



FILE NO:	COMPANY	MGM ENERGY CORP	
	WELL	MGM SHELL EAST MACKAY I-78	
API NO:	FIELD	EAST MACKAY	
	PROVINCE	NORTHWEST TERRITORIES	
Ver. 3.87	LOCATION:		
UID:			
3001786450125 30			
LICENSE:			
1202			
	LAT	64.795 N	LONG 125.722 W
PERMANENT DATUM	G.L.	ELEVATION	155.00 M
LOG MEASURED FROM	K.B.	6.20 M	ABOVE P.D.
DRILL. MEAS. FROM	KELLY BUSHING		
DATE	16-FEB-2013		
RUN	TRIP	2	1
SERVICE ORDER	CA215446		
DEPTH DRILLER	2001.0 M		
DEPTH LOGGER	1998.0 M		
BOTTOM LOGGED INTERVAL	1968.3 M		
TOP LOGGED INTERVAL	402.2 M		
CASING DRILLER	244.5 MM @ 401.8 M		
CASING LOGGER	402.2 M		
BIT SIZE	222.0 MM		
TYPE OF FLUID IN HOLE	GELCHEM		
DENSITY	VISCOSITY	1075.0 G/L	80.0 CP
PH	FLUID LOSS	9.0	6.2 ML
SOURCE OF SAMPLE	TOOL MEASURED		
RM AT MEAS. TEMP.	0.96 OHMM @ 15.0 DEGC		
RMF AT MEAS. TEMP.	0.83 OHMM @ 15.0 DEGC		
RMC AT MEAS. TEMP.	1.15 OHMM @ 15.0 DEGC		
SOURCE OF RMF	RMC	CALCULATED	CALCULATED
RM AT BHT	0.44 OHMM @ 59.1 DEGC		
TIME SINCE CIRCULATION	15.8 HOURS		
MAX. RECORDED TEMP.	59.1 DEGC		
EQUIP. NO.	LOCATION	Z008672	CANADA OPEN
RECORDED BY	J. COLLIER / I. ZALESKI KH		
WITNESSED BY	D. PRIOR		

BOREHOLE RECORD		
BIT SIZE	FROM	TO
31.0 MM	0.0 M	401.8 M
222.0 MM	401.8 M	2001.0 M

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
244.5 MM	59.5 KG/M	NA	0.0 M	401.8 M

REMARKS

TIME STOPPED CIRCULATION: 15-FEB-2013 04:00 PM

CORRELATED TO BAKER HUGHES WIRELINE 29-JAN-2013
GR FAILED NEAR 600M, SPLICED GR FROM DOWNLOG AT 659.0M
STUCK AT 1973.5M, LOGGED UP WHEN TOOLS BECAME FREE

CNC IS AVERAGE CALIPER CORRECTED.
CNC AND PORZ PRESENTED IN SANDSTONE MATRIX 2.65G/CM3.

INTEGRATED TRANSIT TIME TICS EVERY: 1.0, 10.0, & 100.0 μ SEC.

BOREHOLE AND TEMPERATURE CORRECTIONS HAVE BEEN APPLIED TO HDIL DATA.
HDIL RECORDED WITH AND CORRECTED TO 38.0 MM STANDOFF.

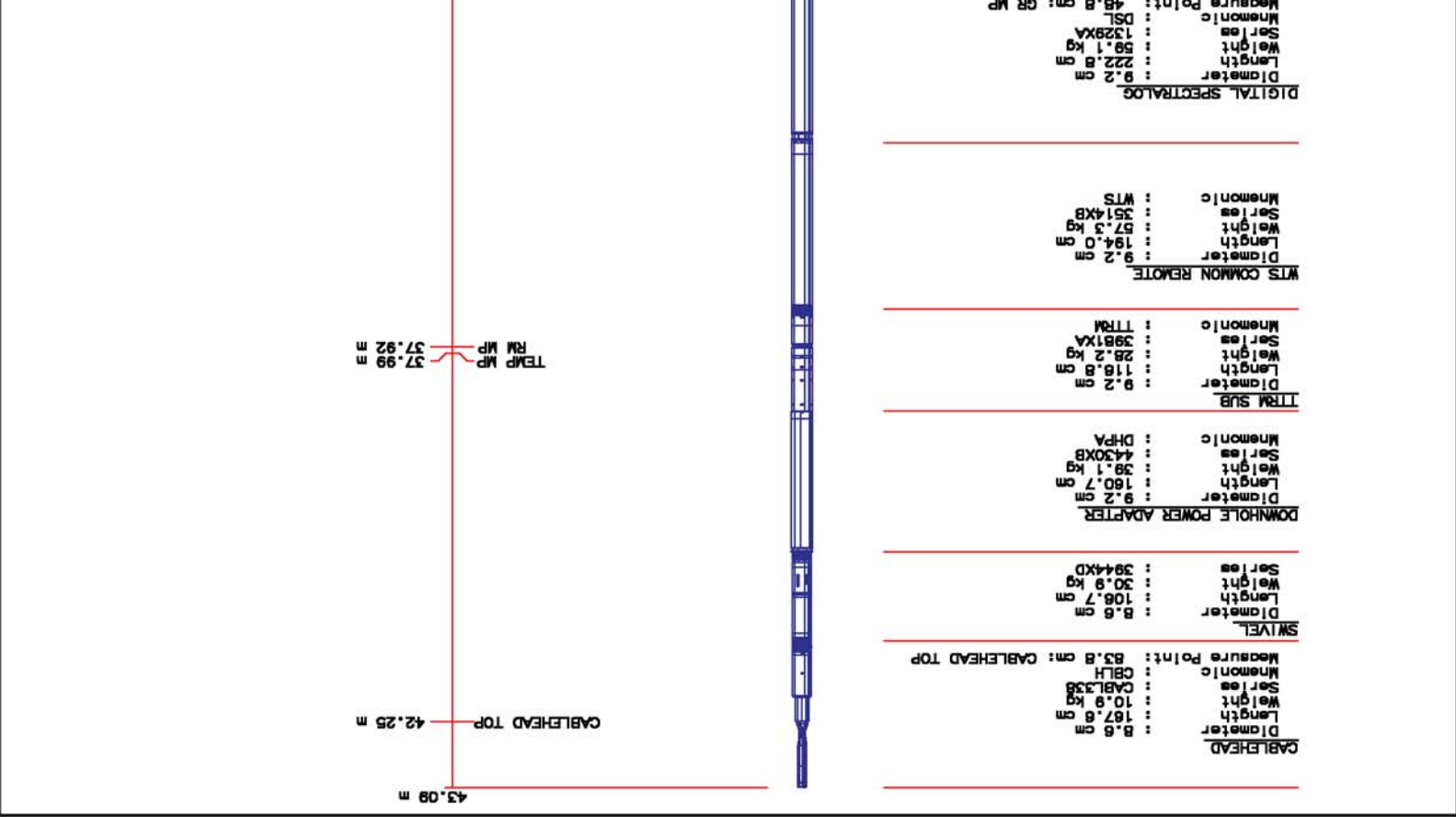
HIGH RESOLUTION PASS PRESENTED ABOVE CAL/VER SECTION.

EQUIPMENT DATA				
RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.
2	1	SWIVEL	3944XD	10513050
2	1	DHPA	4430XB	10390598
2	1	TTRM SUB	3981XB	10516528
2	1	COMM	3514XB	10504656
2	1	WTS DGR/SU	1329XB	10293862
2	1	ORIT	4401XB	12466129
2	1	ACOUSTIC EL	1677EA	10383992
2	1	XMAC RX MDR	1678MC	10386815
2	1	XMAC ISO	1678PB	10039369
2	1	XMAC TX ELC	1678BA	12168167
2	1	XMAC TX ELC	1678FA	12188364
2	1	WTS DBL KNU	3939XA	12448499
2	1	FOC/WTS ADP	3527EA	12337591
2	1	FOC/WTS ADP	3527FA	12494796
2	1	TTRM SUB	3980XA	Z402456
2	1	FOCUS CN	2436XA	10105638
2	1	FOCUS ZDEN	2223XA	10391896
2	1	DBL KNU	3931XA	10469360
2	1	ALIGNMNT SUB	4408NA	10265502
2	1	FOCUS ZDEN	2223XA	10102923
2	1	DBL KNU	3931XA	10308519
2	1	FOCUS HDIL	1530XA	10125755
STANDOFF				

POSITION	SERIAL NO.
FREE	10513050
FREE	10390598
FREE	10516528
FREE	10504656
FREE	10293862
FREE	12466129
CENTRALIZED	10383992
CENTRALIZED	10386815
FREE	10039369
CENTRALIZED	12168167
CENTRALIZED	12188364
FREE	12448499
FREE	12337591
FREE	12494796
FREE	Z402456
DECENTRALIZED	10105638
PAD DEVICE	10391896
FREE	10469360
FREE	10265502
FREE	10102923
PAD DEVICE	10308519
FREE	10125755

INSTRUMENT CONFIGURATION

Source File: /data/MGM/run2_oh/run1-tdg



DIGITAL ORIENTATION
Diameter : 8.6 cm
Length : 329.4 cm
Weight : 50.0 kg
Series : 4401XB
Mnemonic : OR17
Measure Point: 0.0 cm: ORIENT MP

ARRAY ACOUSTIC LOG ELECTRONICS, B CHANNEL
Diameter : 8.6 cm
Length : 238.3 cm
Weight : 46.4 kg
Series : 1677EA
Mnemonic : XMAC

CROSS MULTIPOLE ARRAY ACOUSTIC LOG
Diameter : 9.5 cm
Length : 332.4 cm
Weight : 101.8 kg
Series : 1678MC
Mnemonic : XMT1

SHEAR WAVE ACOUSTIC LOG
Diameter : 9.2 cm
Length : 152.4 cm
Weight : 81.4 kg
Series : 1678PB
Mnemonic : XMAC

MULTI-POLE ARRAY ACOUSTIC
Diameter : 9.5 cm
Length : 241.3 cm
Weight : 77.3 kg
Series : 1678BA
Mnemonic : XMAC

MULTI-POLE ARRAY ACOUSTIC
Measure Point: 185.6 cm: QUADRUPOLE T5
Measure Point: 142.2 cm: MONOPOLE T2
Measure Point: 142.2 cm: Y-DIPOLE T4
Measure Point: 142.2 cm: X-DIPOLE T3
Measure Point: 88.9 cm: MONOPOLE T1
Diameter : 8.6 cm
Length : 131.6 cm
Weight : 26.4 kg
Series : 1678FA
Mnemonic : MAC

KNUCKLE JOINT (DOUBLE)
Diameter : 8.6 cm
Length : 141.8 cm
Weight : 40.9 kg
Series : 3838XA
Mnemonic : KNUJ

WTS FOCUS TELEMETRY TRANSFORMER SUB
Diameter : 9.2 cm
Length : 165.7 cm
Weight : 30.5 kg
Series : 3526EB
Mnemonic : ADAP

WTS FOCUS POWER ADAPTOR
Diameter : 9.2 cm
Length : 110.2 cm
Weight : 70.8 kg
Series : 3526FB
Mnemonic : ADAP

FOCUS TEN/TEMP/MUD RES/ACCEL
Diameter : 8.0 cm
Length : 131.4 cm
Weight : 27.7 kg
Series : 3980XA
Mnemonic : TTMA

FOCUS COMPENSATED NEUTRON
Diameter : 8.0 cm
Length : 146.7 cm
Weight : 29.5 kg
Series : 2438XA
Mnemonic : CN
Measure Point: 58.4 cm: LSN MP
Measure Point: 44.5 cm: SSN MP

GR MP 33.89 m

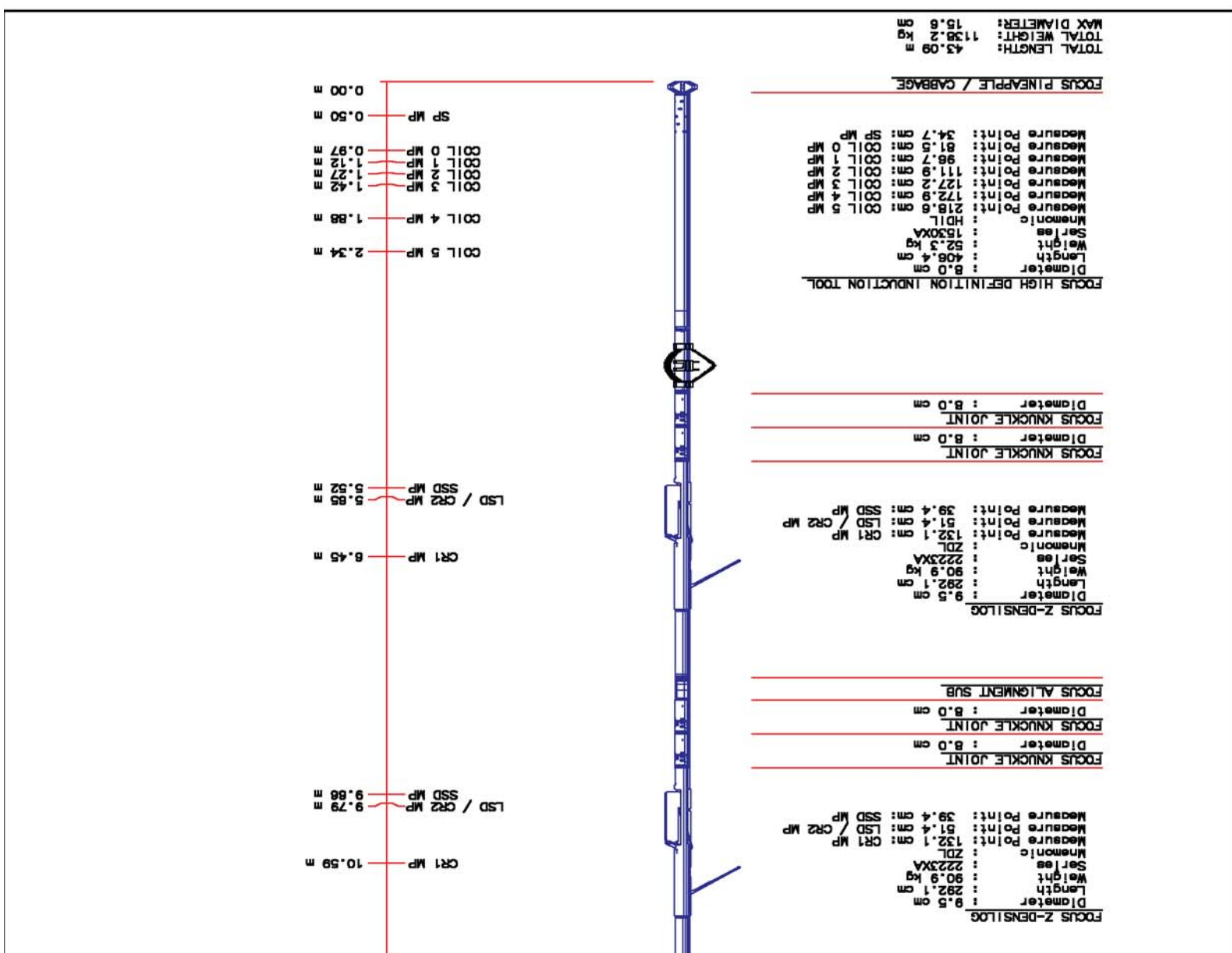
ORIENT MP 30.11 m

R8 26.08 m
R7 25.93 m
R6 25.77 m
R5 25.62 m
R4 25.47 m
R3 25.32 m
R2 25.17 m
R1 25.01 m

MONOPOLE T2 22.42 m
QUADRUPOLE T5 22.42 m
X-DIPOLE T3 21.89 m
Y-DIPOLE T4 21.89 m
MONOPOLE T1 21.36 m

LSN MP 12.78 m
SSN MP 12.64 m

ECLIPS 6.1! Aug 06, 2010 Updates: 1,2 Patches: 3	Cplot	Pdf_Cpp / main/16	Fileview 5.61
--	--------------	--------------------------	----------------------



MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
ACCELERATION PROCESSING				
GENERAL TCC PARAMETERS	AGC	ON		TOP
	SUBCYCLE LENGTH	50		BOTTOM
	SUBSET	1		
	STACK LEVEL	2		
GENERAL MONOPOLE TCC PARAMETERS	DSP FILTER	ON		
	AGC WINDOW	1664	us	
	MOVEOUT	16	us/ft	
	SAMPLE PERIOD	16		
DELTA T TCC PARAMETERS	RX DELAY	16		
	SAMPLE PERIOD	240	us	
	AGC WINDOW	8064	us	
	RX DELAY	24	us	
FULL WAVE MONOPOLE TCC PARAMETERS	RX DELAY	0	us	
	SAMPLE PERIOD			
	AGC WINDOW			
	RX DELAY			
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
ACOUSTIC TCC CONTROL PARAMETERS				
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP
	LOW FREQ CUTOFF	4000	Hz	BOTTOM
	HIGH FREQ CUTOFF	20000	Hz	
	SURFACE WAVE FILTER	ON		
WAVEFORM FILTER - FULLWAVE	SURFACE WAVE FILTER	ON		
	LOW FREQ CUTOFF	7000	Hz	
	HIGH FREQ CUTOFF	22000	Hz	
	SURFACE WAVE FILTER	ON		
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
ACOUSTIC WAVEFORM FILTER				
MONOPOLE DELTA T	FORMATION TYPE	GENERIC (MEDIUM)		TOP
	CORRELATION METHOD	NTH ROOT		
	RESET TAPERS			
	TAPER - LEFT END	150	us/m	TOP
	TAPER - RIGHT END	90	us/m	BOTTOM
	TAPER - LEFT END	450	us/m	TOP
	TAPER - RIGHT END	350	us/m	BOTTOM
	FORMATION TYPE	GENERIC (MEDIUM)		TOP
	CORRELATION METHOD	NTH ROOT		
	RESET TAPERS			
	TAPER - LEFT END	150	us/m	TOP
	TAPER - RIGHT END	90	us/m	BOTTOM
	TAPER - LEFT END	450	us/m	TOP
	TAPER - RIGHT END	350	us/m	BOTTOM
	FORMATION TYPE	GENERIC (MEDIUM)		TOP
	CORRELATION METHOD	NTH ROOT		
MONOPOLE COMPRESSIONAL	FORMATION TYPE	GENERIC (MEDIUM)		TOP
	CORRELATION METHOD	NTH ROOT		
	RESET TAPERS			
	TAPER - LEFT END	150	us/m	TOP
	TAPER - RIGHT END	90	us/m	BOTTOM
	TAPER - LEFT END	450	us/m	TOP
	TAPER - RIGHT END	350	us/m	BOTTOM
	FORMATION TYPE	GENERIC (MEDIUM)		TOP
	CORRELATION METHOD	NTH ROOT		
	RESET TAPERS			
	TAPER - LEFT END	150	us/m	TOP
	TAPER - RIGHT END	90	us/m	BOTTOM
	TAPER - LEFT END	450	us/m	TOP
	TAPER - RIGHT END	350	us/m	BOTTOM
	FORMATION TYPE	GENERIC (MEDIUM)		TOP
	CORRELATION METHOD	NTH ROOT		
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
ACOUSTIC AVAN CORRELATION				
DELTA T CURVE SELECTION	DT24 SOURCE	AVAN DT24		TOP
ACOUSTIC POROSITY				
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	177.800	mm	TOP
	CASING THICKNESS	0.000	mm	BOTTOM
	BIT SIZE	222.000	mm	TOP
	RMUD SOURCE (HDIL)	216.000	mm	BOTTOM
	RMUD SAMPLE TEMP	46.4	degC	TOP
	MUD SAMPLE RES	1.000	ohm.m	BOTTOM
	Known BH REF TEMP	25.0	degC	TOP
	at BH REF DEPTH	0.0	m	BOTTOM
	with TEMP GRADIENT	2.187	degC/m	TOP
	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		BOTTOM
	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		TOP
	FIXED DIAMETER (cnbh*)	222.000	mm	BOTTOM
	FIXED DIAMETER (mbh*)	216.000	mm	TOP
	BOREHOLE CORR DIAMETER	1420.901	mm	BOTTOM
	BOREHOLE CORR DIAMETER SOURCE	1437.970	mm	TOP
X-Y COMBINED CALIPER PROCESSING-FOCMYS Caliper - FOCUS	Average	216.000	mm	TOP
	FIXED DIAMETER (mbh*)	222.000	mm	BOTTOM
	FIXED DIAMETER (cnbh*)	216.000	mm	TOP
	BOREHOLE CORR DIAMETER	1420.901	mm	BOTTOM
	BOREHOLE CORR DIAMETER SOURCE	1437.970	mm	TOP
	BOREHOLE TEMP from GRADIENT	25.0	degC	TOP
	Known BH REF TEMP	25.0	degC	BOTTOM
	at BH REF DEPTH	0.0	m	TOP
	with TEMP GRADIENT	2.187	degC/m	BOTTOM
	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		TOP
	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		BOTTOM
	FIXED DIAMETER (cnbh*)	222.000	mm	TOP
	FIXED DIAMETER (mbh*)	216.000	mm	BOTTOM
	BOREHOLE CORR DIAMETER	1420.901	mm	TOP
	BOREHOLE CORR DIAMETER SOURCE	1437.970	mm	BOTTOM
	X-Y COMBINED CALIPER PROCESSING-FOCMYS Caliper - FOCUS	216.000	mm	TOP
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)

