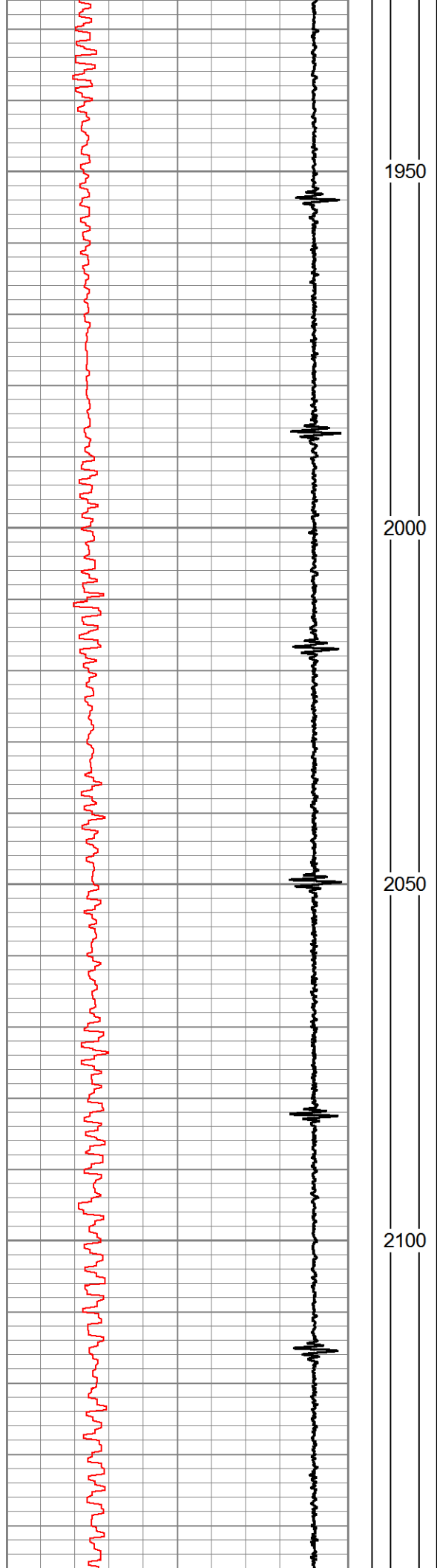
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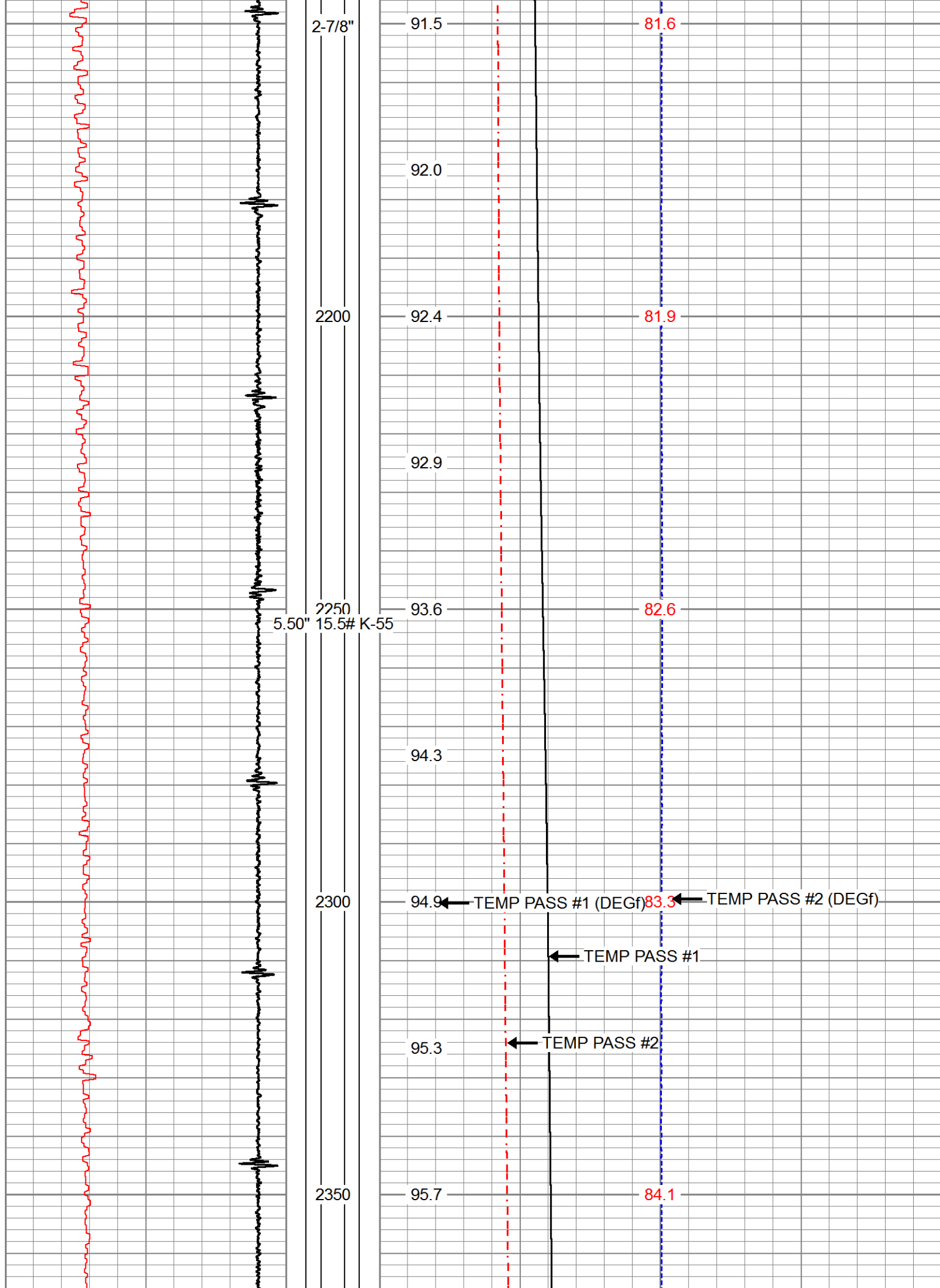
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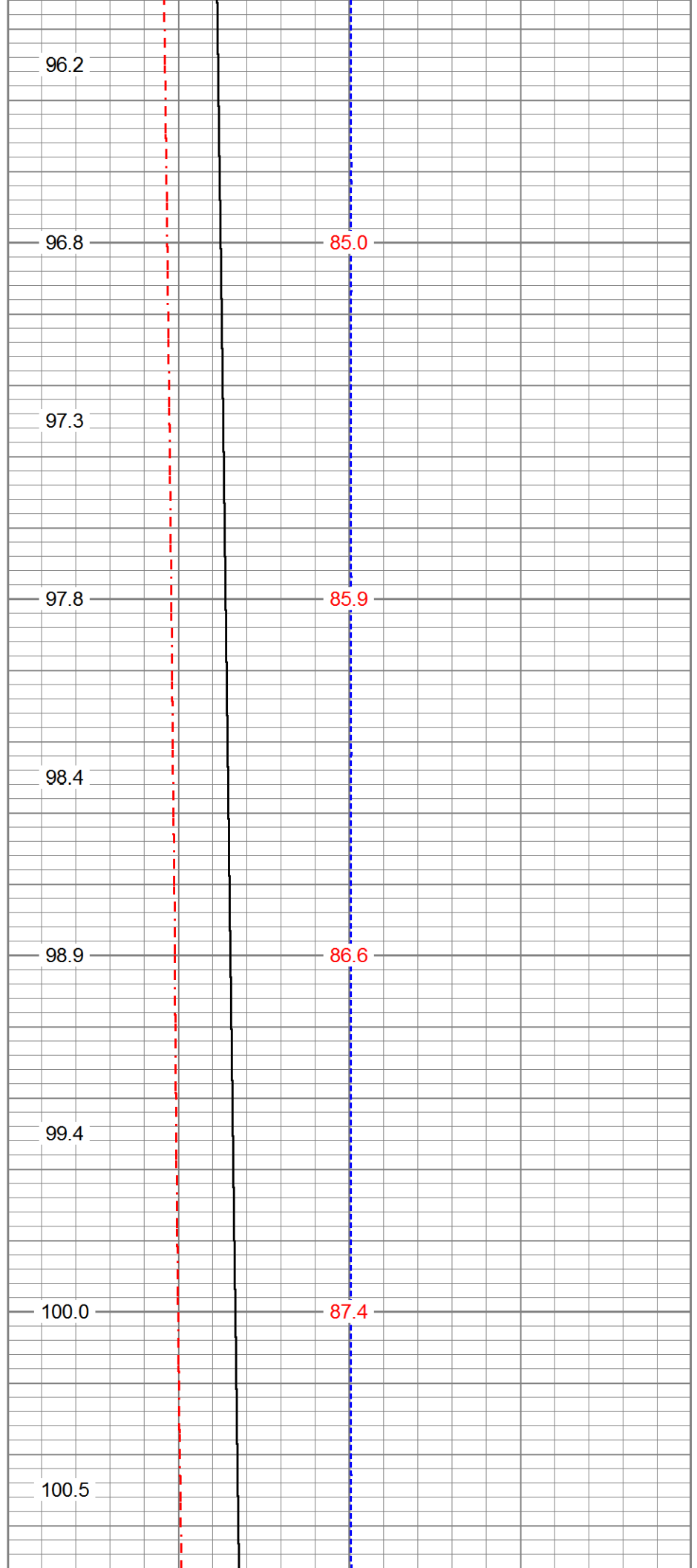
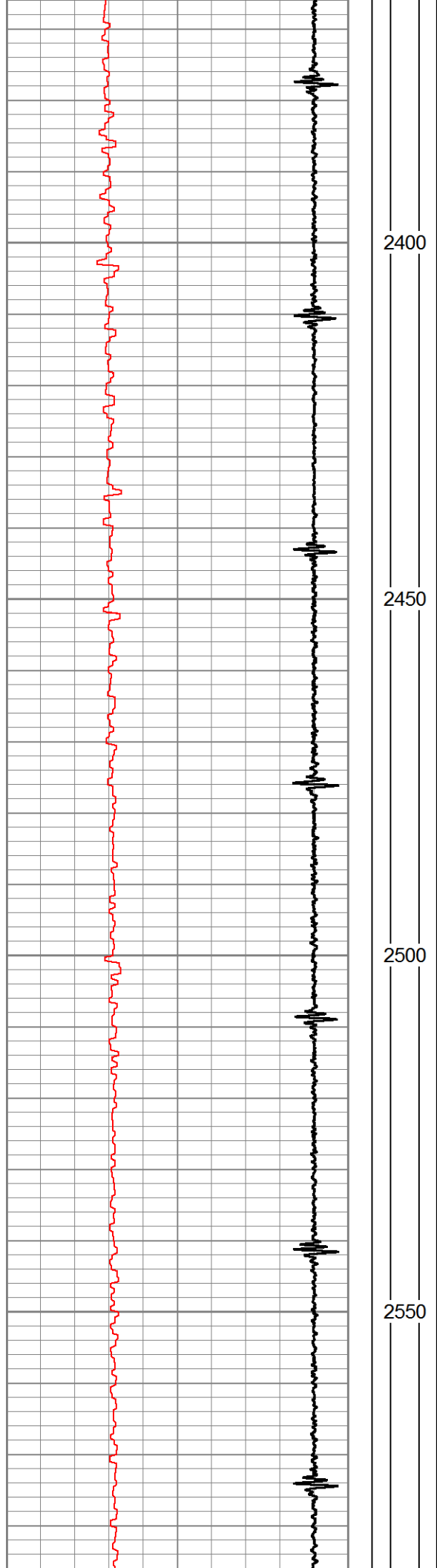


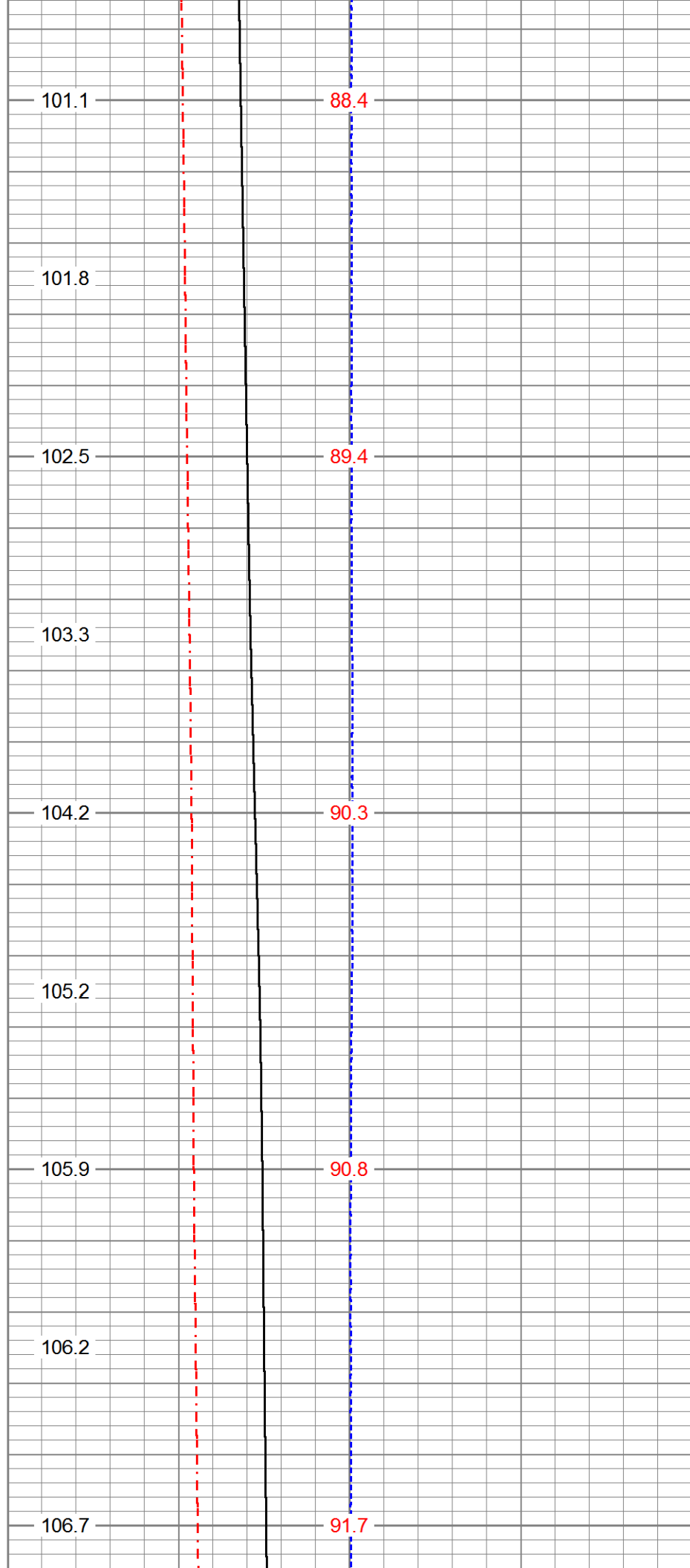
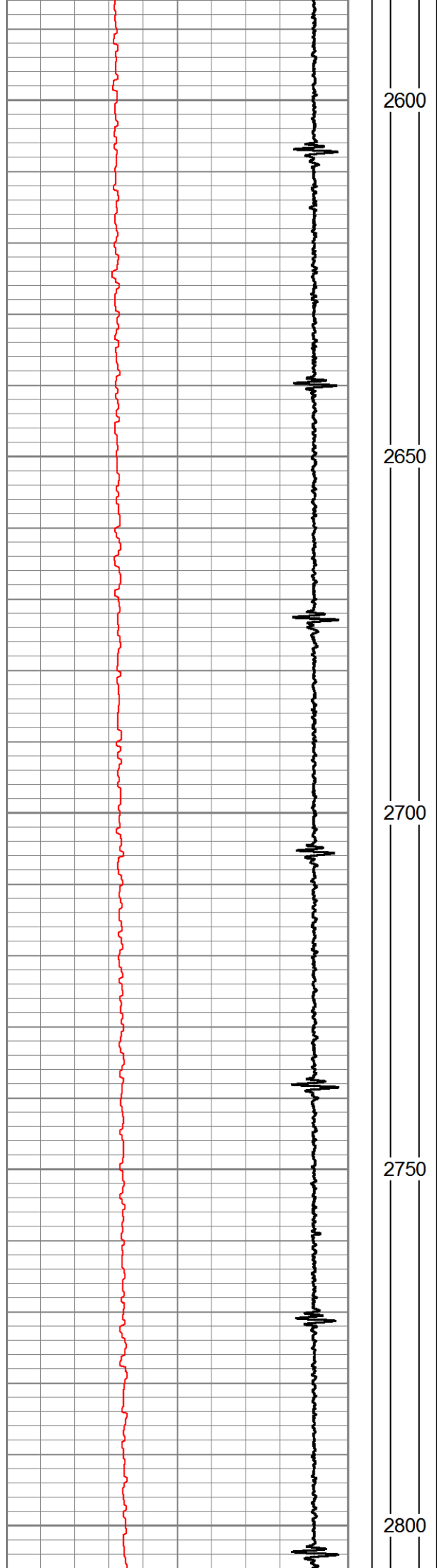


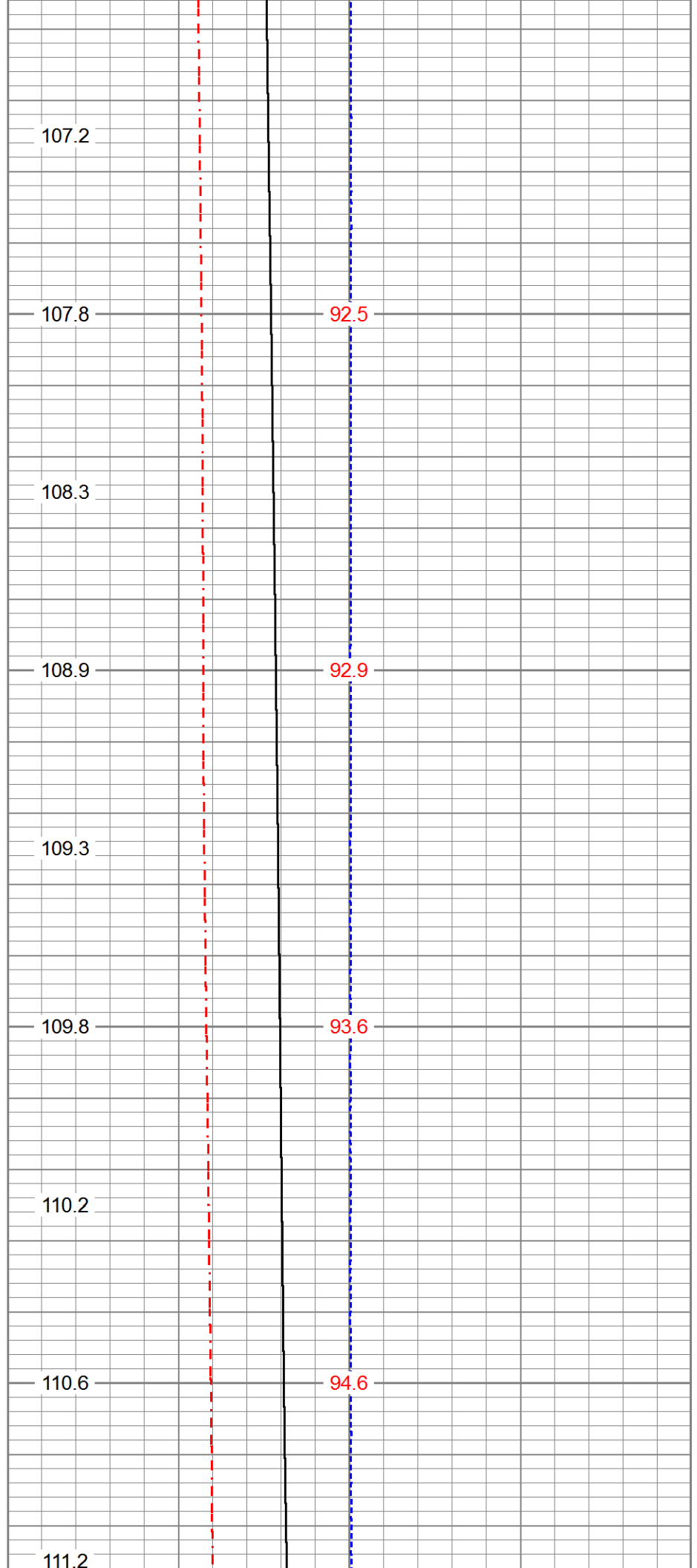
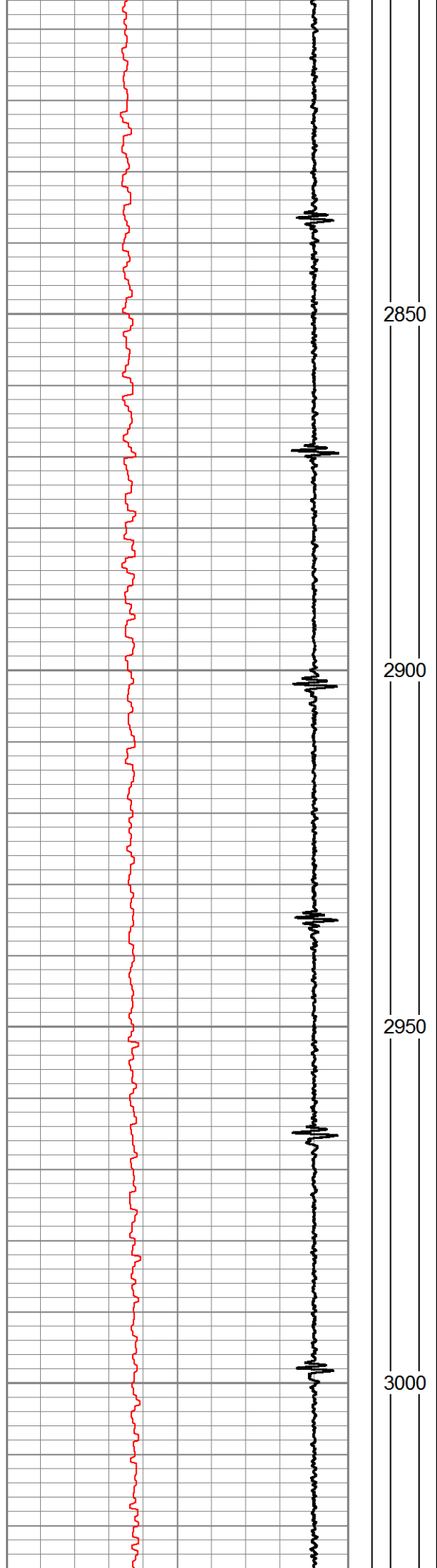


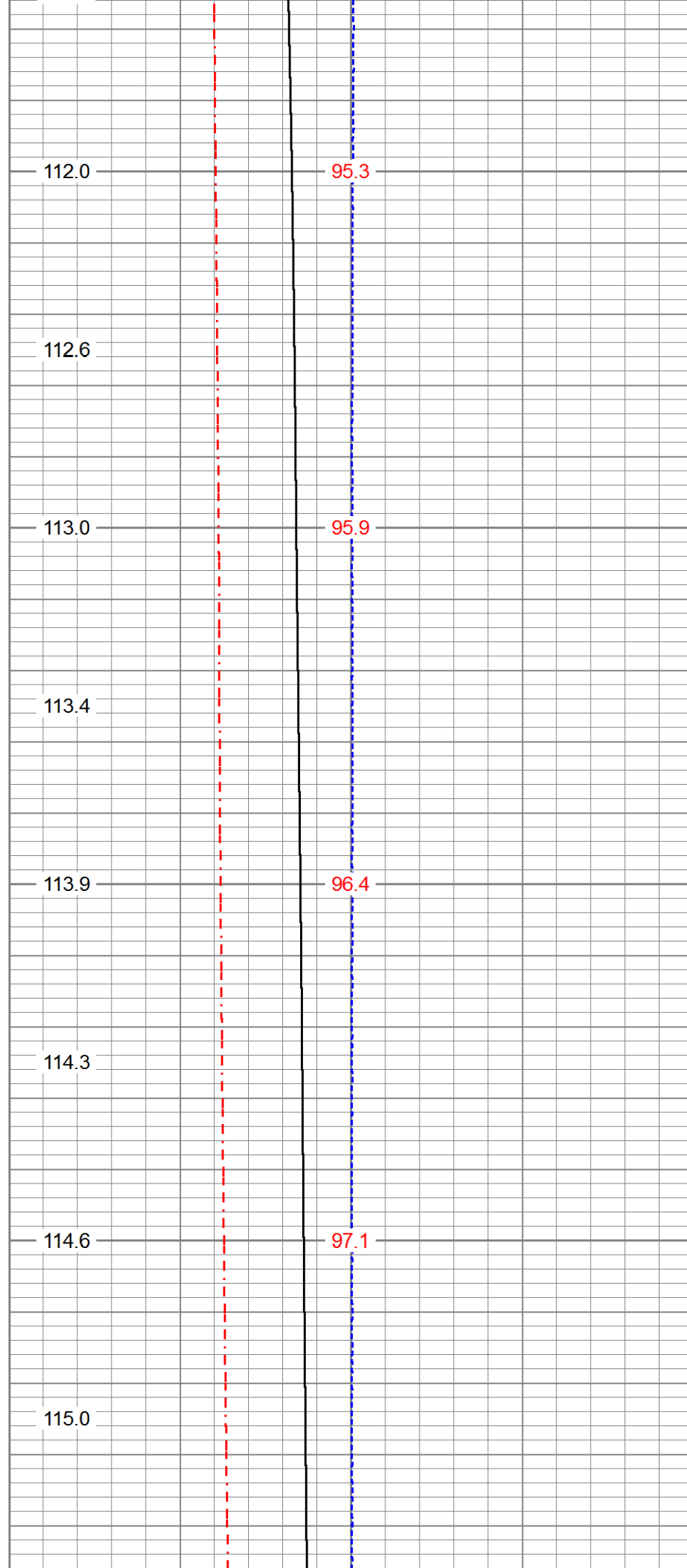
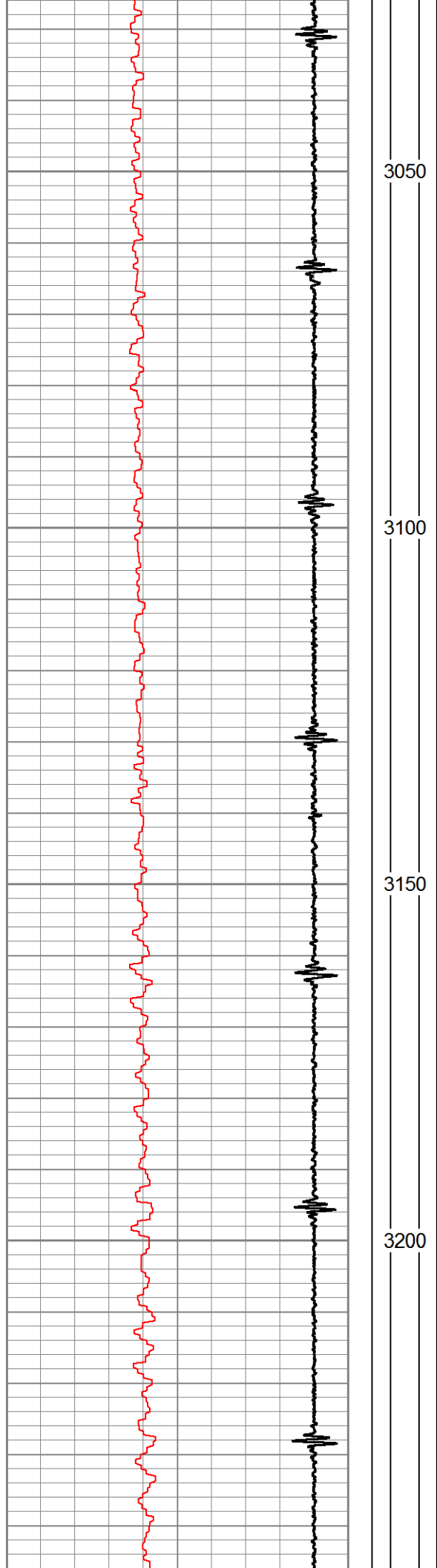


