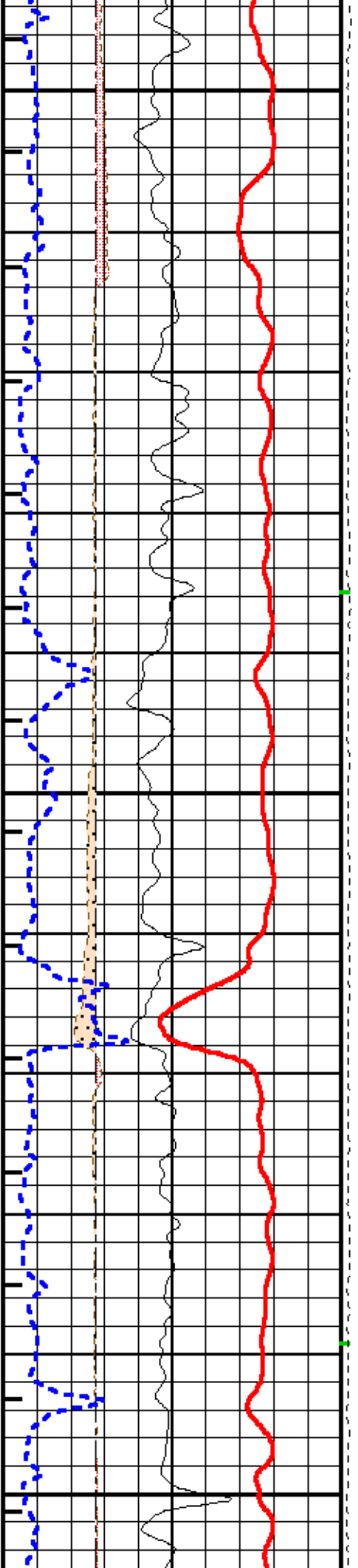
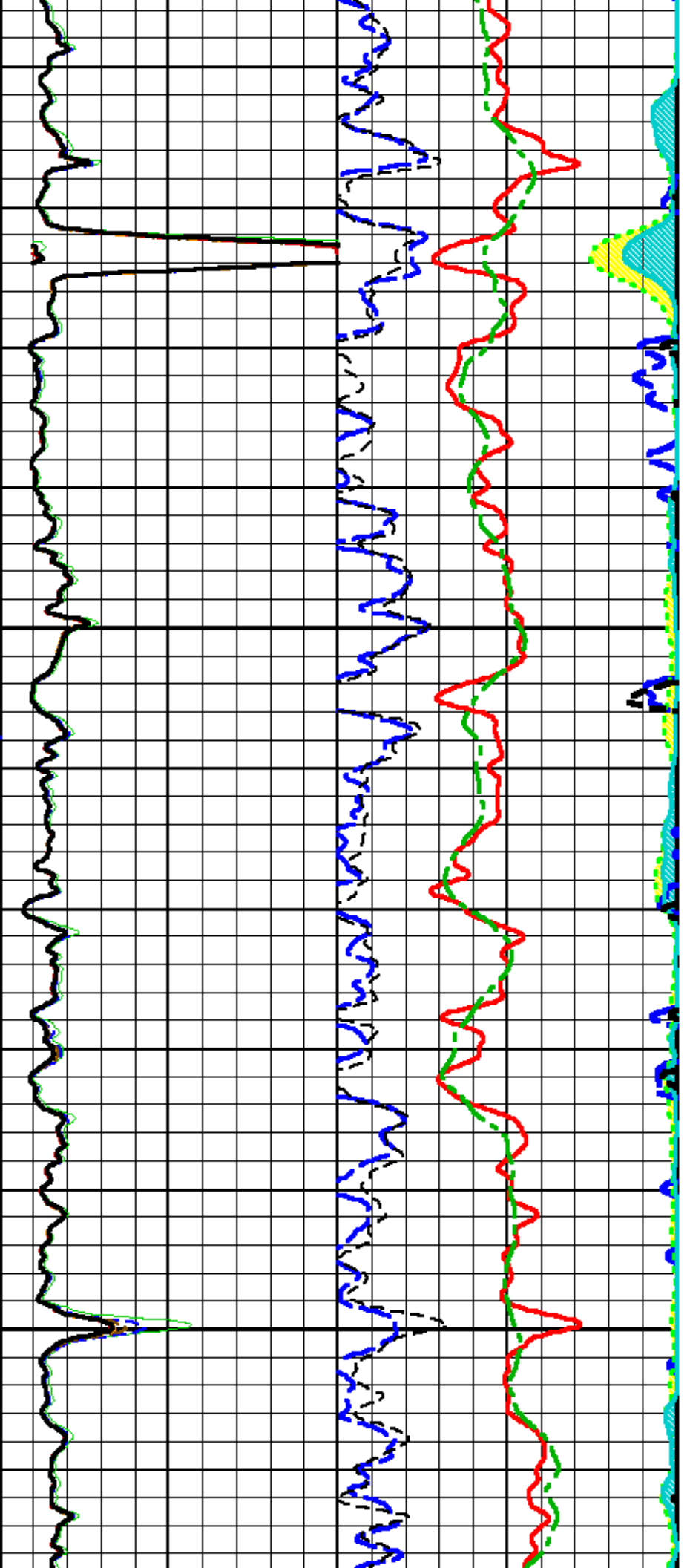