ACCEL CURR SWITCH	ACCEL DEPTH CORR	CORRECTION OFF	TOP	BOTTOM
-------------------	------------------	----------------	-----	--------

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
------------------	-----------	-------	-------	--------------

CN BOREHOLE CORRECTION	SALINITY	0	ppm	TOP BOTTOM
CN CASING & CEMENT CORRECTION	BOREHOLE CORRECTION	ON		TOP BOTTOM
	CORRECTION	OFF		
	BIT SIZE BEHIND CSNG	311.000	mm	

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
------------------	-----------	-------	-------	--------------

DENSITY POROSITY	Air Filled Borehole	NO		TOP BOTTOM
	RHOfluid	1.000	g/cm3	
	RHOmatrix (sand)	2.650	g/cm3	

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)
------------------	-----------	-------	-------	--------------

HDIL TEMPERATURE CORRECTION	TEMP CORRECTION	ON		TOP BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		TOP BOTTOM
	ABC to CALCULATE	STANDOFF		TOP BOTTOM
	STANDOFF	38.10	mm	
	TOOL POSITION	ECCENTERED		TOP BOTTOM
	Rmud MULTIPLIER	1.000		TOP BOTTOM

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
------------	---------------	-------------------

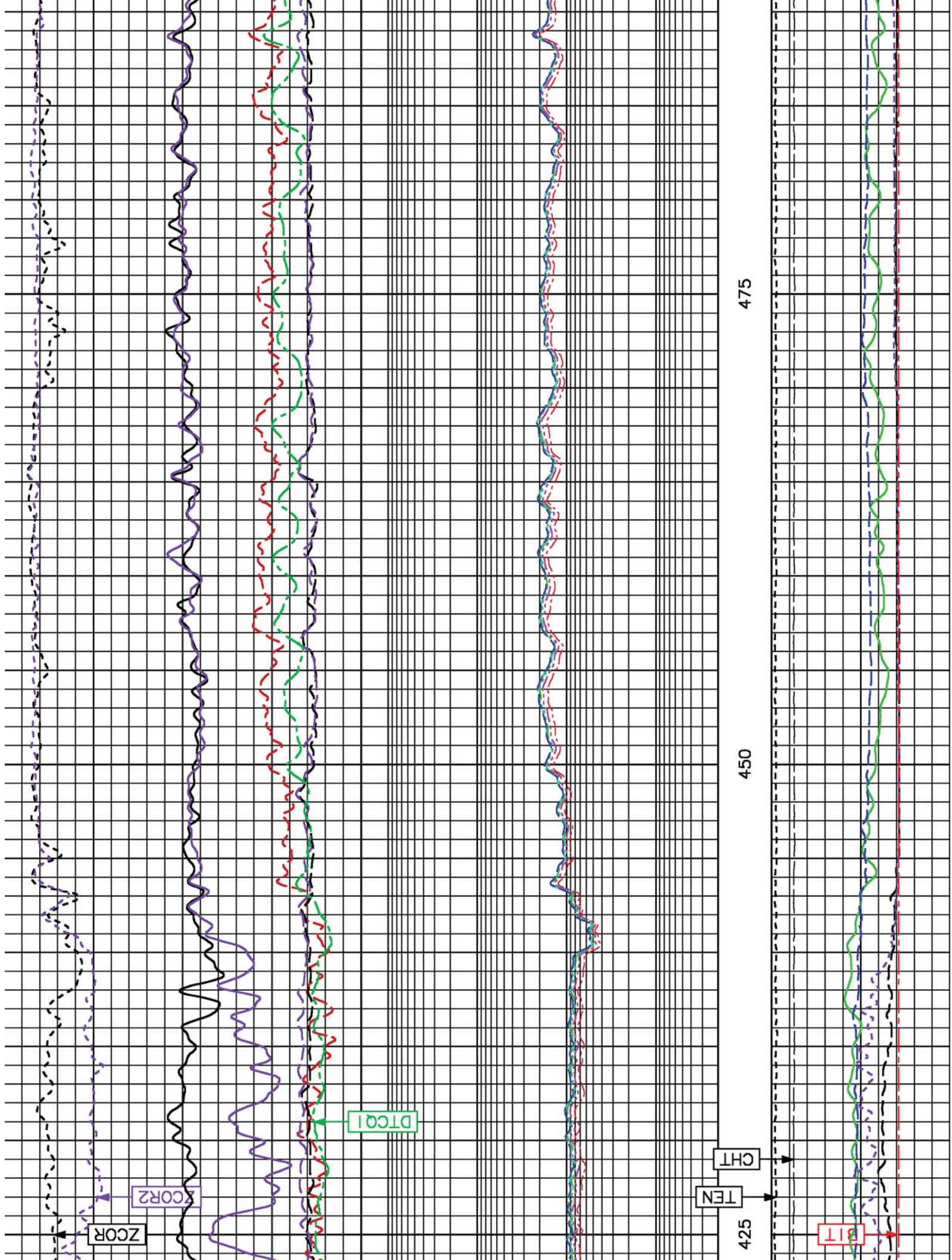
F1:BIT	Feb 16 07:26:57 2013	BIT SIZE
F1:CALX	Feb 16 07:26:57 2013	CALIPER FROM X-AXIS OF XY CALIPER(S)
F1:CALY	Feb 16 07:26:57 2013	CALIPER FROM Y-AXIS OF XY CALIPER(S)
F1:CHT	Feb 16 07:26:57 2013	CABLE HEAD TENSION
F1:CNCSS	Feb 16 07:26:57 2013	BOREHOLE SIZE CORRECTED SANDSTONE COMPENSATED NEU POROSITY
F1:DTCQ1	Feb 16 07:26:57 2013	COMPRESSIONAL WAVE SLOWNESS
F1:GR	Feb 16 07:26:57 2013	GAMMA RAY
F1:M2R1	Feb 16 07:26:57 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R2	Feb 16 07:26:57 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 20-INCH DOI
F1:M2R3	Feb 16 07:26:57 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 30-INCH DOI
F1:M2R6	Feb 16 07:26:57 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Feb 16 07:26:57 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Feb 16 07:26:57 2013	PHOTO ELECTRIC CROSS-SECTION
F1:PE2	Feb 16 07:26:57 2013	PHOTOELECTRIC CROSS-SECTION (2ND TOOL)
F1:PZSS	Feb 16 07:26:57 2013	POROSITY FOR SANDSTONE MATRIX
F1:PZSS2	Feb 16 07:26:57 2013	POROSITY FOR SANDSTONE MATRIX (2ND TOOL)
F1:SP	Feb 16 07:26:57 2013	SPONTANEOUS POTENTIAL
F1:TEN	Feb 16 07:26:57 2013	DIFFERENTIAL TENSION
F1:ZCOR	Feb 16 07:26:57 2013	DENSITY CORRECTION
F1:ZCOR2	Feb 16 07:26:57 2013	DENSITY CORRECTION (2ND TOOL)

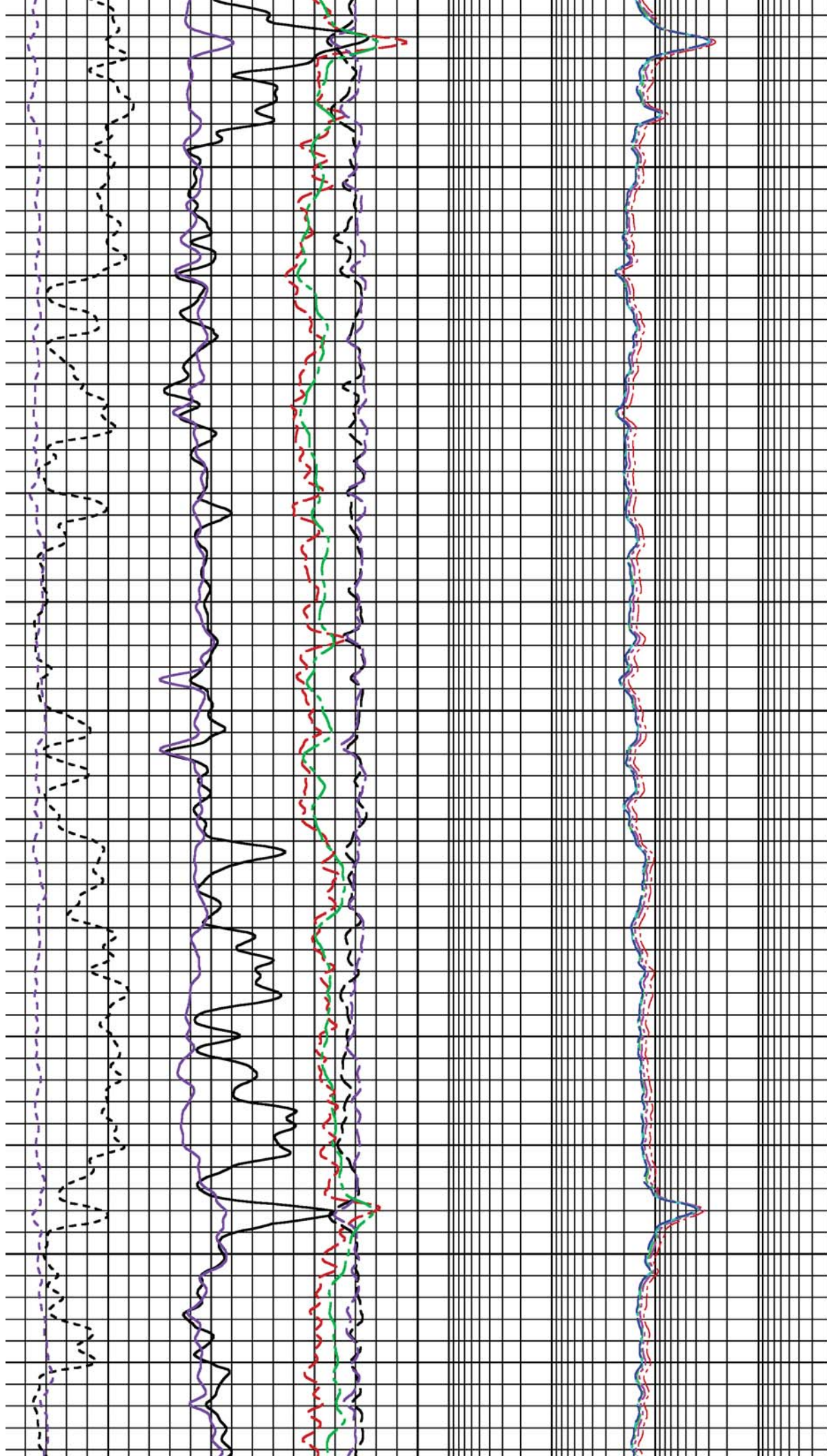
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
-------	------------	-------	------------	-------	------------	-------	------------	-------	------------

BIT	0.00	DTCQ1	25.30	M2R6	0.84	PZSS2	0.84
CALX	9.64	GR	33.76	M2R9	0.84	SP	0.38
CALY	5.49	M2R1	0.84	PE	9.64	TEN	0.00
CHT	0.00	M2R2	0.84	PE2	5.49	ZCOR	9.64
CNCSS	12.50	M2R3	0.84	PZSS	9.64	ZCOR2	5.49

Presentation	: sysa:/data/MGM/run2_oh/comp-main_ss.pdf [1:240 Scale]
Plot Interval	: 385 - 1971.45 Meters
Data File 1	: F1 : sysa:/data/MGM/run2_oh/222_main.xtf
Created On	: Feb 16 07:26:57 2013
Company	: MGM ENERGY CORP
Well	: MGM SHELL EAST MACKAY I-78
Field	: EAST MACKAY
File Interval	: 318.973 - 1971.48 Meters
Oct	: m980e

GR BACKUP	≤	0.2	10 in. DOI [m2r1]	45	NEUTRON SANDSTONE POROSITY [cncss]	-15
-----------	---	-----	-------------------	----	------------------------------------	-----