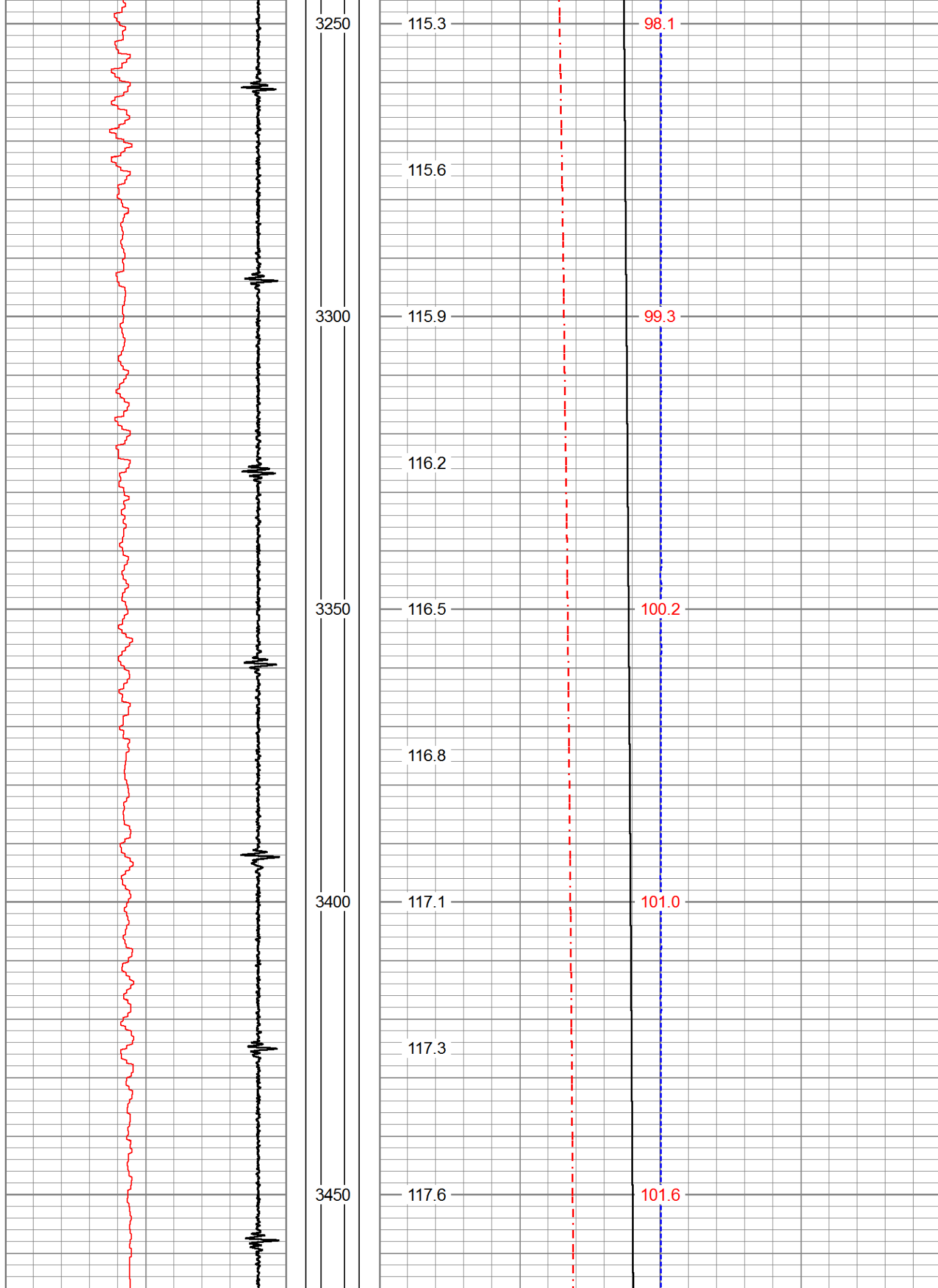


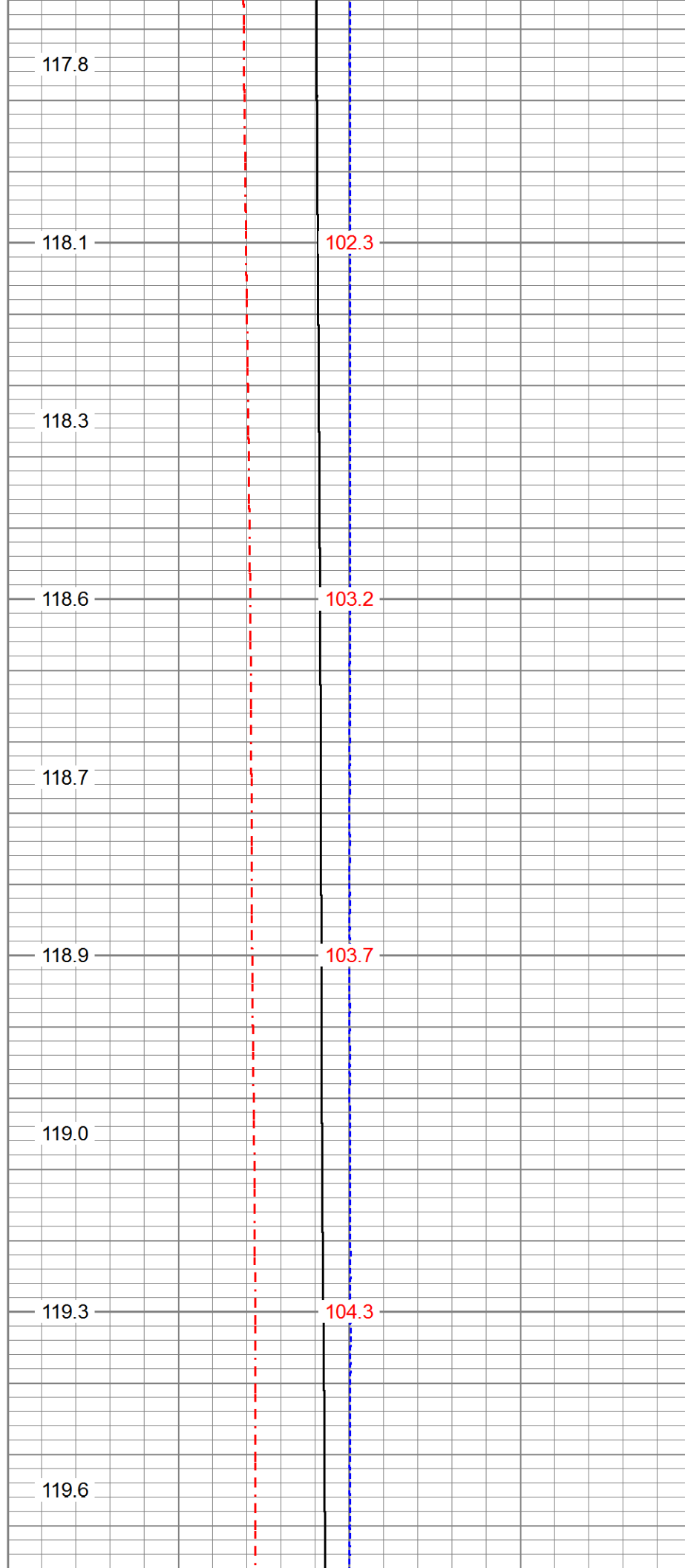
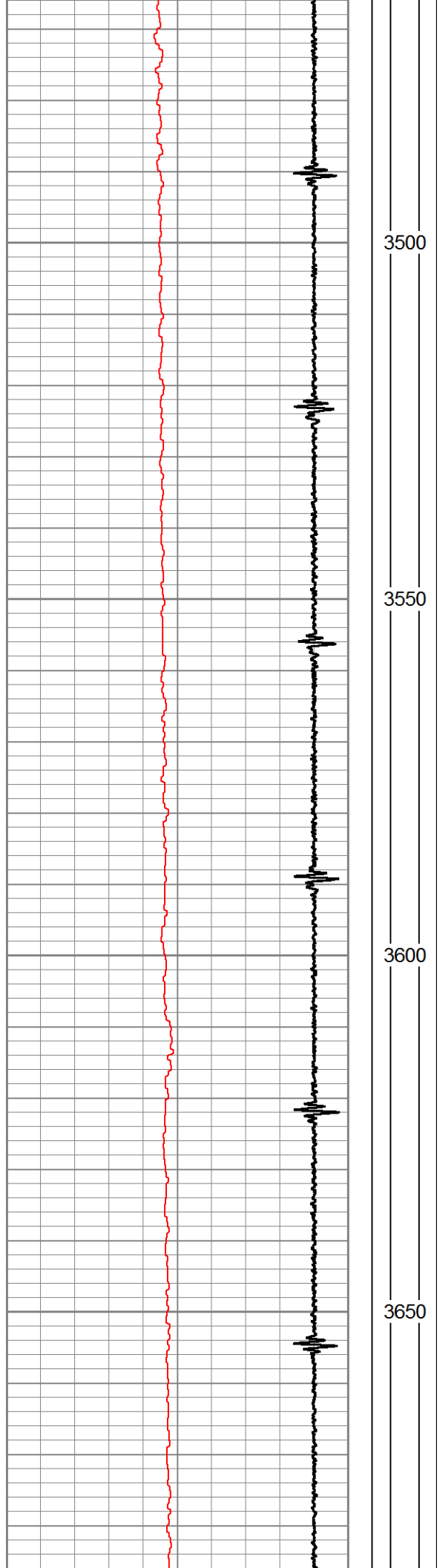


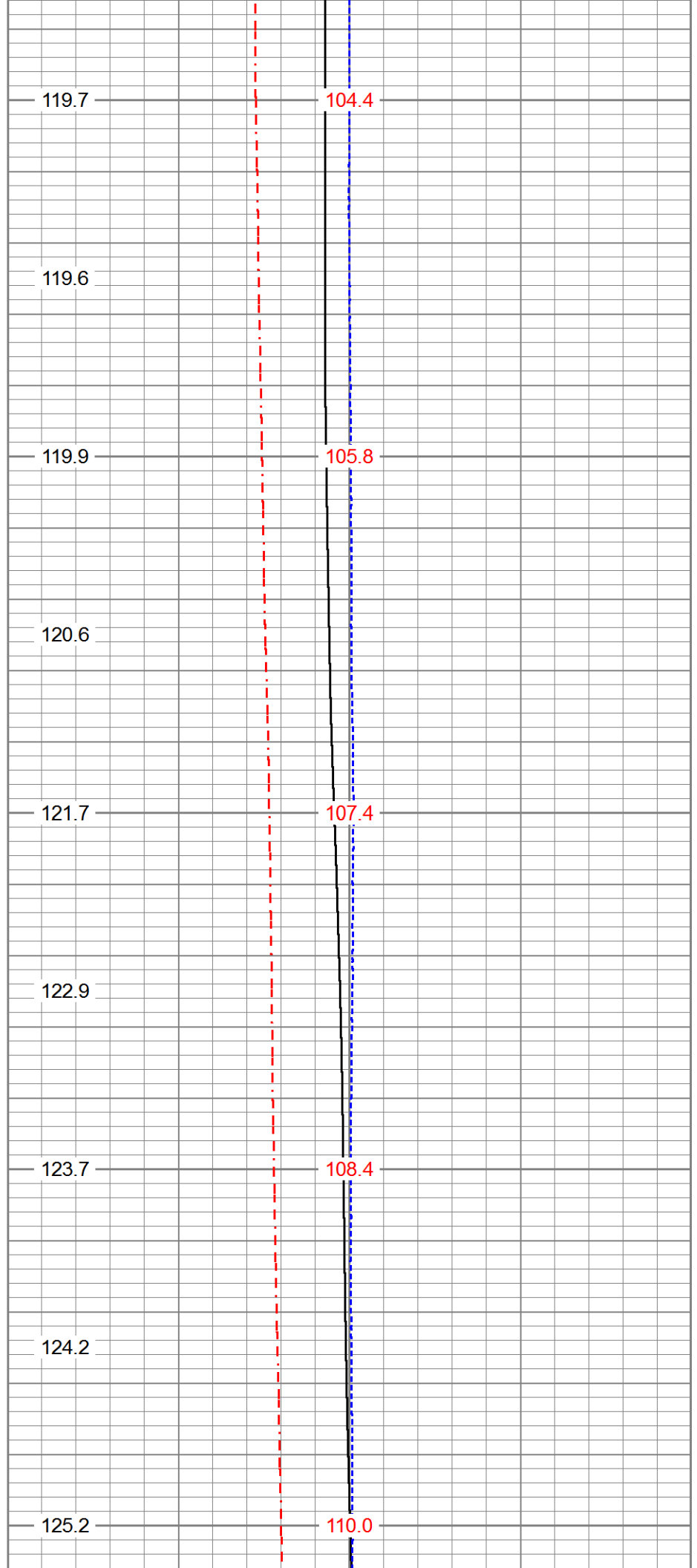
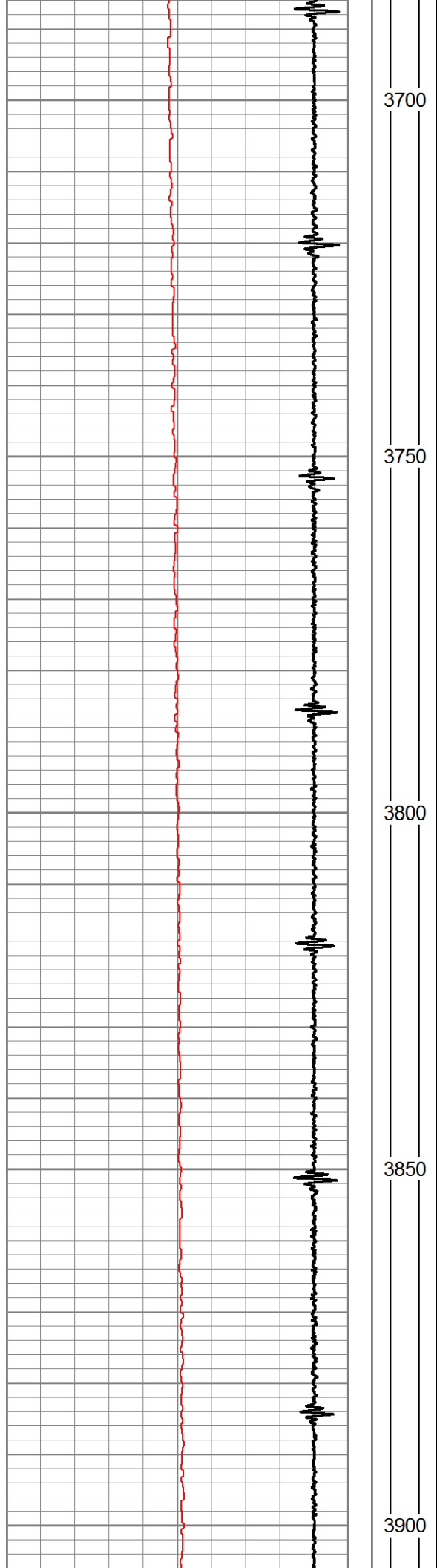


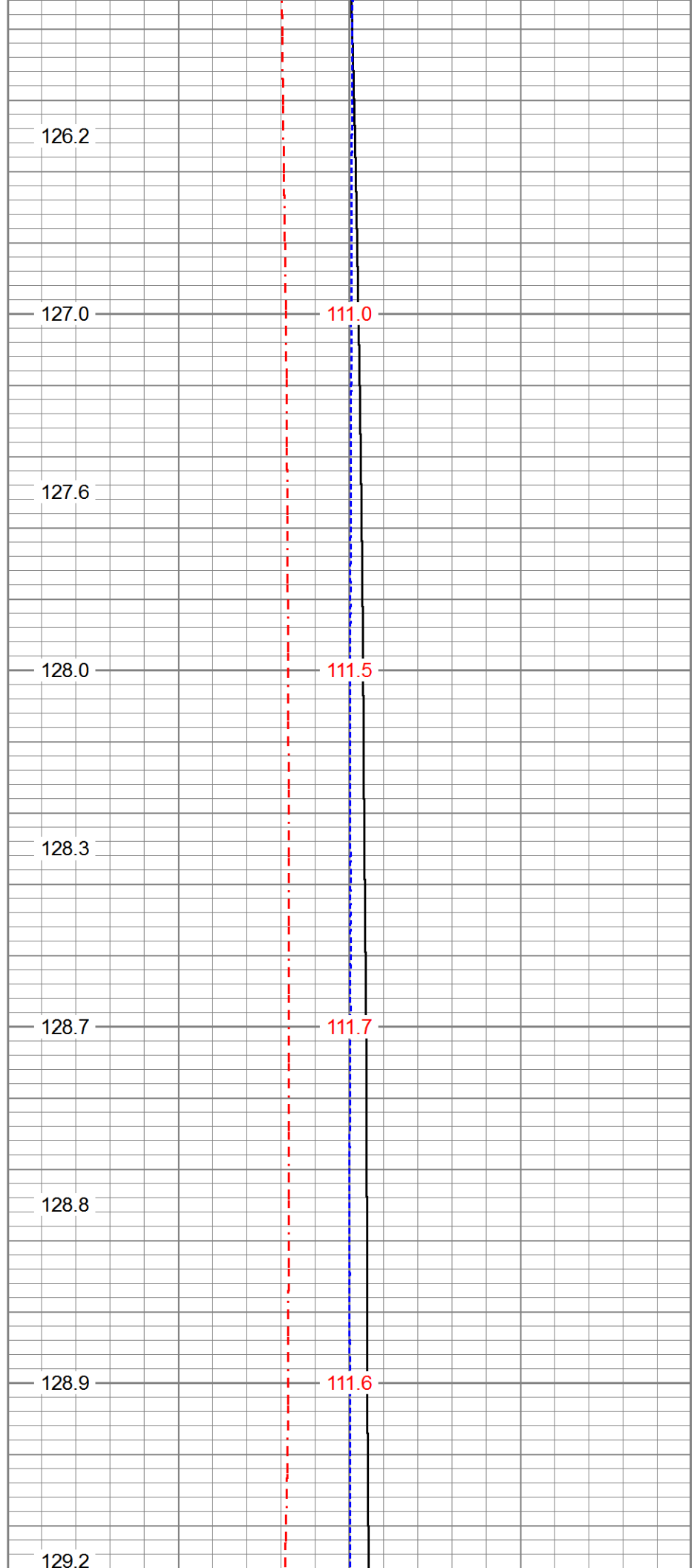
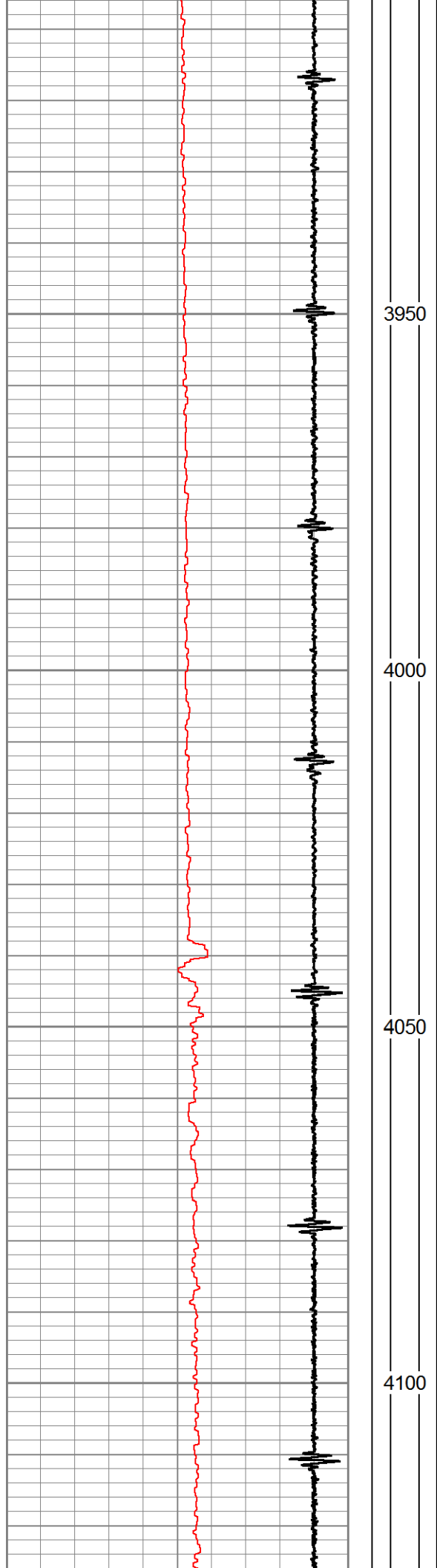