1600

1625

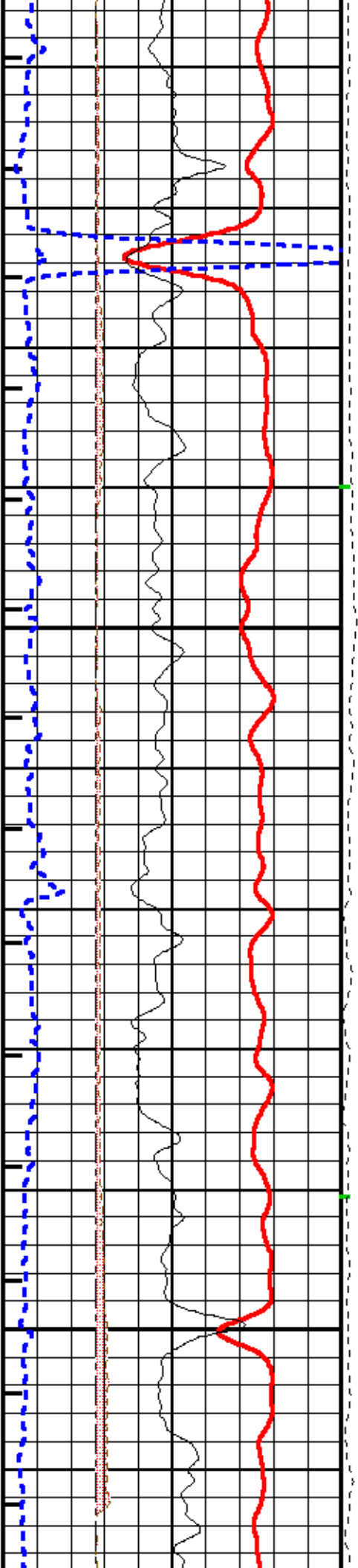
1650

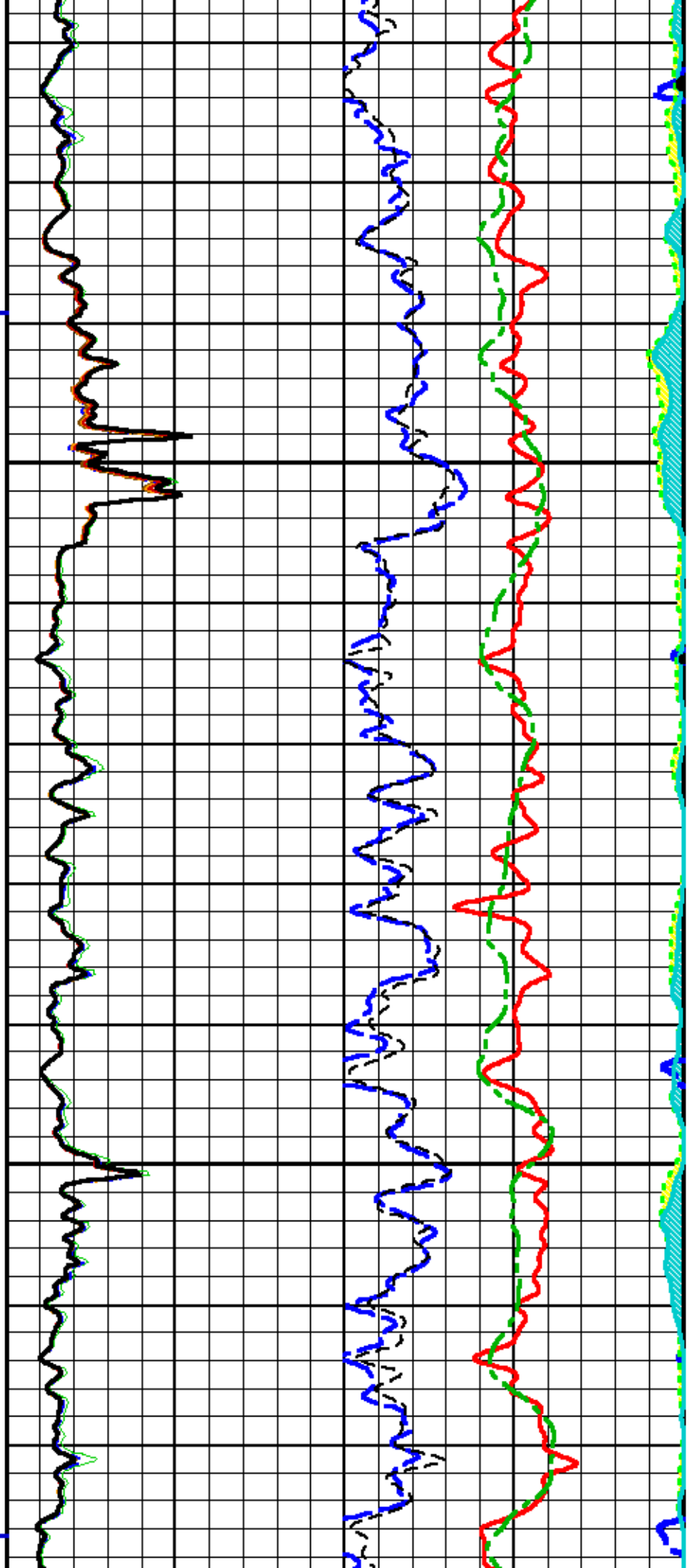




1675

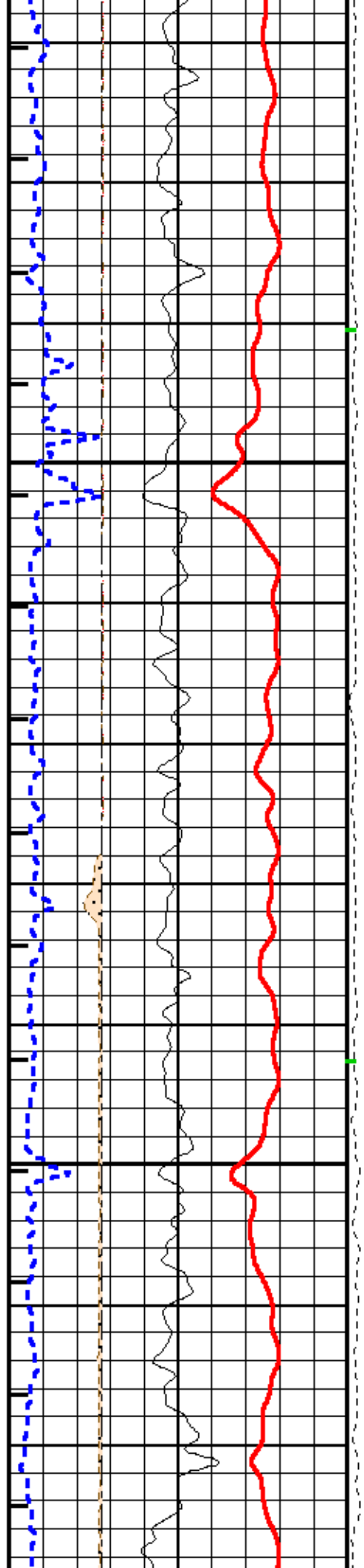
1700

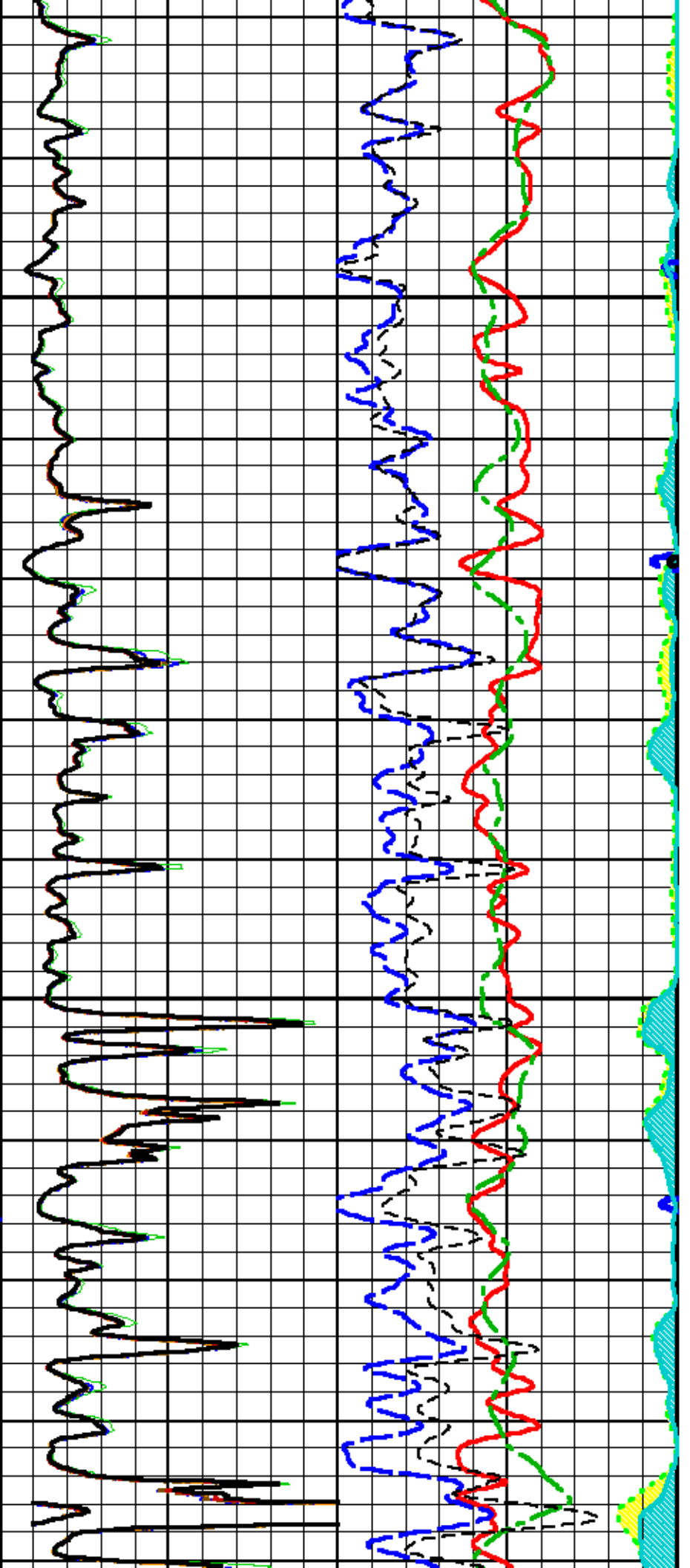




1725

1750

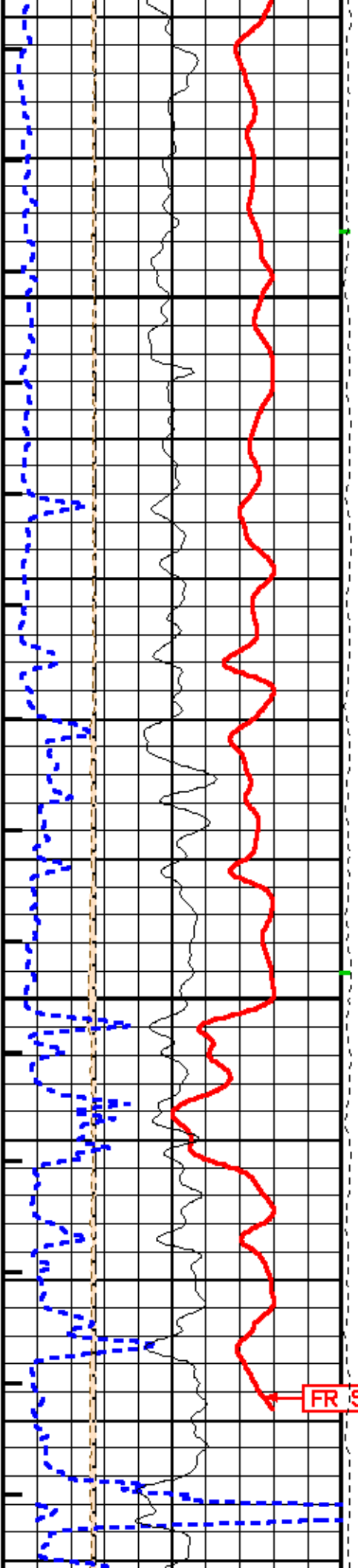