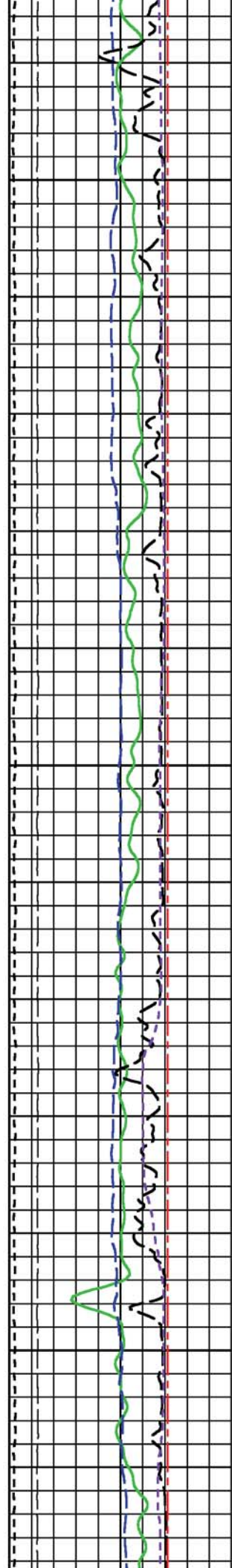


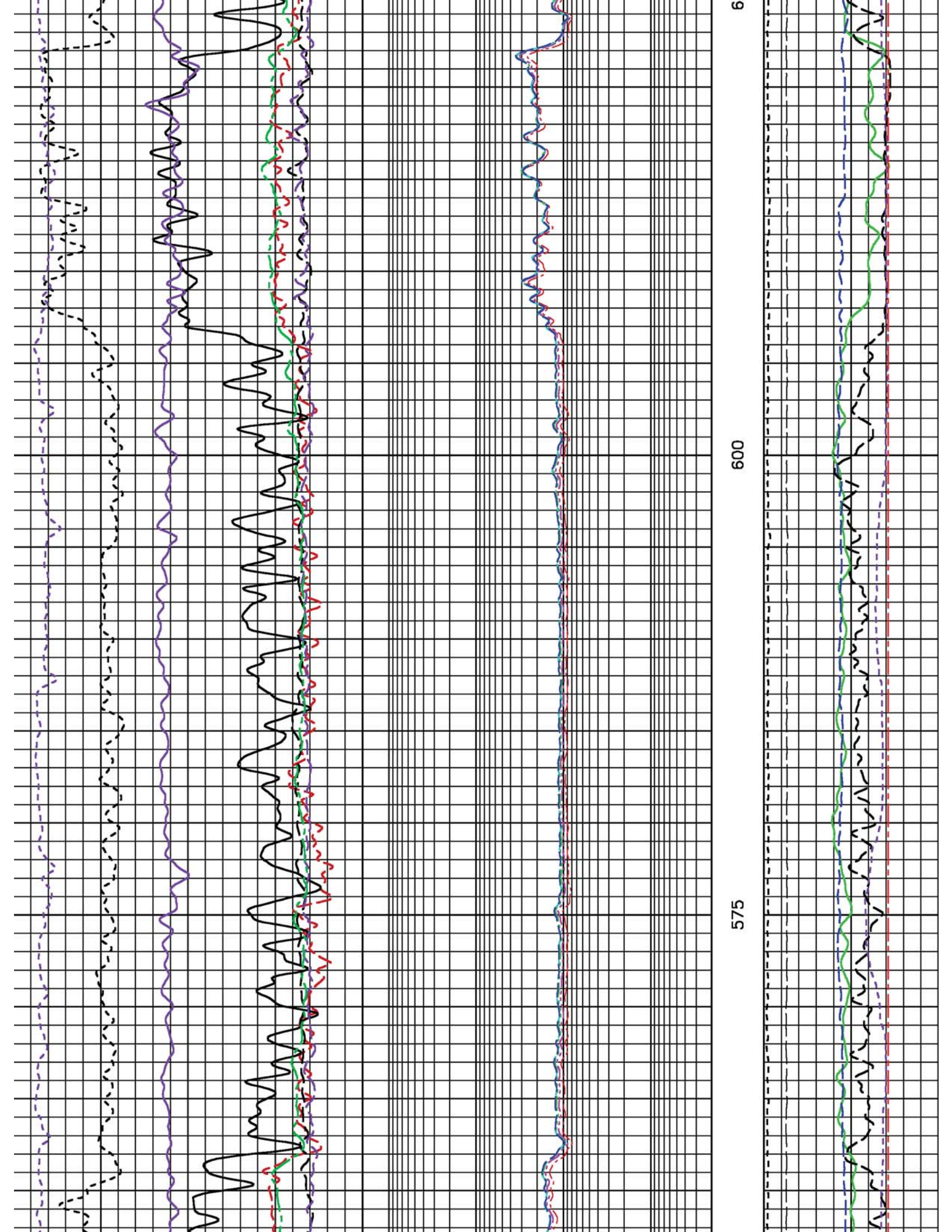


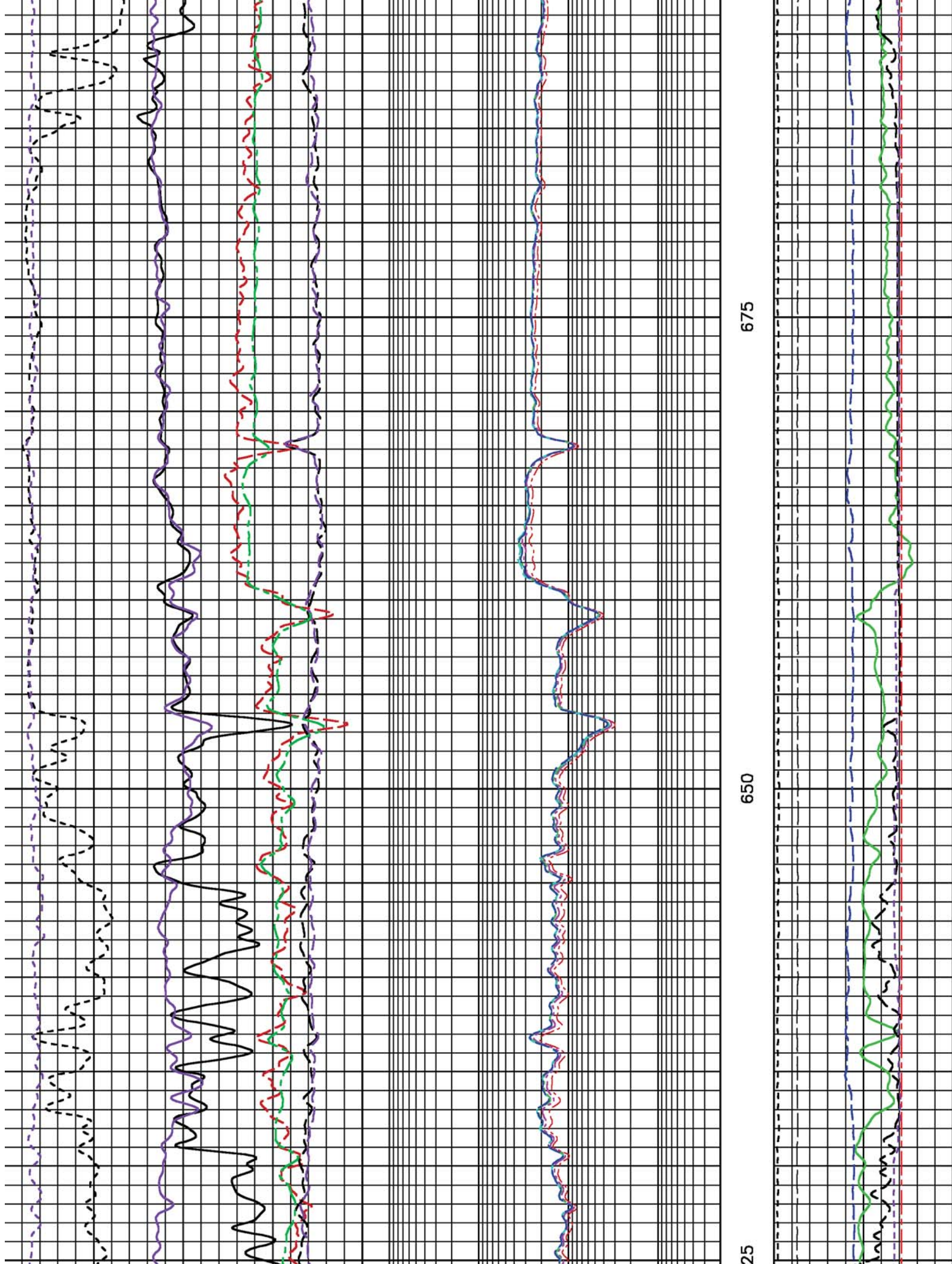
500

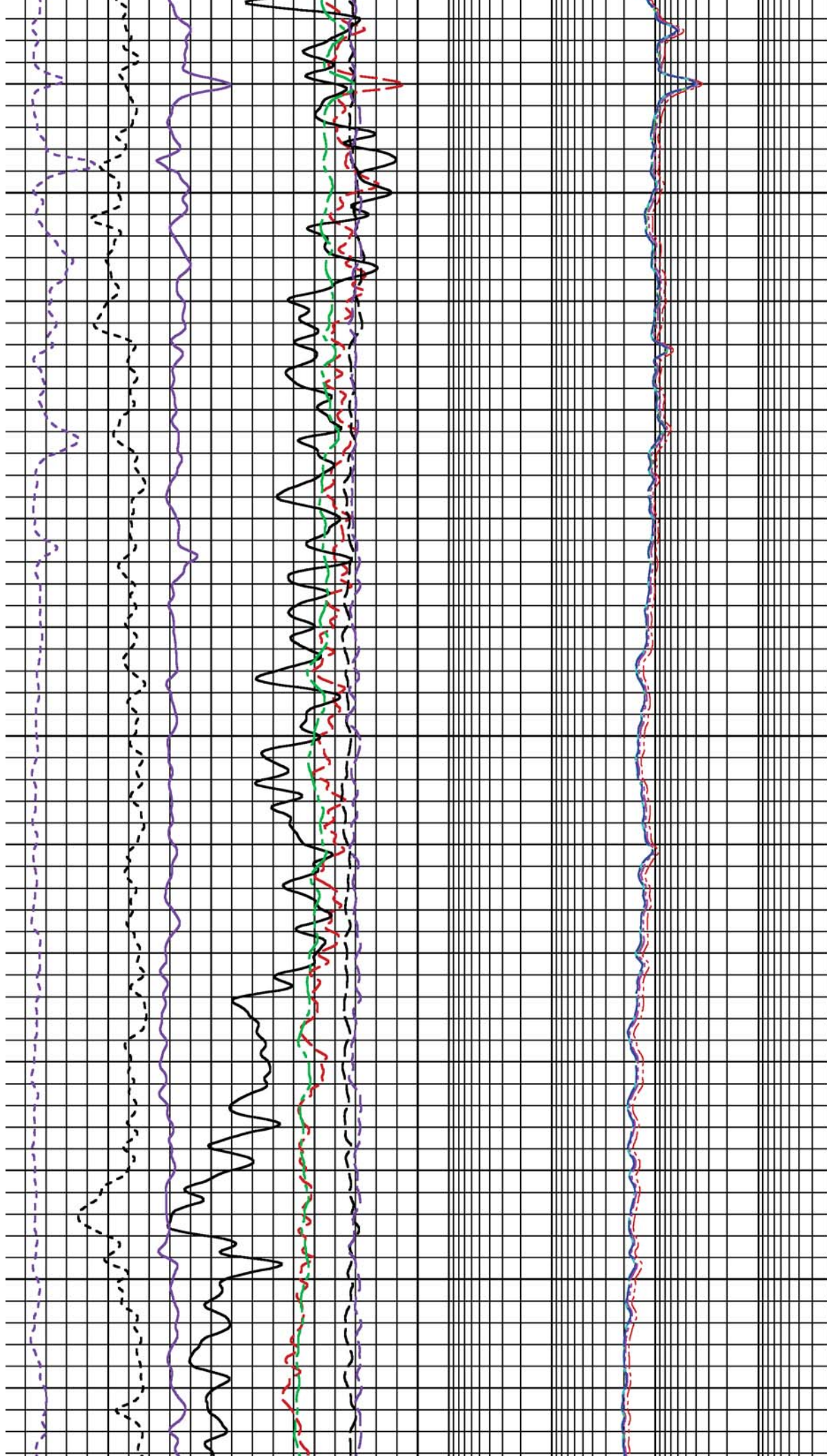
525

550





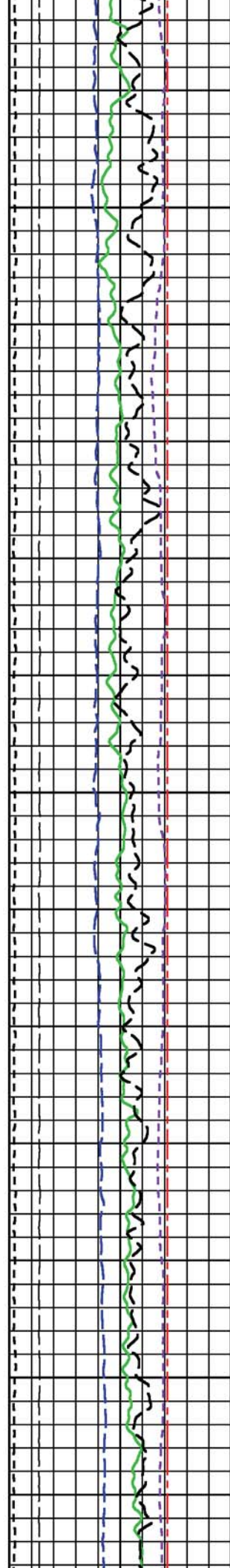


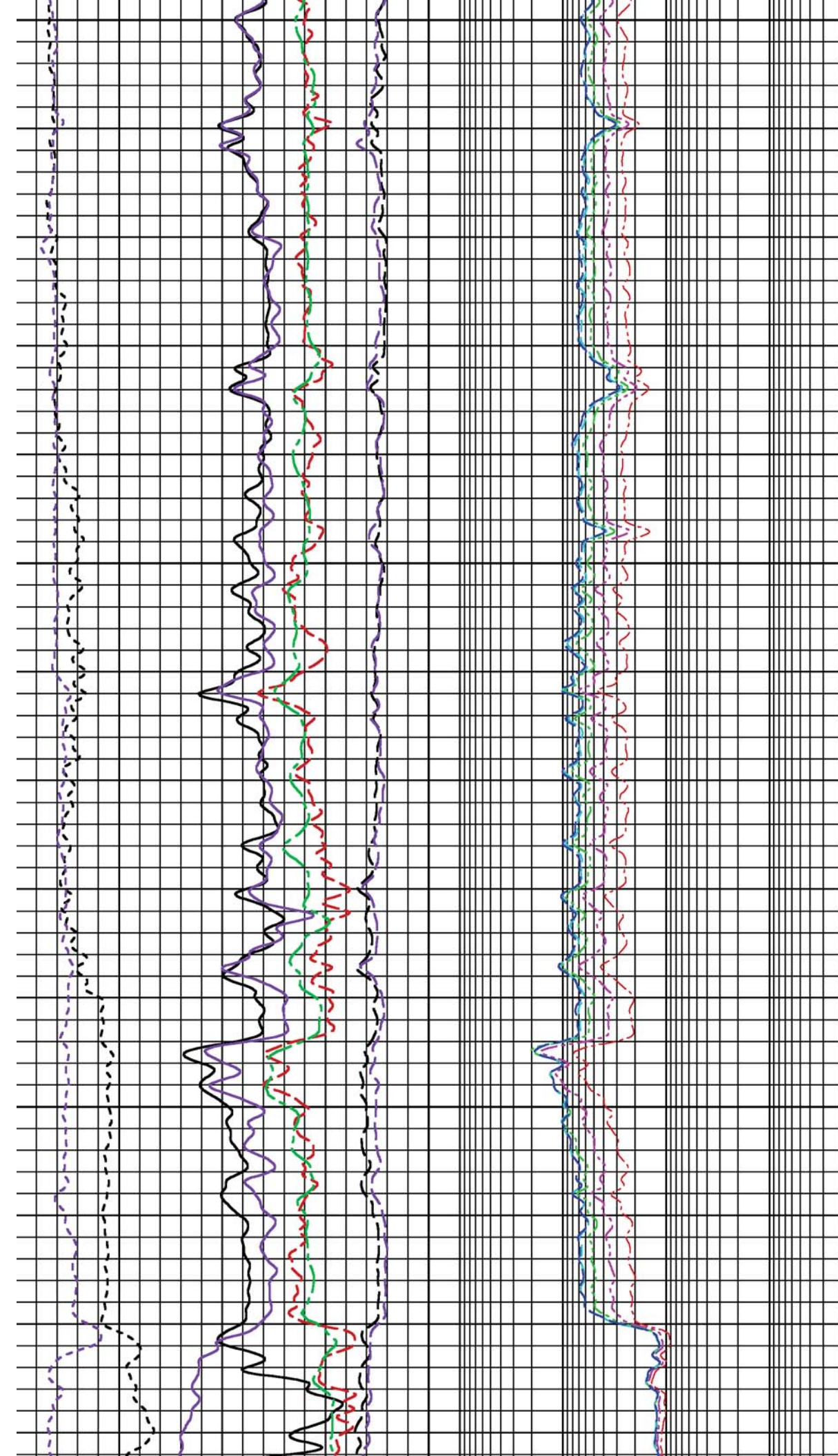


700

725

750

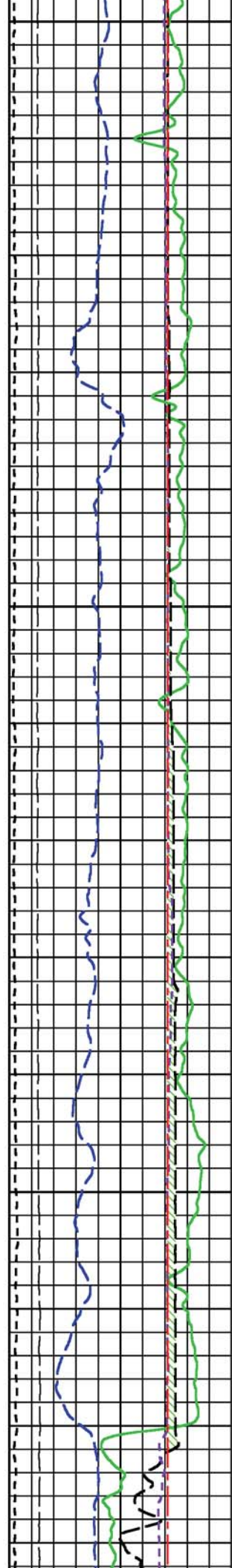


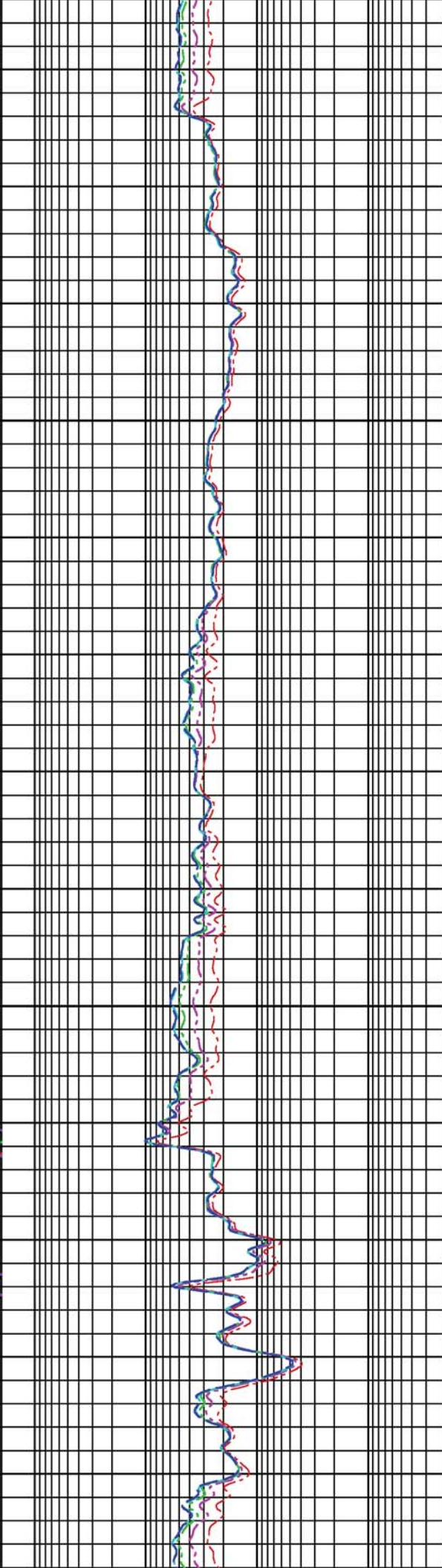
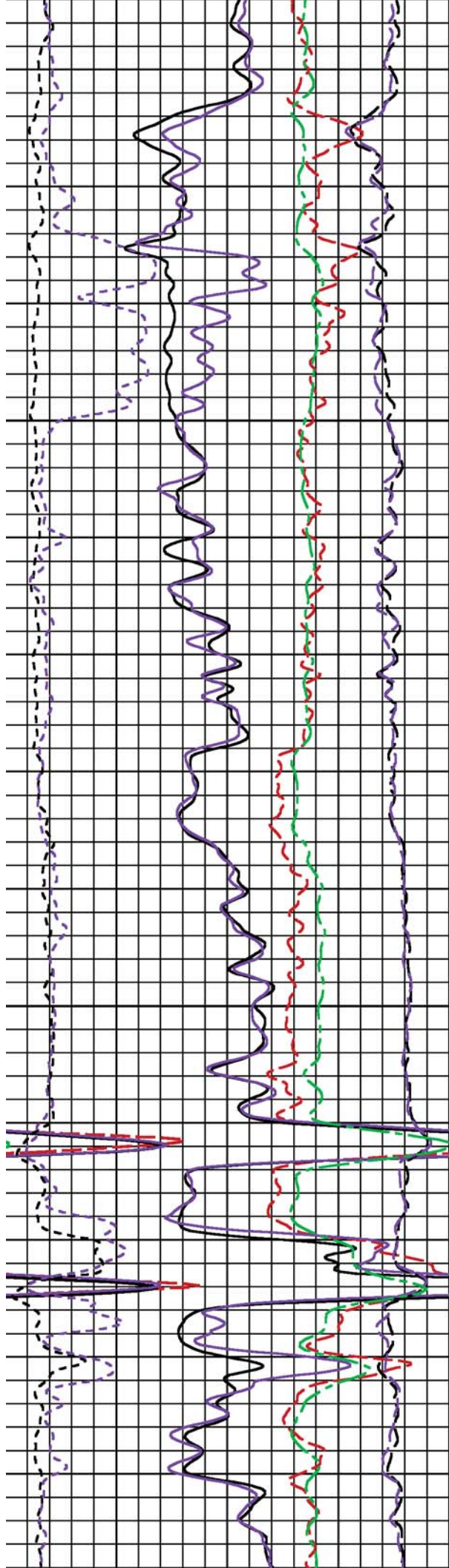