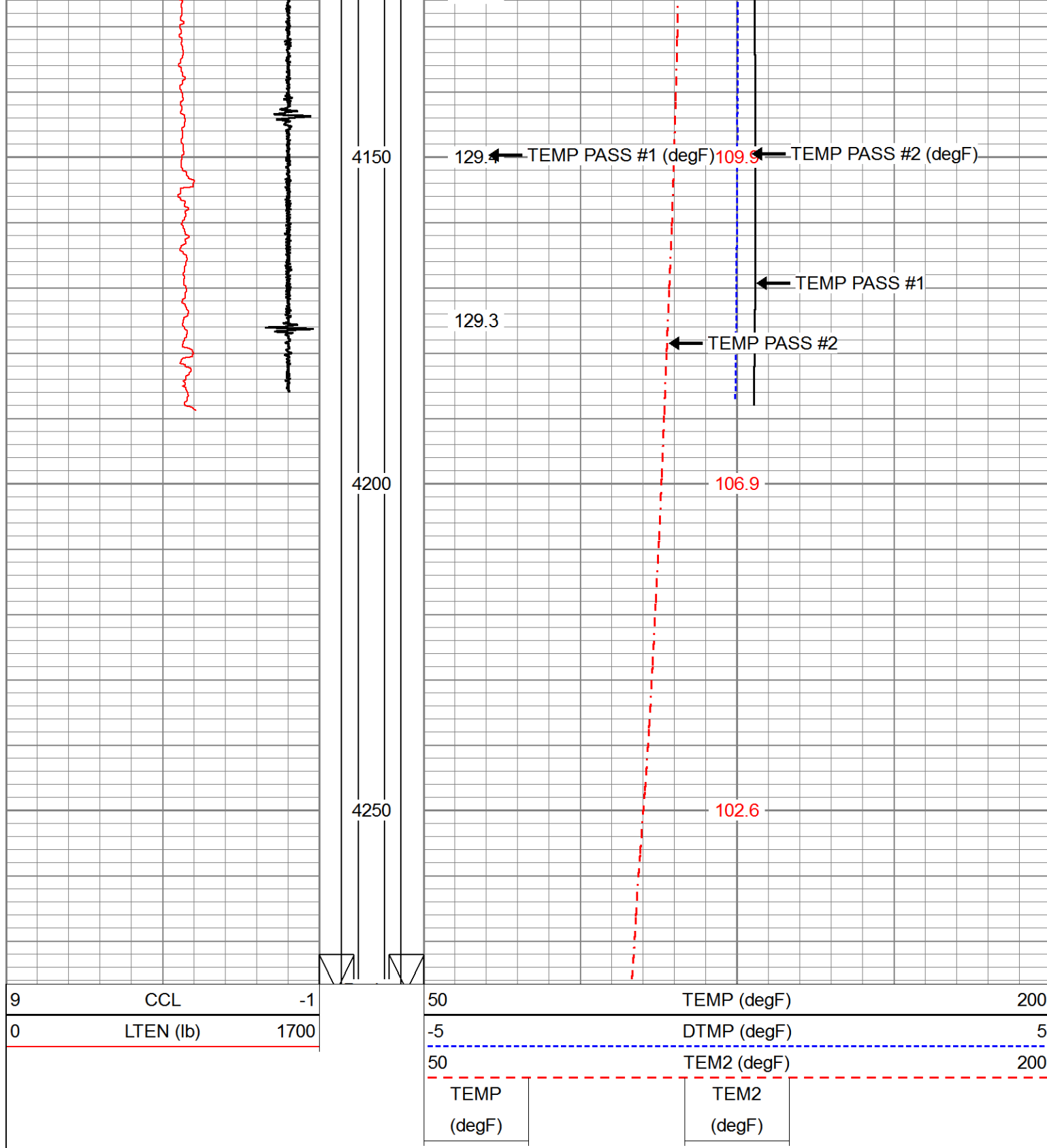




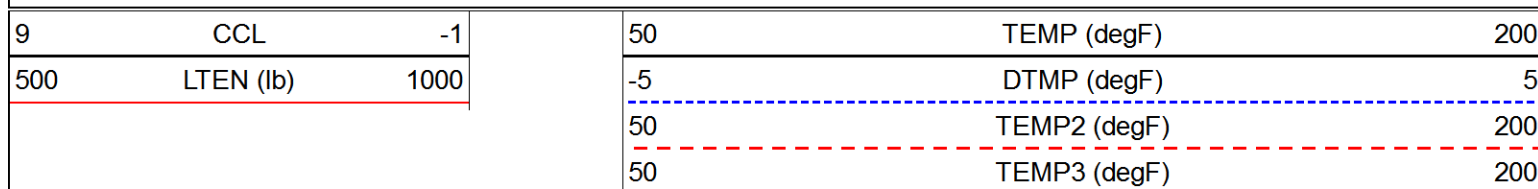


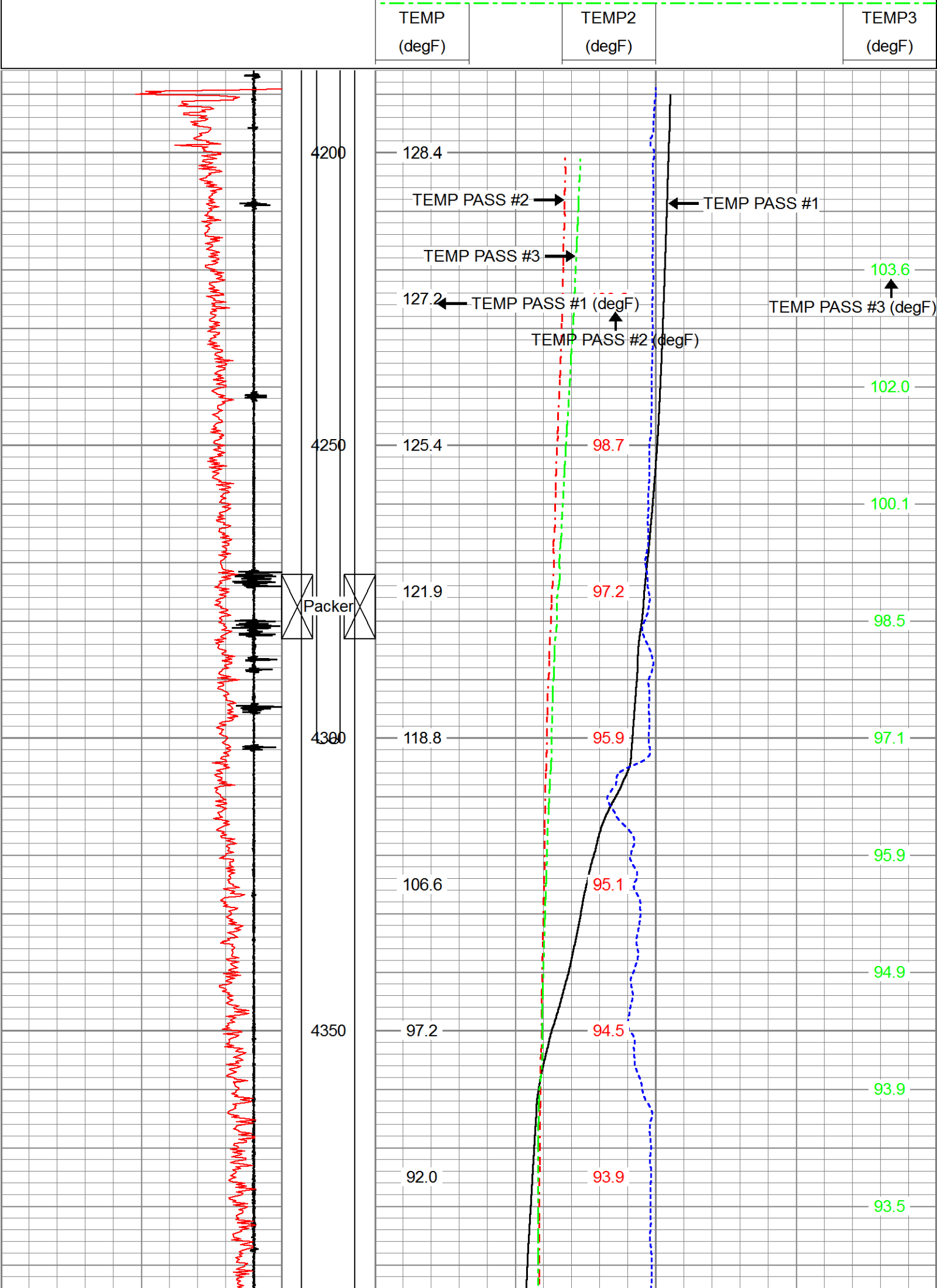


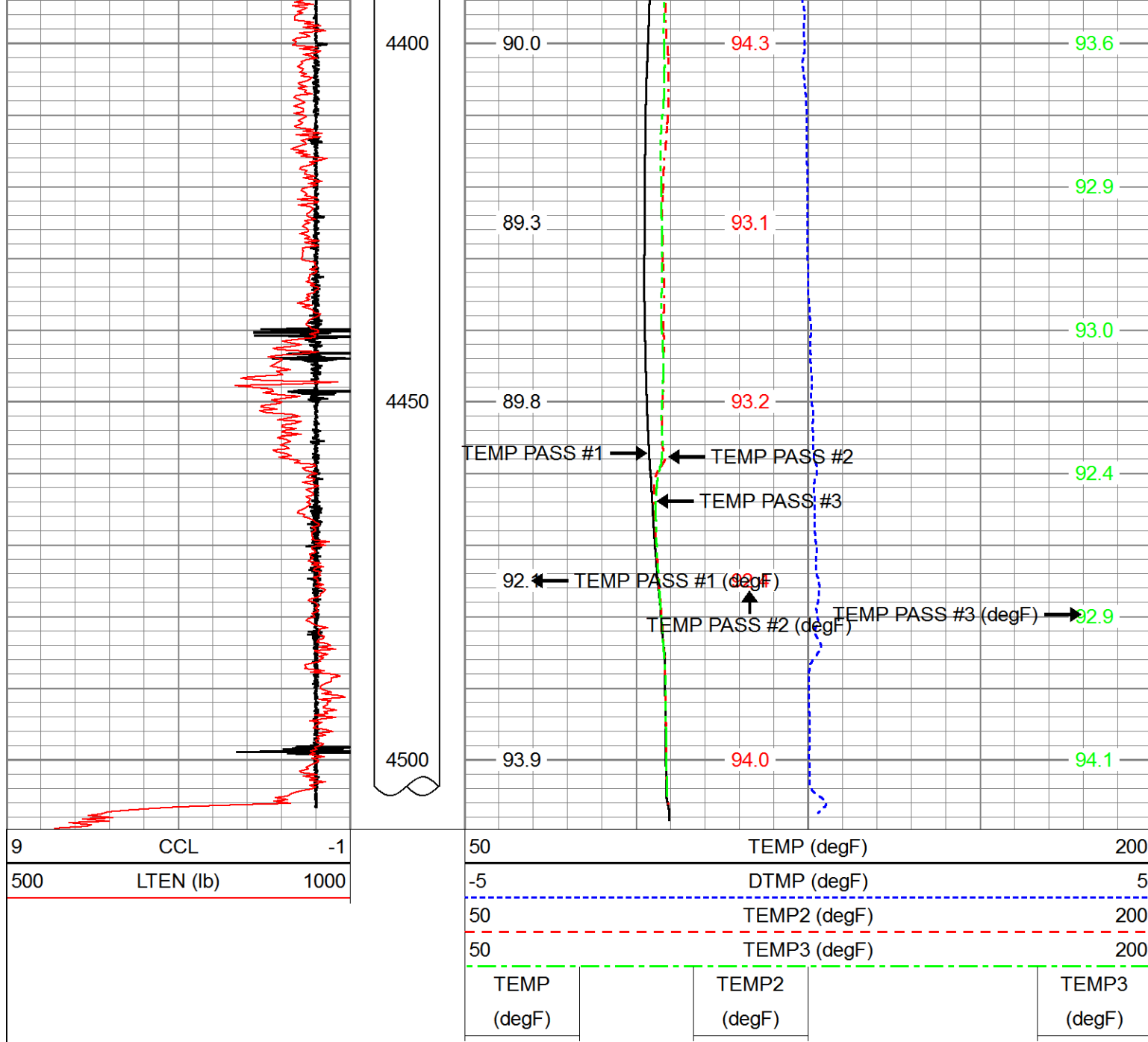




Database File merrionsunco#1swdtemp.db
Dataset Pathname pass2.B
Presentation Format temp
Dataset Creation Tue Jun 26 13:29:59 2018
Charted by Depth in Feet scaled 1:240







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
10

cps
cps

degF
degF



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OCT 25 2018 PM 01:58

MECHANICAL INTEGRITY TEST REPORT

(TA OR UIC)

Date of Test 10-3-18 Operator Agua Moss LLC API # 30-0 45-28653
Property Name Sunco Disposal Well # 1 Location: Unit 2 Sec 2 Twp 29 Rge 12

Land Type:

State
Federal
Private /
Indian

Well Type:

Water Injection
Salt Water Disposal /
Gas Injection
Producing Oil/Gas
Pressure observation

Temporarily Abandoned Well (Y/N): TA Expires:

Casing Pres. 800 Tbg. SI Pres. Max. Inj. Pres.
Bradenhead Pres. 0 Tbg. Inj. Pres.
Tubing Pres. 1300
Int. Casing Pres. N/A

Pressured annulus up to 1040 psi. for 30 mins. Test passed/failed

REMARKS:

Class I - MIT prior to start of injection for fall off
-test.
Bled casing to 0 prior to MIT
BH-O- during whole test

Approval comes from Santa Fe office

By [Signature] (Operator Representative) Witness [Signature] (NMOCD)

Manager
(Position)

Revised 02-11-02

40

35

PRINTED IN U.S.A.

30-045-28653

25

20

15

10

5

1800
1600
1400
1200
1000
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SW

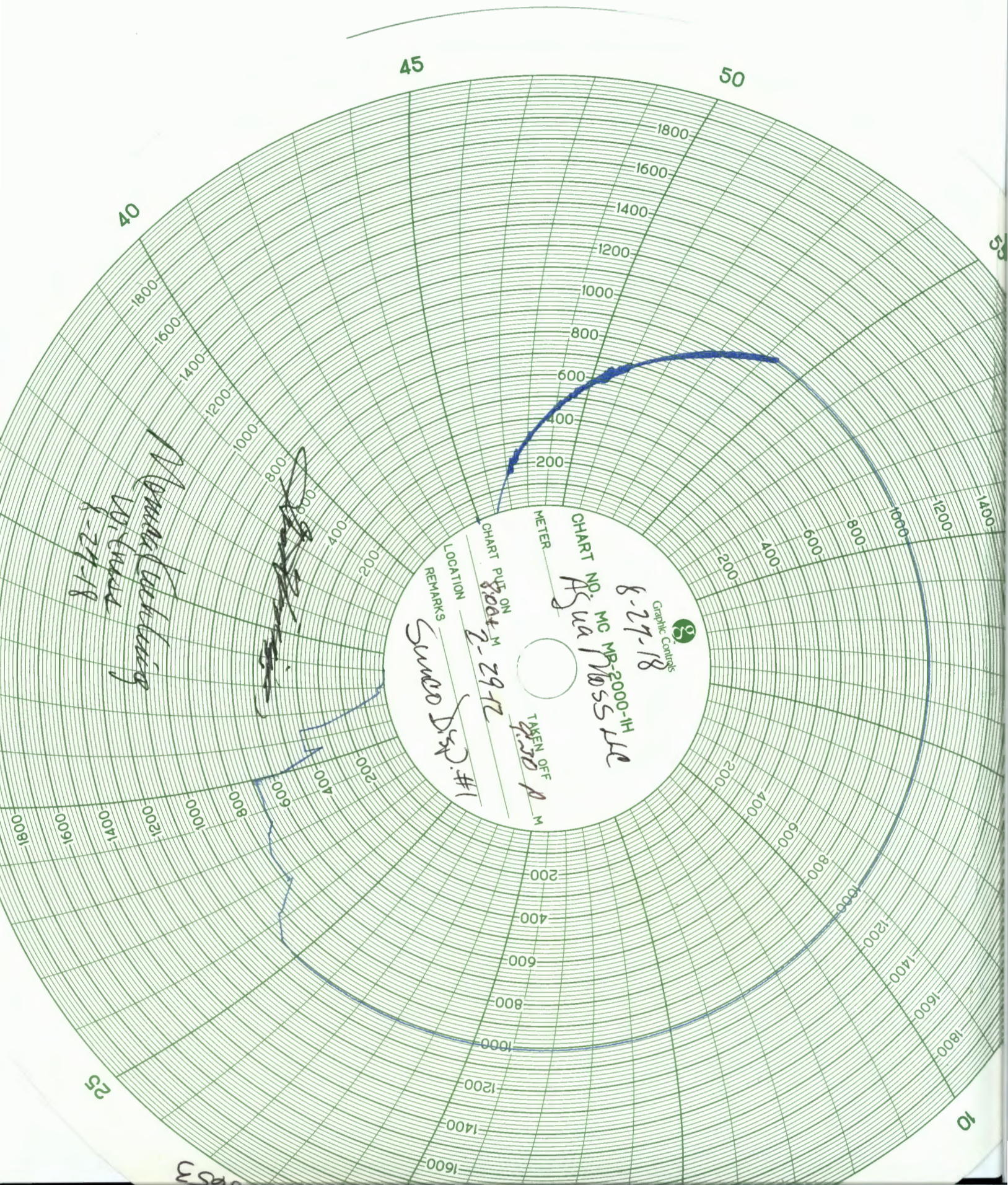
CHART NO. MC MP-2000-1H
Graphic Controls
METER
LOCATION
REMARKS
CHART CUT ON
10/3/18
8:01 AM

SW
10/3/18 8:54 AM
TAKEN OFF
2-29-12
MIT
SW

Wanna Building
Westress
Amold
10-3-18

SW

1800
1600
1400
1200
1000
800
600
400
200



45

50

40

ASua Moss LE
8-27-18

ASua Moss LE
8-27-18

CHART NO. 8-27-18
MC MB-2000-1H
ASua Moss LE
TAKEN OFF 4:30 P M
CHART PUT ON 8:04 M
LOCATION Suedo Div. #1
REMARKS

Graphic Controls

30

10

ASua Moss LE

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, July 26, 2018 3:08 PM
To: 'Philana Thompson'; Ryan Davis (rdavis@merrion.bz); Ryan Merrion (ryan@merrion.bz)
Cc: Sanchez, Daniel J., EMNRD; Goetze, Phillip, EMNRD; Griswold, Jim, EMNRD; Powell, Brandon, EMNRD; Kuehling, Monica, EMNRD
Subject: UICI-005 UIC Class I (NH) SUNCO Well No. 1 (API# 30-045-28653) Disposal Well Agua Moss, LLC MIT Chart 7-26-2018
Attachments: 2018-07-26 Sunco MIT Packet.pdf

Philana, et al.:

The New Mexico Oil Conservation Division (OCD) has completed its review of the above subject well Static Annulus MIT conducted this morning.

OCD hereby **approves** the MIT.

Agua Moss, LLC may **resume** operations at its earliest convenience.

Thank you for your cooperation in this matter.

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: Philana Thompson <pthompson@merrion.bz>
Sent: Thursday, July 26, 2018 11:30 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Subject: Fwd: Sunco MIT Chart

Philana Thompson
Merrion Oil & Gas
Sent from my iPhone

Begin forwarded message:

From: Shacie Murray <shacie@merrion.bz>
Date: July 26, 2018 at 11:14:54 AM MDT

To: Philana Thompson <pthompson@merrion.bz>

Subject: Sunco MIT Chart

Attached.

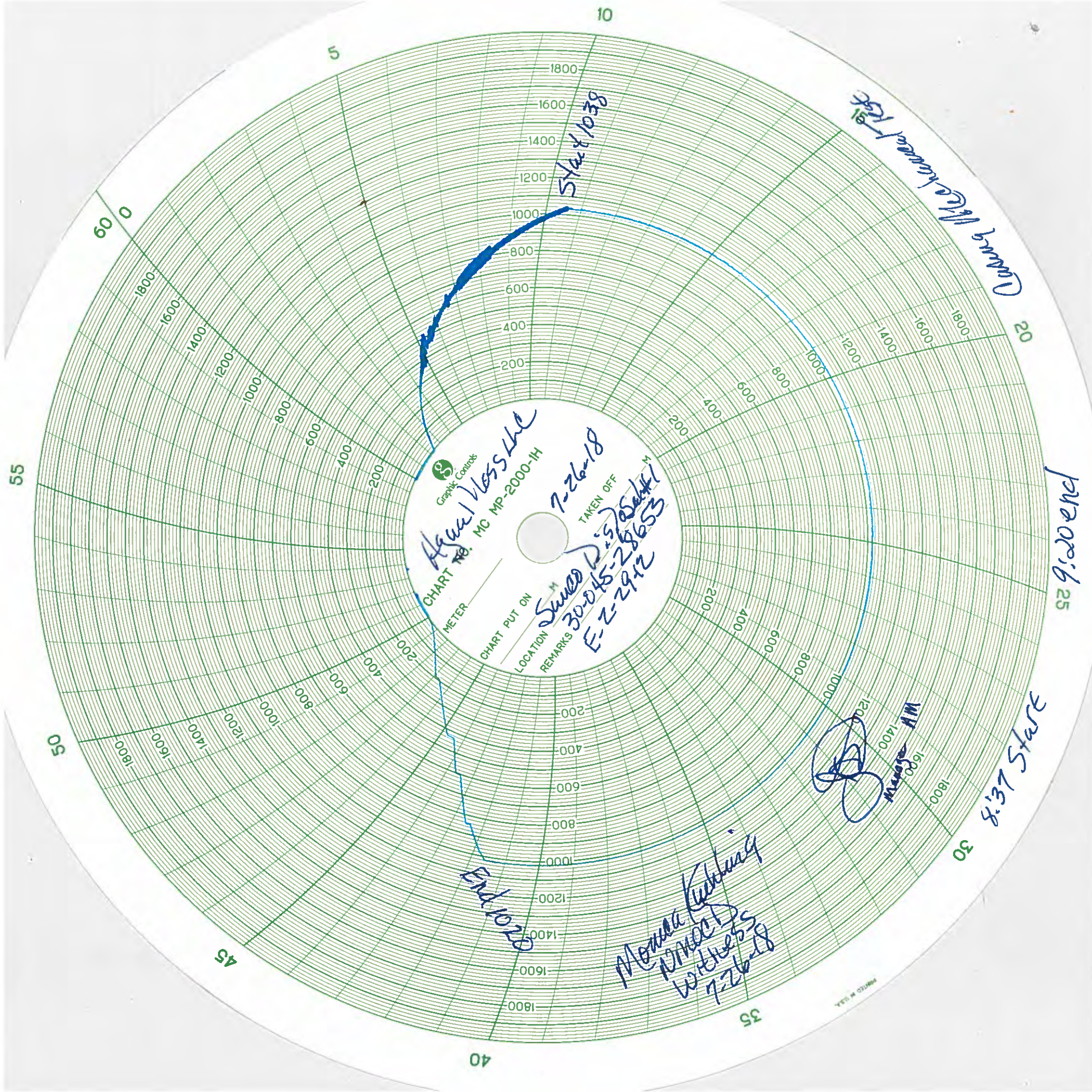
Shacie Murray

Merrion Oil & Gas

Production Engineer

(505) 330-7605

shacie@merrion.bz



JADE SALES & SERVICE, INC.

(505) 325-6173

CONTENT AND METER REPORT

GAS FROM _____ STA NO. _____

LEASE MERRION OIL & GAS SYSTEM _____

LEGAL DESCR. _____ GAS TO _____

DATE OF TEST 7/25/18 TIME OF TEST 0800 EFFECTIVE DATE 7/25/18

METER DATA			RECORDER DATA			AP CALIBRATION			
TYPE CONNECTION	FLG <input type="checkbox"/> O <input type="checkbox"/> I	PIPE <input type="checkbox"/> I	FLOW COMPUTER <input type="checkbox"/>			APP D W	ATMOS D W	FOUND	LEFT
METER TUBE SIZE	<u>▲</u>		RECORDER S/N OR MFG.	<u>BARTON</u>	<u>0</u>				<u>0</u>
ORIFICE INSTALLED	<u>▲</u>		DIFF <u>SN-202A-175391</u>	<u>400</u>					<u>400</u>
ORIFICE REMOVED	<u>▲</u>		STATIC RANGE	<u>2000 #</u>	<u>1000</u>				<u>1000</u>
ORIFICE S/N	<u>▲</u>		TEMP RANGE		<u>1600</u>				<u>1600</u>
AV DIFF			AV STATIC		<u>2000</u>				<u>2000</u>
SAMPLE TAKEN	YES <input type="checkbox"/> NO <input type="checkbox"/>		TYPE OF TEST	CHECK <input type="checkbox"/> SETTLE <input type="checkbox"/> ORIFICE <input type="checkbox"/>	<u>0</u>				<u>0</u>
TESTER <u>AARON ESTRADA</u>						SCH #	DP CALIBRATION		
							APP D W	FOUND	LEFT
WITNESS _____									
REMARKS —									
<u>BARTON - 1 - PEN - 2000 #</u>									
<u>RECORDER.</u>									
<u>TEST SOURCE: BETA</u>									
<u>0-3000 # SN: 3247007</u>									
<u>CERTIFICATION DATE: 3/26/18</u>									



Calibration Data

Range	: 0 to 3000 PSIG (HP Transducer)
Stated Accuracy	: +/- 0.025% of Full Scale

Standard	: PM600-A20M
Serial No.	: 3247007

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	0.00	0.0	Left, As Found	-0.4	0.4
2	3000.00	2999.6	Left, As Found	2999.2	3000.8
3	2700.00	2699.7	Left, As Found	2699.2	2700.8
4	2400.00	2399.7	Left, As Found	2399.2	2400.8
5	2100.00	2099.7	Left, As Found	2099.2	2100.8
6	1800.00	1799.9	Left, As Found	1799.2	1800.8
7	1500.00	1500.0	Left, As Found	1499.2	1500.8
8	1200.00	1199.9	Left, As Found	1199.2	1200.8
9	900.00	900.0	Left, As Found	899.2	900.8
10	600.00	600.0	Left, As Found	599.2	600.8
11	300.00	300.0	Left, As Found	299.2	300.8
12	0.00	0.0	Left, As Found	-0.4	0.4

Range	: 0 to 30 Volts DC
Stated Accuracy	: +/- 0.015% of Reading + 0.002V

Standard	: M3001
Serial No.	: 9499092

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	0.000	0.000	Left, As Found	-0.002	0.002
2	15.000	15.000	Left, As Found	14.996	15.004
3	30.000	30.000	Left, As Found	29.993	30.007

Range	: 4 to 20 mA DC Current
Stated Accuracy	: +/- 0.015% of Reading + 0.002mA

Standard	: M3001
Serial No.	: 9499092

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	4.000	FAILED	Left, As Found	3.997	4.003
2	12.000	FAILED	Left, As Found	11.996	12.004
3	20.000	FAILED	Left, As Found	19.995	20.005

Range	: 25° Fahrenheit to 200° Fahrenheit
Stated Accuracy	: +/- 0.2° F (0.1°C)

Standard	: RTD-100
Serial No.	: 2915

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	25.00	*24.71	25.05	24.80	25.20
2	100.00	*99.6	100.04	99.80	100.20
3	200.00	*199.45	200.03	199.80	200.20

* Indicates "Out of Tolerance"

MESA

MEASUREMENT

Certificate of Calibration

13197

Page 1 of 2

Customer Information

Jade Sales & Service
5240 Hwy 64
Farmington, NM 87401

Tech: Adrian Velarde
PO #: TBD
Account #: JSS-115

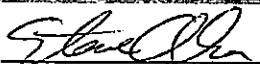
Instrument Identification

Description: Digital Pressure Calibrator
Manufacture: Beta Calibrators
Accuracy: Manufacturer's Specifications

Model: 321
Serial #: 9622076

Certification Information

Reason For Service: Maintenance of Accuracy
Type Of Calibration: Pneumatic Gauge
As Found Condition: Out of Tolerance (RTD)
As Left Condition: In Tolerance (All)
Procedure: Mfr's 100055-3

Attested By: 
Technician: Steve Olsen
Cal Date: 26-Mar-2018
Cal Due: 26-Mar-2019
Temperature: 23 +/- 3.0° C
Relative Humidity: 20% - 60%

Technician Remarks: Previous calibration by JM Test on 08/25/2015

This instrument has been calibrated using standards with accuracies traceable to the National Institute of Standards and Technology, derived from natural physical constants, derived from ratio measurements, or compared consensus standards.

MESA MEASUREMENT's calibrations, as applicable, are performed in compliance with the requirements of ANSI/NCCL Z540-1-1994, ISO 10012-1 & ISO/IEC 17025 Quality Standards.

The results contained herein relate only to the item calibrated. Calibration due dates appearing on the Certificate of Calibration and label are determined by the client for administrative purposes and do not imply continued conformance to specification.

Calibration Data

Range	: 0 to 800 In.H ₂ O @ 60° Fahrenheit
Stated Accuracy	: +/- 0.025% of Full Scale

Standard	: PM600-G200K
Serial No.:	3231005

Step	Reference's Indicated Value	As Found Calibrator's Reading	As Left Calibrator's Reading	Acceptance Minimum	Limits Maximum
1	0.000	0.00	0.00	-0.05	0.05
2	800.000	800.12	800.12	799.80	800.20
3	720.000	720.13	720.13	719.80	720.20
4	640.000	640.09	640.08	639.80	640.20
5	560.000	560.09	560.08	559.80	560.20
6	480.000	480.06	480.06	479.80	480.20
7	400.000	400.06	400.05	399.80	400.20
8	320.000	320.04	320.03	319.80	320.20
9	240.000	240.02	240.01	239.80	240.20
10	160.000	160.02	160.00	159.80	160.20
11	80.000	80.02	80.00	79.80	80.20
12	0.000	0.04	0.02	-0.05	0.05

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, July 12, 2018 4:58 PM
To: Ryan Merrion (ryan@merrion.bz); Ryan Davis (rdavis@merrion.bz); 'pthompson@merrion.bz'
Cc: Sanchez, Daniel J., EMNRD; Griswold, Jim, EMNRD; Goetze, Phillip, EMNRD; Powell, Brandon, EMNRD; Kuehling, Monica, EMNRD
Subject: UIC Class I (NH) SUNCO Well No. 1 (API# 30-045-28653) Disposal Well (UICI-005) C-103 Form Dated by Operator 6/14/2018 and Approved by OCD with Conditions June 21, 2018

Ladies and Gentlemen:

The New Mexico Oil Conservation Division (OCD) has received and reviewed all requested information associated with the above subject temperature survey run by Blue Jet, Inc. on June 26, 2018.

OCD concurs with Merrion Oil & Gas (Operator) and Blue Jet, Inc.'s Temperature Survey (survey) findings and conclusions, which confirm fluid injection is into the Pt. Lookout Formation. The survey did not detect any anomalous temperature fluxes above the injection zone beyond an established temperature gradient during four temperature survey runs.

OCD hereby directs the Operator to comply with the remainder of the OCD approved C-103 Form with Conditions from June 21, 2018.

Please contact Monica Kuehling (Aztec District Office) to schedule the witnessing of the first and consecutive (contingent of availability) Annulus Pressure Tests (30 min.) under static well conditions. Monica will communicate on the chart recorder (include copy of chart recorder calibration sheet with calibration performed less than 3 months from date of MIT), clock speed (function of chart time), spring (spring weight is a function of test pressure), and chart (4-hr. or less) with chart test information (i.e., test type, date, start pressure, end pressure, and witness signatures).