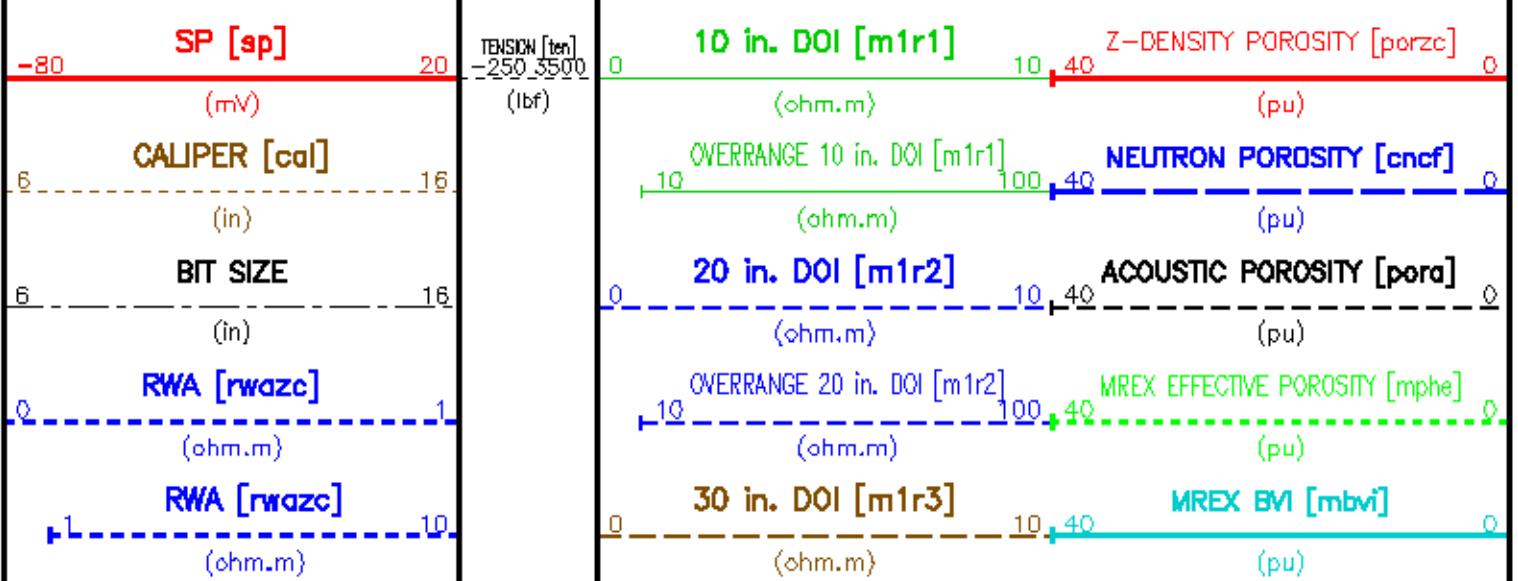
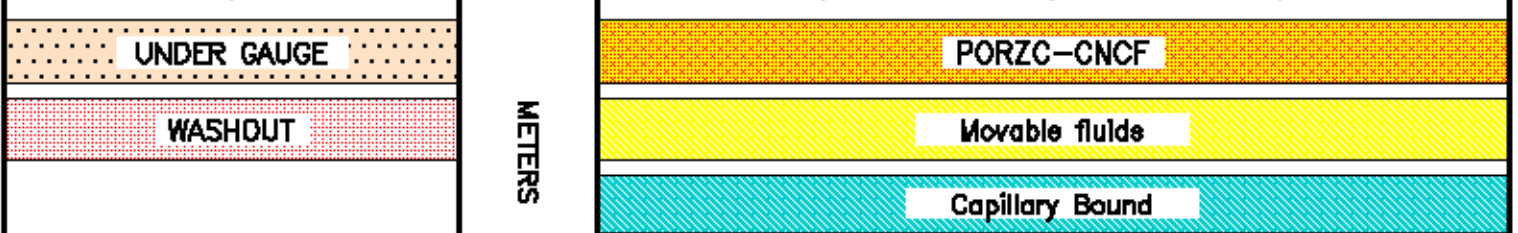
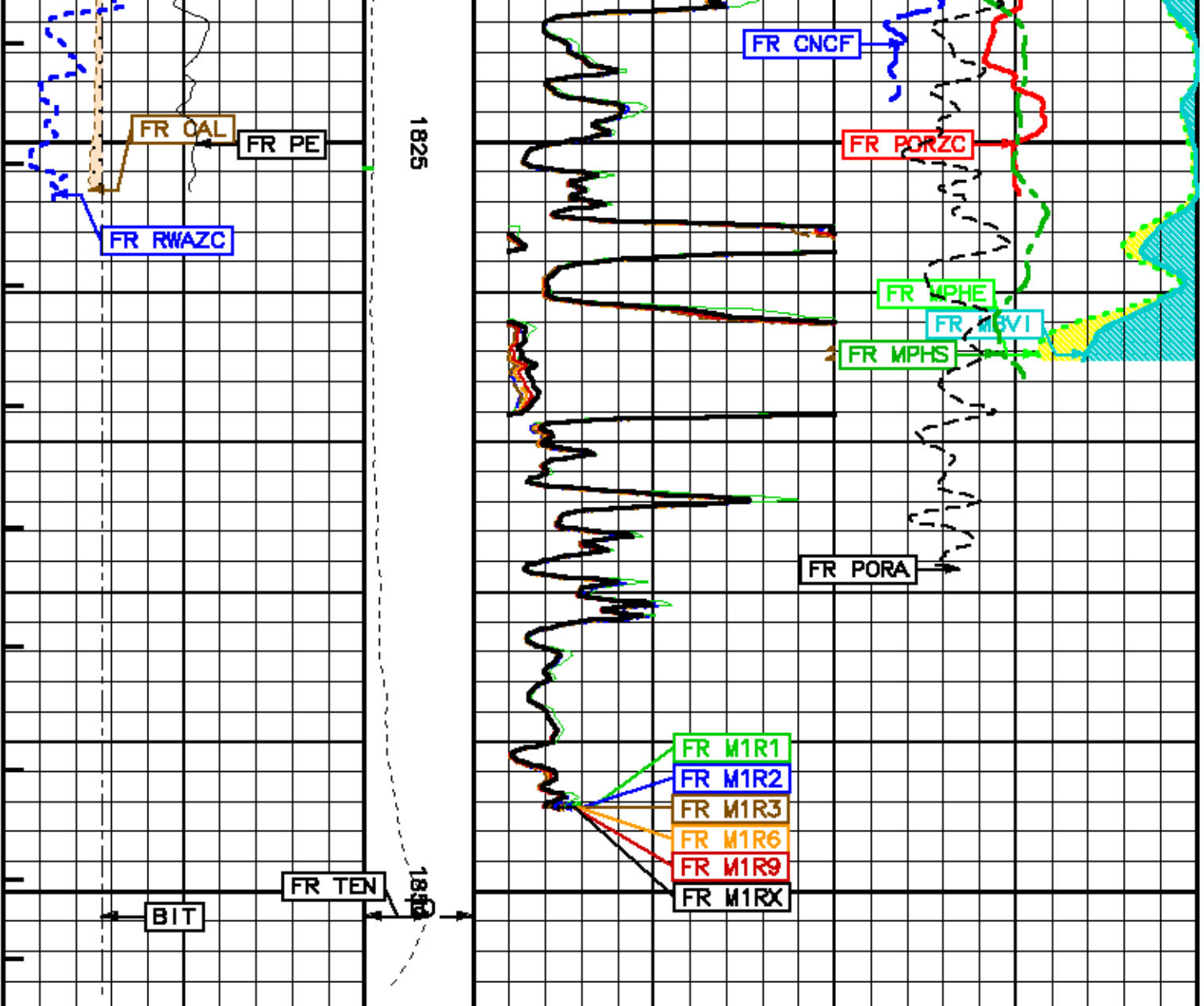


1775

1800

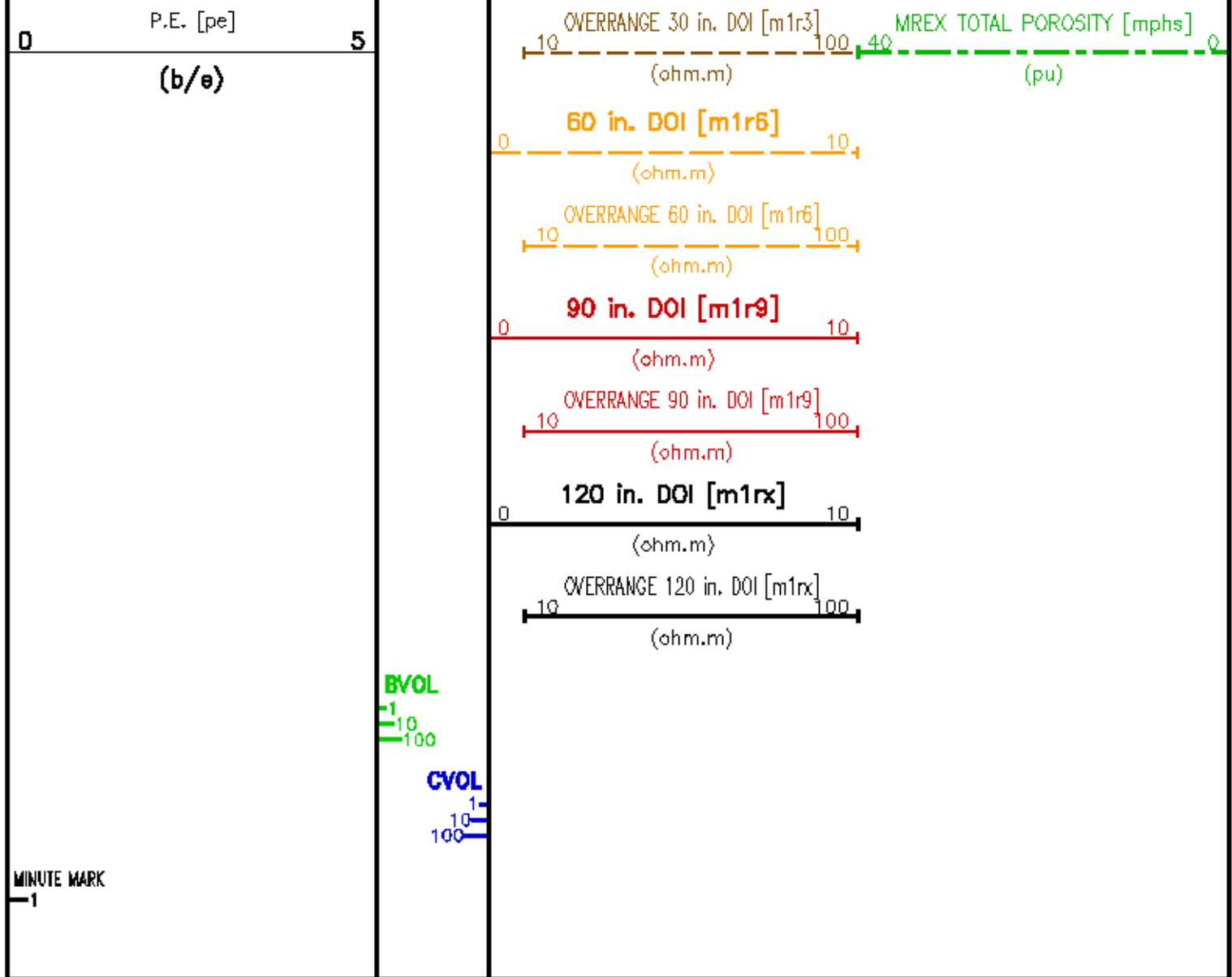
FR SP





TENSION [ten]
-250 3500
(lbf)