775

800

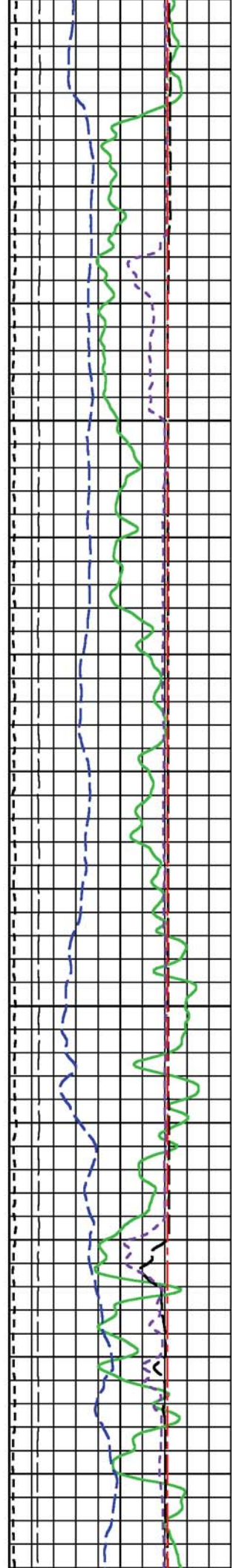
825

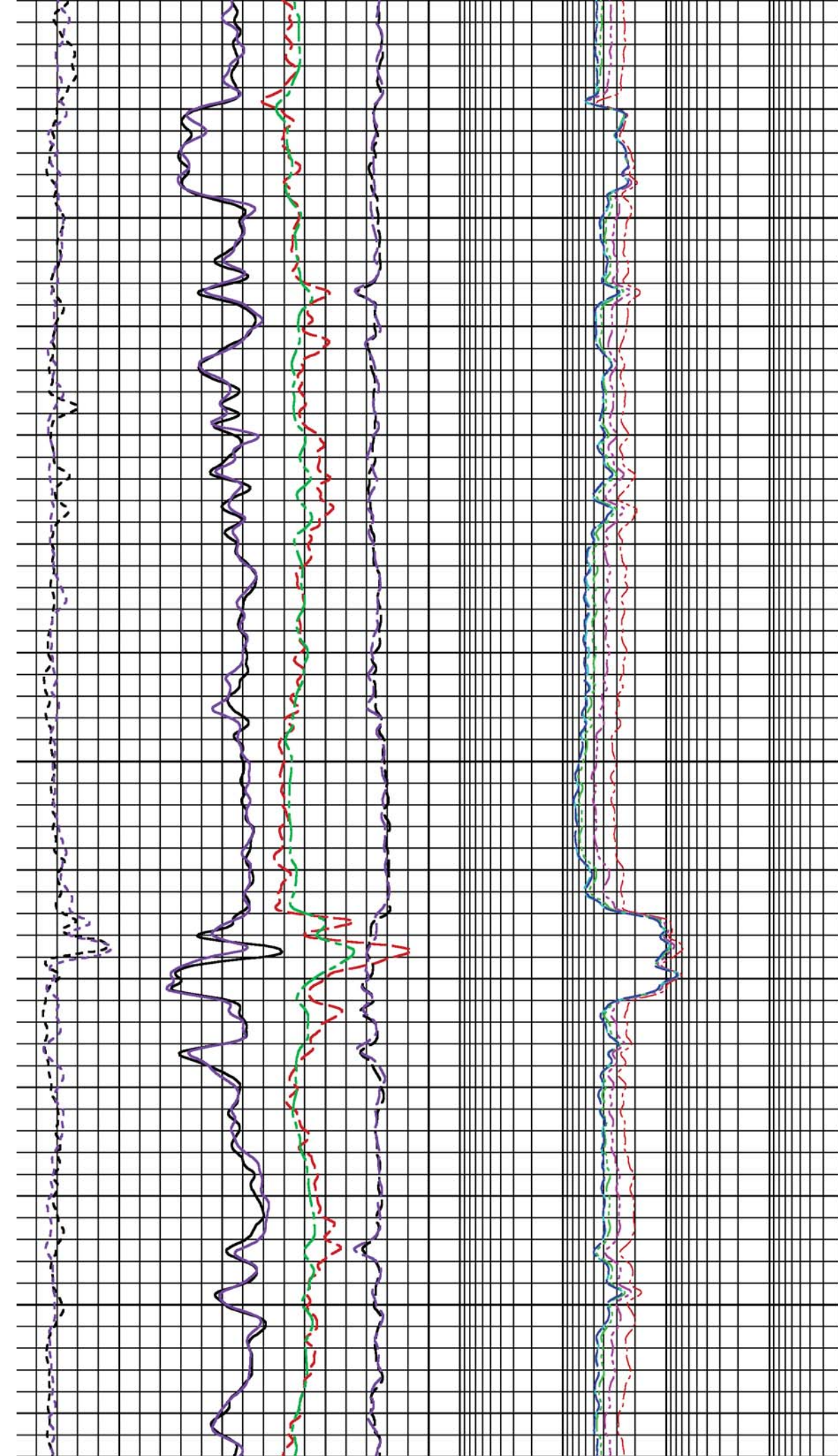




850

875

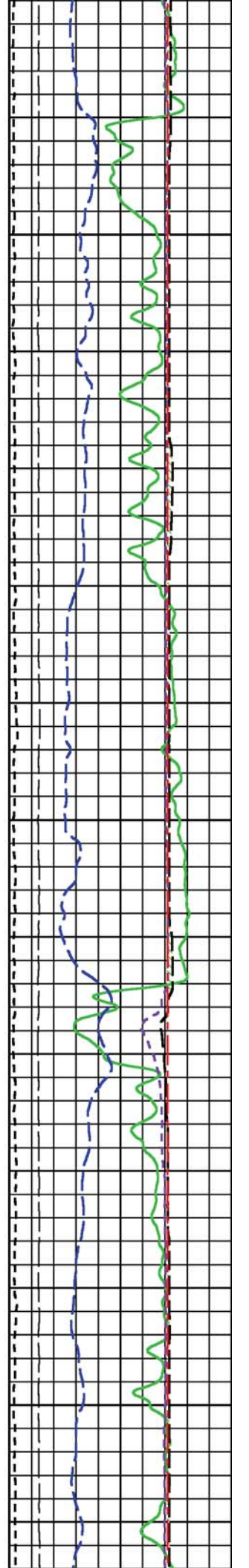


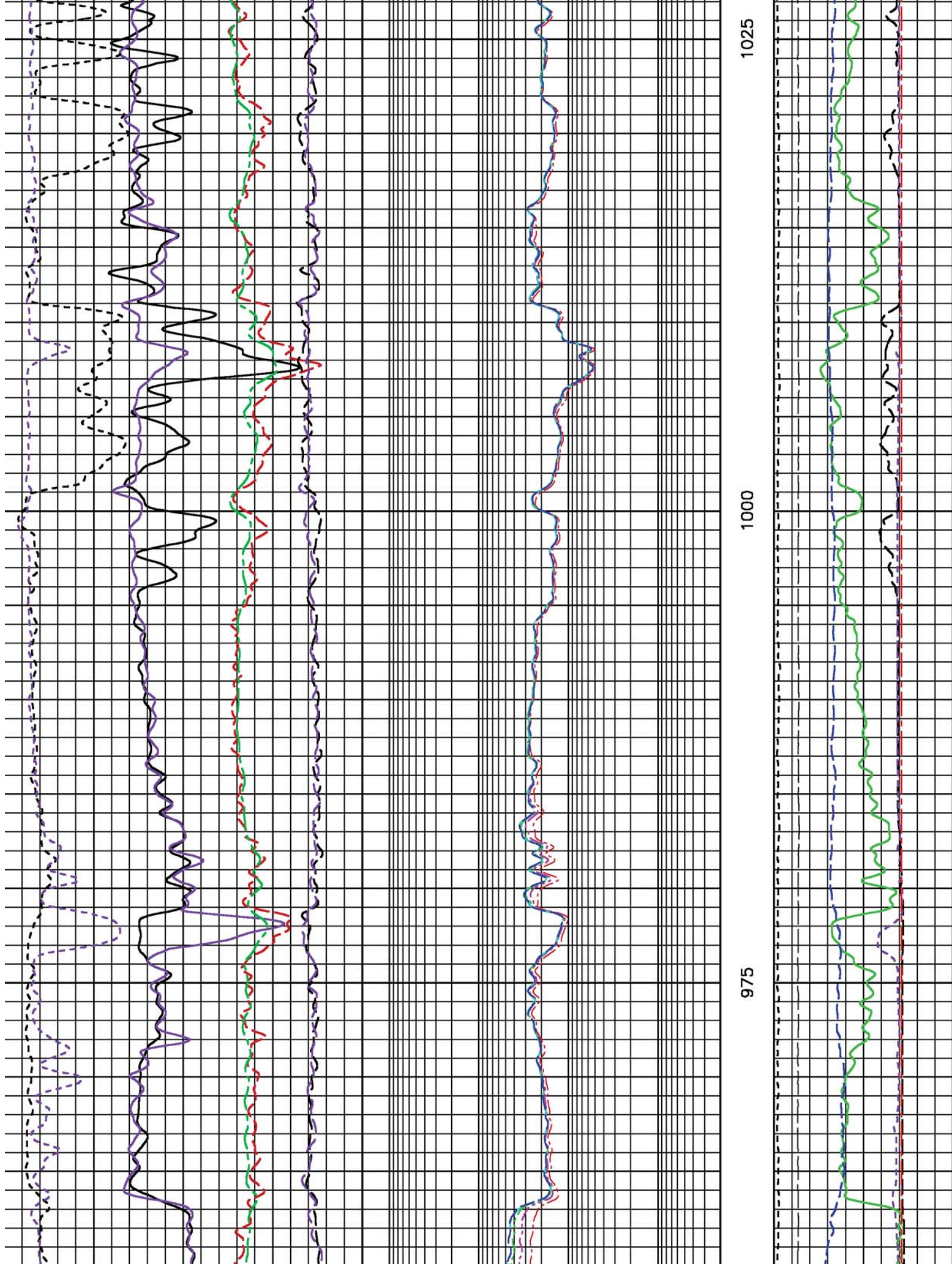


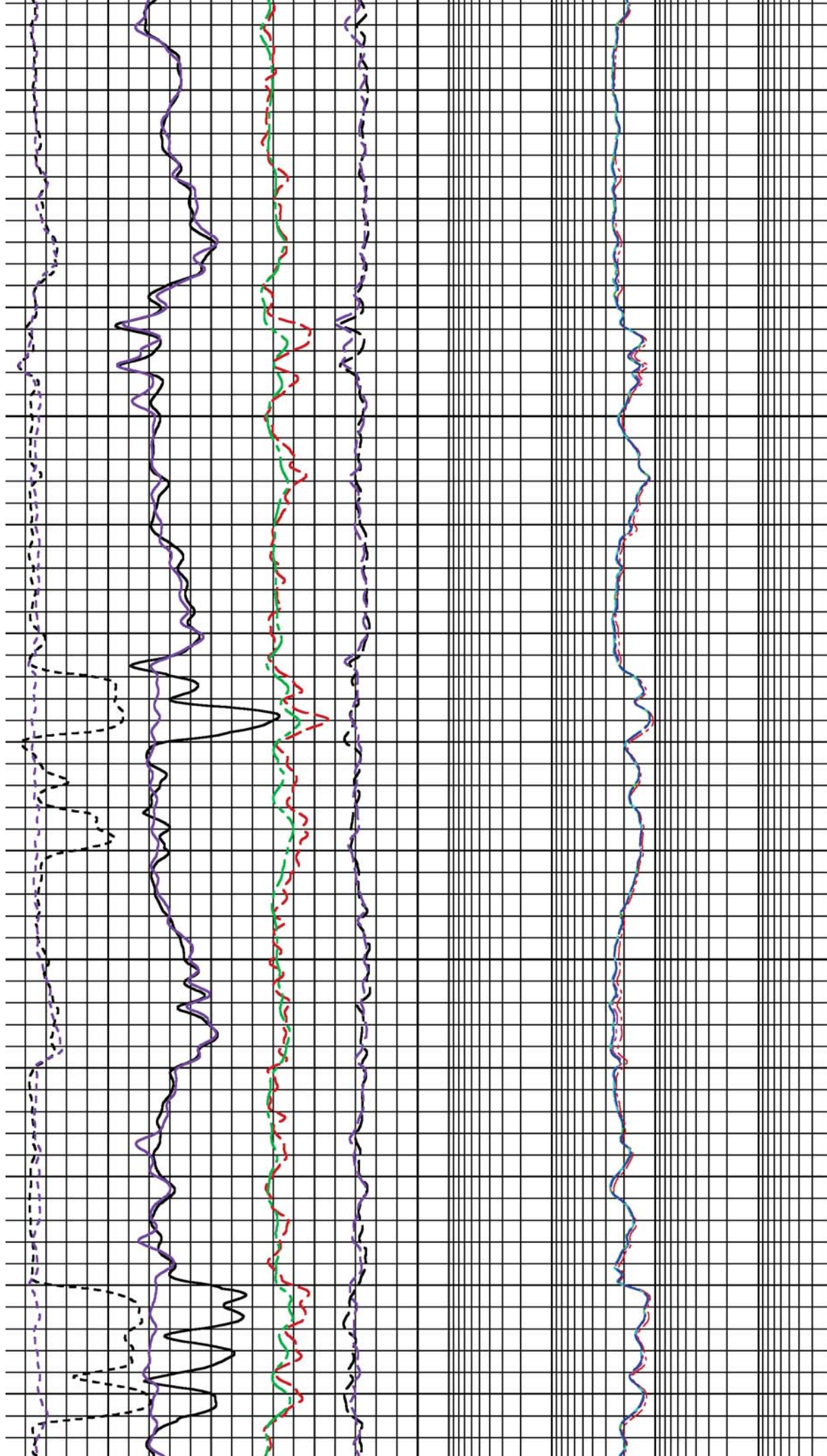
900

925

950

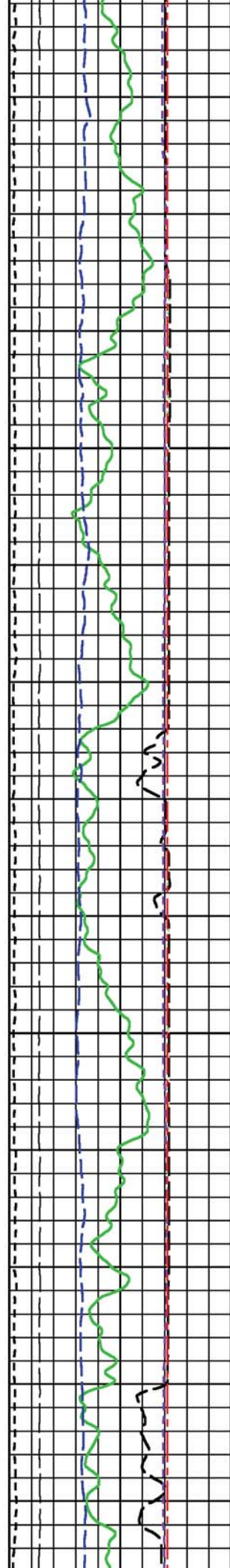


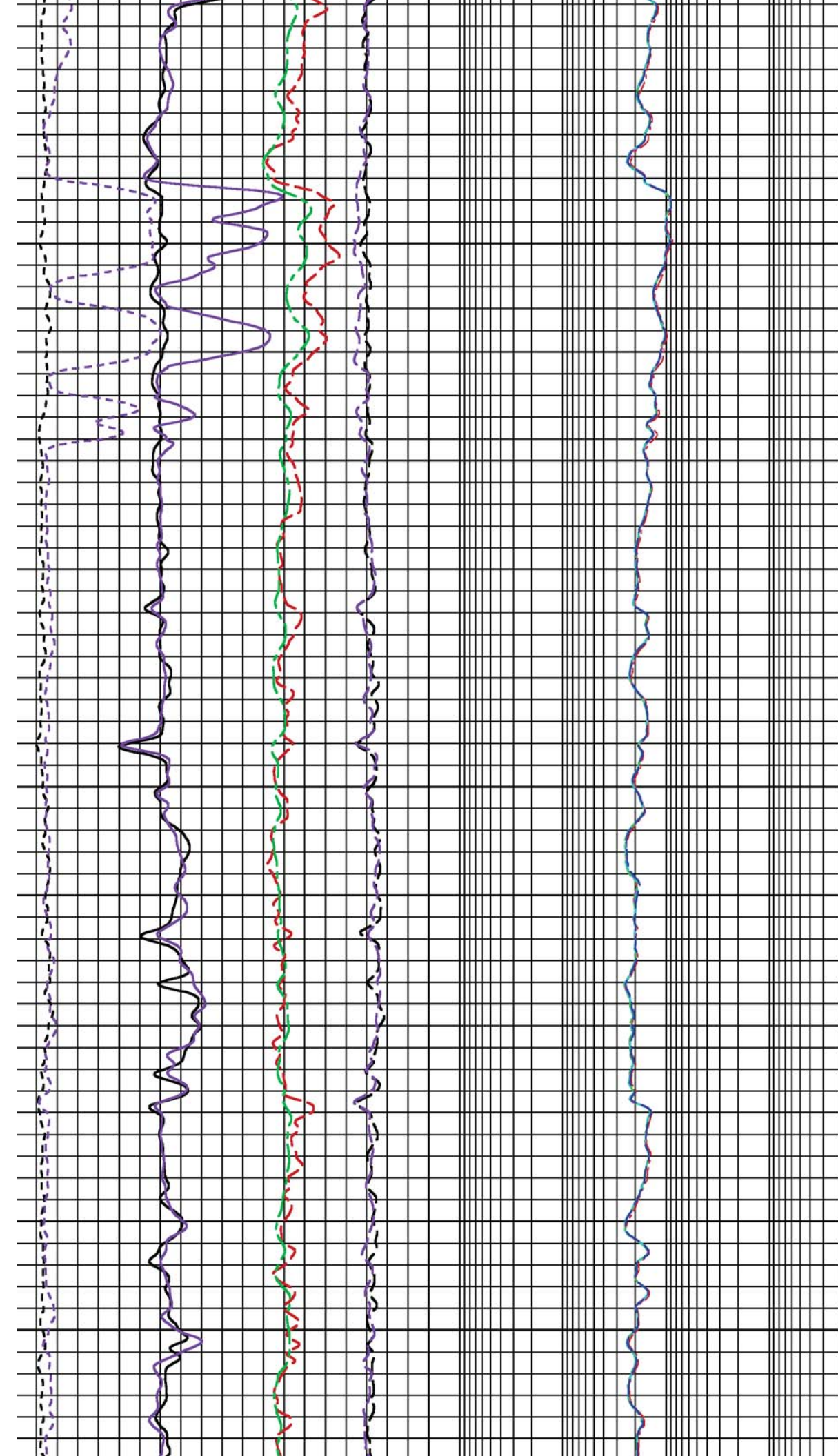




1050

1075