Upon conclusion of the MIT, and within 5 business days, the original MIT chart shall be sent to Carl Chavez (CarlJ.Chavez@state.nm.us) in Santa Fe with a copy to OCD Aztec in order for OCD Santa Fe to issue the final "pass/fail" (Generally +/-10% Pressure Differential) determination.

OCD thanks everyone involved for their cooperation and professionalism in this matter.

Please contact me if you have questions.

Respectfully,

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: Tuesday, July 10, 2018 3:42 PM

To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>

Subject: Fwd: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

Ryan Merrion

Production Engineer



ryan@merrion.bz

(303) 653-2231

----- Forwarded message -----

From: Danny Seip <dseip@bluejetinc.com>

Date: Tue, Jul 3, 2018 at 12:58 PM

Subject: RE: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

To: Ryan Merrion <ryan@merrion.bz>, Ryan Davis <rdavis@merrion.bz>, daniel.sanchez@state.nm.us, Jim.Griswold@state.nm.us, Phillip.Goetze@state.nm.us, Jeff Davis <jdaguamoss@hotmail.com>, Philana Thompson <pthompson@merrion.bz>, Shacie Murray <shacie@merrion.bz>, charlie.perrin@state.nm.us

Cc: dseip@bluejetinc.com

Hello All,

06/26/2018,

RU Wireline, Crane and Grease injection system- Tubing: 1500 psig. Casing: 850 psig. RIH will 1-7/16" Digital Temp tool and CCL logging from 700' to T.D. (4509') BASE TEMP LOG. The base log showed a natural gradient from 700' to the packer. Just below the packer a significant decrease in temp through the zone of injection. Temp tool was then placed at 4200' while 100 bbls of fluid was pumped waiting for 1:20 minutes after pumping the 1st down pass (TEMP PASS 1) was logged, 4200-4509' recording lower temperatures from 4200- 4509 approximately 29 degrees. After a down time of 30 minutes the 2nd down pass (TEMP PASS 2) was recorded from 4200-4509, at 4200 the temperature had increased about 4 degrees from pass 1 at 4270' the temperatures of both pass we the same temperature indicating fluid entry into the zone of interest due to the slow recovery of temperature over time. we then logged from 4509' to 65' confirming after a time of 2-1/2 hrs the all temperature's above the Pt. Lookout had return to natural gradient.

With all of this information at hand it definitely confirms fluid injection into the Pt. Lookout formation.

Thank you,

Danny L. Seip

President / CEO

Blue Jet, Inc.

[700 East Murray Dr.](#)

[Farmington, New Mexico, 87401](#)

Cell: 505-320-0172

Off: 505-325-5584

Email: dseip@bluejetinc.com

From: Ryan Merrion [mailto:ryan@merrion.bz]

Sent: Tuesday, July 03, 2018 12:08 PM

To: Danny Seip

Subject: Fwd: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

Danny,

As per the NMOCD's request, can you please provide your observations and conclusions for the Sunco 1 temperature survey.

Thanks,

Ryan Merrion

Production Engineer



ryan@merrion.bz

(303) 653-2231

----- Forwarded message -----

From: **Chavez, Carl J, EMNRD** <CarlJ.Chavez@state.nm.us>

Date: Tue, Jul 3, 2018 at 11:58 AM

Subject: RE: Agua Moss Sunco Well Mtg.(UICI-5) C-103 Form Dated by Operator 6/14/2018

To: Ryan Merrion <ryan@merrion.bz>

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>

Ryan, et al.:

The New Mexico Oil Conservation Division UIC Director Daniel Sanchez is requiring a third-party review of the temperature log with observations with conclusions by Blue Jet™.

Please submit at your earliest convenience.

Thank you for your cooperation in this matter.

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 Merrion <ryan@merrion.bz>

Sent: Tuesday, July 3, 2018 11:45 AM

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

Please see the attached logs which show the temperature survey above 700'.

Thanks,

Ryan Merrion

Production Engineer



ryan@merrion.bz

(303) 653-2231

On Wed, Jun 27, 2018 at 4:01 PM, Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us> wrote:

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



ryan@merrion.bz

(303) 653-2231



Virus-free. www.avg.com



**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	
Permanent Datum		1595 FNL & 1005 FWL	
Log Measured From		SEC 2 TWP 29N RGE 12W	
Drilling Measured From		G.L. Elevation 5859	
Other Services		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		H2O	
Type Fluid		H2O	
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	
Run Number		ONE	
Bit		12.25	
From		0	
To		235	
Size		235	
Weight		4760	
From			
To			
Casing Record		Size	
Surface String		8.625	
Prot. String		5.5	
Production String			
Liner			

<<< Fold Here >>>

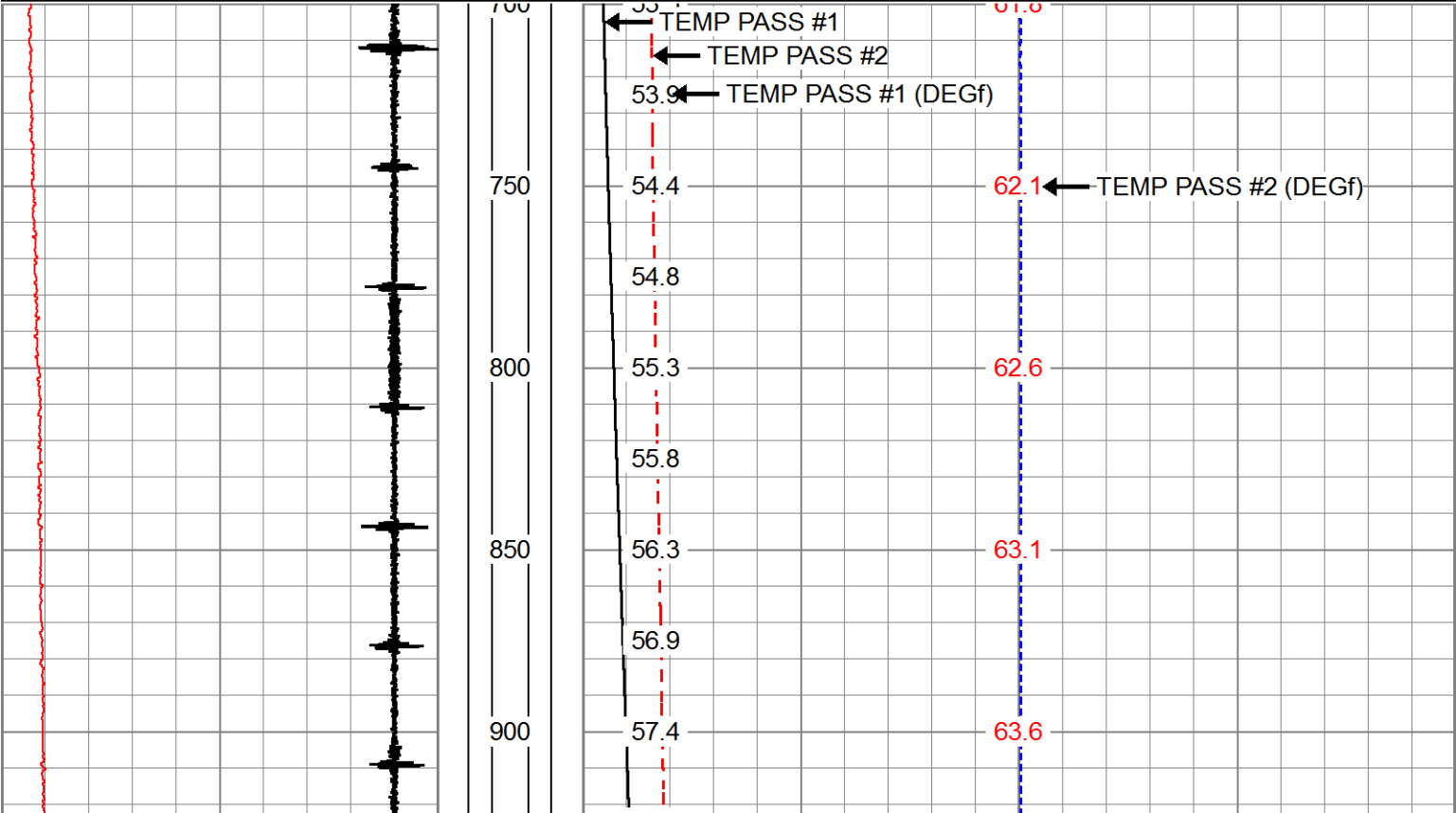
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

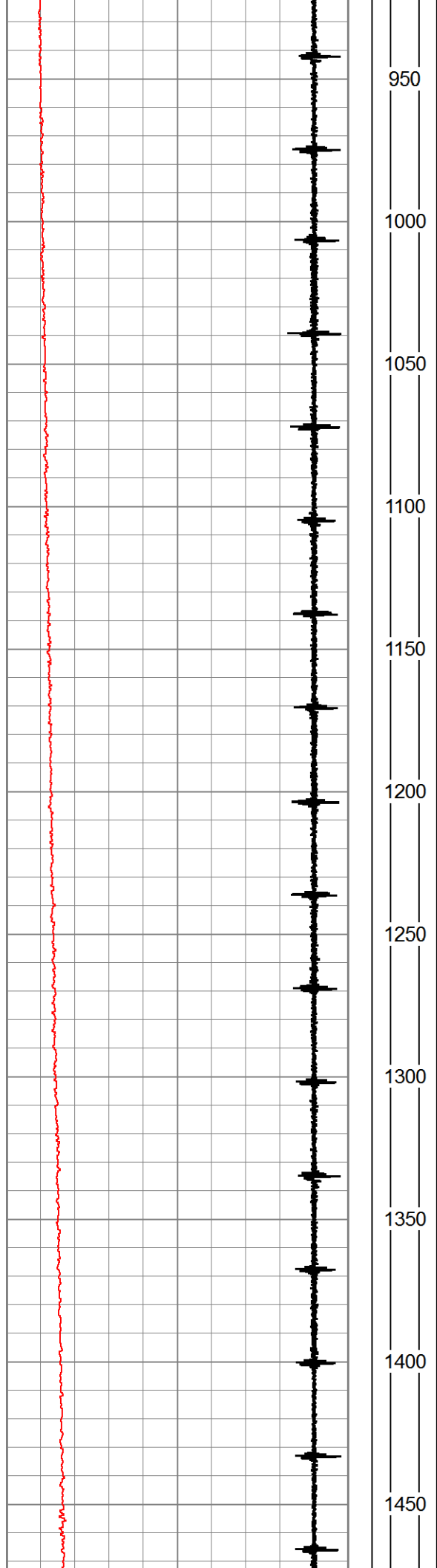
Comments

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

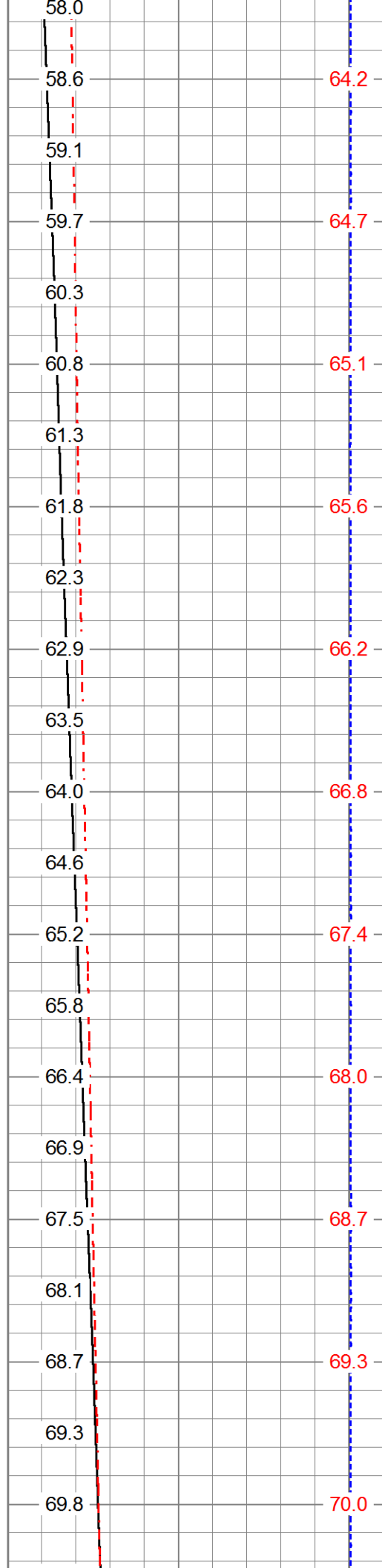
				1 11/16" Logging CCL			
				TEMP-Comprobe (FW1302-005) Comprobe Temperature Tool	2.30	1.44	4.00
TEMP	0.17						
		Dataset: merrionsunco#1swdtemp.db: field/well/run1/pass2.C Total length: 3.65 ft Total weight: 14.00 lb O.D.: 1.69 in					

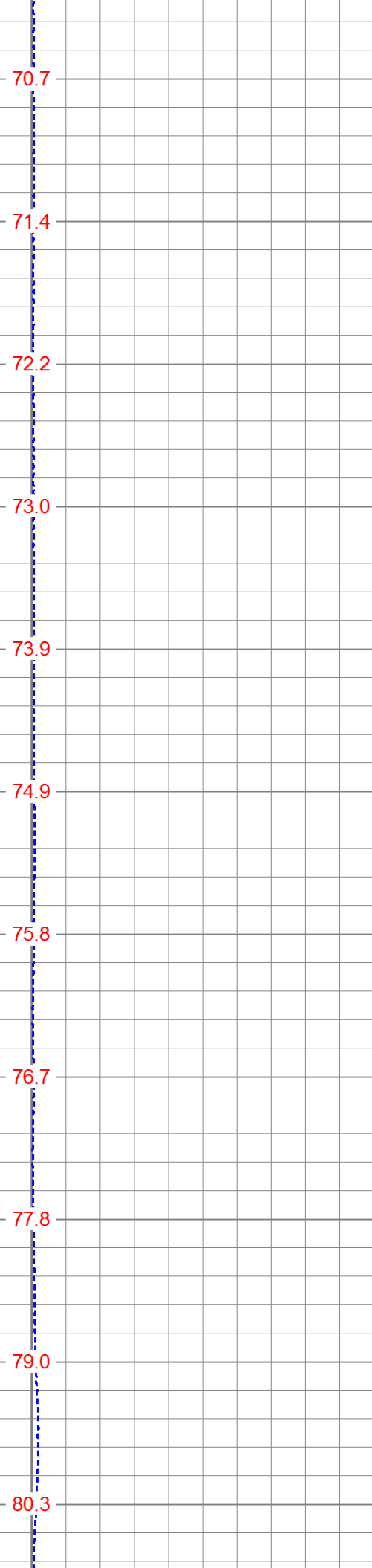
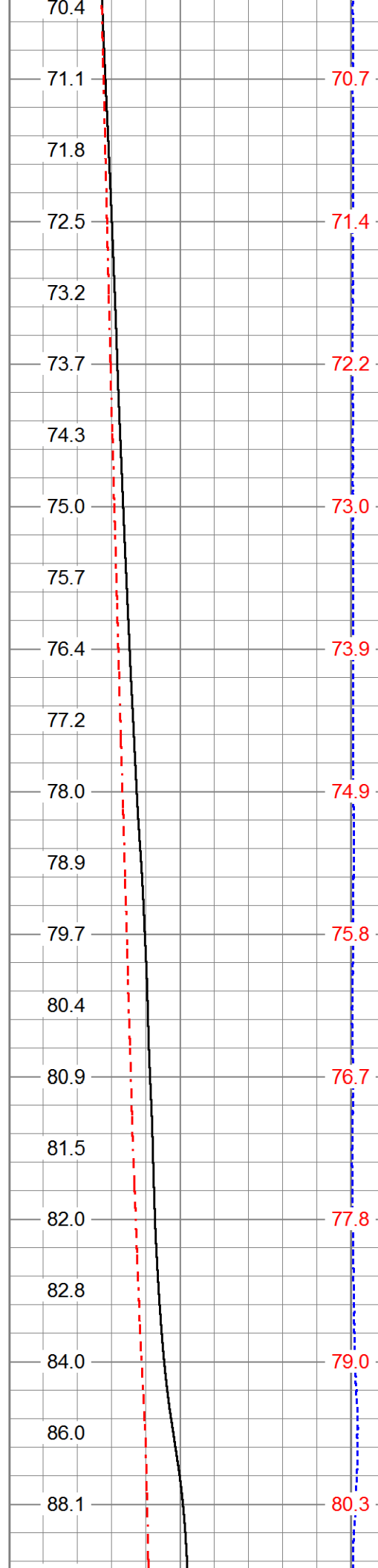
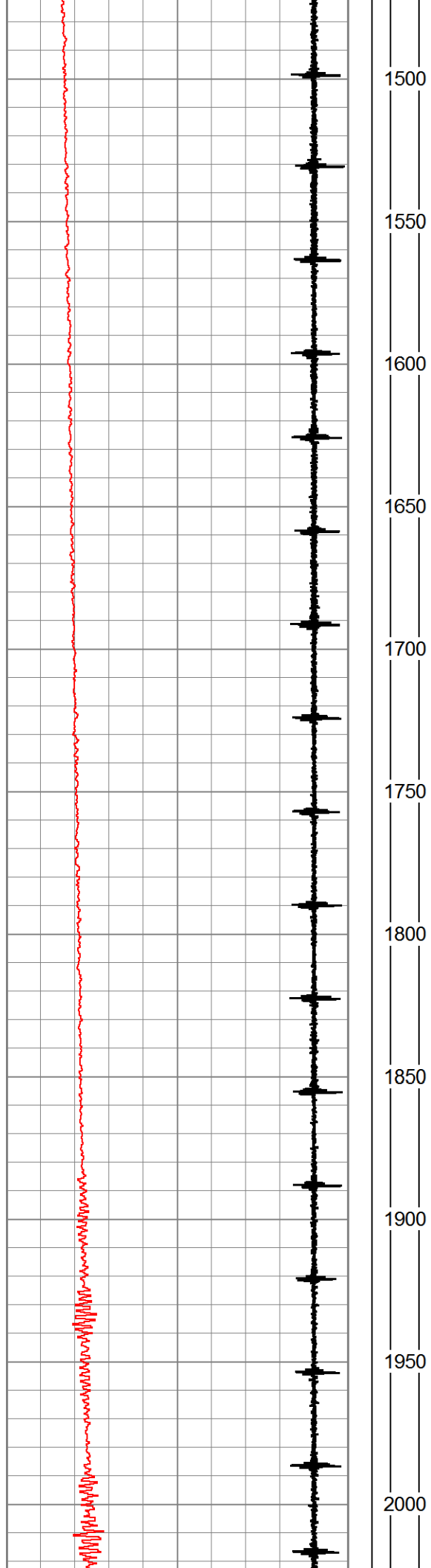
Database File		merrionsunco#1swdtemp.db				
Dataset Pathname		pass2.C				
Presentation Format		temp				
Dataset Creation		Tue Jun 26 13:38:22 2018				
Charted by		Depth in Feet scaled 1:600				
9	CCL	-1	50	TEMP (degF)		200
0	LTEN (lb)	1700	-5	DTMP (degF)		5
			50	TEM2 (degF)		200
			TEMP		TEM2	
			(degF)		(degF)	

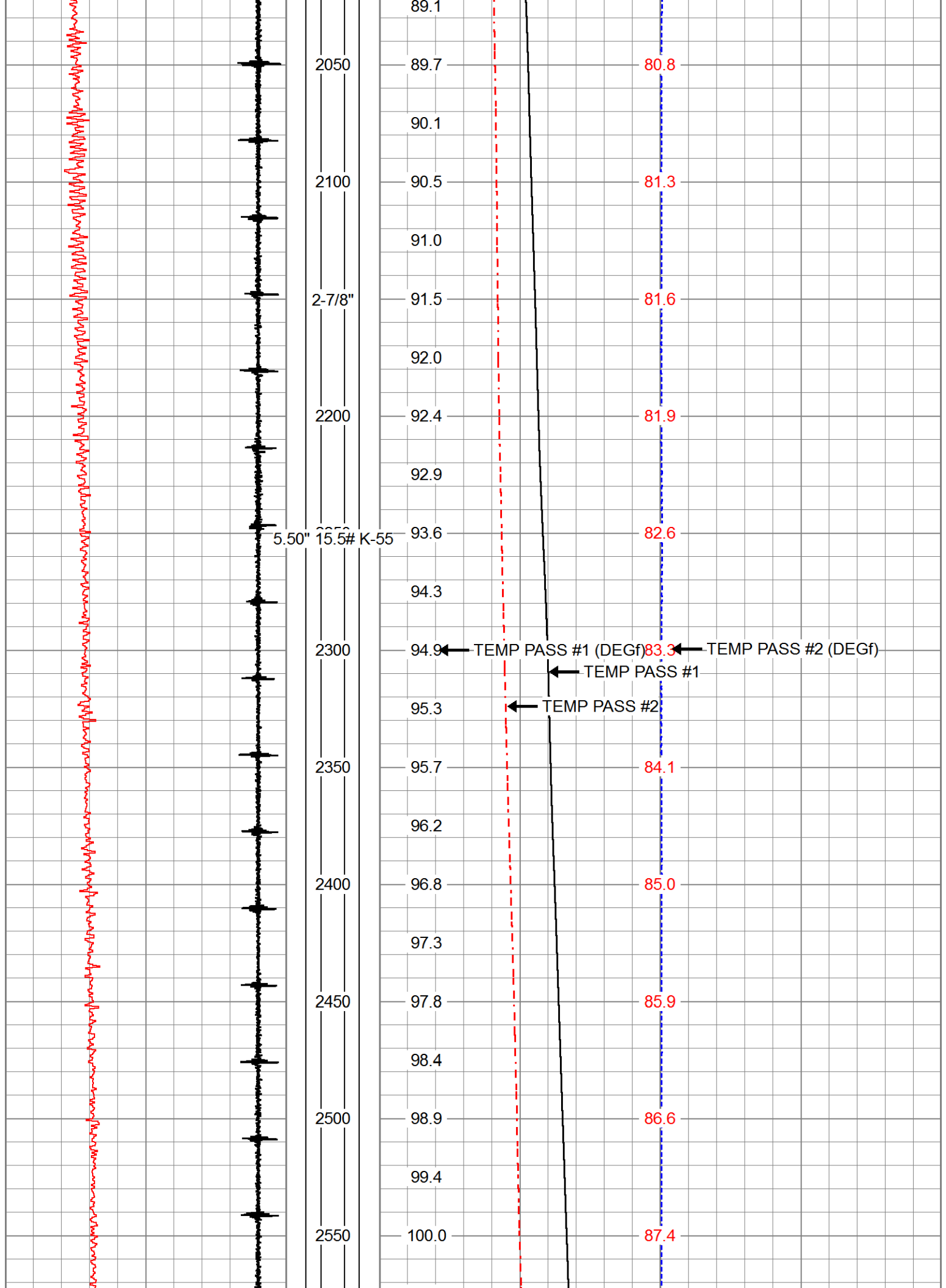


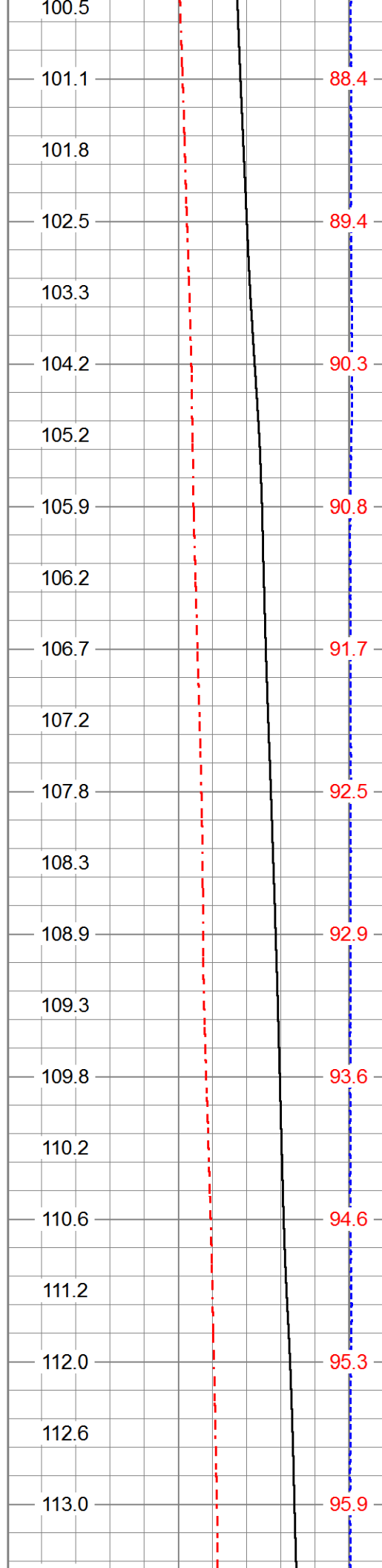
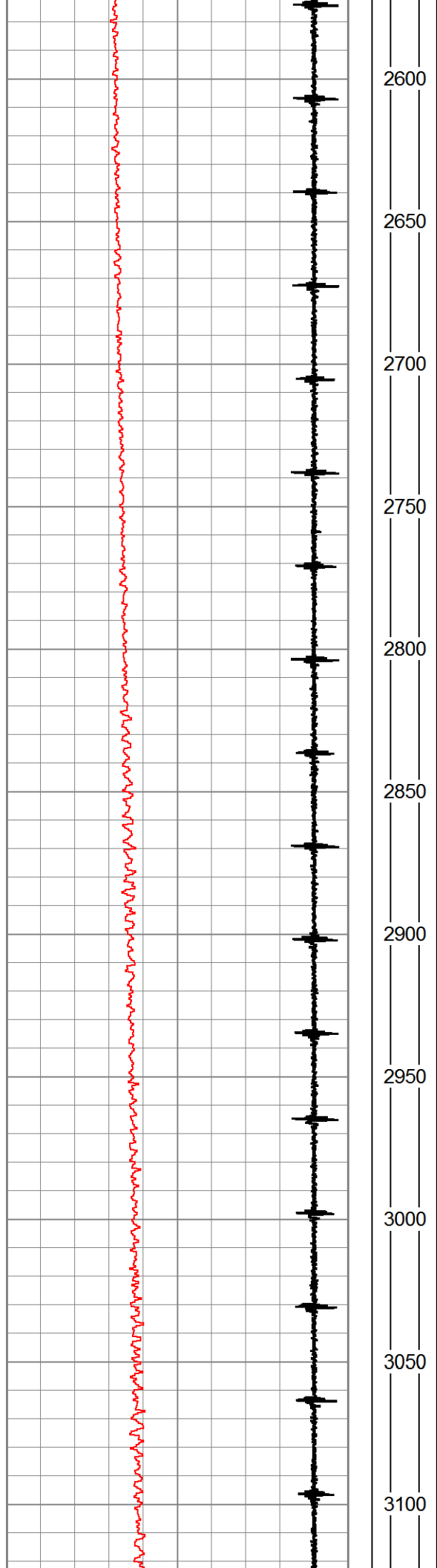