METERS



TRAMO REPETIDO - ESCALA 1:200

ECLIPS 6.01 Feb 21, 2008
Updates: 1

Tue May 4 00:33:55 2010

Perplt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/EA774/k87bv204.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1747.489 m BOTTOM DEPTH: 1854.115 m

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
TRM	FILTER ()	medium	(1)	TOP	BOTTOM
	FILTER (.h)	medium	(1)	"	"
	FILTER (.l)	medium	(1)	"	"
	FILTER (.fd)	medium	(1)	"	"
Y AXIS CALIPER	FILTER ()	medium	(1)	"	"

TENSION	FILTER ()	medium (1)	"	"
CN	FILTER ()	medium (1)	"	"
CALIPER	FILTER ()	medium (1)	"	"
	FILTER (.h)	medium (1)	"	"
	FILTER (.l)	medium (1)	"	"
ZDL MED RES	FILTER (hrd1*)	medium	"	"
	FILTER (hrd1a*)	medium	"	"
	FILTER (hrd2*)	medium	"	"
	FILTER (hrd2a*)	medium	"	"
	FILTER (soft*)	medium	"	"
MREX - POROSITY	FILTER ()	medium (1)	"	"
SP-SPDH	FILTER ()	medium (1)	"	"
DT24	FILTER ()	light (2)	"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	5.500	1n	TOP	BOTTOM
	CASING THICKNESS	0.000	1n	"	"
BIT SIZE	BIT SIZE	8.750	1n	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	1.000	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	77.0	degF	"	"
	at BH REF DEPTH	0.0	m	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (onbh*)	USE CALIPER		"	"
	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
	CALIPER/FIXED DIA. (zdlbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (onbh*)	8.750	1n	"	"
	FIXED DIAMETER (mbh*)	8.750	1n	"	"
BH MUD RESISTIVITY SOURCE	RMD SOURCE (HDIL)	TOOL MEASURED		"	"

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
2448 CN MATRIX	2448 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	0	ppm	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSMB	7.675	1n	"	"

GENERAL & MULTI-SERVICE

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
FORMATION FACTOR	A	0.810		TOP	BOTTOM
	M	2.000		"	"

ZDL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
MUD DENSITY	MUD DENSITY	1.15	g/cm3	TOP	BOTTOM
DENSITY POROSITY	RHOmatrix	2.650	g/cm3	"	"
	RHOfluid	1.000	g/cm3	"	"
ZDL	DEIX TRACKING	ON		"	"

SP CONTROL

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
SP CONTROL	Tool/Bridle	CH/BRIDLE		TOP	BOTTOM

HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
HDIL TEMPERATURE CORRECTION	TEMP CORR SOURCE	USE RXTEMP		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		"	"
	ABC to CALCULATE	MUD CONDUCTIVITY		"	"
	STANDOFF	1.50	1n	"	"
	TOOL POSITION	CENTRALIZED		"	"
	Rmad MULTIPLIER	1.000		"	"

MREX GENERAL

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
MREX TCC	ACM NAME	poolfoot.ccm		TOP	BOTTOM

MREX ACQUISITION PARAMETERS

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
MREX TGC	SUBSET 0 INTERVAL	5.000	s	TOP	BOTTOM
	NUM FREQ GROUPS	1		"	"
	1ST FREQ	INDEX 12, 959.5 kHz		"	"
	2ND FREQ	INDEX 10, 856.8 kHz		"	"
	3RD FREQ	INDEX 8, 766.4 kHz		"	"
	NOMINAL TIP ANG (B)	135	deg	"	"
	PULSE SHAPE	SOFT		"	"
	1ST T2 TE	0.40	ms	"	"
	2ND T2 TE	2.50	ms	"	"
	3RD T2 TE	0.40	ms	"	"
	4TH T2 TE	2.50	ms	"	"
	5TH T2 TE	2.00	ms	"	"
	1ST T2 ECHOES	750		"	"
	2ND T2 ECHOES	120		"	"
	3RD T2 ECHOES	750		"	"
	4TH T2 ECHOES	120		"	"
	5TH T2 ECHOES	150		"	"
	1ST T2 TW	2.534	s	"	"
	2ND T2 TW	2.536	s	"	"
	3RD T2 TW	0.905	s	"	"
	4TH T2 TW	0.905	s	"	"
	5TH T2 TW	4.218	s	"	"
	1ST T2 TRAIN LENGTH	300	ms	"	"
	CBW TE	0.40	ms	"	"
	CBW ECHOES/PACKET	25		"	"
	CBW TRAIN LENGTH	10	ms	"	"
	1ST CBW PACKETS	16		"	"
	2ND CBW PACKETS	16		"	"
	3RD CBW PACKETS	16		"	"
	4TH CBW PACKETS	16		"	"
	5TH CBW PACKETS	16		"	"
	CBW TW	0.020	s	"	"

MREX PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
NOISE & CAL PULSE SELECTION	FREQ DISPLAY SELECT	FREQUENCY A		TOP	BOTTOM
	POROSITY	MBV1/MBVM BOUNDARY	CLASTIC (33 mm)	"	"
		USER MBV1/MBVM	33	mm	"
	CBW CUTOFF	3.4	ms	"	"
AVERAGING LENGTH (SAMPLES)	ET Averaging Length	6 samples		"	"
INVERSION (FITTING) PARAMETERS	T2 FIRST BIN	4.00	ms	"	"
	T2 LAST BIN	1024.00	ms	"	"
	T2 BINS USED	17		"	"
	CBW FIRST BIN	0.35	ms	"	"
	CBW LAST BIN	1024.00	ms	"	"
	CBW BINS USED	16		"	"
	TPOR FIRST BIN	0.35	ms	"	"
	TPOR LAST BIN	1024.00	ms	"	"
	TPOR BINS USED	24		"	"
RESET PHASE ROTATION ANGLE	RESET ACCUM. PHASE	RESET ACCUM PHASE		"	"
MAX T2 BIN CENTER TIME	T2 BIN - MAX TIME	1024 us		"	"
CLAY BOUND WATER CORRECTION	CBW CORRECTION	ON		"	"
STACK T2 with UNEQUAL LONG TWs	T2 TW UPPER LIMIT	25	s	"	"
STACK T2 with LONG TW BV1	STACK T2 and BV1	STACK T2-BV1		"	"
MREX FORMATION/BOREHOLE TEMP	BOREHOLE TEMP SRC	MEASURED (3081/3080)		"	"

ACOUSTIC POROSITY

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
ACOUSTIC POROSITY	POROSITY TYPE	R-H-G		TOP	BOTTOM
	DTmatrix	54.00	us/ft	"	"
	DTfluid	190.00	us/ft	"	"
	DTshale	100.00	us/ft	"	"
	MOD. BYLLIE PARM	2.25		"	"
	MOD. R-H-G PARM	2.00		"	"
DELTA T CURVE SELECTION	DT24 SOURCE	FIRST ARRIVAL DT24		"	"

ACOUSTIC PICK CONTROL

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
DELTA T CURVE SELECTION	DELTA T CURVE SELECTION	DT24		TOP	BOTTOM

DELTA-T REJECTION RANGE	REJECTION DTmax	40	us/ft	TOP	BOTTOM
FIRST ARRIVAL PICK (3 FT)	SEARCH START OFFSET (sfan1 ^o)	0	us	"	"
	SEARCH START OFFSET (sfan2 ^o)	0	us	"	"
	SEARCH START OFFSET (sfan3 ^o)	0	us	"	"
	SEARCH START OFFSET (sfan4 ^o)	0	us	"	"
	SEARCH WINDOW LENGTH	800	us	"	"
	THRESHOLD FACTOR	0.30		"	"
	THRESHOLD MINIMUM (sfan1 ^o)	1.8	pot	"	"
	THRESHOLD MINIMUM (sfan2 ^o)	1.8	pot	"	"
	THRESHOLD MINIMUM (sfan3 ^o)	1.8	pot	"	"
	THRESHOLD MINIMUM (sfan4 ^o)	1.8	pot	"	"
	E3 THRESHOLD	OFF		"	"
FIRST ARRIVAL PICK (5 FT)	SEARCH START OFFSET (sfaf1 ^o)	0	us	"	"
	SEARCH START OFFSET (sfaf2 ^o)	0	us	"	"
	SEARCH START OFFSET (sfaf3 ^o)	0	us	"	"
	SEARCH START OFFSET (sfaf4 ^o)	0	us	"	"
	SEARCH WINDOW LENGTH	445	us	"	"
	THRESHOLD FACTOR	0.30		"	"
	THRESHOLD MINIMUM (sfaf1 ^o)	1.8	pot	"	"
	THRESHOLD MINIMUM (sfaf2 ^o)	1.8	pot	"	"
	THRESHOLD MINIMUM (sfaf3 ^o)	1.8	pot	"	"
	THRESHOLD MINIMUM (sfaf4 ^o)	1.8	pot	"	"
	E3 THRESHOLD	OFF		"	"