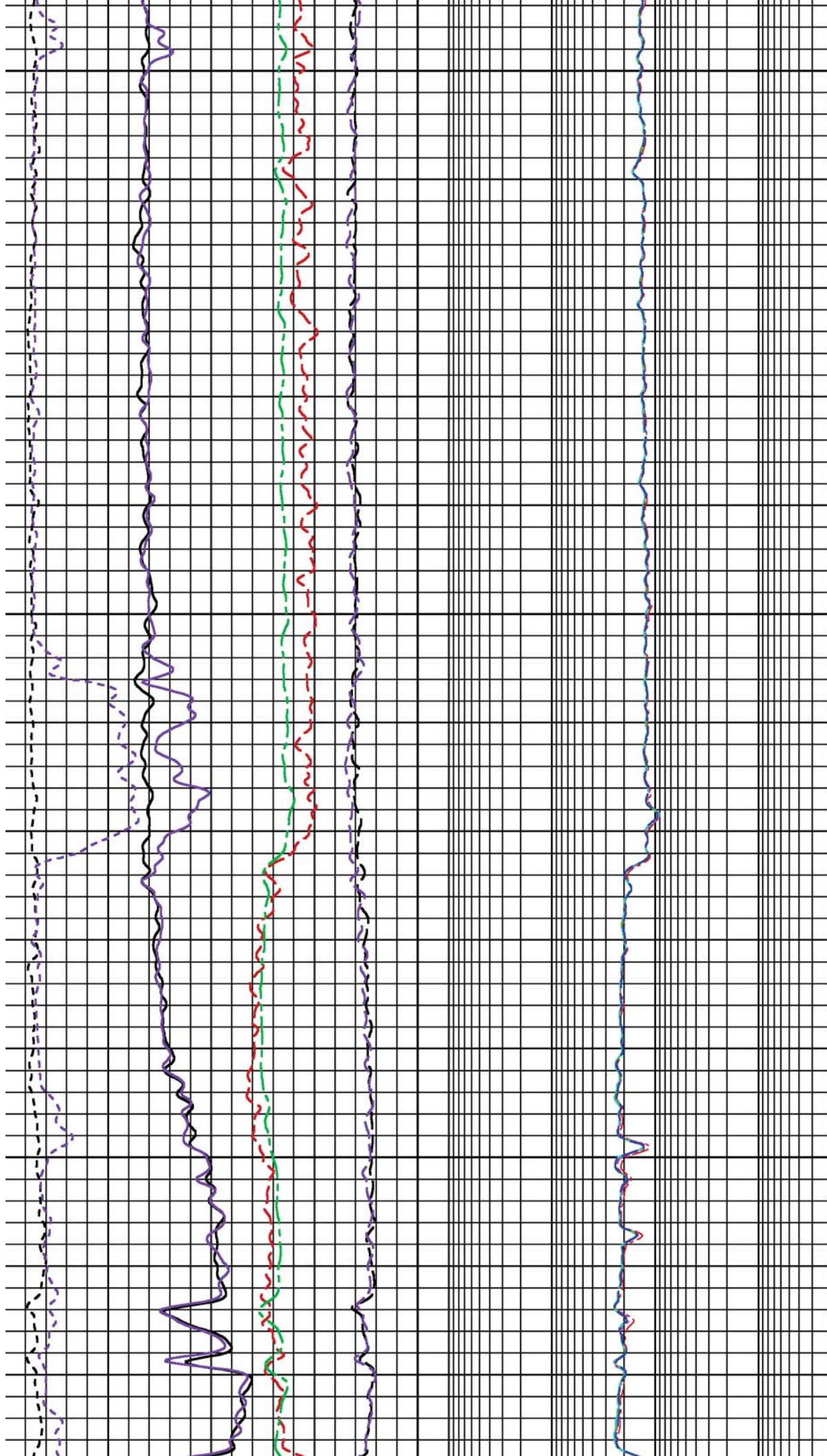




1100

1125

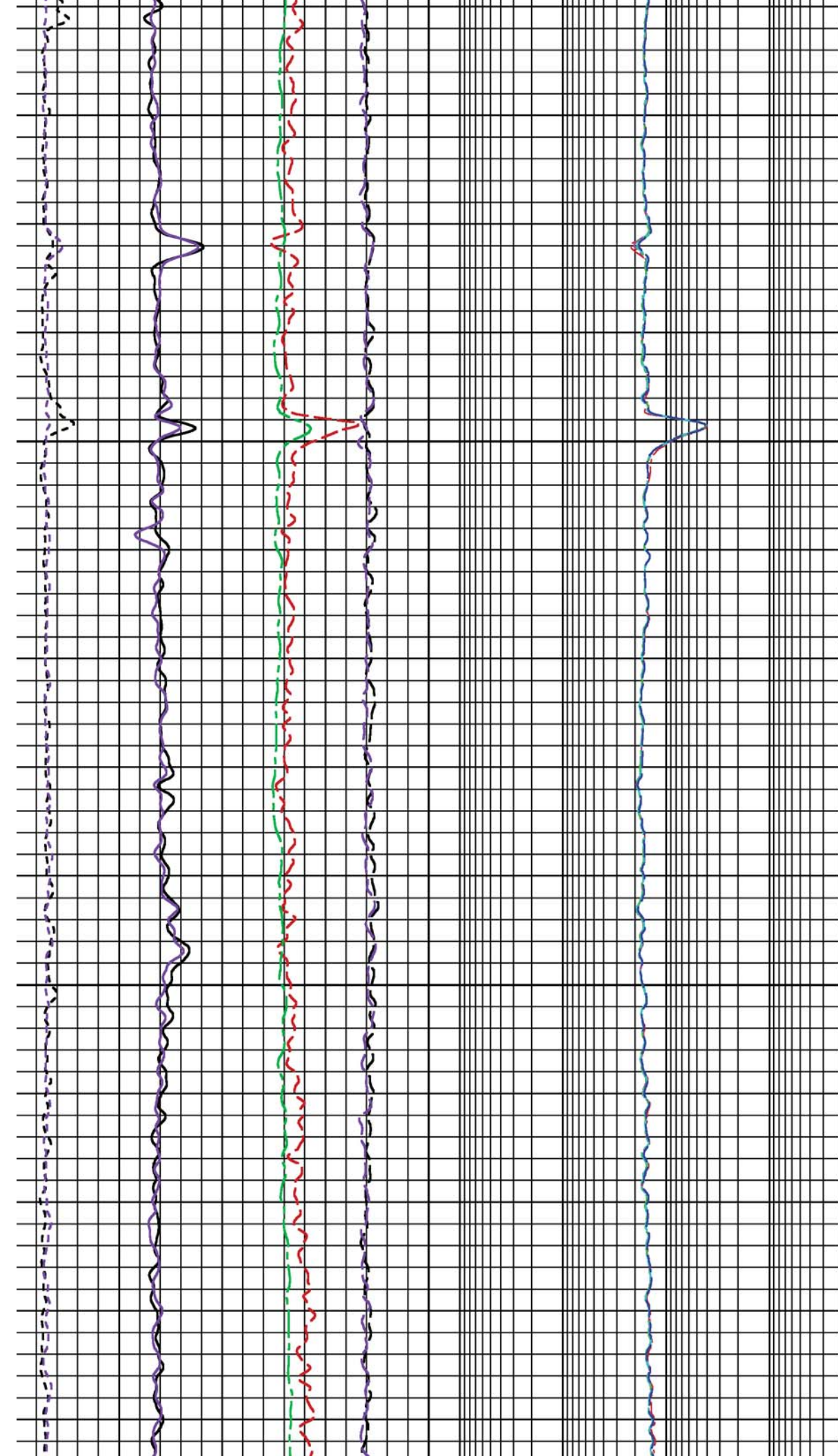
1150



1175

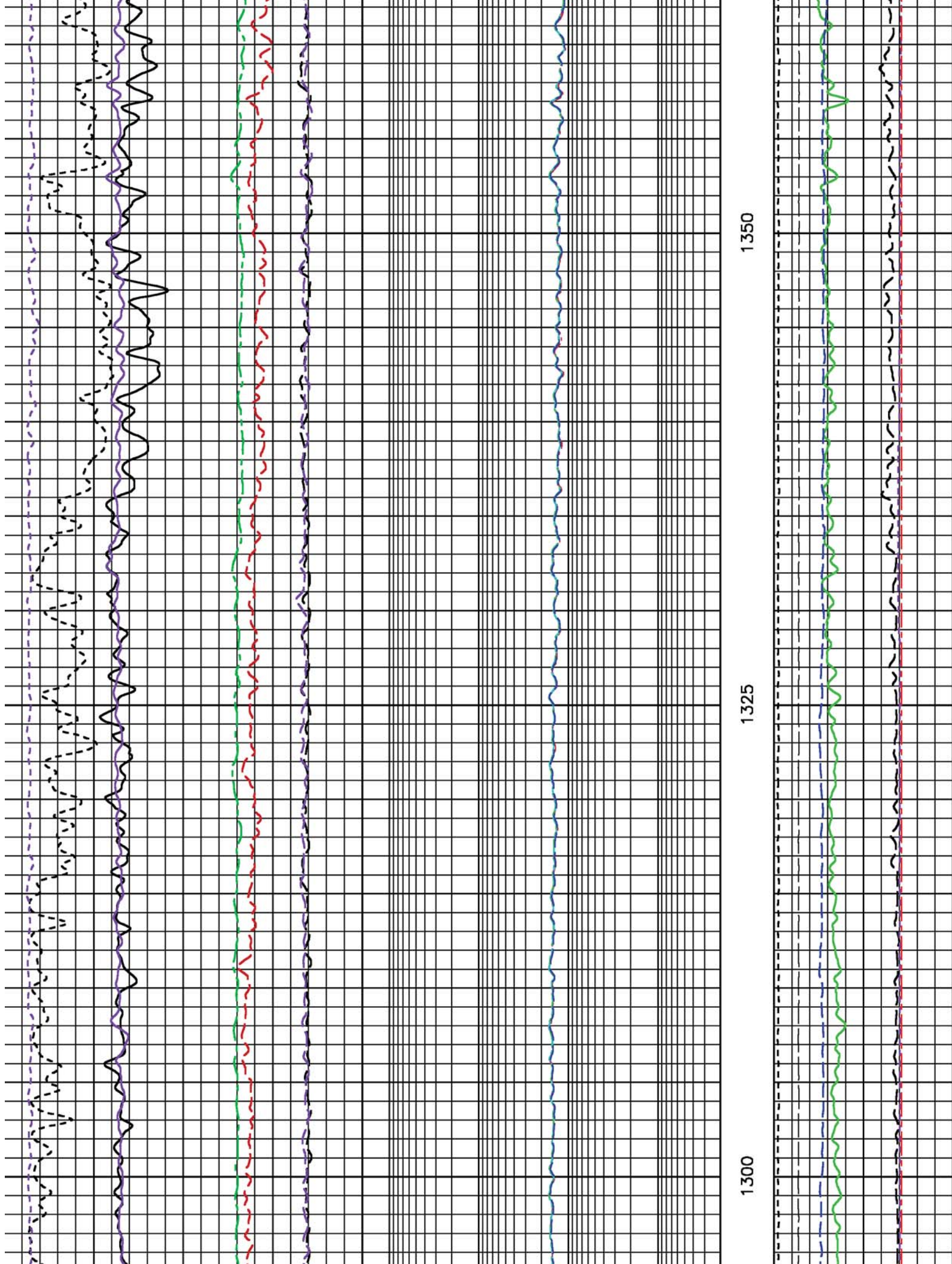
1200

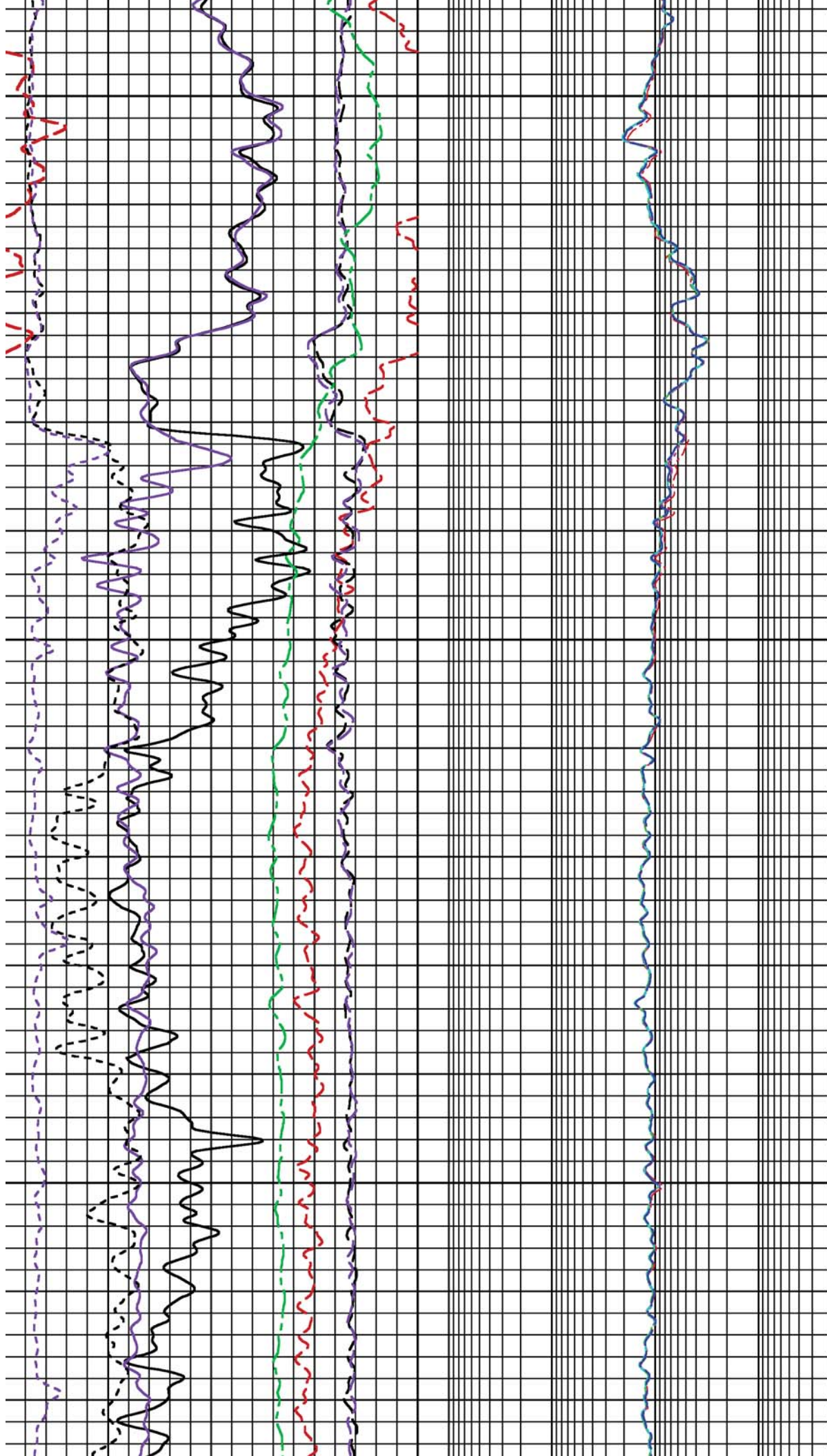
1225



1250

1275

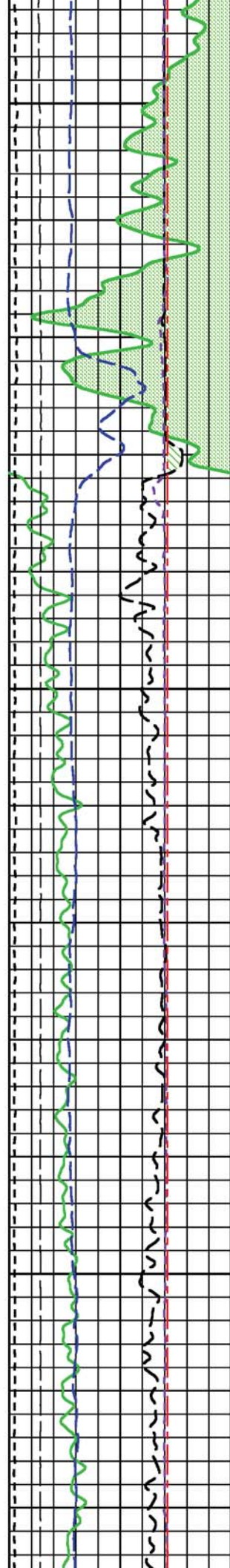


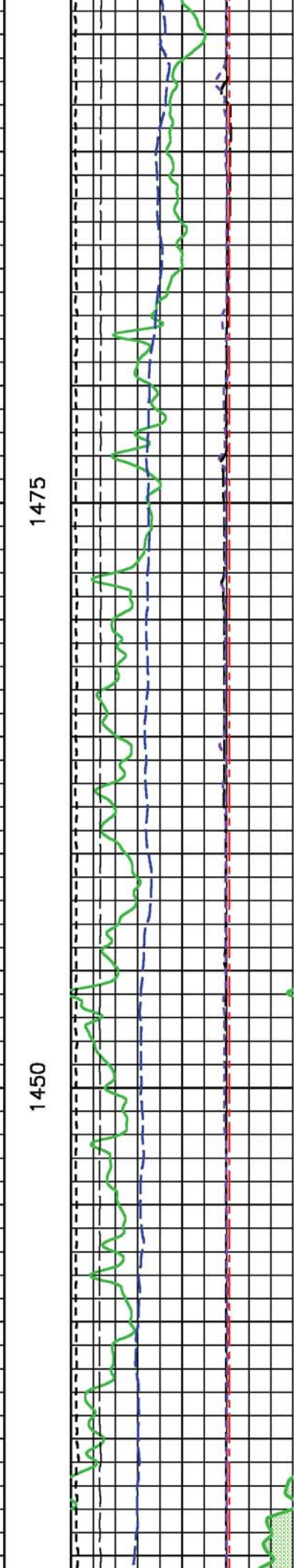
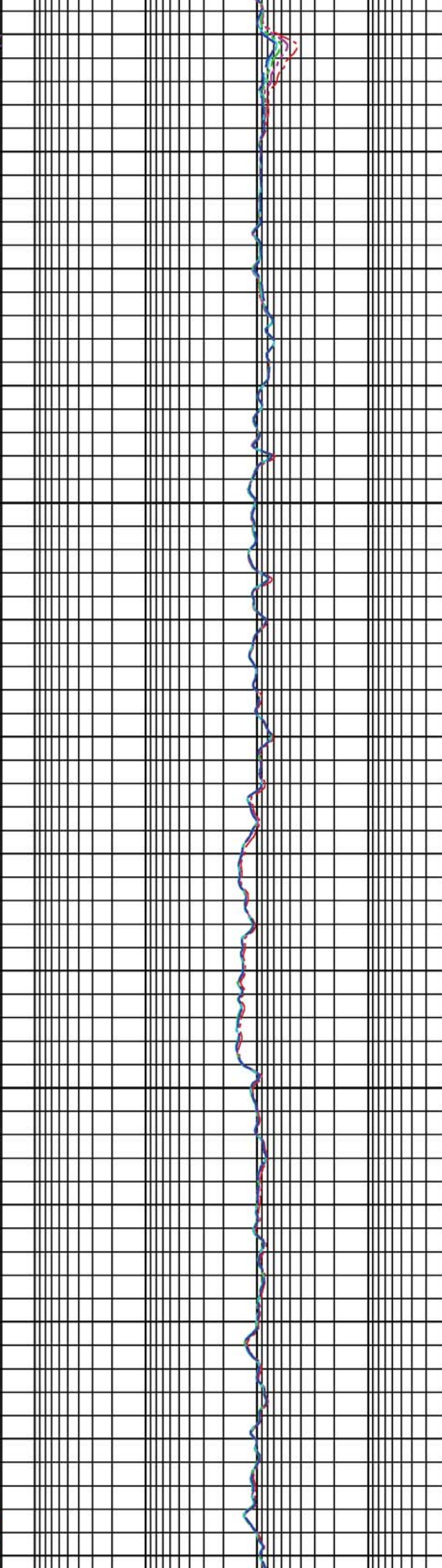
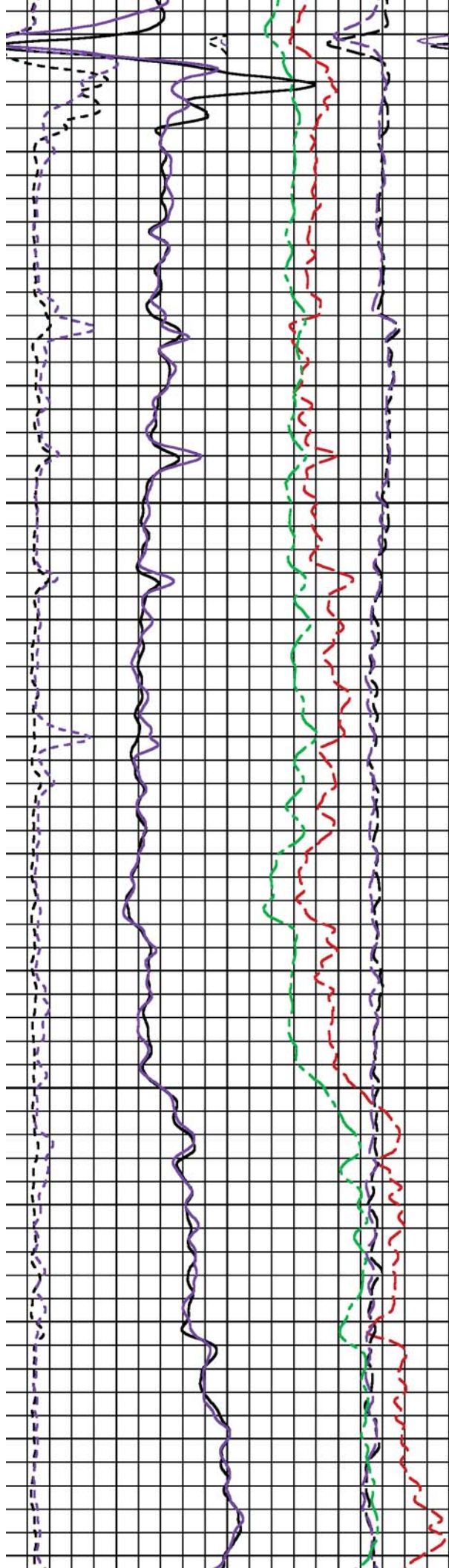