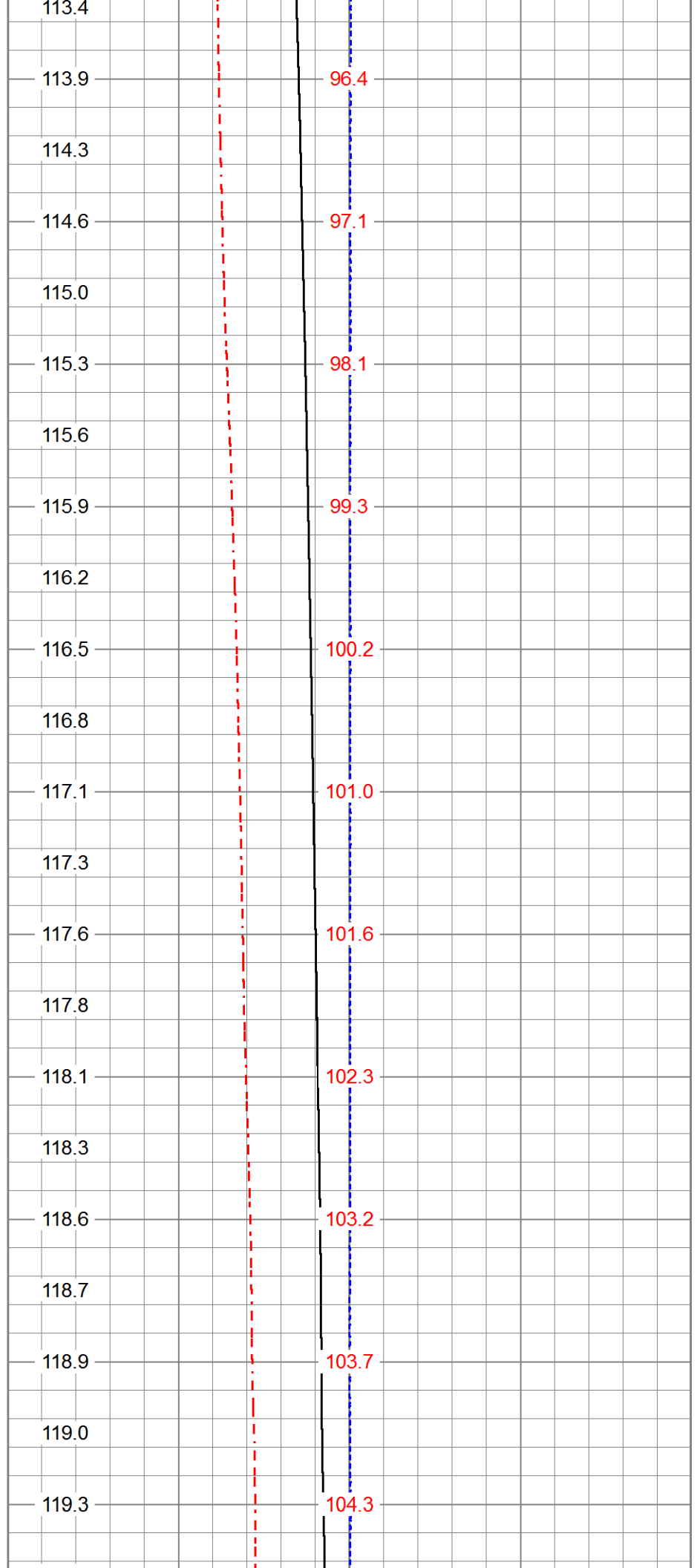
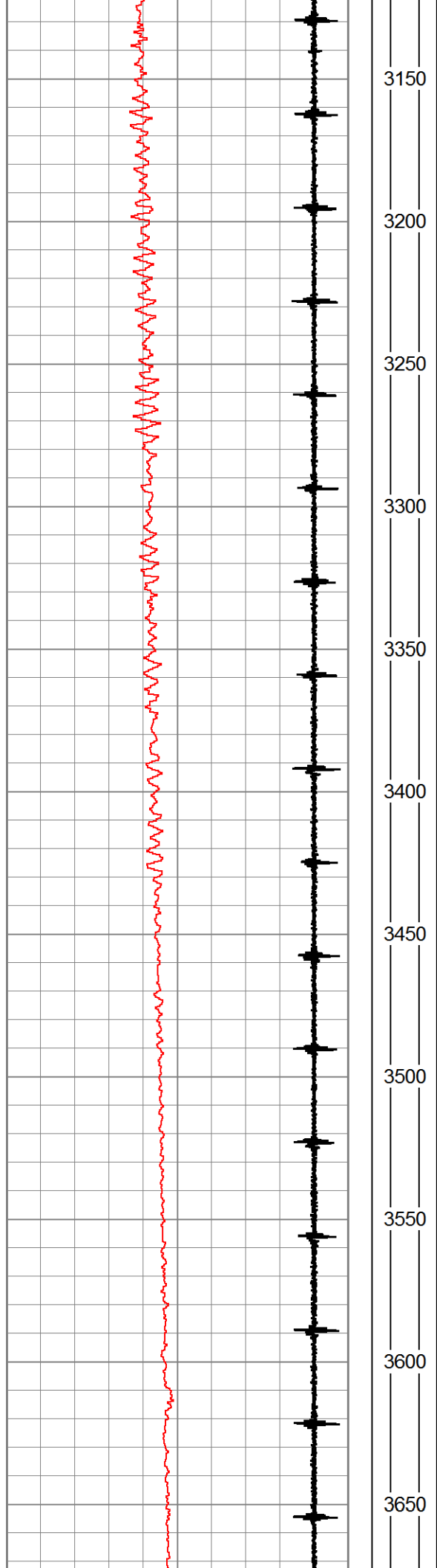
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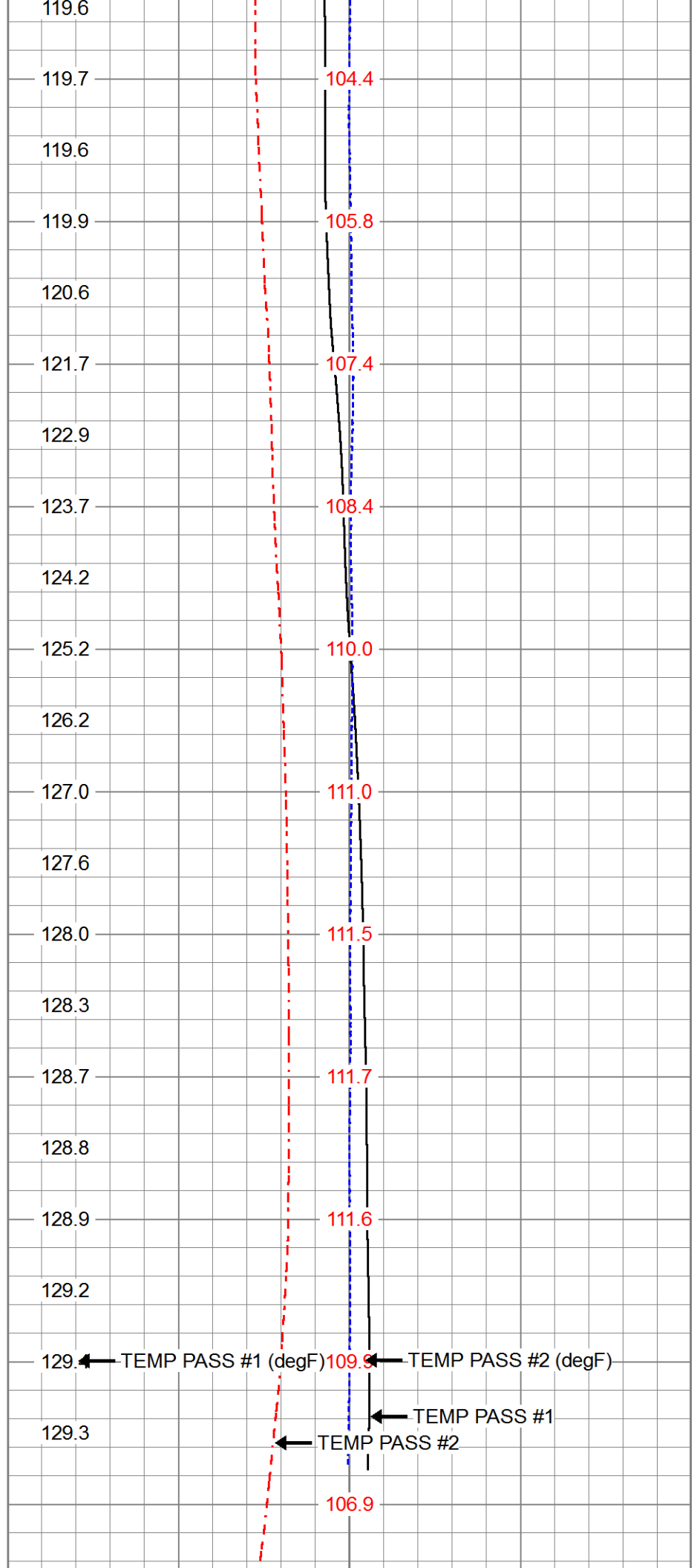
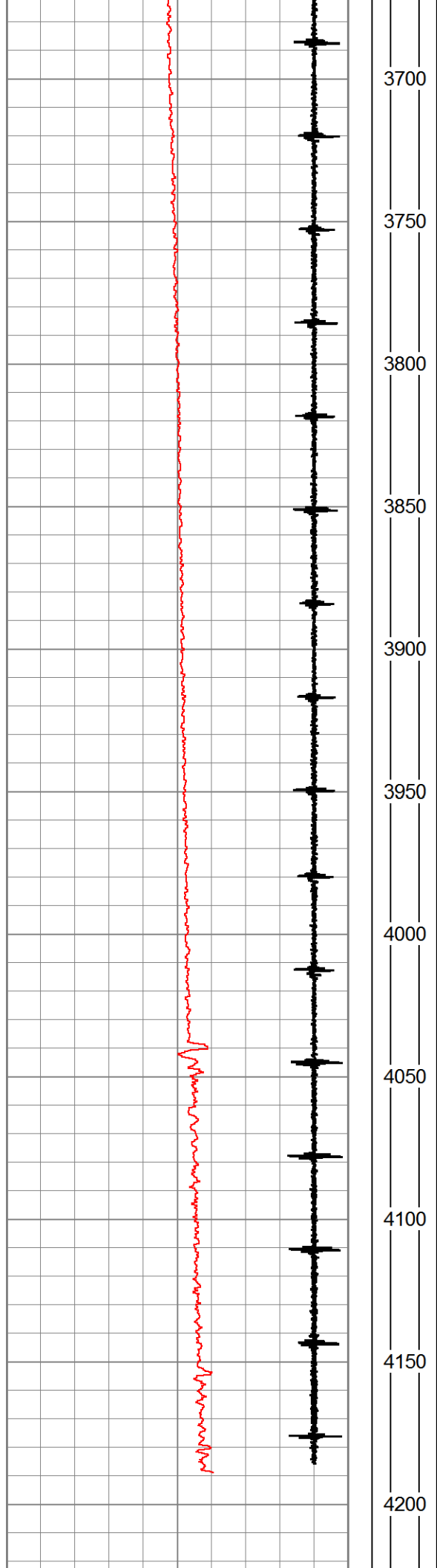


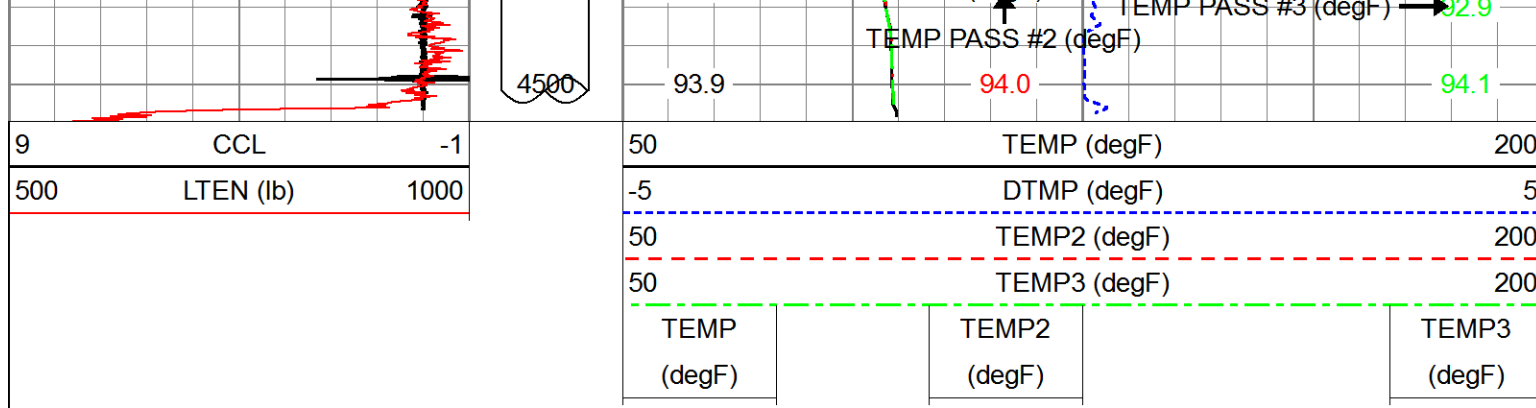




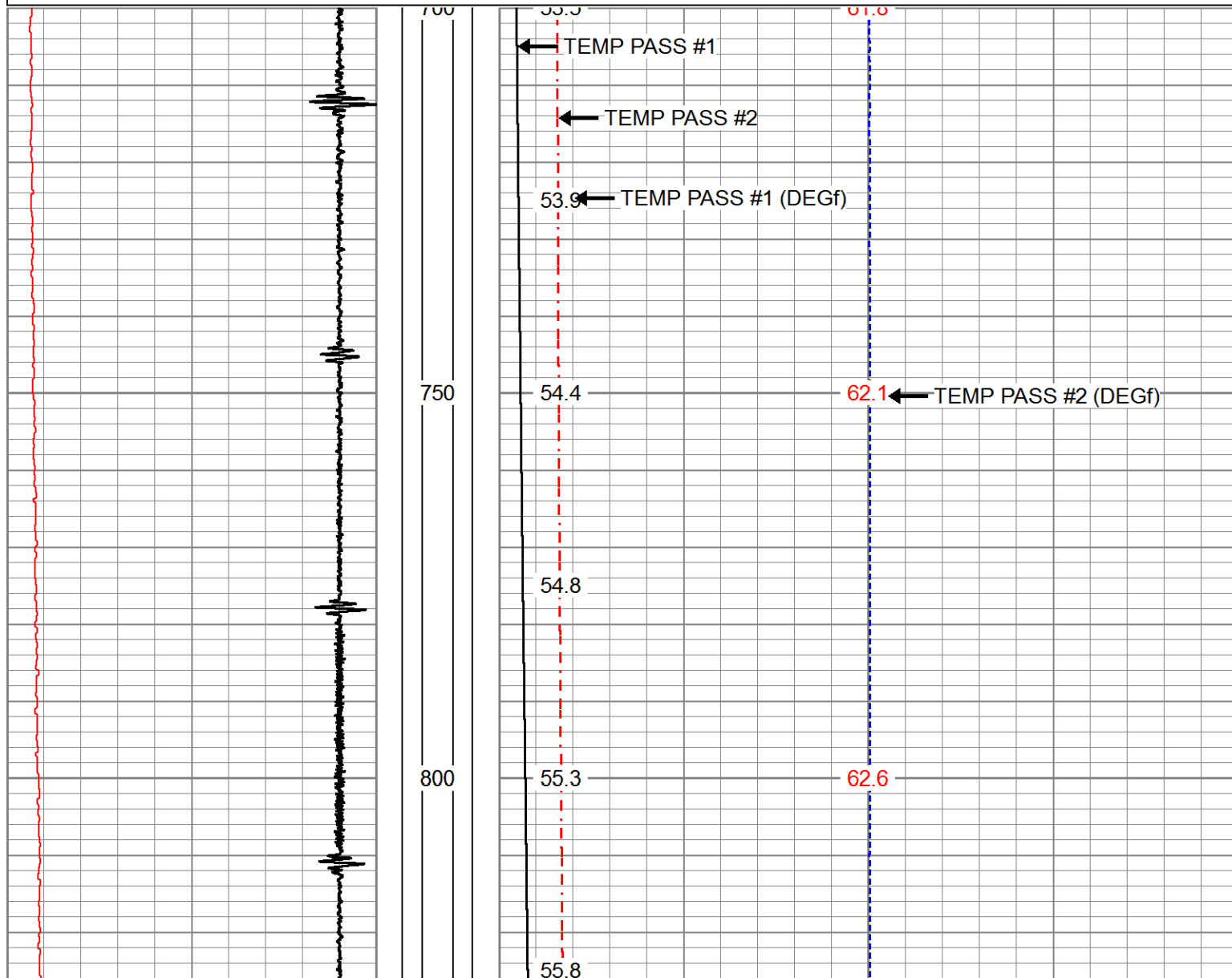
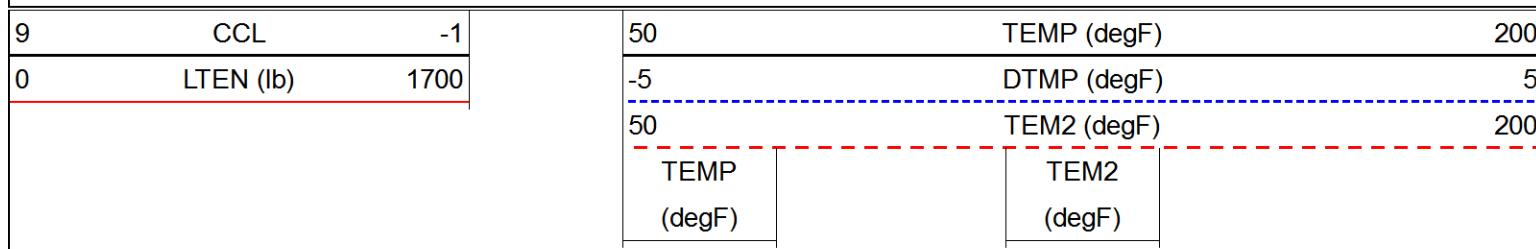


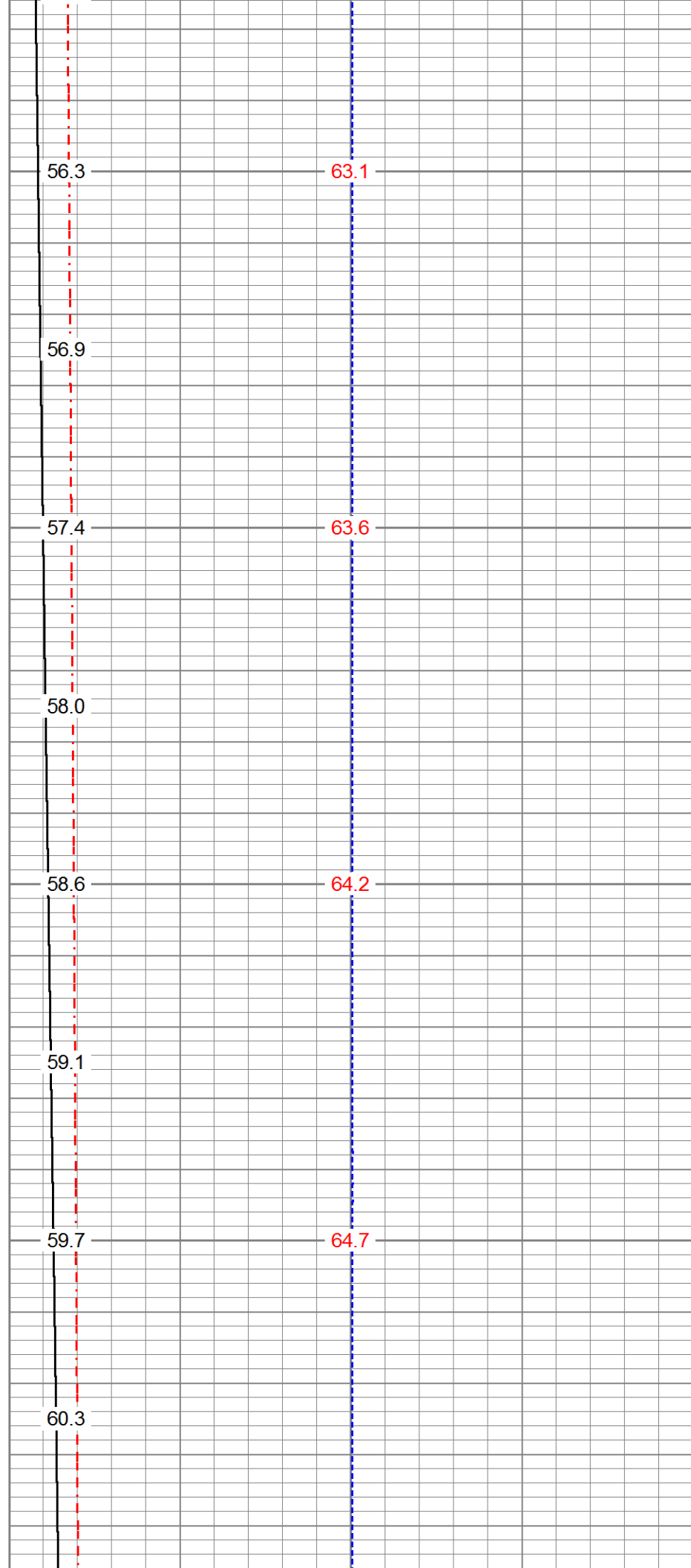
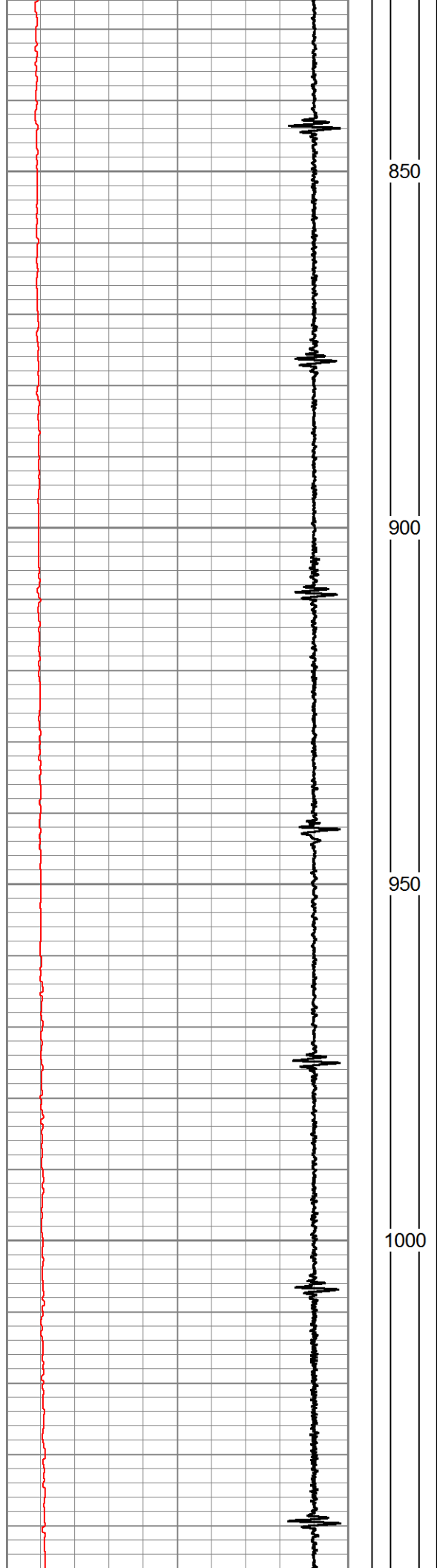


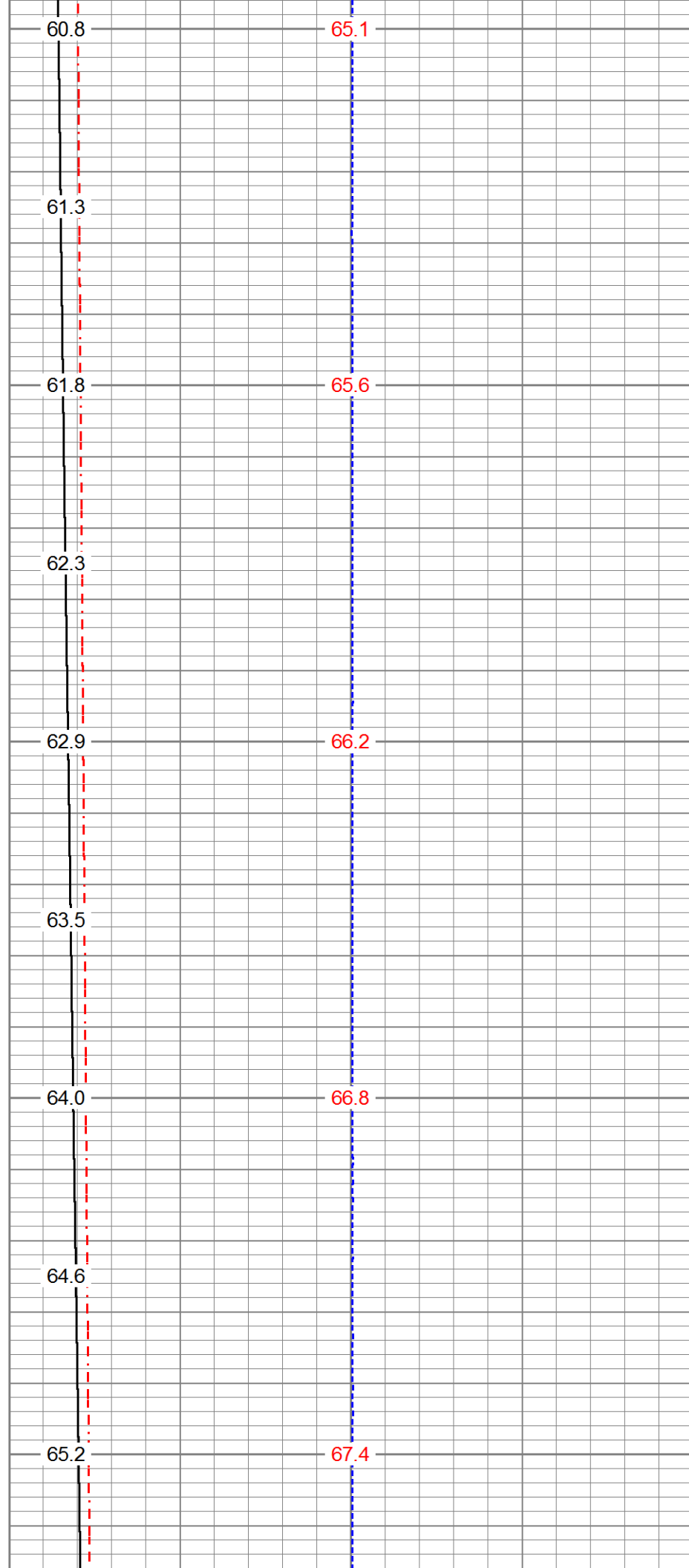
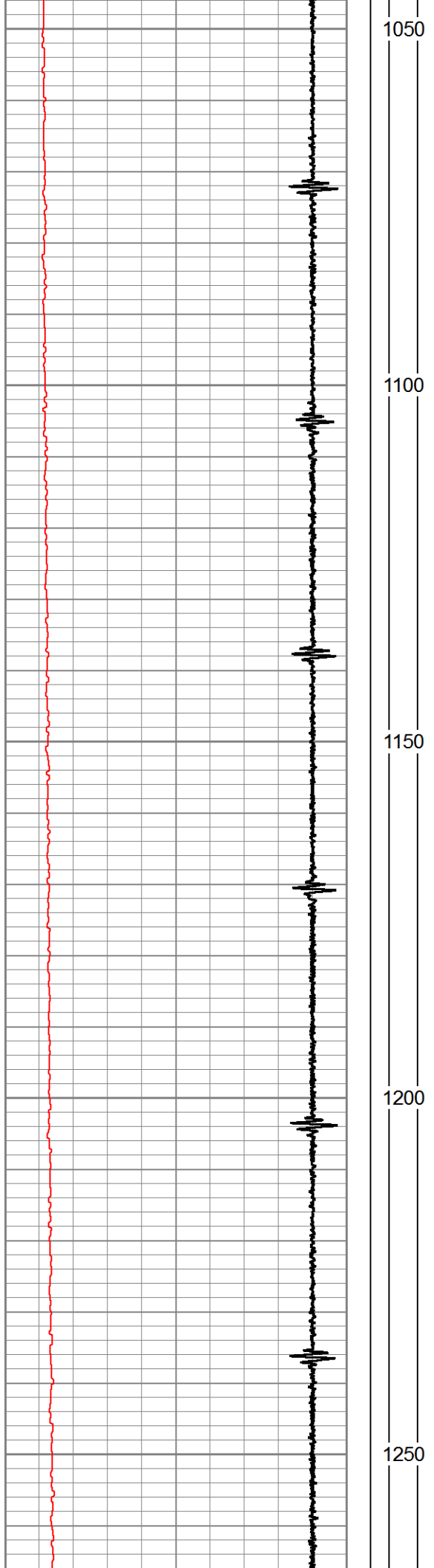