ACOUSTIC QUALITY CONTROL

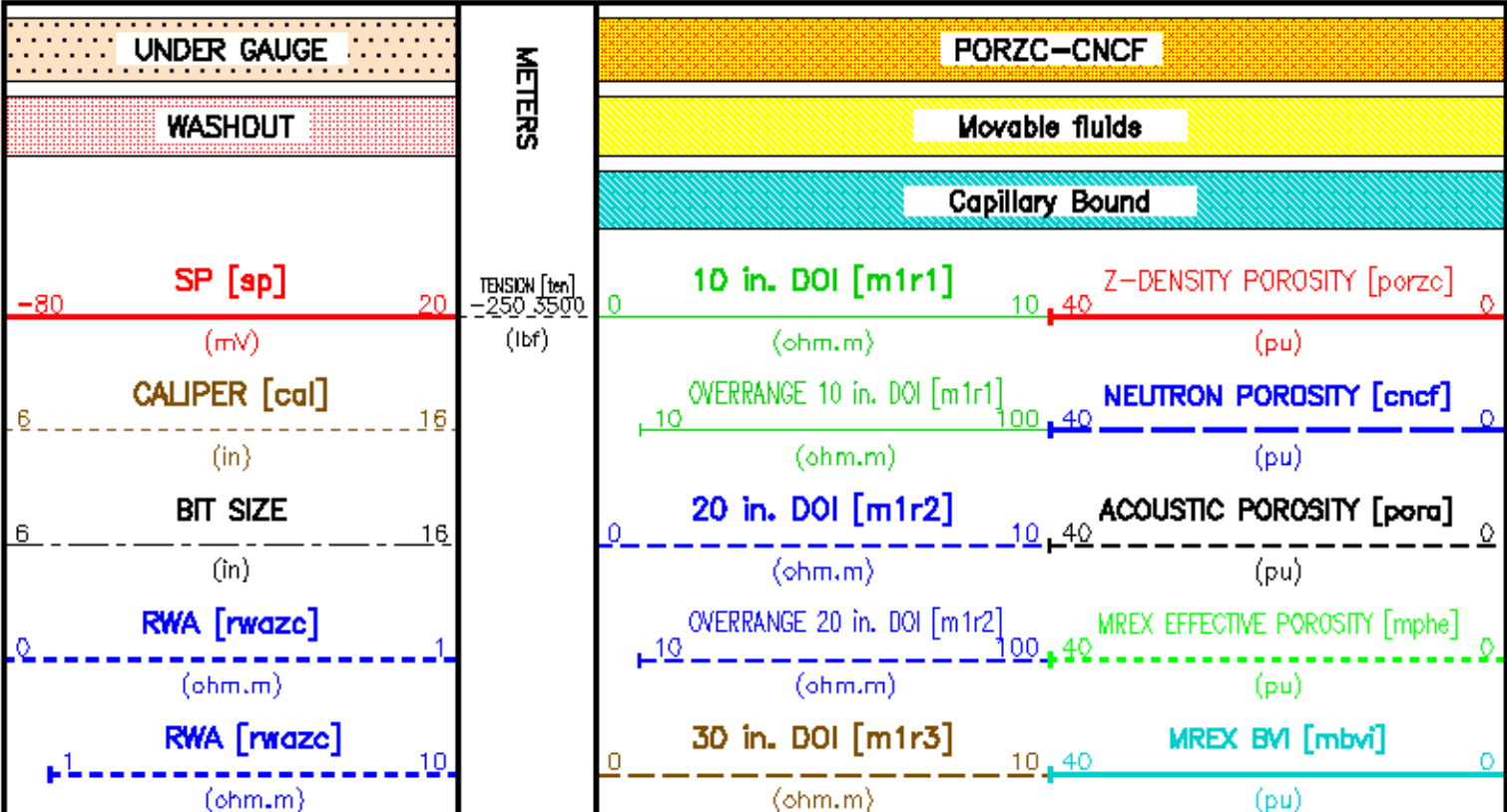
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CYCLE SKIP LIMIT	CYCLE SKIP LIMIT	100	us	TOP	BOTTOM

ACOUSTIC WAVEFORM FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP	BOTTOM
	LOW FREQ CUTOFF	4000	Hz	"	"
	HIGH FREQ CUTOFF	30000	Hz	"	"

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
BIT	0.00	M1R3	3.66	MPHE	18.75	RMZC	3.66
CAL	25.91	M1R6	3.66	MPHS	18.75	SP	38.46
CNCF	29.11	M1R9	3.66	PE	25.78	TEN	0.00
M1R1	3.66	M1RX	3.66	PORA	10.21		
M1R2	3.66	MBVI	18.75	PORZC	25.78		



P.E. [pe]

0

5

(b/e)

OVERRRANGE 30 in. DOI [m1r3]

MREX TOTAL POROSITY [mphs]

10 100

40 0

(ohm.m)

(pu)

60 in. DOI [m1r6]

0 10

(ohm.m)

OVERRRANGE 60 in. DOI [m1r6]

10 100

(ohm.m)

90 in. DOI [m1r9]

0 10

(ohm.m)

OVERRRANGE 90 in. DOI [m1r9]

10 100

(ohm.m)

120 in. DOI [m1rx]

0 10

(ohm.m)

OVERRRANGE 120 in. DOI [m1rx]

10 100

(ohm.m)

BVOL

1 10 100

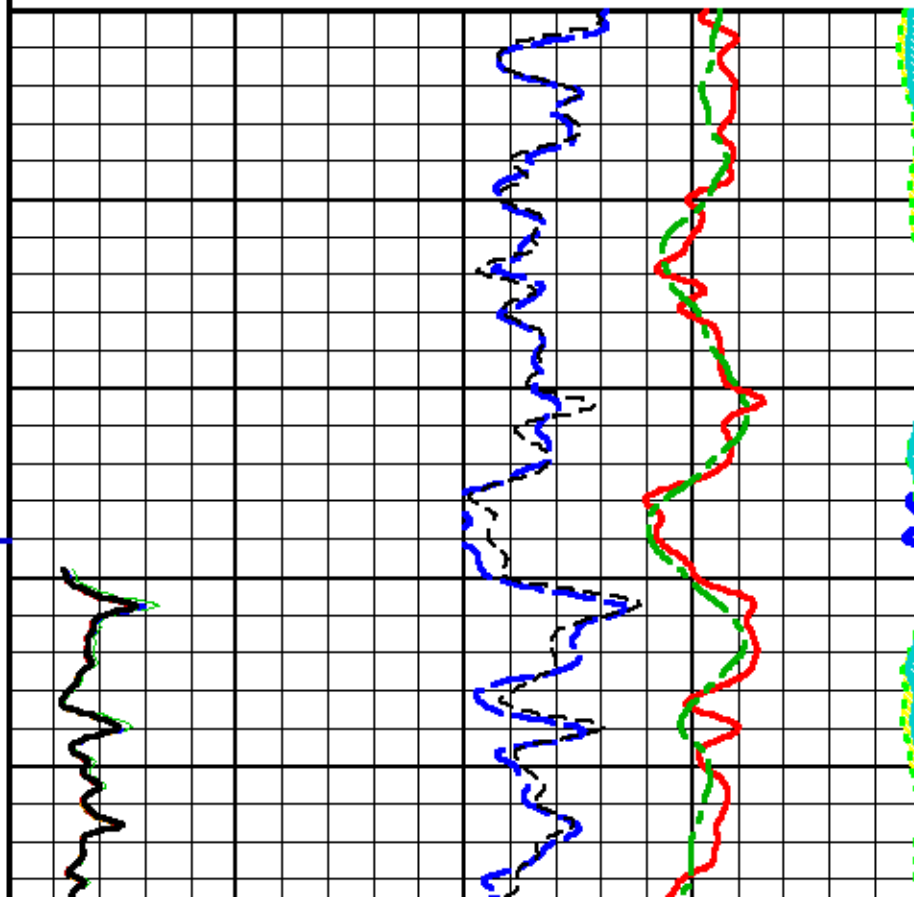
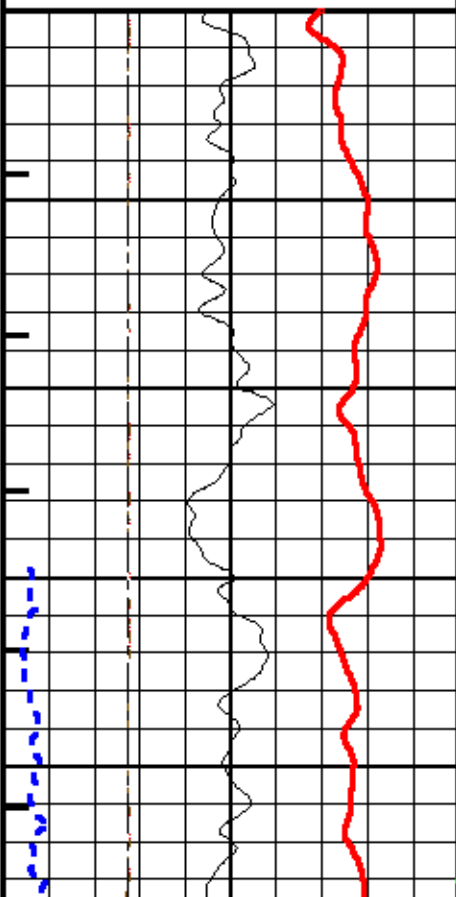
CVOL