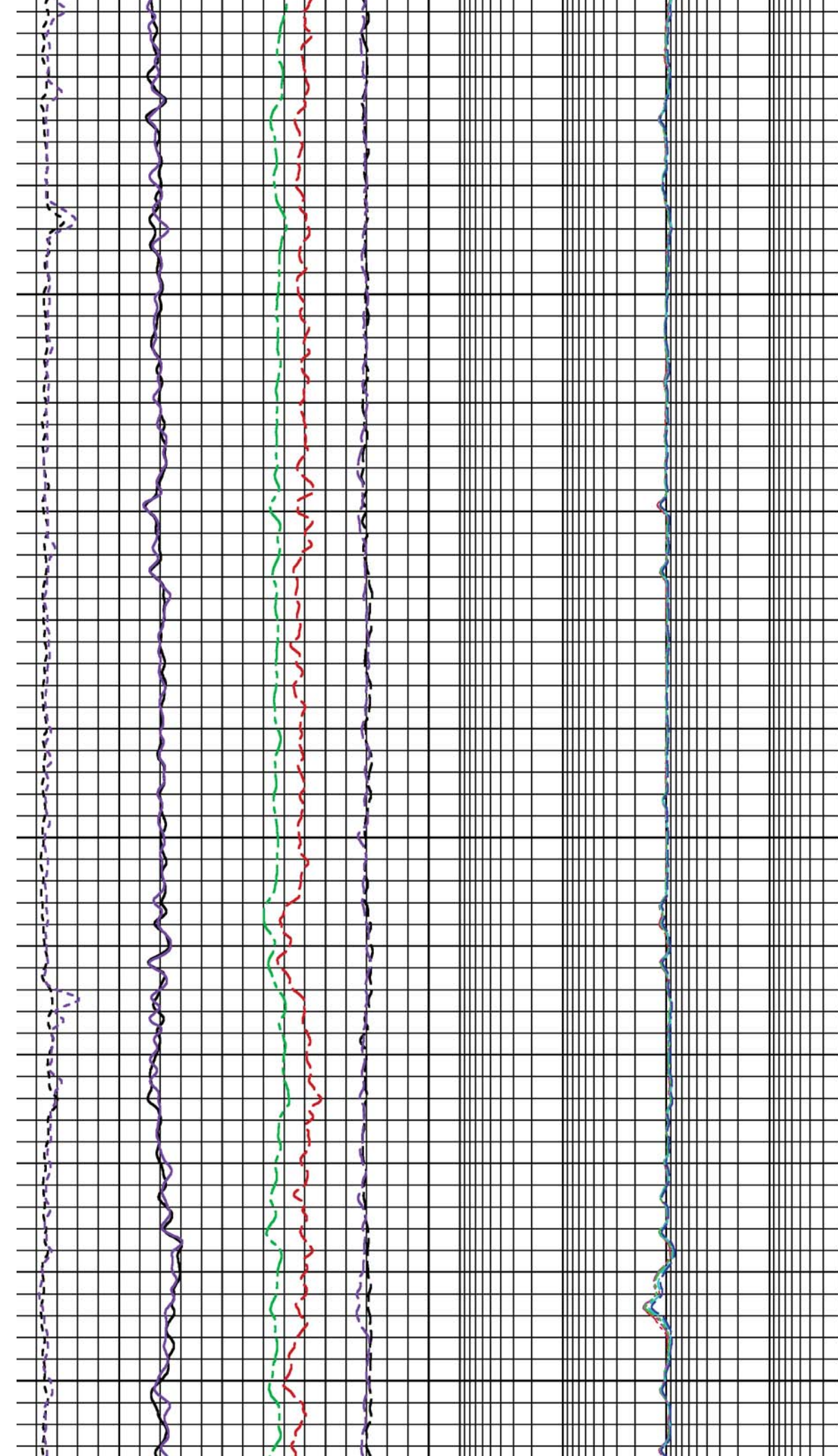
1375

1400

1425



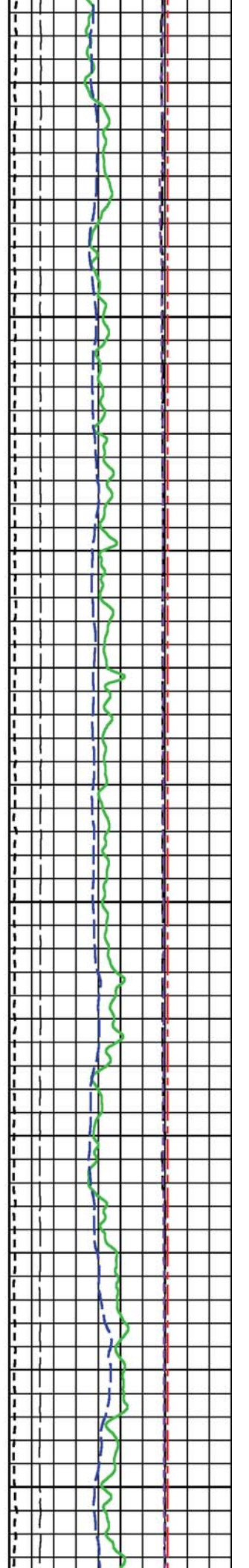


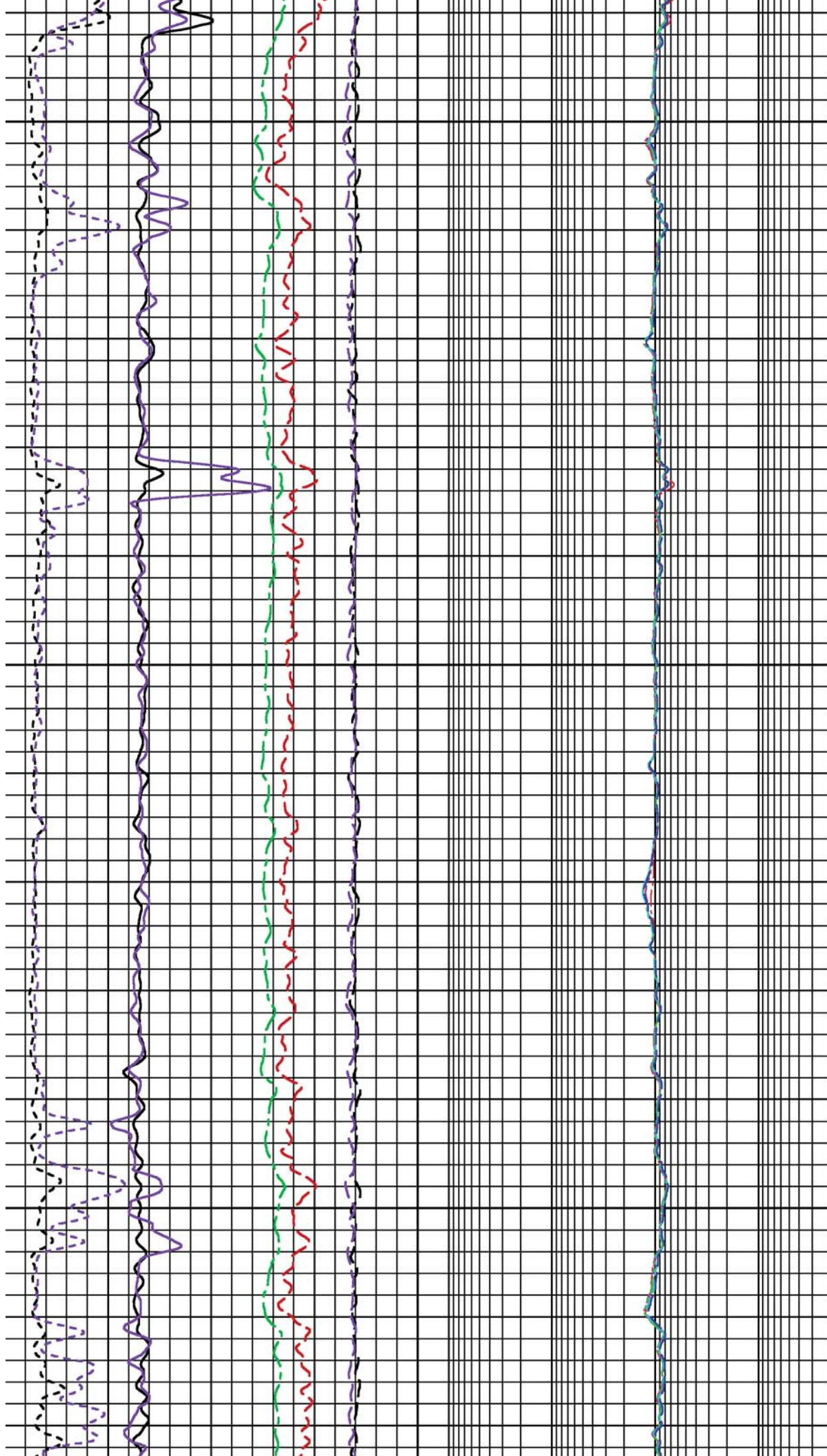


1500

1525

1550

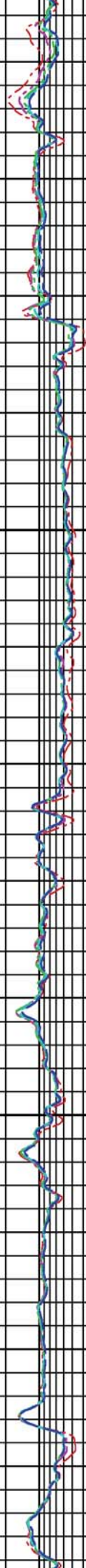
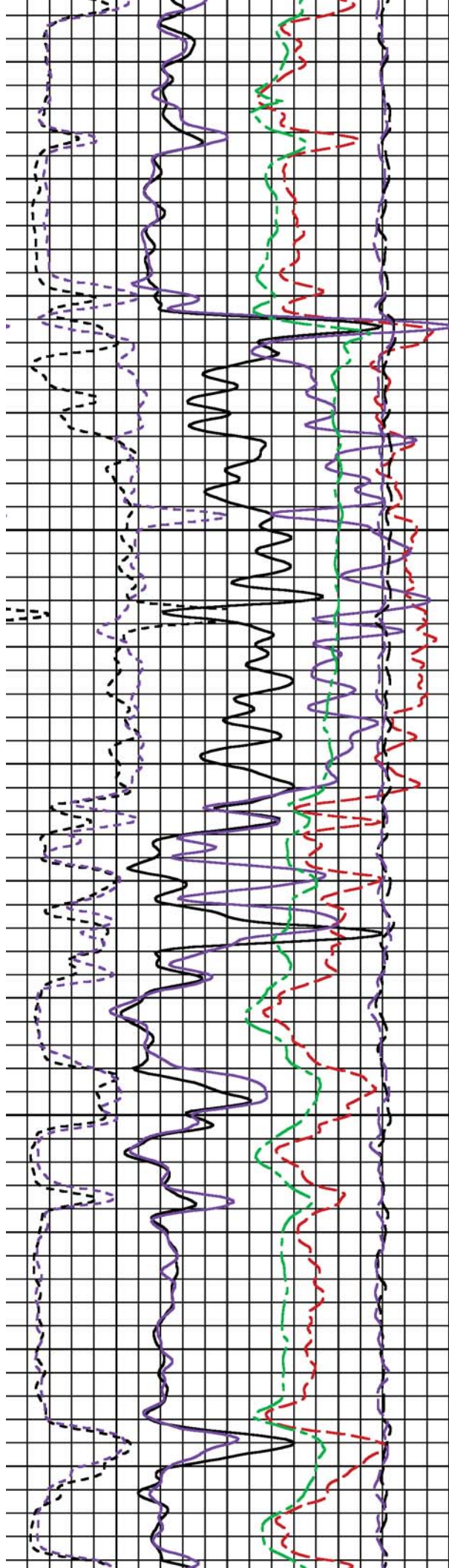