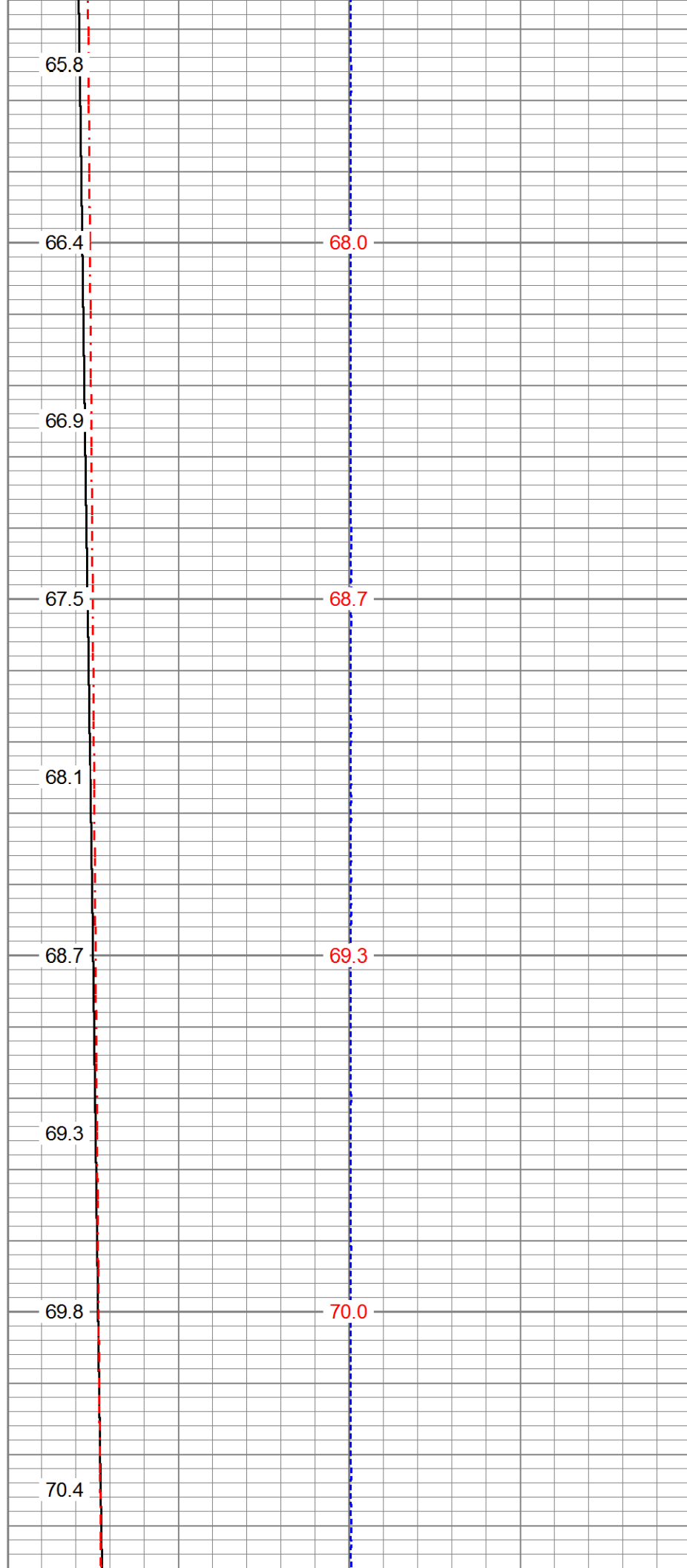
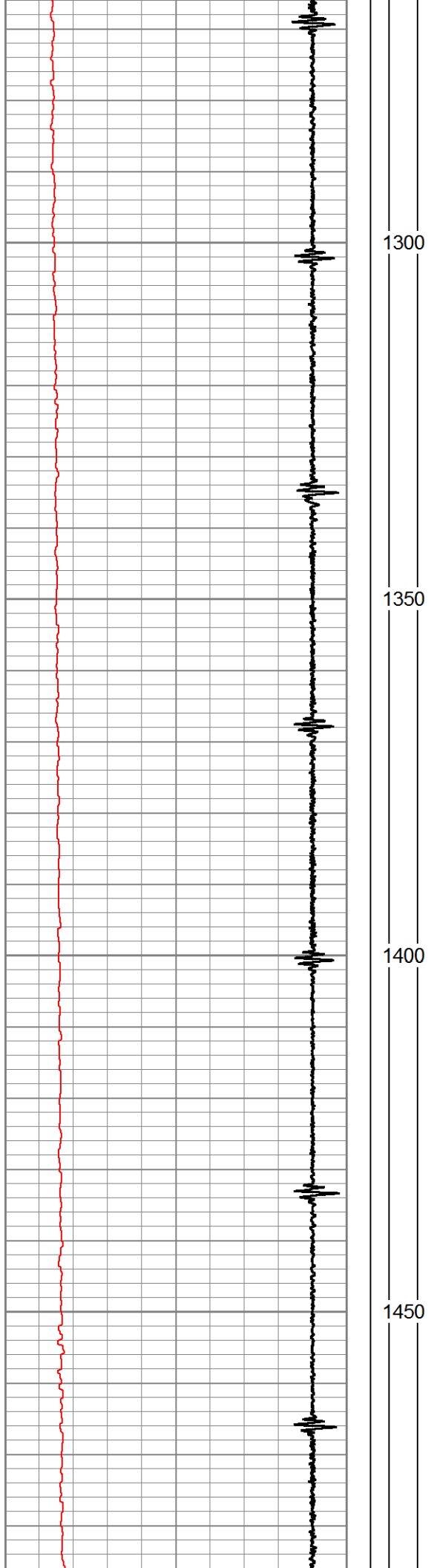


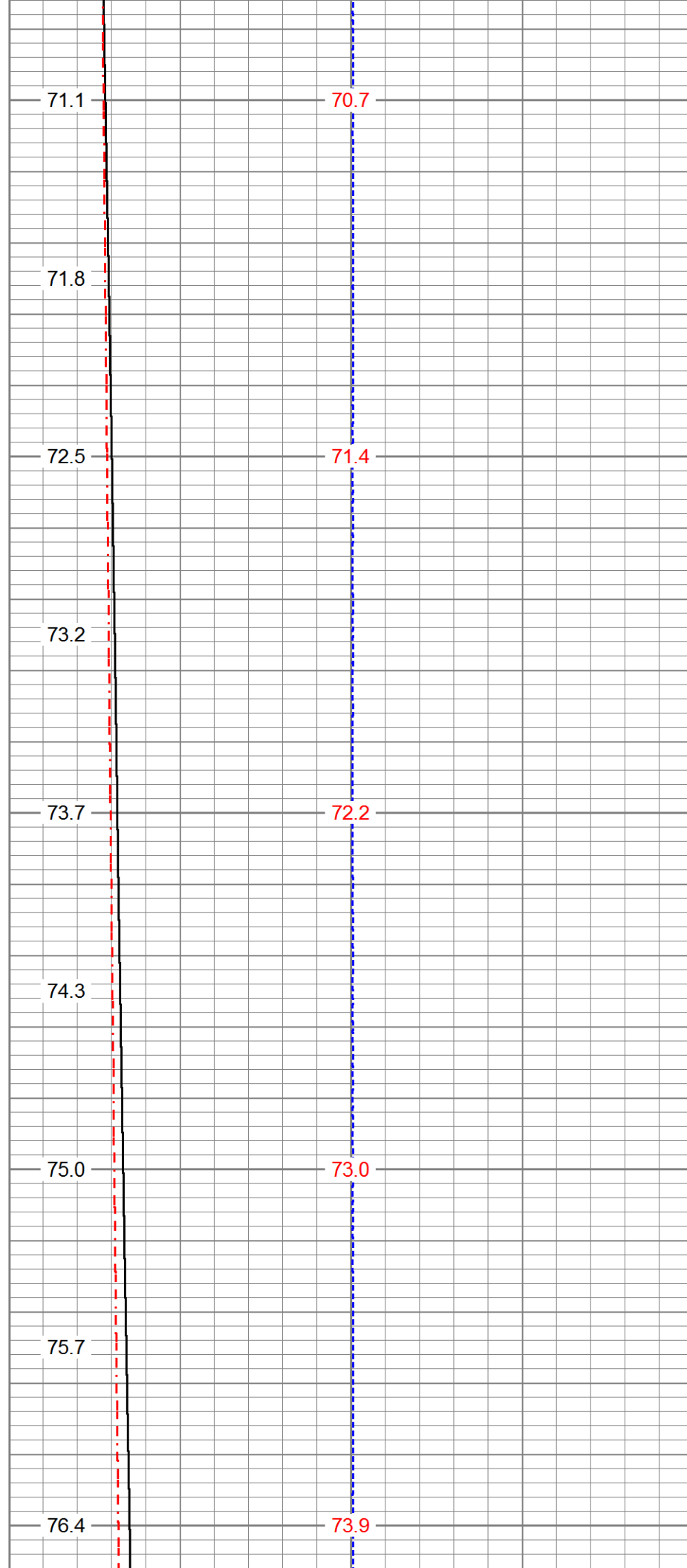
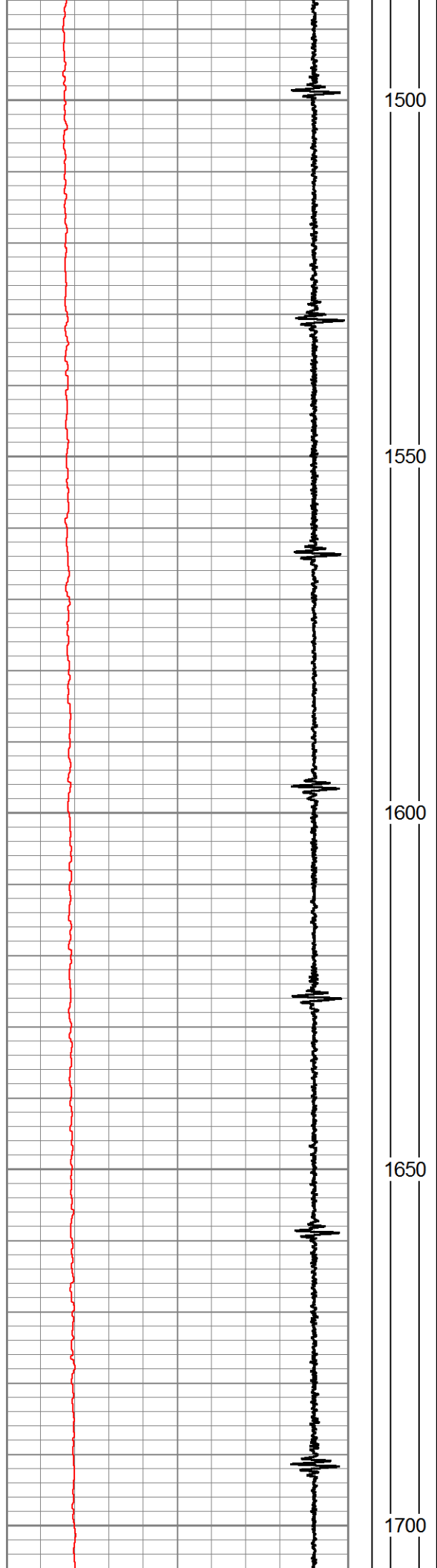
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Dataset Pathname pass2.C
Presentation Format temp
Dataset Creation Tue Jun 26 13:38:22 2018
Charted by Depth in Feet scaled 1:240

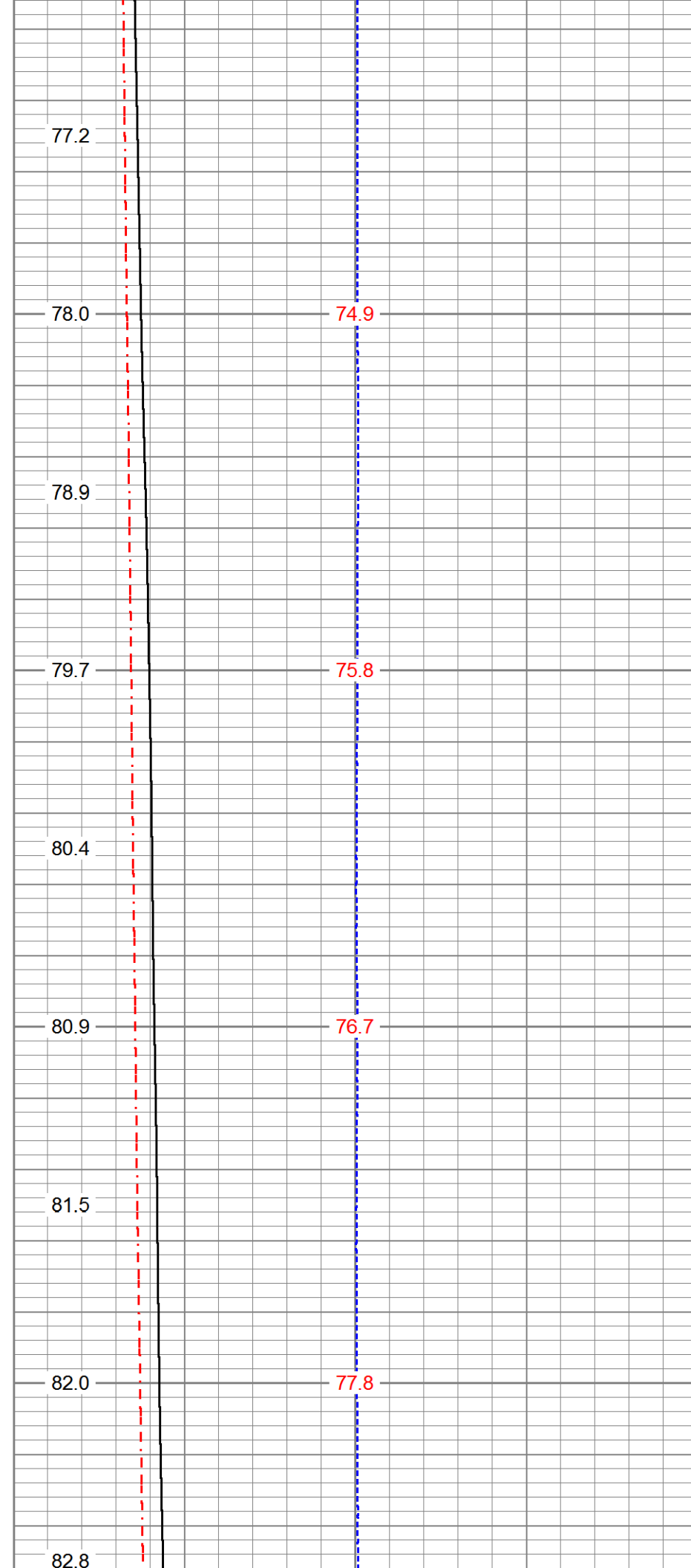
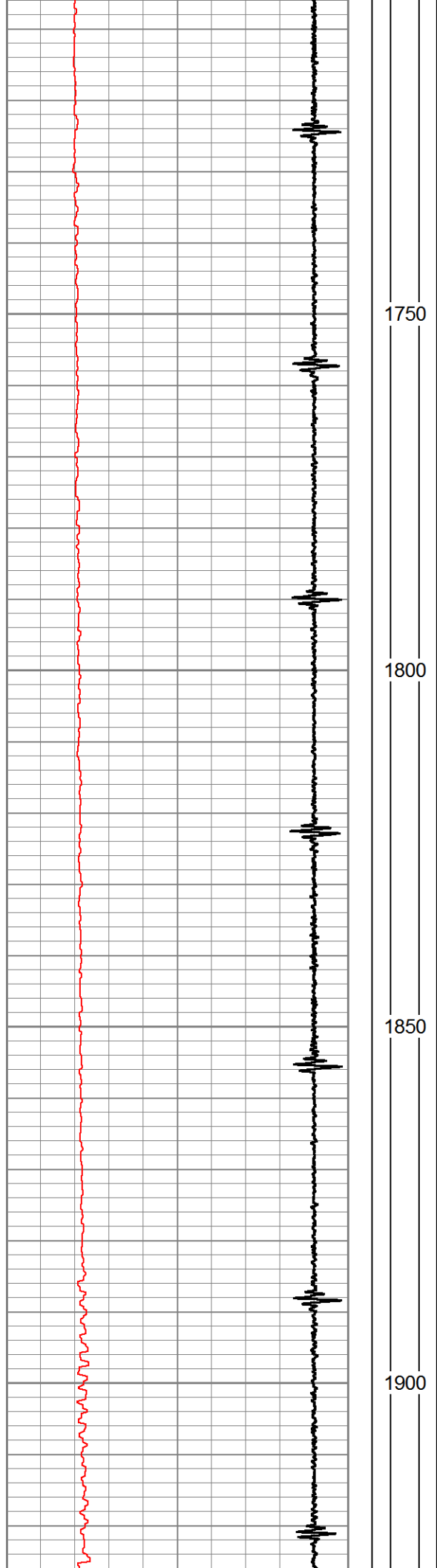


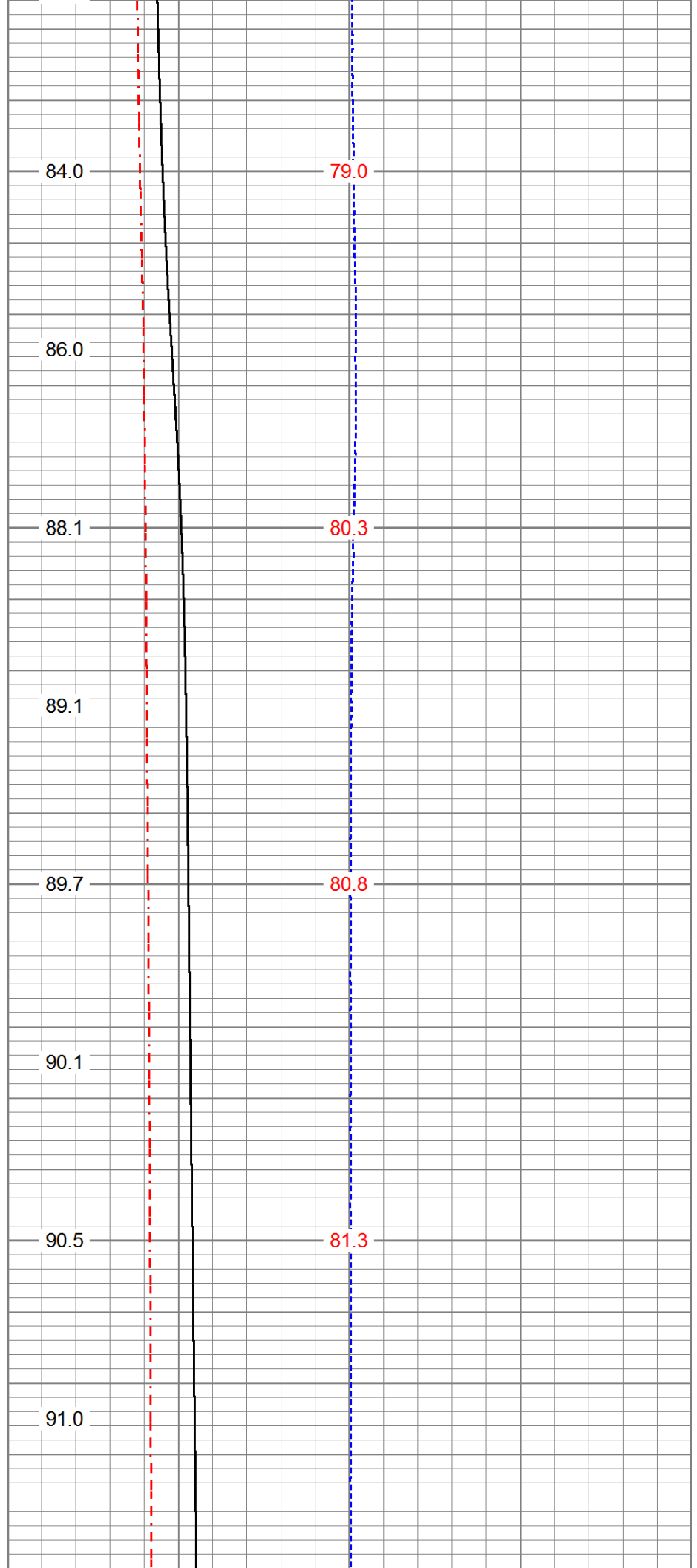
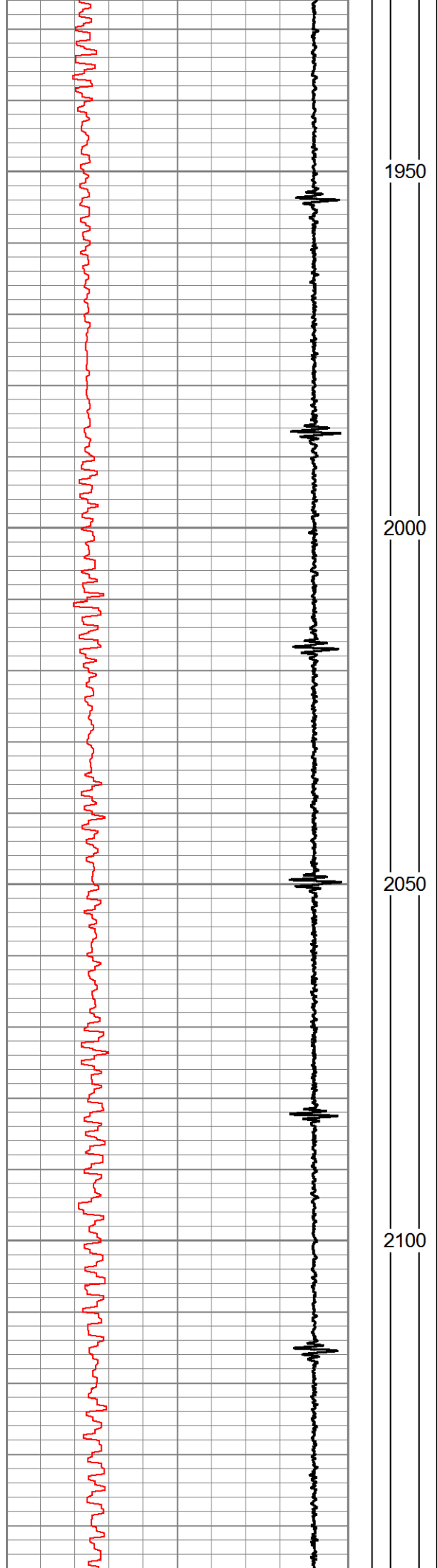