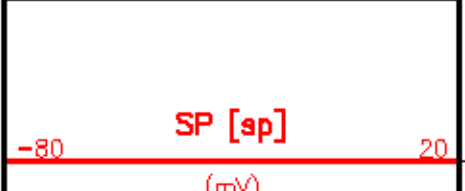
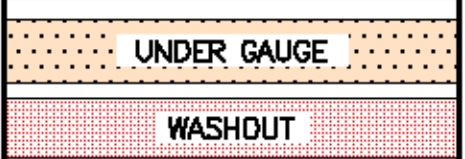
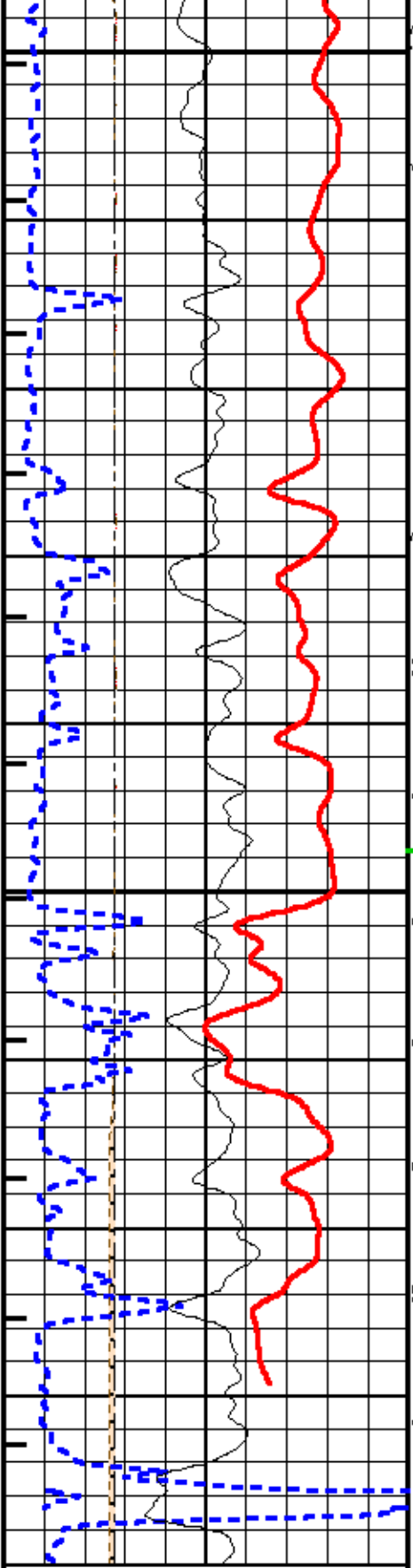
1 10 100

MINUTE MARK

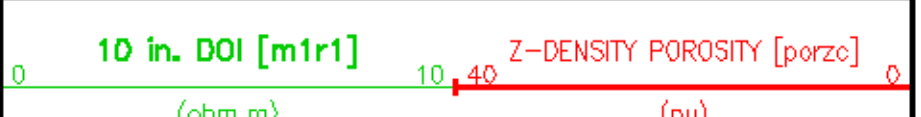
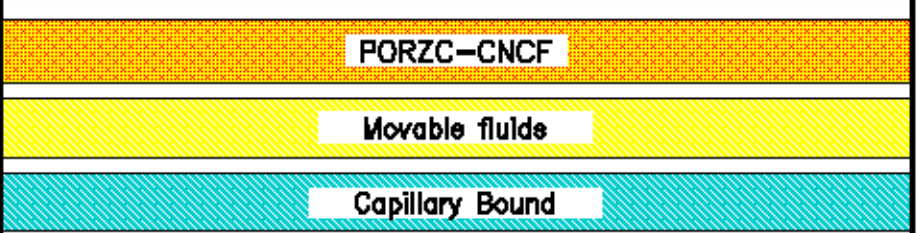
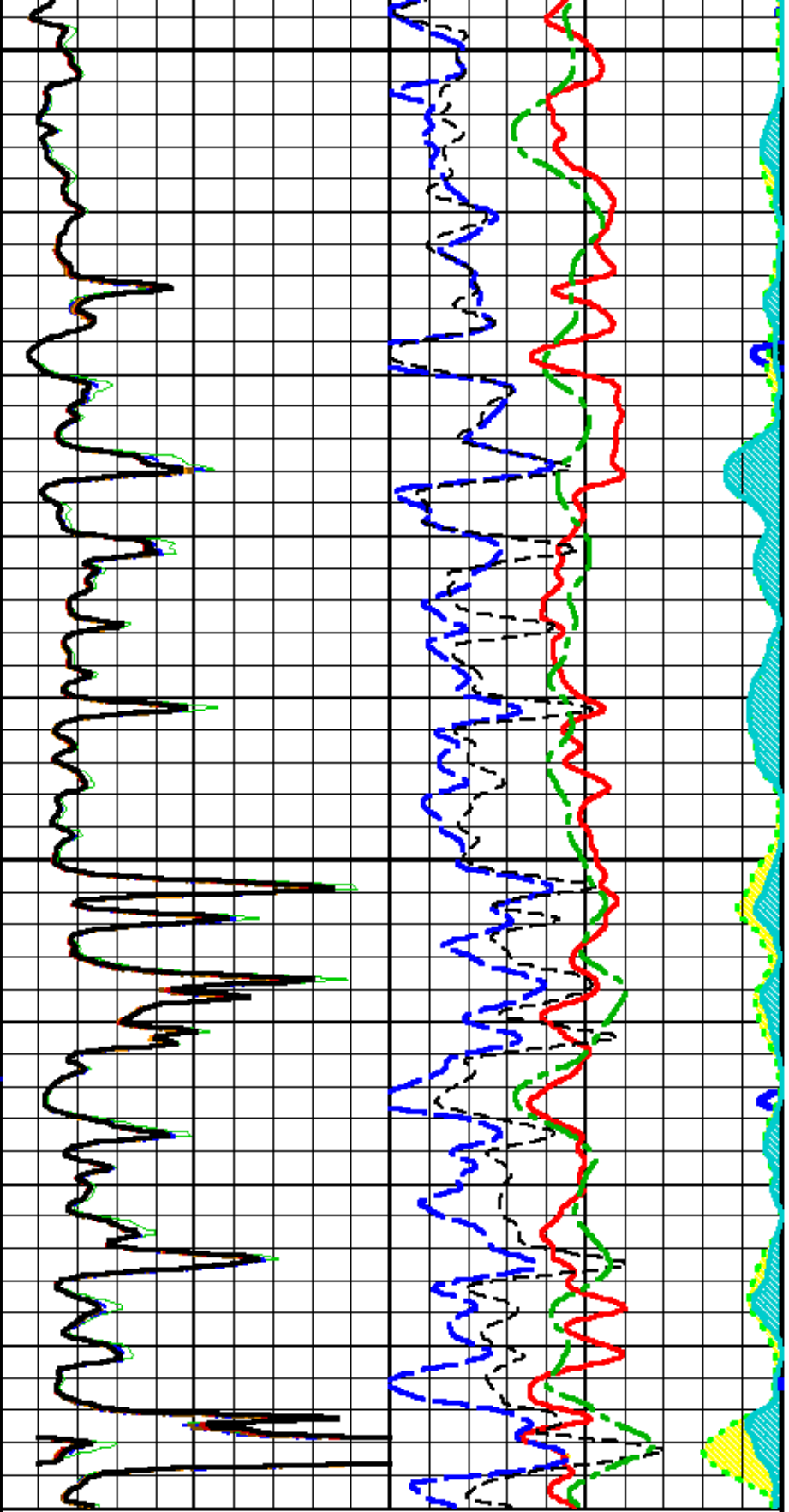
1