1575

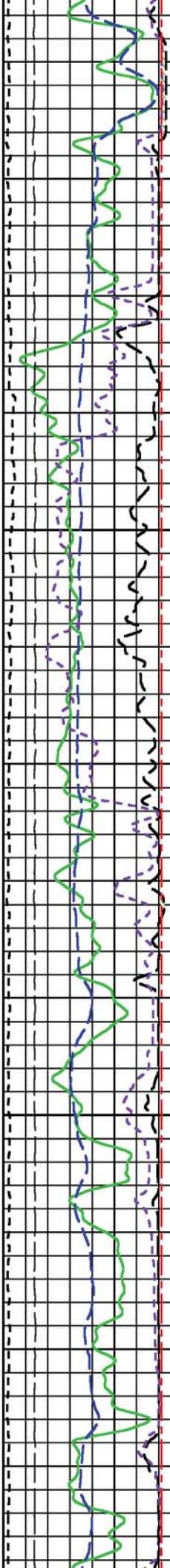
1600

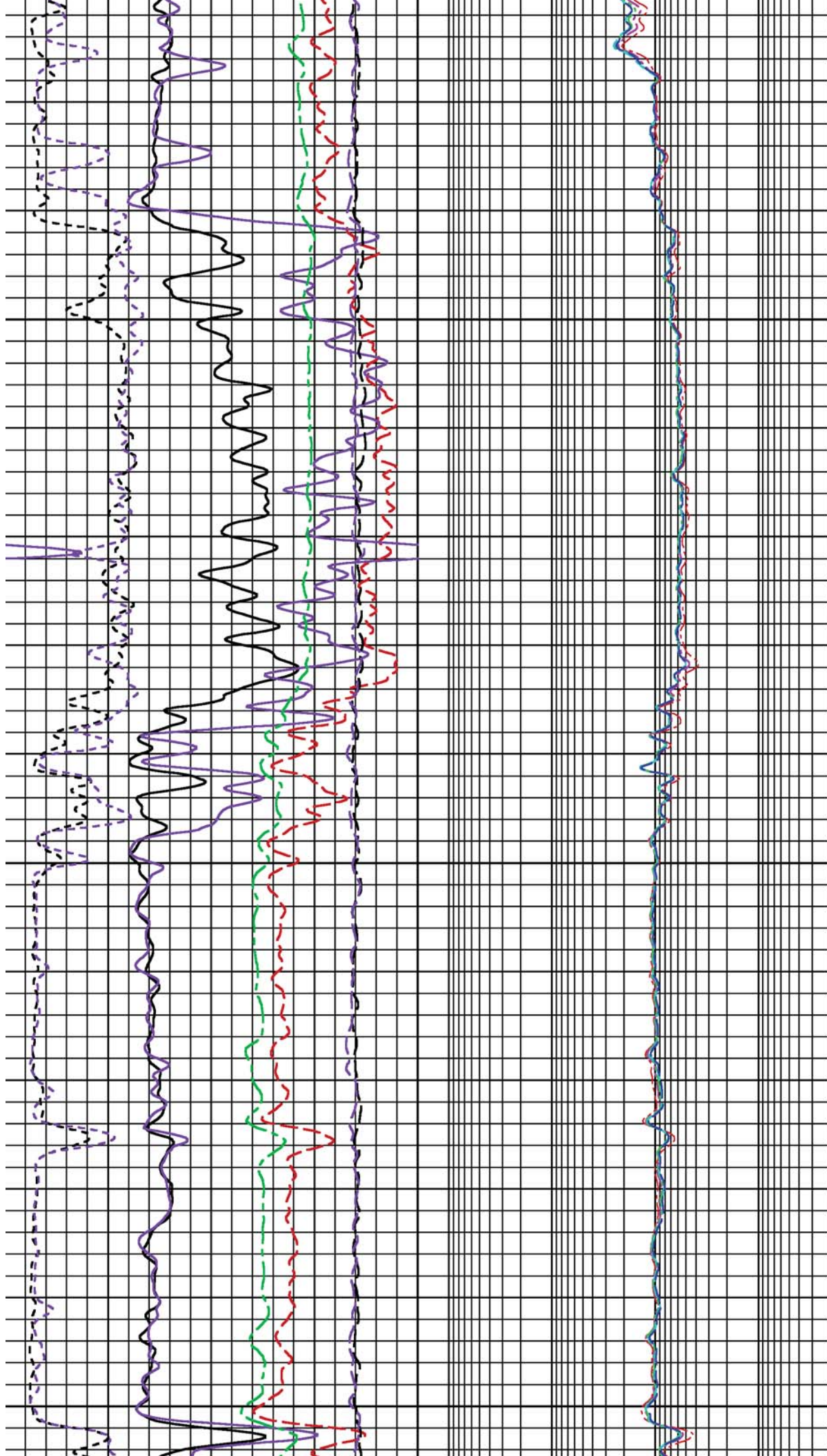
1625



1650

1675

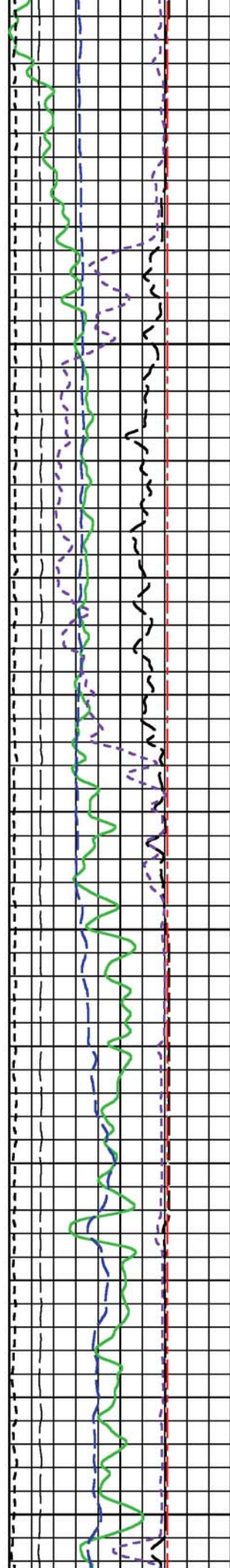


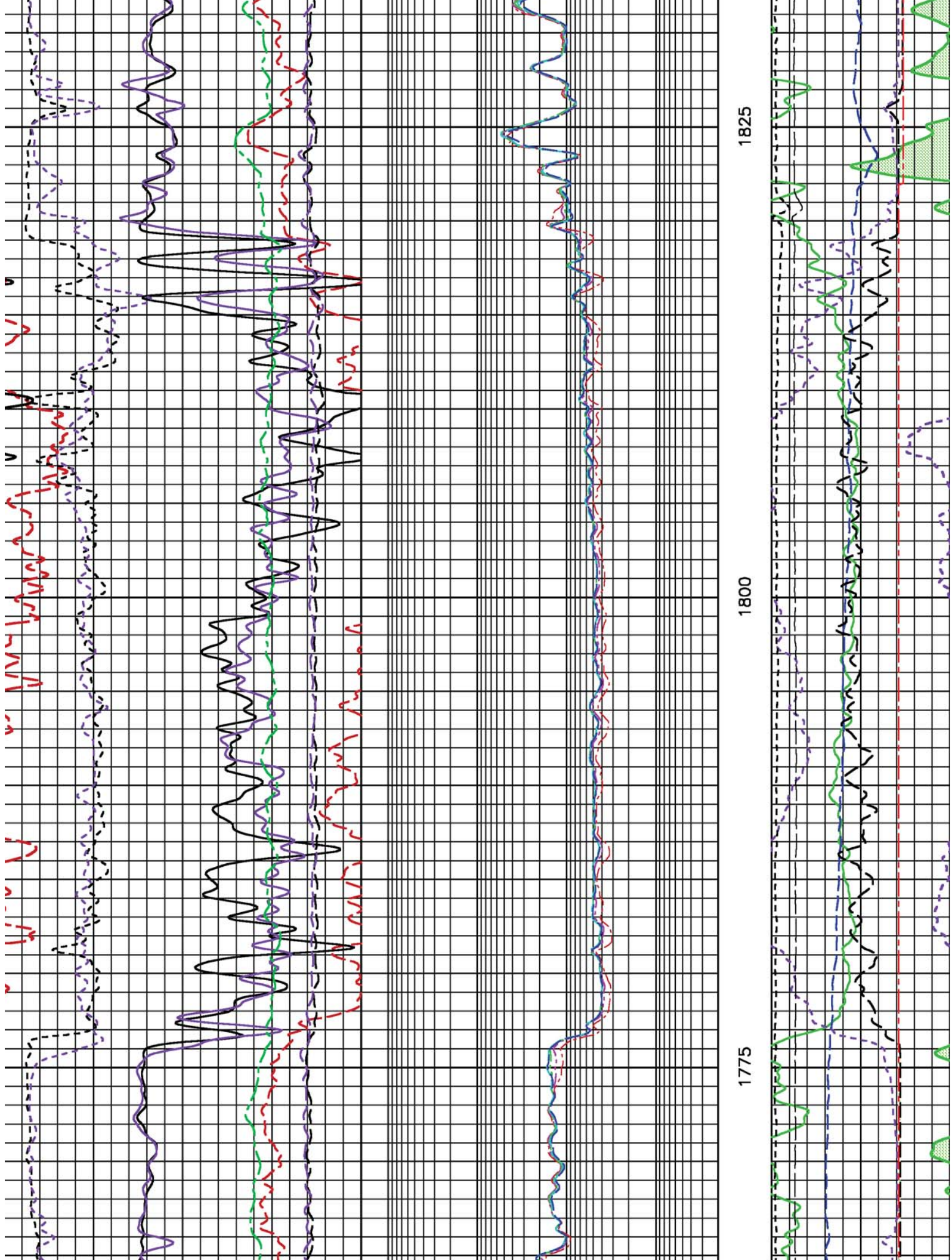


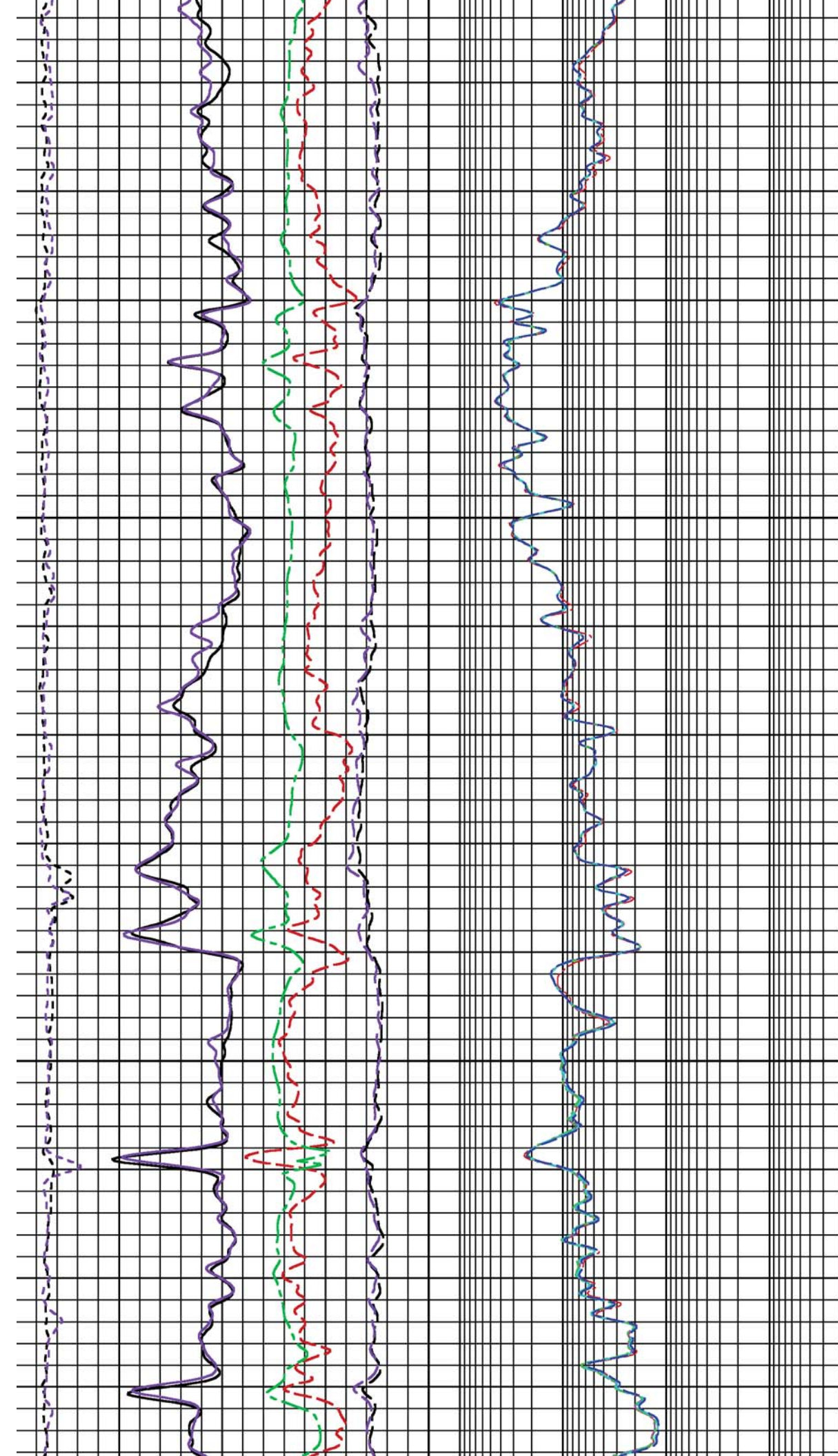
1700

1725

1750

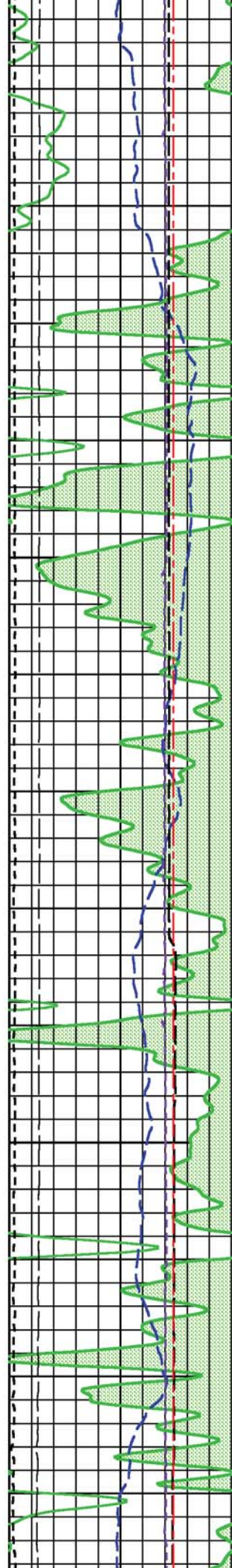


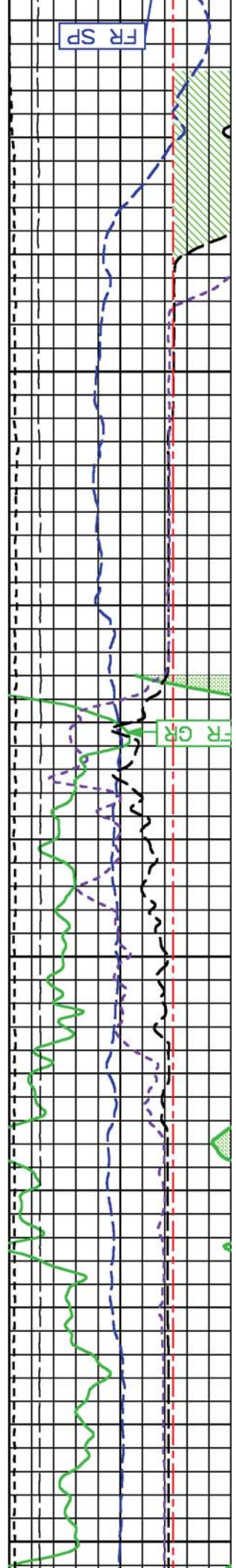
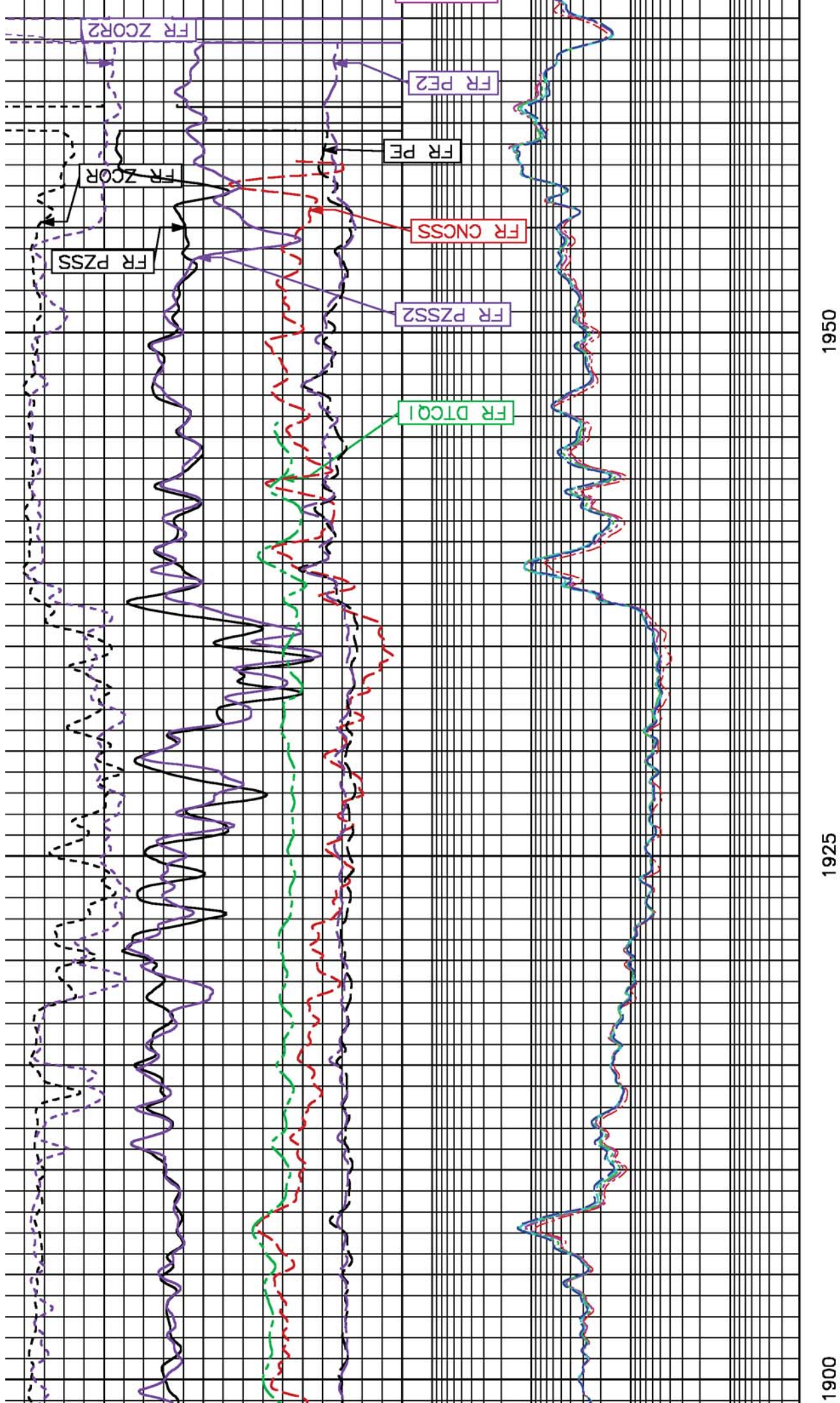




1850

1875





Source File: /data/MGM/run2_oh/m980e_r2t1.ip1

CALIBRATION / VERIFICATION SUMMARY

Signal Low Signal High Scale Mult Scale Add Eng'r Low Eng'r High

50.00 (raw) 560.75 (raw) 1.96 -97.90 0.00 (kgf) 1000.00 (kgf)

CHT

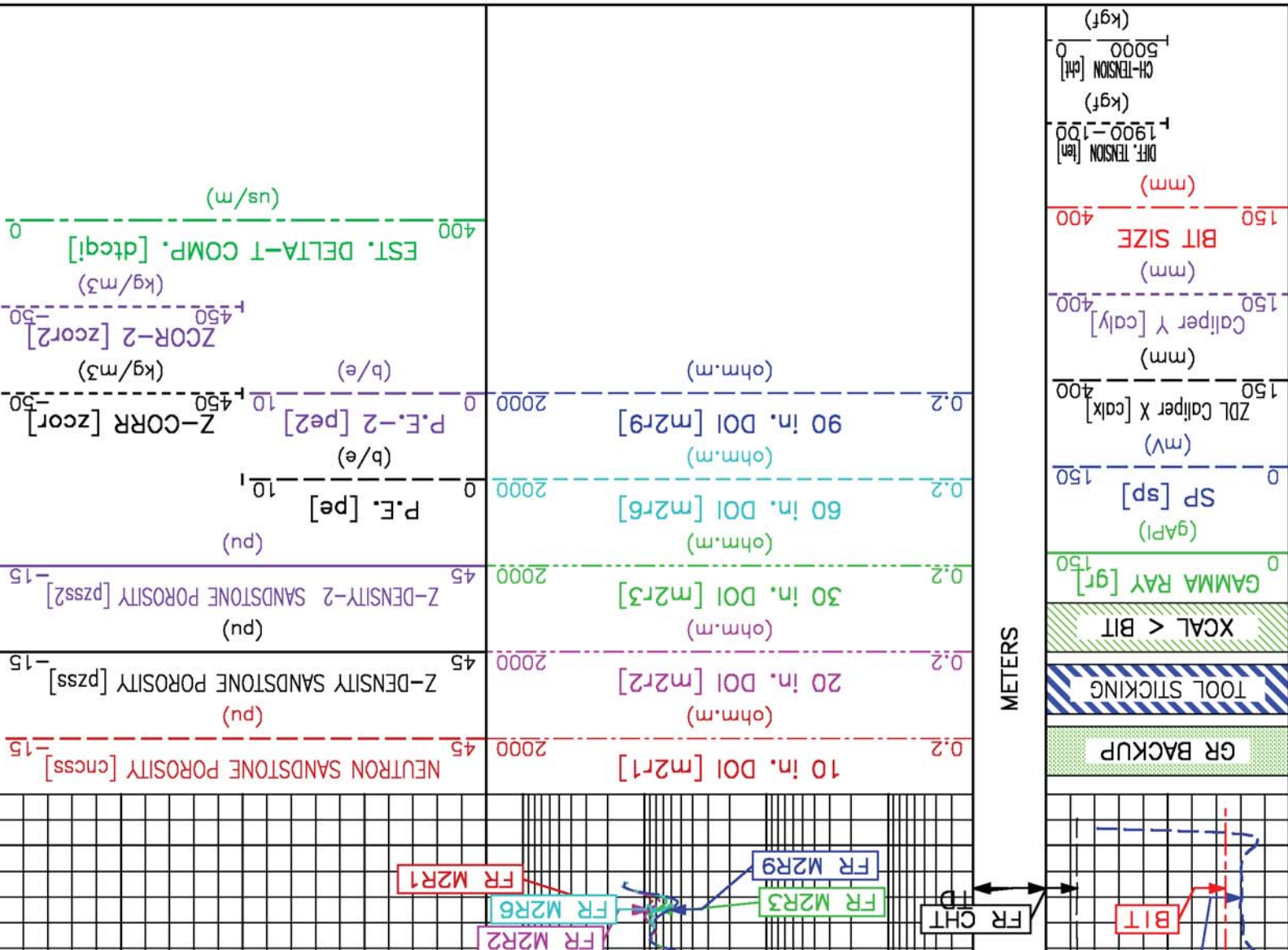
UNIT #: 38155A 008672

TOOL #: 3981XA 10516528

DATE/TIME PERFORMED: Tue Jan 29 18:40:58 2013

CHT PRIMARY CALIBRATION SUMMARY

CALIBRATION / VERIFICATION SUMMARY



TOOL #: 1329XA 10293862 DATE/TIME PERFORMED: Sun Feb 10 10:53:03 2013

UNIT #: 3815SA 008672 CALB JIG #: 4702NK DA-477

GR	38.87	966.29	927.4	0.162	6.29	156.29	150
	(cts/s)	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
BACKGROUND CALBTR ON	CR DIFF	MULT	BACKGROUND CALBTR ON				

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10293862 DATE/TIME PERFORMED: Sun Feb 10 11:02:45 2013

UNIT #: 3815SA 008672 VERI JIG #: 4702NK DA-477

GR	39.18	960.56	0.162	6.34	155.36	149.02	140.00	160.00
	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)		
BACKGROUND CALBTR ON	MULT	BACKGROUND CALBTR ON	DIFF.					

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 10293862 DATE/TIME PERFORMED: Sun Feb 10 11:09:32 2013

DAYS SINCE CAL: 0 UNIT #: 3815SA 008672 VERI JIG #: 4702NK DA-477

GR	40.98	963.64	0.162	6.63	155.86	149.23	139.02	159.02
	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)		
BACKGROUND CALBTR ON	MULT	BACKGROUND CALBTR ON	DIFF.					

GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 167BMC 10386815 DATE/TIME PERFORMED: Sun Jan 6 11:29:56 2013

UNIT #: 5753XB 10108816 ORIENTATION #: 4401XB 12466129

DEV	89.9	1000.2	359.7	0.4	0.4	0.0
	(deg)	(mg)	(deg)			
QA	990.0	1010.0	357.5			
MEAS RB						
RB OFFSET						
ROTATED RB						

XMAC_OR PRIMARY CALIBRATION SUMMARY

TOOL #: 167BMC 10386815 DATE/TIME PERFORMED: Sun Jan 6 11:29:56 2013

UNIT #: 5753XB 10108816 ORIENTATION #: 4401XB 12466129

DEV	89.9	1000.2	359.7	0.4	0.4	0.0
	(deg)	(mg)	(deg)			
QA	990.0	1010.0	357.5			
MEAS RB						
RB OFFSET						
ROTATED RB						

XMAC_OR PRIMARY CALIBRATION SUMMARY

CN PRIMARY CALIBRATION SUMMARY

TOOL #: 2436XA 10105638 DATE/TIME PERFORMED: Sun Jan 13 18:44:58 2013

UNIT #: RCOR 10274 CALIBRATOR #: 2437XB 112675 SOURCE #: 4718XA N-1234

SSN	4800.31	LSN	823.98	SSN/LSN	5.82573	MCF	0.98477	CNRATIO	5.73700	CN	25.241
DT CPS		DT CPS								PU	
							0.95000 1.05000				

CN BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2436XA 10105638 DATE/TIME PERFORMED: Sat Feb 16 00:19:49 2013 DAYS SINCE CAL: 33

UNIT #: 3815SA 008672 CALIBRATOR #: INTRNL N/A

SSN	992.07	LSN	994.44	SSN/LSN	0.99762	TEMP	19.0	HV	1357.1	LV	4.605
DT CPS		DT CPS				(degC)		(V)		(V)	
							138.0		1250.0 1450.0		4.300 5.000

CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2436XA 10105638 DATE/TIME PERFORMED: Sat Feb 16 12:44:40 2013 DAYS SINCE CAL: 33

UNIT #: 3815SA 008672 CALIBRATOR #: INTRNL N/A

SSN	992.07	LSN	994.44	SSN/LSN	0.99762	TEMP	32.2	HV	1358.6	LV	4.612
DT CPS		DT CPS				(degC)		(V)		(V)	
							138.0		1250.0 1450.0		4.300 5.000

CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2223XA 10391896 DATE/TIME PERFORMED: Fri Jan 18 17:30:07 2013

UNIT #: S23 8672

SIZE VALUE MULTIPLIER ADD
(mm)

SMALL RING (Arm) 177.800 1199.6

LARGE RING (Arm) 279.400 2200.0

0.10156

55.96938

PAD CLOSED

1723.2

0.06350

-109.42319

CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10391896 DATE/TIME PERFORMED: Sat Feb 16 01:03:10 2013 DAYS SINCE CAL: 28

UNIT #: 3815SA 008672

VALUE	MULTIPLIER	ADD	SIZE
ARM	1680.0	0.10156	55.96938
			(mm)
PAD	1708.4	0.06350	-109.42319
			-0.9

DIA METER (arm+pad)	226.000	225.6	215.8	236.2
	(mm)	(mm)		
ACTUAL		MEASURED		

CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10391896 DATE/TIME PERFORMED: Sat Feb 16 12:43:32 2013 DAYS SINCE CAL: 28

UNIT #: 3815SA 008672

VALUE	MULTIPLIER	ADD	SIZE
ARM	1724.0	0.10156	55.96938
			(mm)
PAD	1688.8	0.06350	-109.42319
			-2.2

DIA METER (arm+pad)	224.400	228.9	214.2	234.6
	(mm)	(mm)		
ACTUAL		MEASURED		

ZDL PRIMARY CALIBRATION SUMMARY

TOOL: 2223XA 10391896 DATE/TIME PERFORMED: Sun Jan 13 18:12:46 2013 UNIT: S23 8672 CALB BLKS: 2225XA 094290 CS SRC: 4705XA 16107B PAD TYPE: PADTYP 7.5" PAD

SS CS PK	(Channel)	224.0	220.0	230.0
LS CS PK	(Channel)	224.9	220.0	230.0
SS_BKGD	(cps)	1404.6		
LS_BKGD	(cps)	1628.9		

SS	(cps)	38709.2	14552.3	0.751	1697.000	0.000	1.900
LS	(cps)						
SHR							
DEN	(kg/m3)						
CORR	(kg/m3)						
PE	(b/e)						

MG (LO PE)

CAL[2] PRIMARY CALIBRATION SUMMARY

SS	LS	TOTAL		CSPK		HV	
		(cps)	(Channel)	(V)	(mA)		
22344.8	22355.0	22344.8	22364.8	220.0	230.0	1250.0	1550.0
3332.1	3342.1	3332.1	3352.1	220.0	230.0	1250.0	1550.0
4.8	5.0	5.2	50.0	120.0	84.8		
LV		PAD CURRENT					

TOOL #: 2223XA 10391896

DATE/TIME PERFORMED: Sat Feb 16 12:44:31 2013

DAYS SINCE CAL: 33

UNIT #: 3815SA 008672

ZDL AFTER LOG VERIFICATION SUMMARY

SS	LS	TOTAL		CSPK		HV	
		(cps)	(Channel)	(V)	(mA)		
22344.8	22354.6	22344.8	22364.8	220.0	230.0	1250.0	1550.0
3332.1	3342.1	3332.1	3352.1	220.0	230.0	1250.0	1550.0
4.8	5.0	5.2	50.0	120.0	86.4		
LV		PAD CURRENT					

TOOL #: 2223XA 10391896

DATE/TIME PERFORMED: Sat Feb 16 00:19:53 2013

DAYS SINCE CAL: 33

UNIT #: 3815SA 008672

ZDL BEFORE LOG VERIFICATION SUMMARY

AL + SHIM		32324.1	2851.1	2548.000	98.000
MG + SHIM (HI PE)		19185.1	6952.3	0.294	0.280
RATIO AL + SHIM/AL		1.33	1.74	1.60	1.80
RATIO MG/AL		1.60	8.89	8.55	9.55
AL		24264.8	1636.8	2637.000	-16.000
8.550					

UNIT #: S23 8672

SIZE	VALUE	MULTIPLIER	ADD
SMALL RING (Arm)	177.800		1040.0
LARGE RING (Arm)	279.400	0.09961	74.20783
PAD CLOSED	1784.0	0.06350	-113.28400

CAL[2] BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10102923 DATE/TIME PERFORMED: Sat Feb 16 01:03:18 2013 DAYS SINCE CAL: 28
UNIT #: 3815SA 008672

SIZE	VALUE	MULTIPLIER	ADD
ARM	1488.0	0.09961	74.20783
PAD	1900.0	0.06350	-113.28400
ACTUAL MEASURED	226.000		229.8
			215.8 236.2

CAL[2] AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10102923 DATE/TIME PERFORMED: Sat Feb 16 12:42:55 2013 DAYS SINCE CAL: 28
UNIT #: 3815SA 008672

SIZE	VALUE	MULTIPLIER	ADD
ARM	1464.0	0.09961	74.20783
PAD	1911.6	0.06350	-113.28400
ACTUAL MEASURED	224.400		228.1
			214.2 234.6

ZDL[2] PRIMARY CALIBRATION SUMMARY

SS CS PK	224.6	230.0	220.0
LS CS PK	224.7	230.0	220.0
SS BKGD	(Channel)	(cps)	(cps)
LS BKGD	1149.5	1466.0	

SS	39084.9	14425.4	0.733	1697.000	0.000	1.900
LS	(cps)	(cps)	0.720	(kg/m3)	(kg/m3)	(b/e)
SHR	0.890					
DEN	2657.000	-16.000				
CORR	2548.000	98.000				
PE						

AL + SHIM	32297.3	2817.2				
MG + SHIM (HI PE)	19158.4	6839.7	0.285	0.280	0.360	8.550

RATIO AL + SHIM/AL	1.33	1.40	1.60	1.80
RATIO MG/AL	1.61	8.55	9.55	

ZDL[2] BEFORE LOG VERIFICATION SUMMARY

TOTAL	3341.3	3332.1	220.0	230.0	1250.0	1480.8
LS	(cps)	3332.1	220.0	230.0	1250.0	1550.0
SS	22349.3	22364.8	220.0	230.0	1250.0	1452.2
	22344.8	22364.8	220.0	230.0	1250.0	1550.0
CSPK	(Channel)	(cps)	(Channel)	(cps)	(V)	(V)
HV						

LV	5.0	5.2	50.0
PAD CURRENT	86.4	120.0	

ZDL[2] AFTER LOG VERIFICATION SUMMARY

TOTAL	3343.0	3332.1	220.0	230.0	1250.0	1497.0
LS	(cps)	3332.1	220.0	230.0	1250.0	1550.0
SS	22360.5	22364.8	220.0	230.0	1250.0	1470.7
	22344.8	22364.8	220.0	230.0	1250.0	1550.0
CSPK	(Channel)	(cps)	(Channel)	(cps)	(V)	(V)
HV						

HDIL PRIMARY CALIBRATION SUMMARY

TOOL #: 1530XA 10125755

DATE/TIME PERFORMED: Fri Jan 18 04:30:03 2013

UNIT #: 3815SA 008672 GRCOND ID & DATE: Leduc 11813

ZERO DATA(mV) 10 KHz 30 KHz 50 KHz 70 KHz 90 KHz 110 KHz 130 KHz 150 KHz

Coil 0 R	0.0051	-0.0016	-0.0009	0.0007	-0.0012	0.0005	0.0002	0.0003
Coil 0 Q	-0.0048	-0.0021	0.0009	-0.0010	0.0003	0.0005	-0.0006	-0.0000
Coil 1 R	-0.0073	0.0001	-0.0007	0.0019	-0.0002	-0.0001	0.0004	0.0022
Coil 1 Q	-0.0169	0.0001	-0.0000	0.0013	-0.0005	0.0005	0.0006	0.0010
Coil 2 R	-0.0001	-0.0029	0.0018	-0.0001	-0.0034	-0.0003	0.0012	-0.0018
Coil 2 Q	-0.0020	-0.0000	0.0023	-0.0020	-0.0034	-0.0005	-0.0000	0.0012
Coil 3 R	0.0030	-0.0072	0.0028	-0.0004	-0.0004	0.0020	-0.0012	-0.0040
Coil 3 Q	-0.0038	-0.0027	0.0030	0.0005	0.0002	0.0013	0.0001	-0.0016
Coil 4 R	-0.0380	0.0001	0.0056	-0.0069	0.0008	-0.0002	0.0030	-0.0033
Coil 4 Q	0.0095	0.0076	0.0011	-0.0045	0.0033	-0.0015	-0.0057	0.0001
Coil 5 R	-0.0949	-0.0102	-0.0011	0.0031	-0.0017	0.0046	0.0131	-0.0087
Coil 5 Q	0.0196	0.0146	0.0227	-0.0034	-0.0076	0.0054	0.0044	-0.0075

ELEC. GAINS

10 KHz 30 KHz 50 KHz 70 KHz 90 KHz 110 KHz 130 KHz 150 KHz

Coil 0 M	161.24	159.90	157.17	153.12	147.73	141.04	133.17	123.98
Coil 0 P	7.653	25.205	42.334	59.431	76.548	93.715	110.883	128.108
Coil 1 M	283.01	280.47	275.36	267.77	257.78	245.49	231.11	214.57
Coil 1 P	7.712	25.410	42.664	59.864	77.071	94.270	111.496	128.682
Coil 2 M	571.86	566.67	556.16	540.76	520.61	495.72	466.91	433.66
Coil 2 P	7.810	25.663	43.072	60.425	77.755	95.107	112.453	129.813

Coil 3 M	Coil 3 P	Coil 4 M	Coil 4 P	Coil 5 M	Coil 5 P
928.30	7.934	1448.5	7.838	2951.6	7.980
919.66	26.028	1435.5	25.730	2924.6	26.148
902.11	43.686	1409.4	43.189	2869.4	43.889
876.20	61.276	1371.0	60.587	2787.5	61.558
842.46	78.835	1320.8	77.981	2681.9	79.212
800.98	96.396	1259.3	95.375	2552.7	96.848
752.74	113.972	1188.0	112.787	2404.0	114.481
697.61	131.521	1107.8	130.196	2238.3	132.078
658.00	104.000	1010.0	105.000	2075.0	106.000
628.00	90.000	910.0	91.000	1910.0	93.000
589.00	76.000	810.0	77.000	1745.0	79.000
550.00	62.000	710.0	63.000	1580.0	65.000
510.00	48.000	610.0	49.000	1415.0	51.000
470.00	34.000	510.0	35.000	1250.0	37.000
430.00	20.000	410.0	21.000	1085.0	23.000
390.00	6.000	310.0	7.000	920.0	9.000

AM Factor	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	-1089	-633	-499	-429	-380	-343	-318	-296
Coil 0 Q	-812	-589	-484	-436	-410	-395	-388	-383
Coil 1 R	-113	-126	-120	-114	-107	-100	-94	-90
Coil 1 Q	-262	-123	-95	-85	-81	-79	-78	-76
Coil 2 R	7.0	-28.7	-32.2	-31.0	-29.3	-27.3	-25.5	-23.4
Coil 2 Q	-47.7	-13.0	-9.4	-8.5	-7.3	-6.4	-4.4	-2.5
Coil 3 R	3.4	-8.9	-10.2	-9.4	-9.6	-9.0	-8.2	-8.1
Coil 3 Q	65.2	25.6	18.7	16.2	16.0	17.0	18.1	20.1
Coil 4 R	-2.68	-3.14	-3.77	-4.22	-3.42	-3.44	-3.92	-3.68
Coil 4 Q	40.00	17.61	14.37	14.73	16.32	18.15	20.81	23.34
Coil 5 R	-8.24	-2.09	-2.01	-2.16	-1.98	-1.99	-2.15	-2.41
Coil 5 Q	12.04	7.35	8.33	10.45	13.15	15.69	18.44	21.10

MM Factor	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 M	0.986	0.991	0.994	0.995	0.996	0.995	0.996	0.995
Coil 0 P	-0.224	-0.271	-0.179	-0.098	-0.033	0.008	0.017	0.063
Coil 1 M	0.974	0.981	0.984	0.985	0.985	0.985	0.986	0.985
Coil 1 P	-0.217	-0.326	-0.221	-0.134	-0.045	-0.014	0.018	0.050
Coil 2 M	0.999	0.999	1.000	1.000	1.001	1.000	1.001	1.000
Coil 2 P	-0.020	-0.058	-0.063	-0.060	-0.063	-0.041	-0.031	-0.002
Coil 3 M	1.007	1.008	1.009	1.009	1.009	1.009	1.008	1.007

HDIL BEFORE LOG VERIFICATION SUMMARY

	PARMS					Cal Temp		T Factor		(degC)	IDS
	TCID 0	TCID 1	TCID 2	TCID 3	TCID 4	TCID 5	TCID 6	TCID 7	TCID 8		
Coil 3 P	0.011	-0.018	-0.015	0.007	0.018	0.049	0.115	0.143			
Coil 4 M	1.001	1.002	1.003	1.003	1.004	1.003	1.004	1.005			
Coil 4 P	-0.017	-0.058	-0.062	-0.058	-0.022	0.002	0.021	0.030			
Coil 5 M	0.997	0.997	0.997	0.997	0.998	0.998	0.999	1.000			
Coil 5 P	-0.036	-0.046	-0.055	-0.065	-0.026	0.066	0.033	0.026			

TOOL # : 1530XA 10125755	DATE/TIME PERFORMED : Sat Feb 16 02:43:37 2013	DAYS SINCE CAL : 28	UNIT # : 38155SA 008672
ZERO DATA(mv)			

Coil 0 R	0.005	-0.002	-0.001	0.000	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Coil 0 Q	-0.005	-0.002	0.000	-0.000	-0.001	0.001	0.001	-0.001	-0.001	-0.001	-0.001
Coil 1 R	-0.004	0.000	-0.001	0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Coil 1 Q	-0.015	-0.000	-0.000	-0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.001
Coil 2 R	0.000	-0.001	-0.002	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001
Coil 2 Q	0.003	-0.001	0.000	-0.004	0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Coil 3 R	0.009	-0.007	0.003	0.003	-0.004	-0.004	-0.004	-0.002	-0.003	-0.003	-0.000
Coil 3 Q	-0.003	-0.002	0.001	-0.001	-0.001	-0.002	-0.003	-0.003	-0.003	-0.003	-0.000
Coil 4 R	-0.037	-0.000	0.000	-0.003	0.002	-0.000	0.001	0.003	0.003	0.003	0.000
Coil 4 Q	0.003	0.008	-0.004	-0.004	-0.002	0.001	-0.005	-0.003	-0.003	0.002	0.002
Coil 5 R	-0.065	-0.008	0.006	-0.002	-0.022	0.002	0.002	-0.003	-0.003	-0.006	-0.006
Coil 5 Q	-0.016	0.007	0.006	0.006	0.006	0.006	-0.003	-0.003	-0.003	-0.000	-0.008

ELEC. GAINS 10 KHz 30 KHz 50 KHz 70 KHz 90 KHz 110 KHz 130 KHz 150 KHz

Coil 0 M	160.69	159.37	156.67	152.65	147.27	140.63	132.75	123.68
Coil 0 P	7.169	25.106	42.349	59.529	76.729	93.945	111.204	128.478

Coil 1 M	283.15	280.62	275.48	267.93	257.90	245.66	231.20	214.67
Coil 1 P	7.255	25.327	42.700	59.979	77.256	94.532	111.819	129.090
Coil 2 M	570.24	565.08	554.69	539.35	519.11	494.53	465.62	432.61
Coil 2 P	7.294	25.549	43.081	60.510	77.930	95.325	112.735	130.159
Coil 3 M	927.46	918.90	901.41	875.65	841.89	800.73	752.65	697.36
Coil 3 P	7.437	25.921	43.690	61.349	78.982	96.612	114.233	131.862
Coil 4 M	1450.1	1437.3	1411.2	1373.0	1322.5	1261.3	1189.7	1108.8
Coil 4 P	7.366	25.624	43.191	60.660	78.123	95.583	113.049	130.504
Coil 5 M	2950.7	2923.9	2869.0	2787.6	2682.7	2553.3	2403.6	2237.1
Coil 5 P	7.513	26.038	43.877	61.603	79.296	97.011	114.690	132.343

HDIL AFTER LOG VERIFICATION SUMMARY

TOOL #: 1530XA 10125755 DATE/TIME PERFORMED: Sat Feb 16 12:44:59 2013 DAYS SINCE CAL: 29 UNIT #: 3815SA 008672

Coil 0 R	0.005	-0.001	0.000	0.001	-0.001	-0.000	0.000	-0.000
Coil 0 Q	-0.004	-0.002	0.001	-0.000	-0.000	0.000	-0.000	0.000
Coil 1 R	-0.005	0.002	-0.002	0.002	0.000	0.000	-0.001	0.001
Coil 1 Q	-0.015	-0.001	-0.000	0.001	0.000	0.002	0.000	0.000
Coil 2 R	0.001	-0.001	-0.002	0.000	-0.002	0.000	0.001	-0.001
Coil 2 Q	0.000	0.001	0.000	-0.001	-0.001	0.001	0.001	0.000
Coil 3 R	0.004	-0.001	-0.001	0.001	-0.001	0.002	-0.001	-0.000
Coil 3 Q	-0.004	-0.005	-0.000	-0.001	0.003	0.001	-0.004	-0.004
Coil 4 R	-0.028	0.001	0.005	-0.005	0.000	-0.004	0.001	-0.004
Coil 4 Q	0.009	0.004	-0.000	0.002	0.004	0.004	-0.001	0.003
Coil 5 R	-0.098	-0.013	-0.005	-0.003	0.003	-0.002	0.006	0.004
Coil 5 Q	-0.009	0.006	0.021	-0.009	0.007	0.011	-0.001	-0.004

ZERO DATA(mV) 10 KHZ 30 KHZ 50 KHZ 70 KHZ 90 KHZ 110 KHZ 130 KHZ 150 KHZ

Coil 0 M	160.89	159.55	156.83	152.81	147.39	140.79	132.89	123.78
Coil 0 P	7.569	25.208	42.373	59.497	76.654	93.817	111.053	128.286
Coil 1 M	283.08	280.53	275.40	267.85	257.77	245.57	231.16	214.63
Coil 1 P	7.640	25.421	42.713	59.944	77.181	94.395	111.658	128.872
Coil 2 M	570.83	565.60	555.15	539.82	519.49	494.92	465.93	432.86
Coil 2 P	7.706	25.661	43.104	60.489	77.851	95.218	112.606	129.972
Coil 3 M	927.49	918.83	901.25	875.51	841.53	800.41	752.23	696.92
Coil 3 P	7.838	26.028	43.716	61.329	78.920	96.506	114.100	131.687
Coil 4 M	1448.9	1435.8	1409.9	1371.4	1321.1	1259.8	1188.5	1108.0
Coil 4 P	7.758	25.730	43.217	60.642	78.053	95.478	112.913	130.348
Coil 5 M	2950.5	2923.7	2868.6	2787.2	2681.1	2553.0	2403.0	2237.4
Coil 5 P	7.902	26.144	43.907	61.596	79.275	96.937	114.597	132.218



COMPANY		MGM ENERGY CORP		WELL		MGM SHELL EAST MACKAY I-78		FIELD		EAST MACKAY		NORTHWEST TERRITORIES		PROVINCE	
FILE NO:								API NO:							
LOCATION:		ELEVATIONS:		KB		161.20 M		DF		GL		155.00 M		DATE	
LAT		64.795 N		LONG		125.722 W		16-FEB-2013							