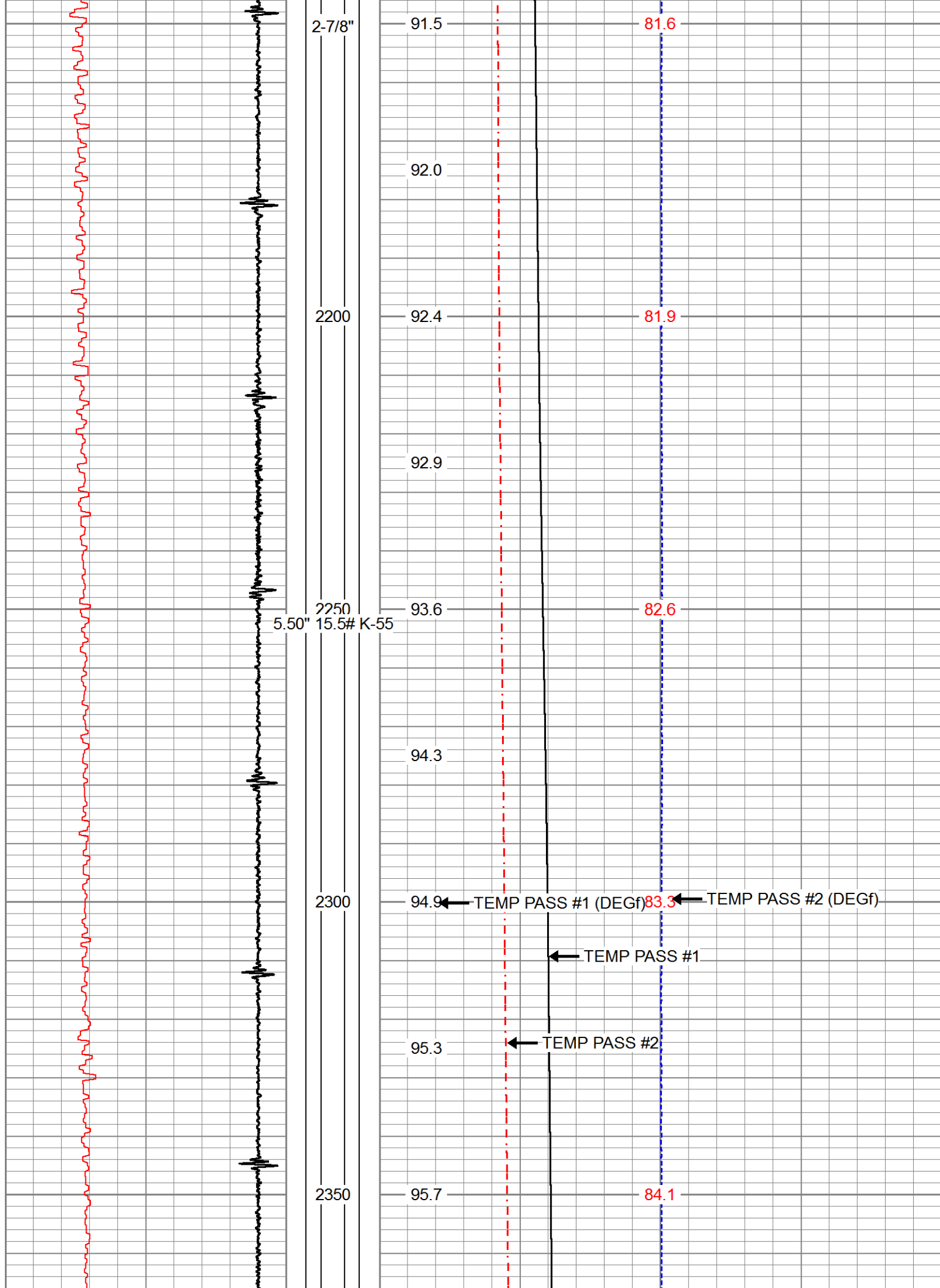


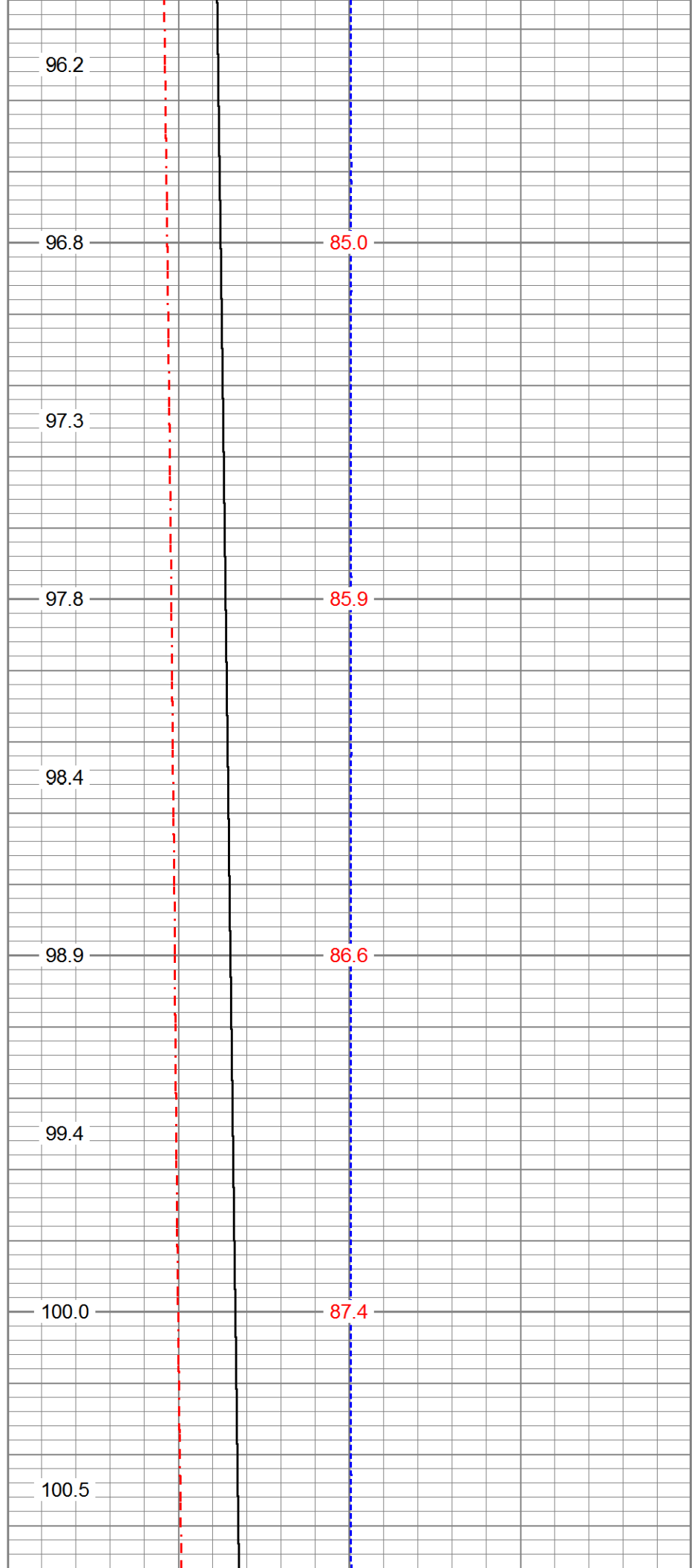
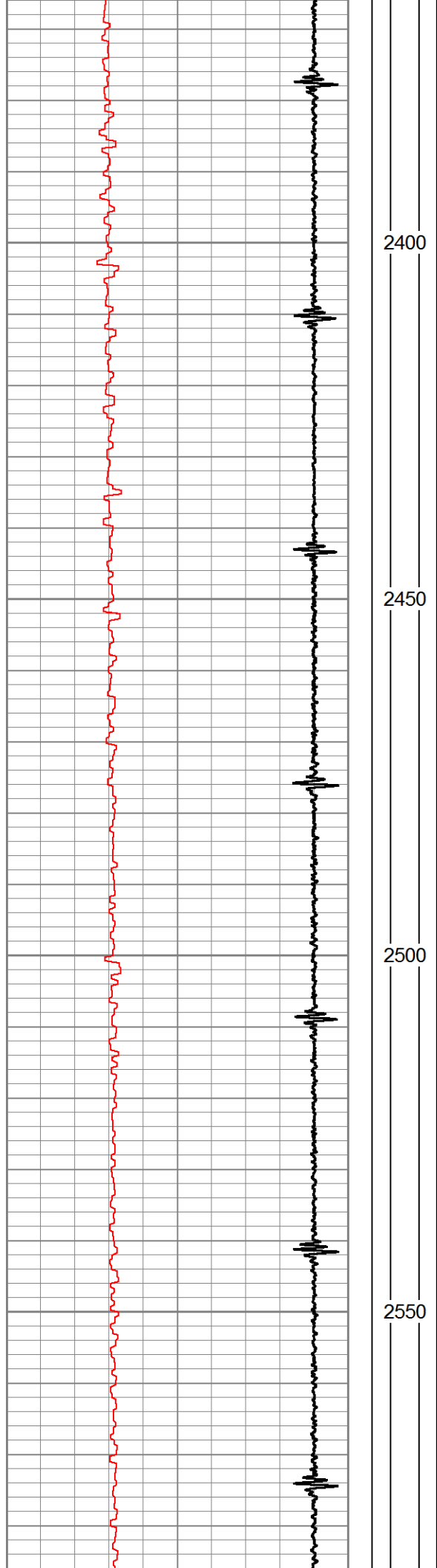


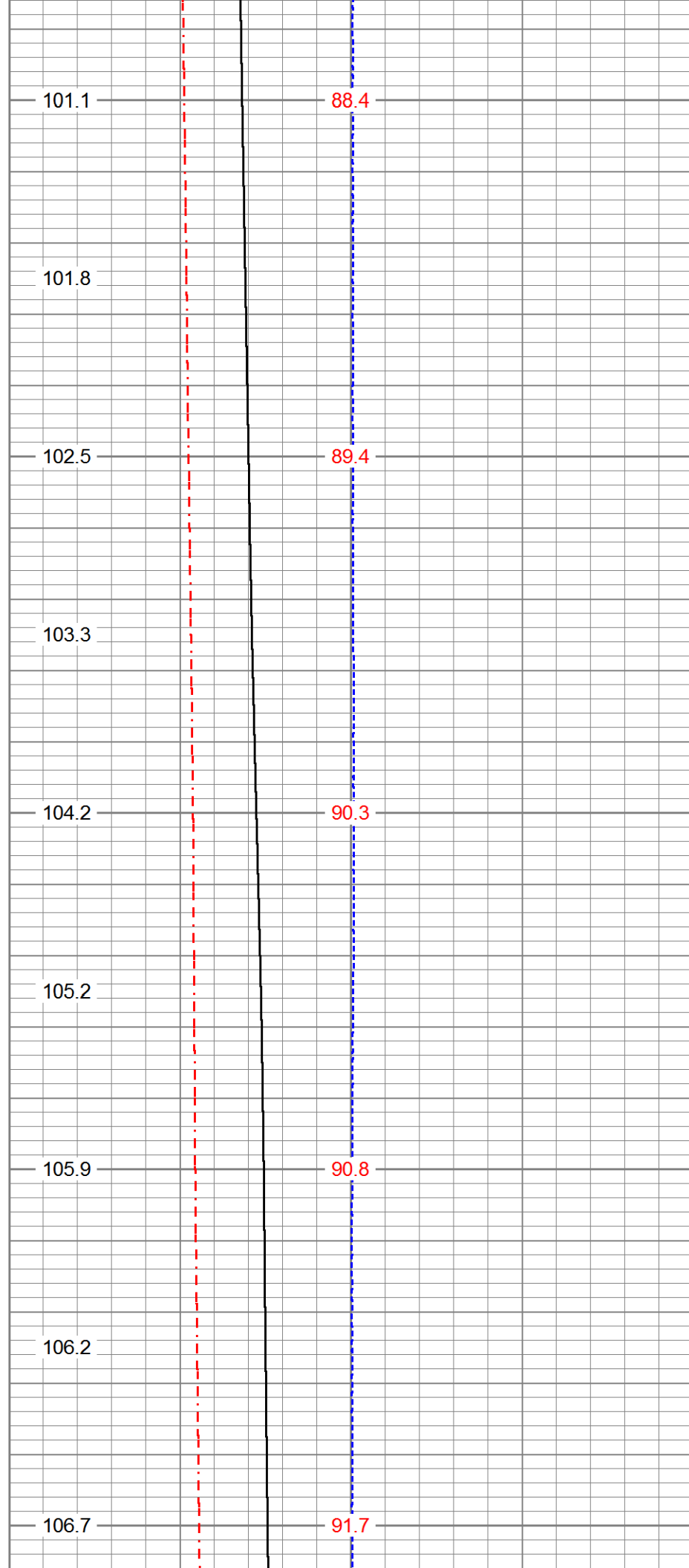
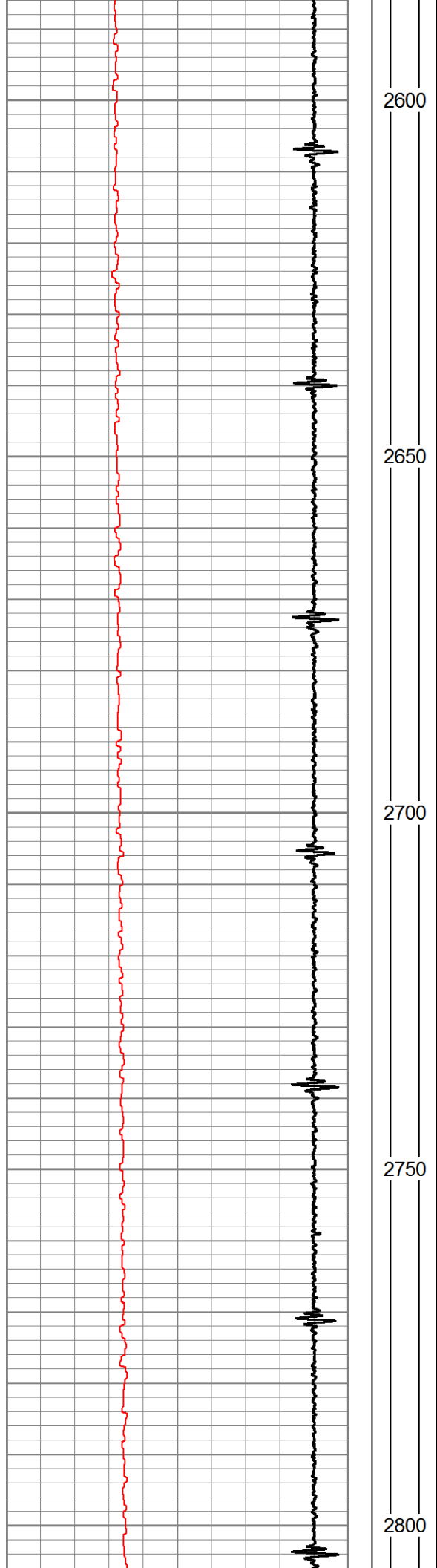


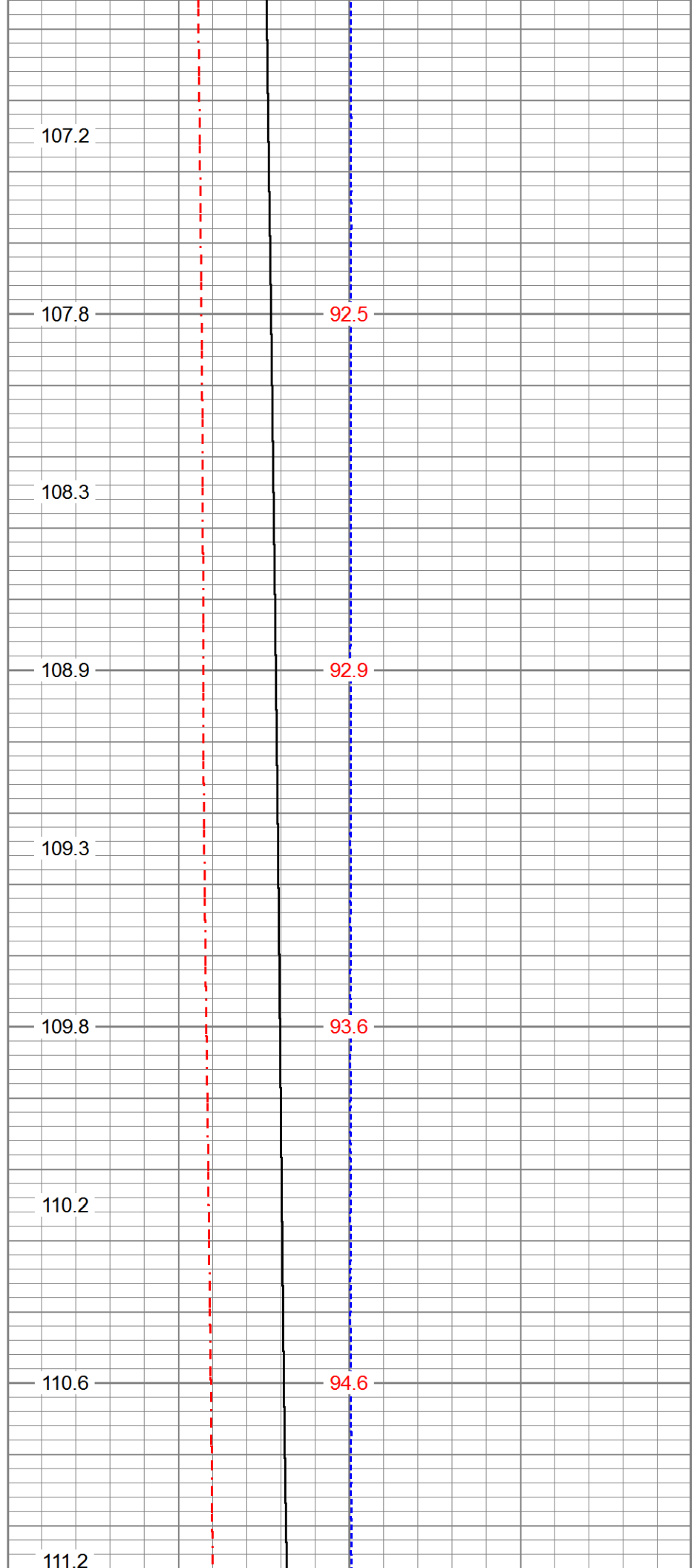
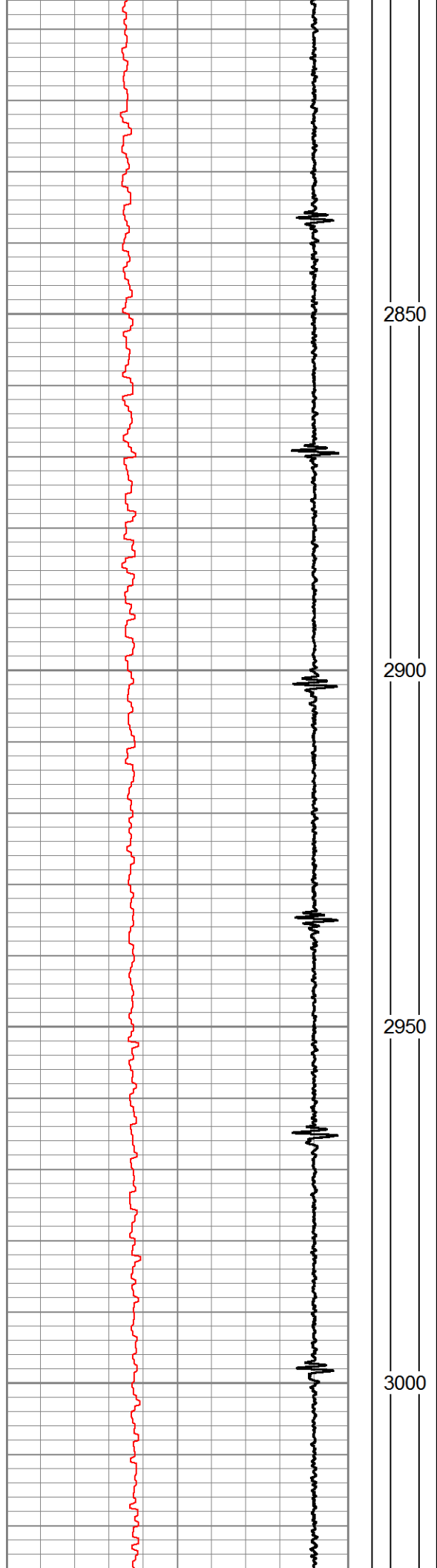


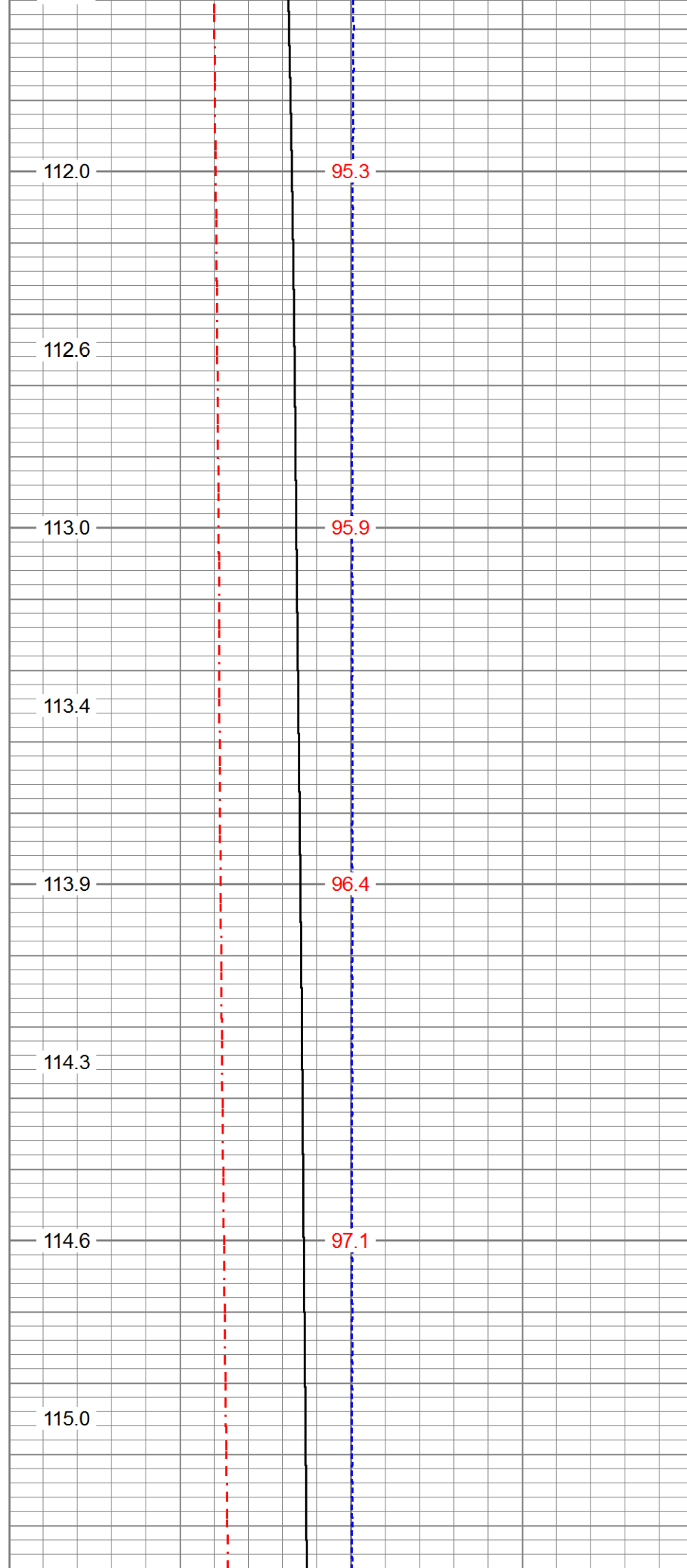
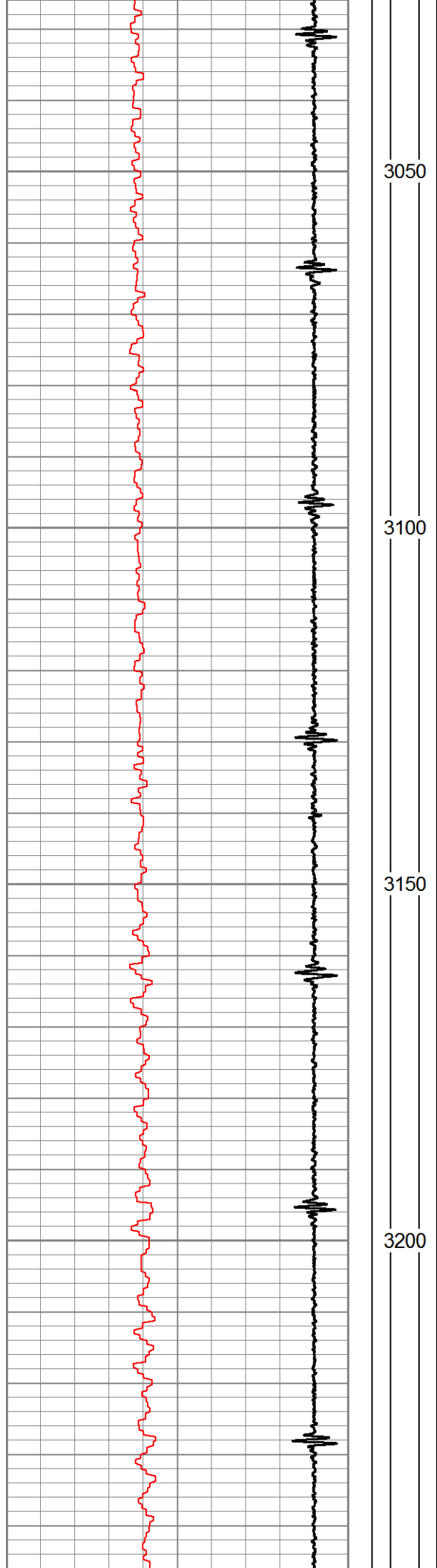