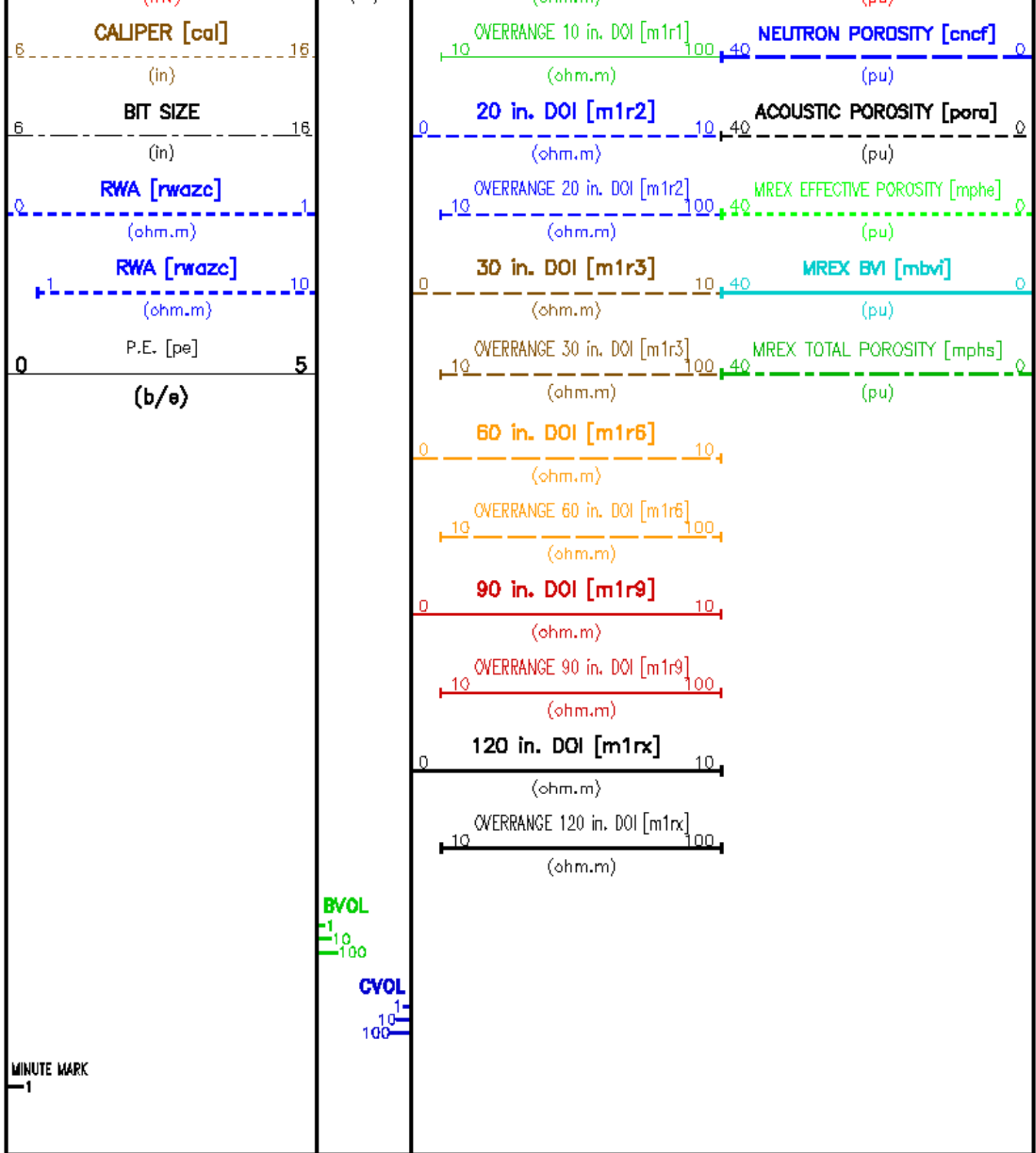
1750





1775
1800
METERS

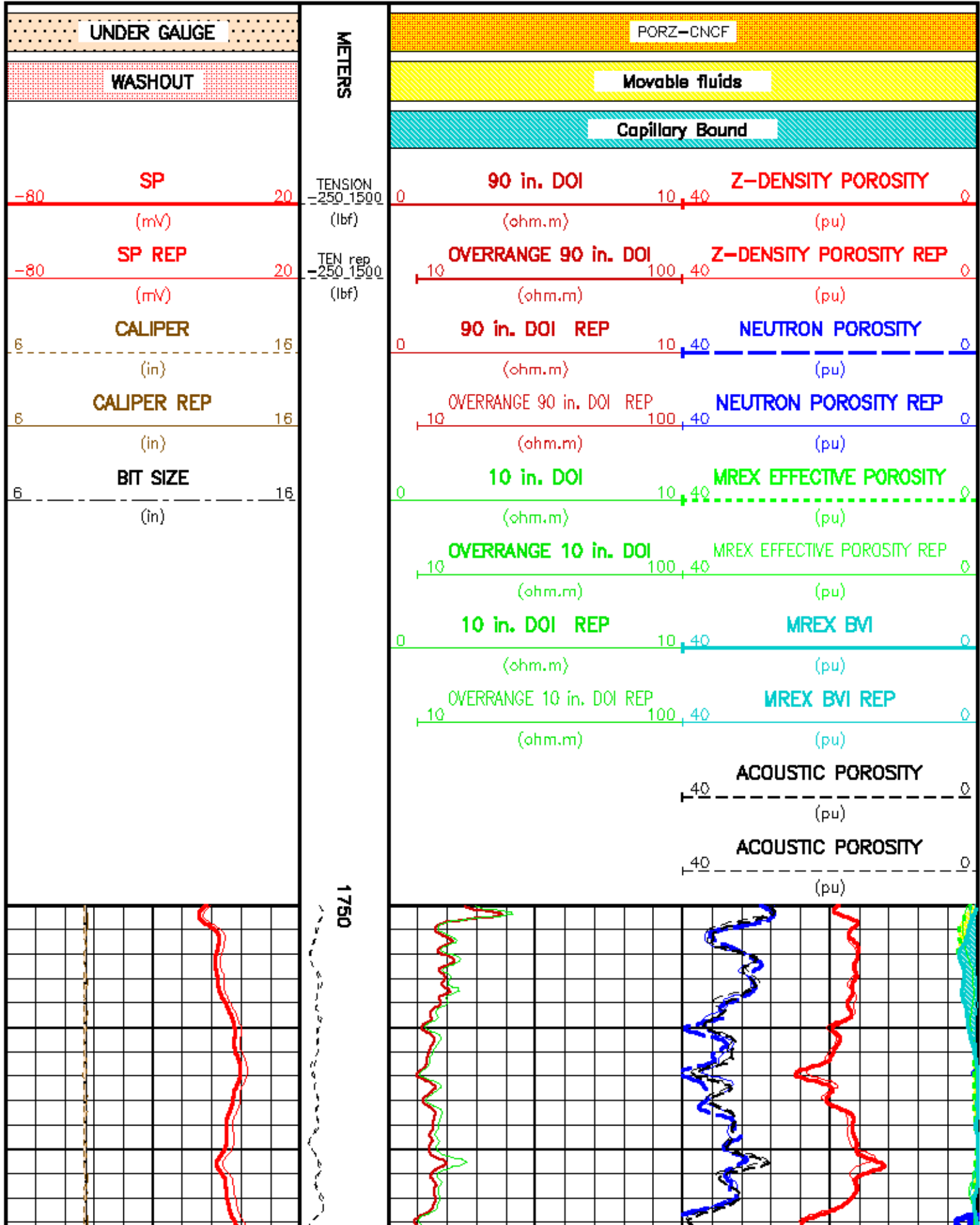


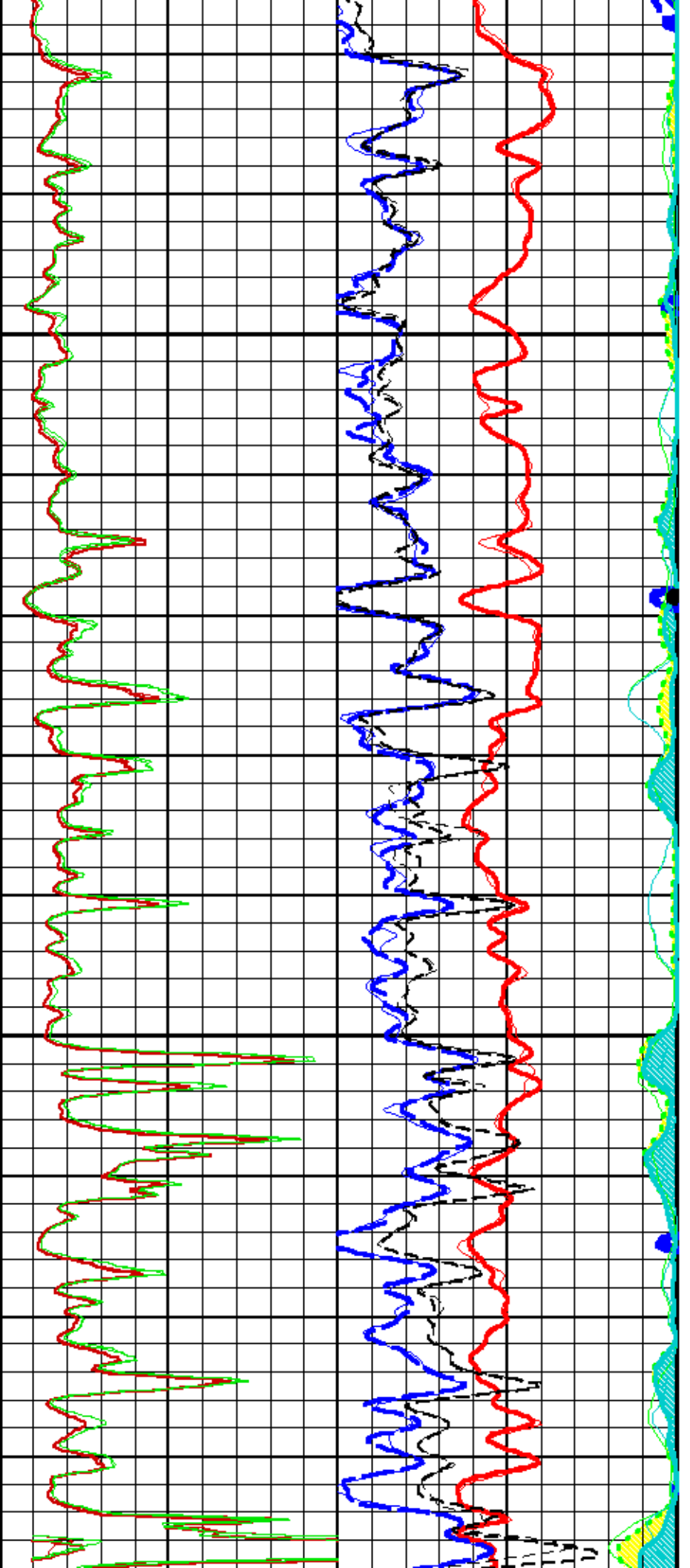


ANALISIS DE REPETIBILIDAD

CURVE MEASURE POINT OFFSET

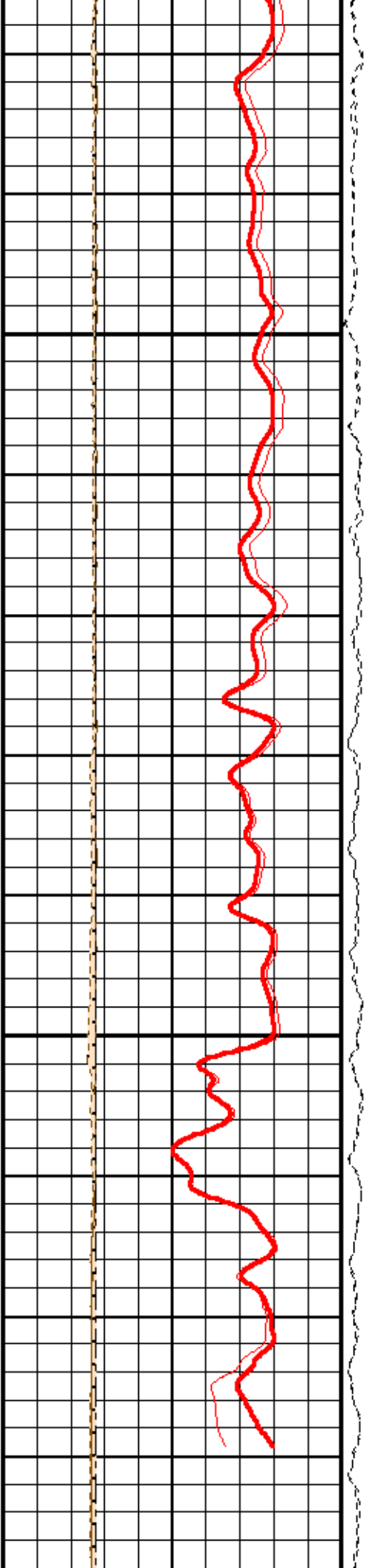
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
BIT	0.00	M1R1	3.66	MPHE	18.75	PORZCP	25.76
CAL	25.91	M1R1P	2.44	MPHEP	18.75	SP	38.48
CALP	9.14	M1R9P	2.44	PORA	10.21	SPP	4.27
CNCF	29.11	MBV1	18.75	PORAP	10.21	TEN	0.00
CNCFP	29.11	MBV1P	18.75	PORZC	25.76	TEMP	0.00

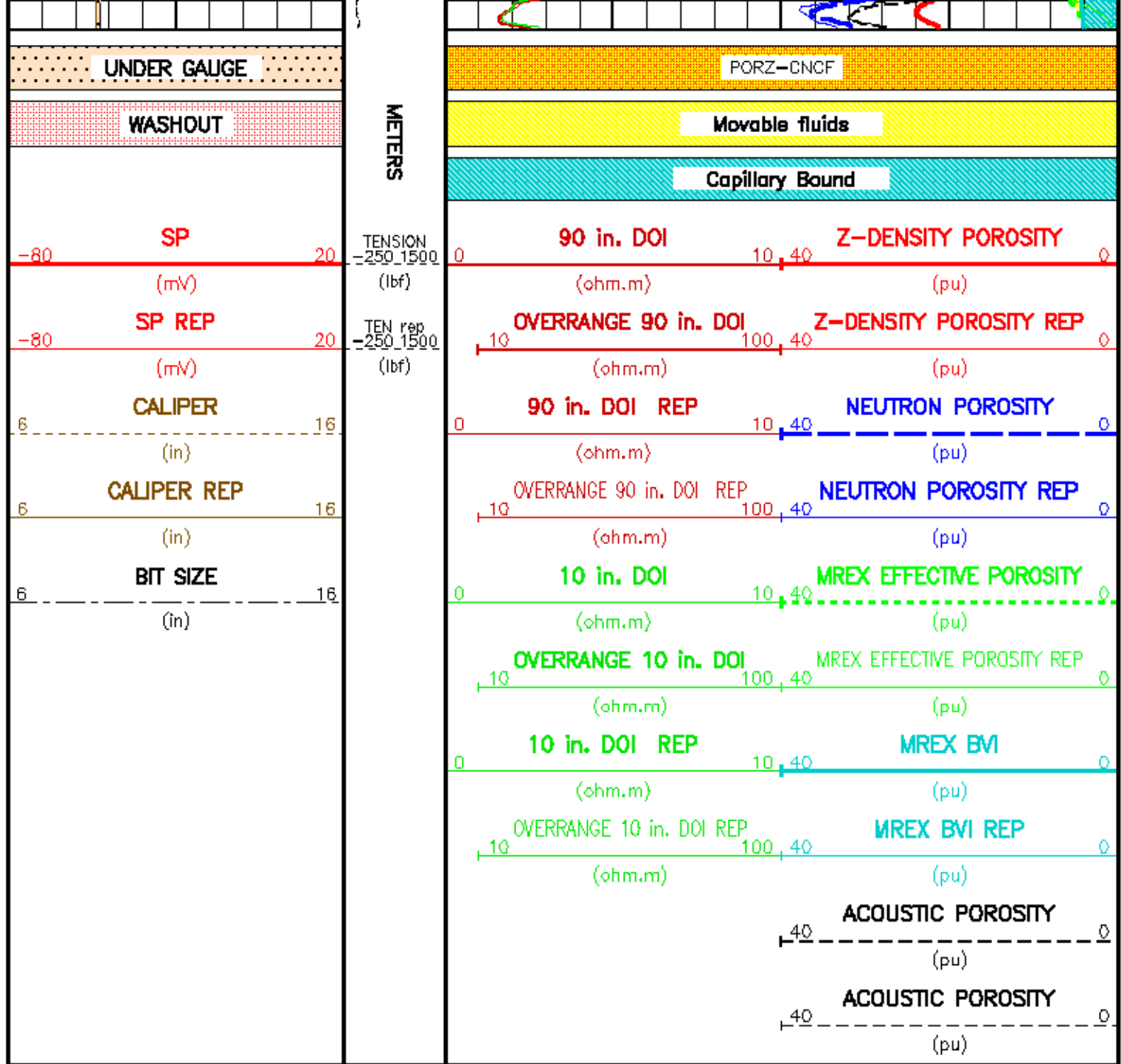




1775

1800





CALIBRATION / VERIFICATION SUMMARY

Source File: /dall1a/EA274/RUN1.tp1

CN PRIMARY CALIBRATION SUMMARY

TOOL #: 2446XA 10386894

DATE/TIME PERFORMED: Mon Apr 12 10:01:23 2010

UNIT #: 3882TE HL6708

CALIBRATOR #: 2437XB 102182308

SOURCE #: 4717XS 064874

	MEASURED CPS	DEADTM CPS	CORR	DTC SSN/LSN	NOMINAL SSN/LSN	CORRECTION FACTOR	POROSITY (pu)
LSN	695.31	707.11					
SSN	1797.58	1864.62					