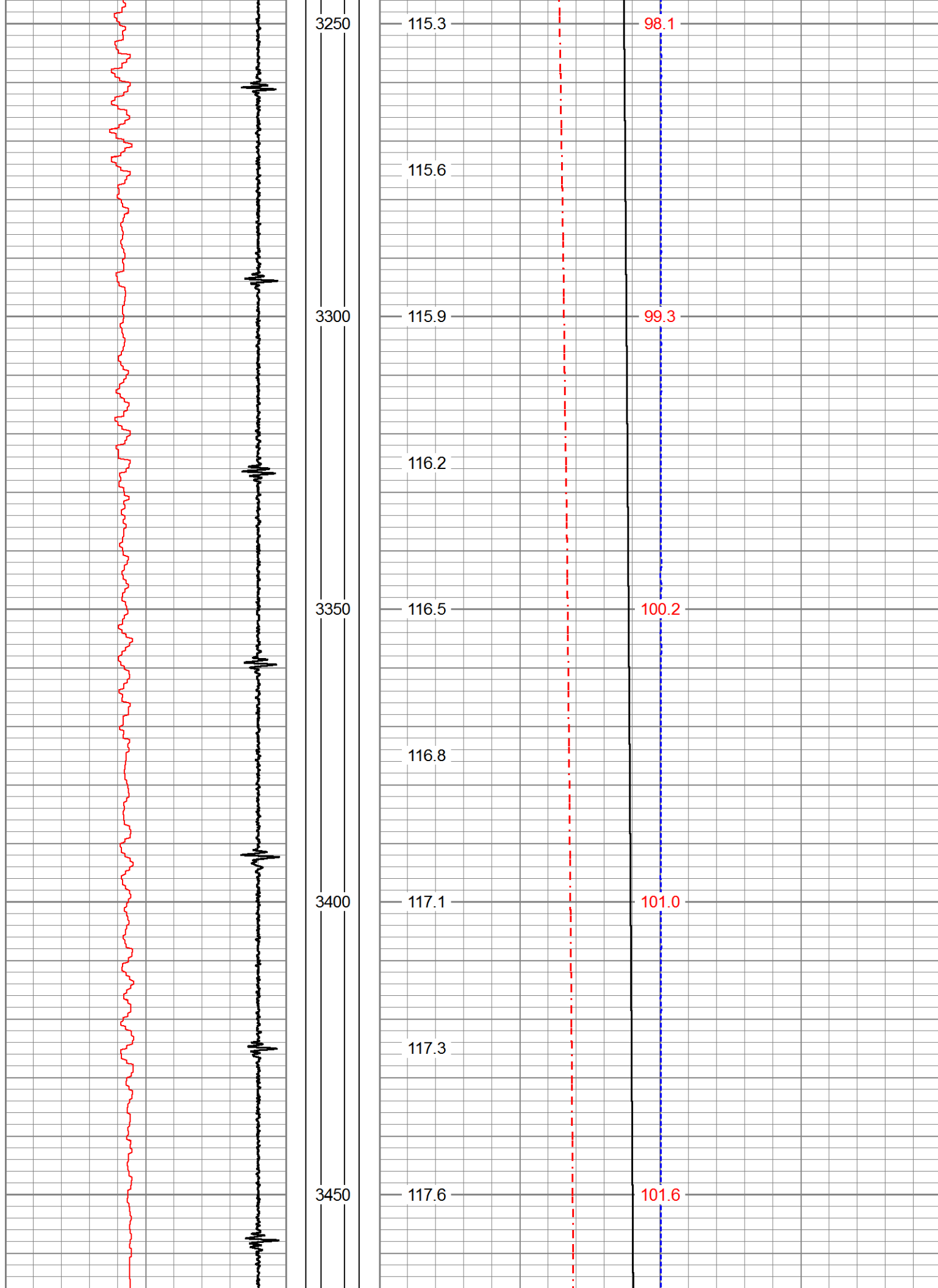


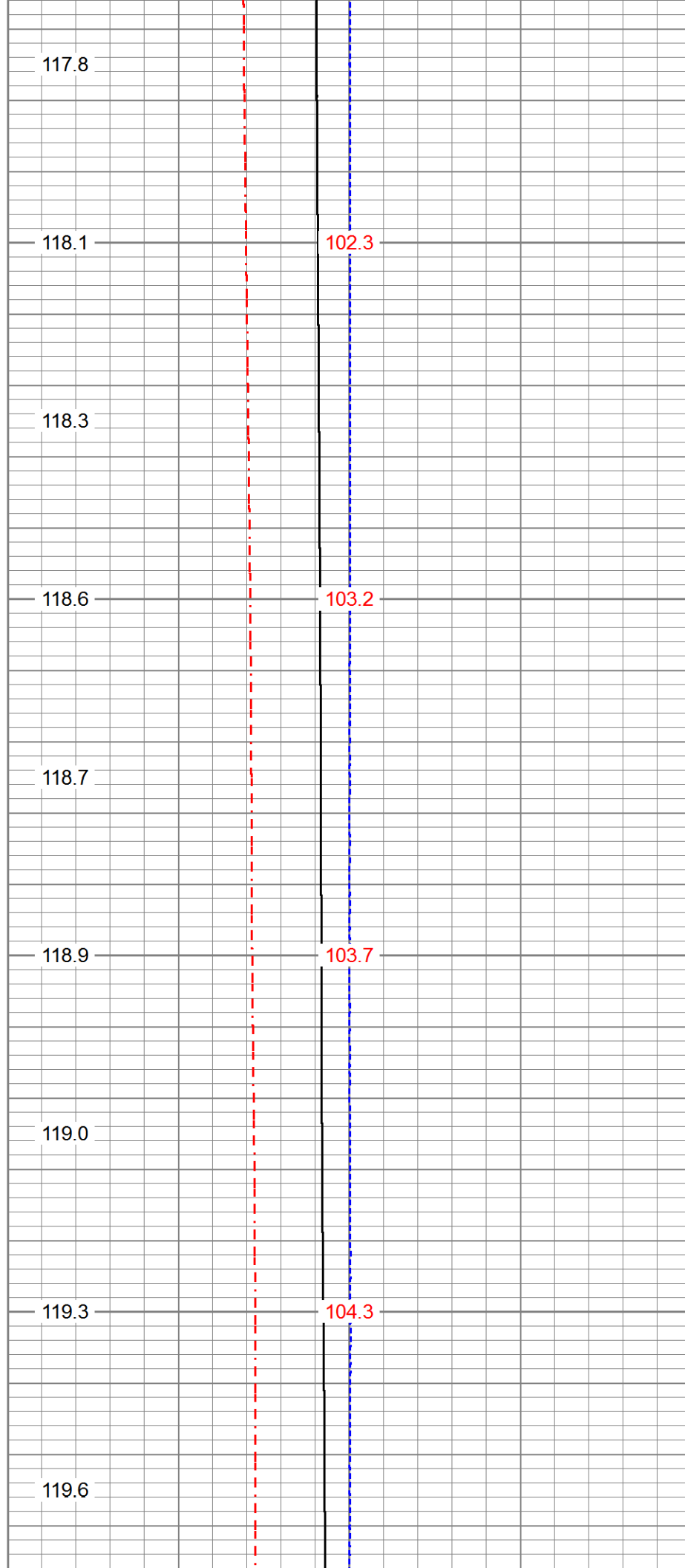
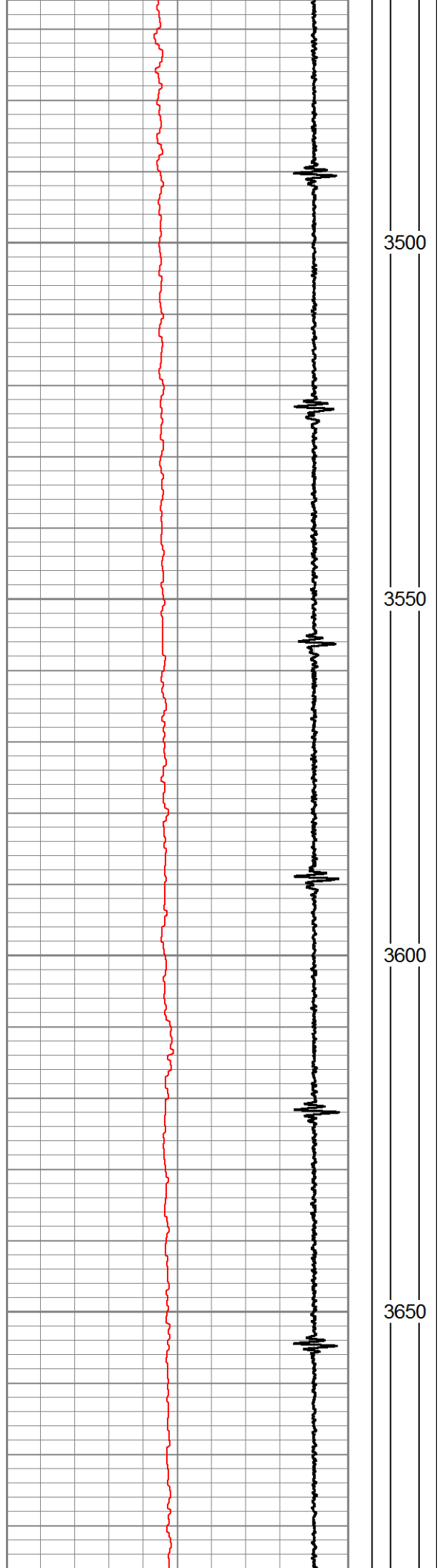


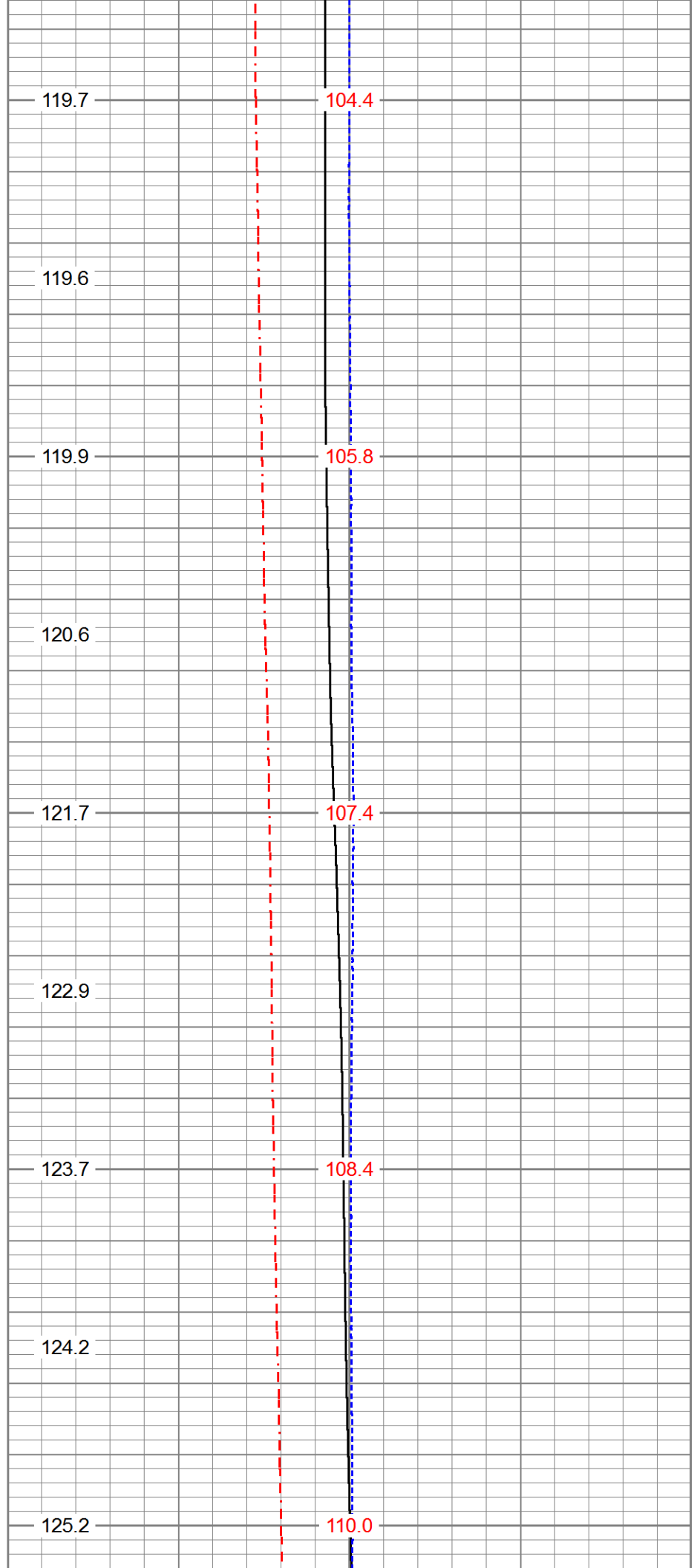
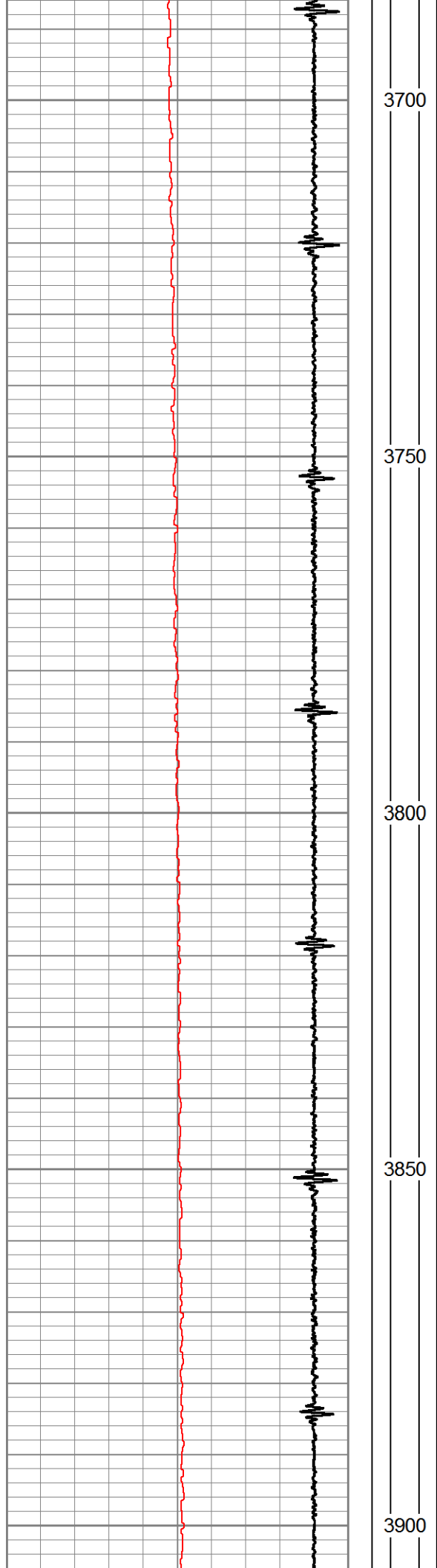


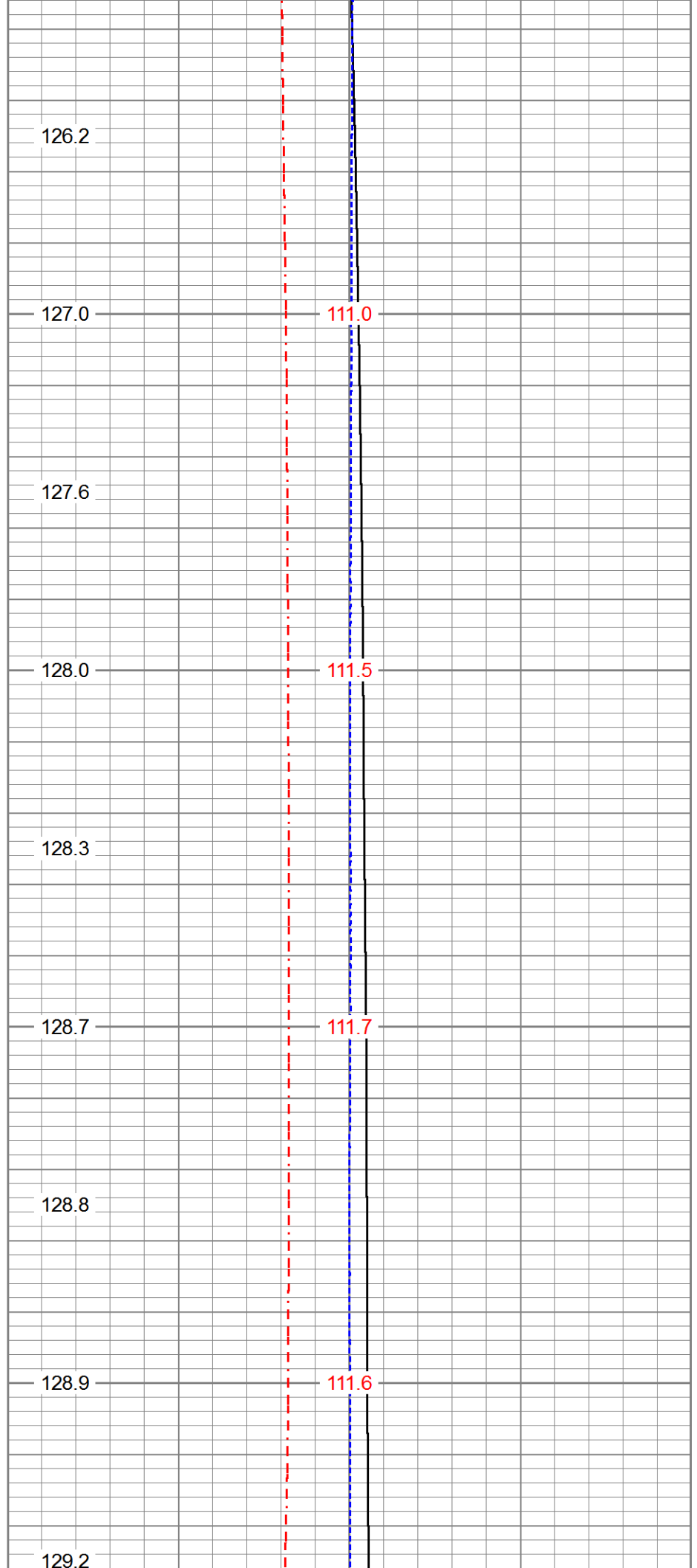
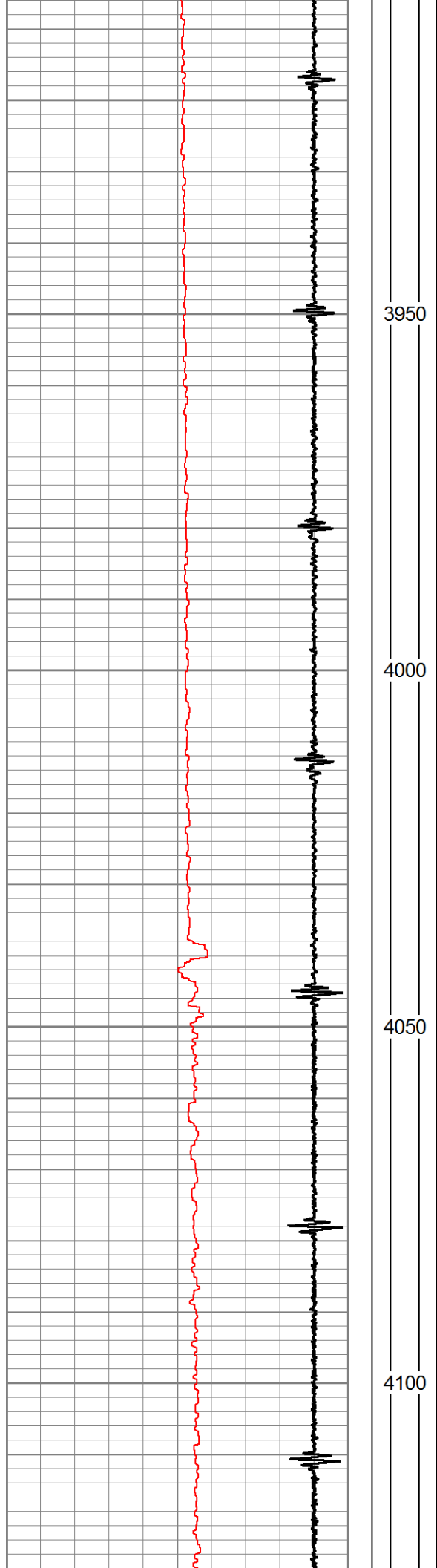


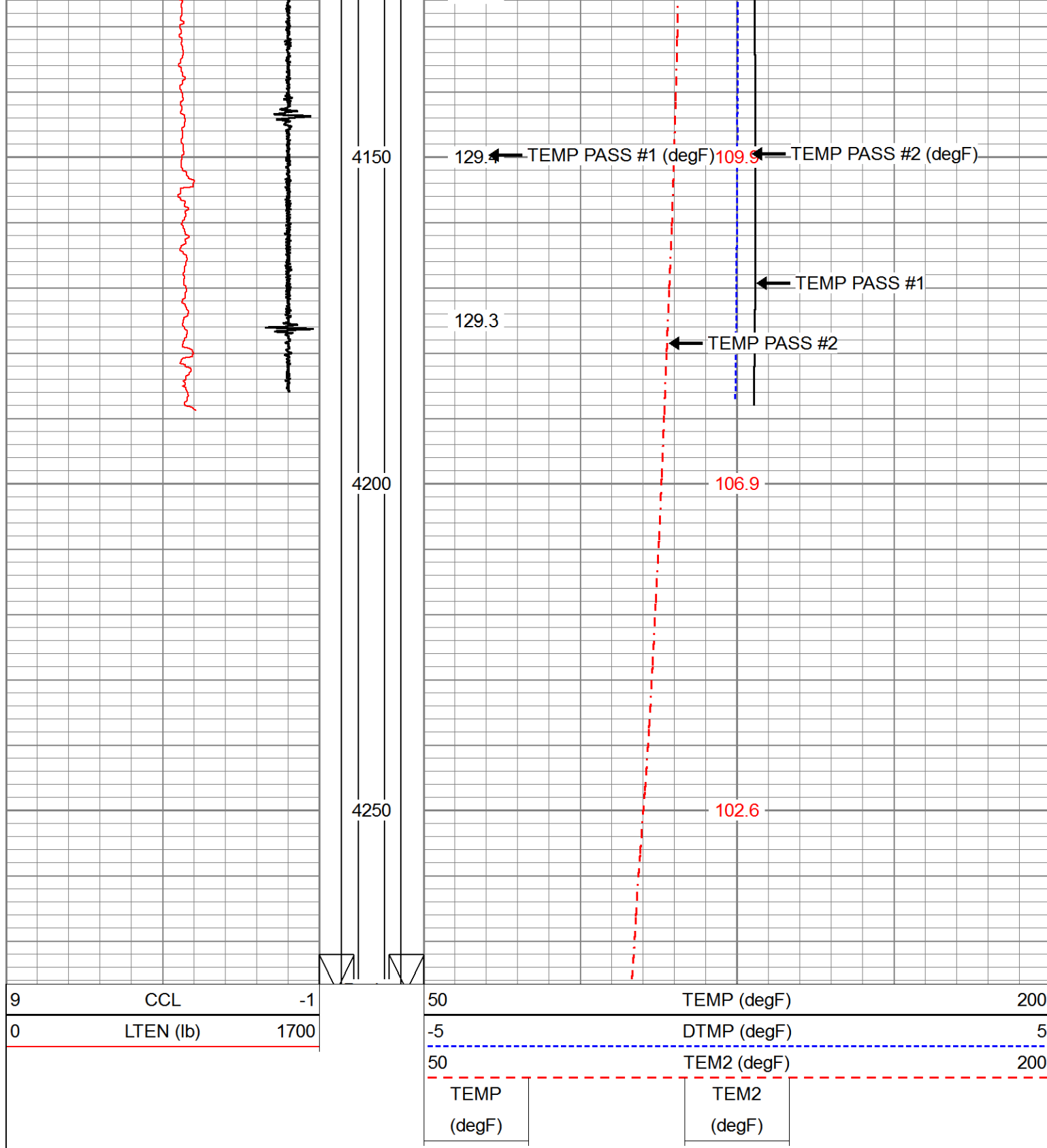




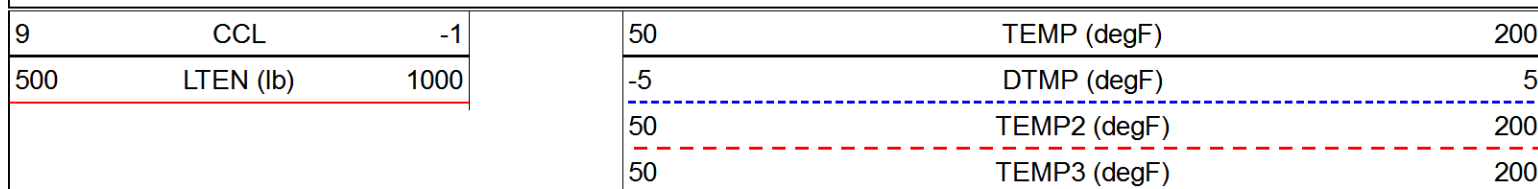


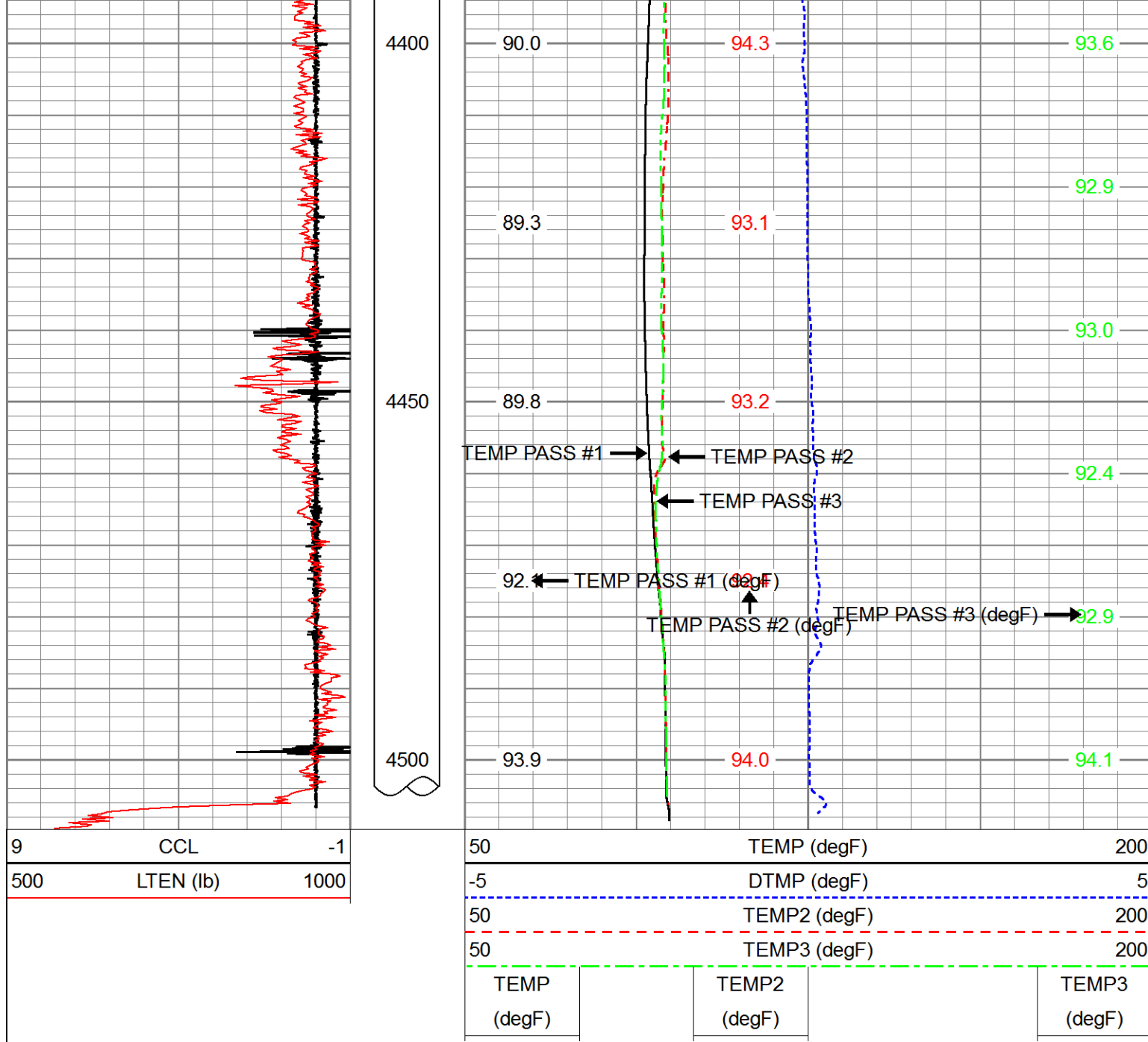






Database File merrionsunco#1swdtemp.db
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Presentation Format temp
Dataset Creation Tue Jun 26 13:29:59 2018
Charted by Depth in Feet scaled 1:240





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	
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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
10

cps
cps

degF
degF