RATIO				2.63696	2.75100	1.04325 0.97000 1.07000	
CN							21.358

CN PRIMARY VERIFICATION SUMMARY

TOOL #: 2446XA 10386894 DATE/TIME PERFORMED: Thu Apr 29 16:24:55 2010

UNIT #: 3882TE HL6693 ICE BLOCK #: 4717ND D--217

	MEASURED CPS	DEADTM CPS	CORR	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1996.13	2096.62					
SSN	4095.77	4461.28					
RATIO				2.12785	1.04325	2.22085	
CN							14.213

CN BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2446XA 10386894 DATE/TIME PERFORMED: Mon May 3 09:30:24 2010 DAYS SINCE CAL: 20

UNIT #: 3882TE HL6693 ICE BLOCK #: 4717ND D--217

	MEASURED CPS	DEADTM CPS	CORR	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1891.70	1981.71					
SSN	4086.19	4449.93					
RATIO				2.24550	1.04325	2.34368	
CN							15.787 12.213 16.213

CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2446XA 10386894 DATE/TIME PERFORMED: Mon May 3 18:18:20 2010 DAYS SINCE CAL: 21

UNIT #: 3882TE HL6693 ICE BLOCK #: 4717ND D--217

	MEASURED	DEADTM	CORR	DTC	CORRECTION	DTC CORR	POROSITY
	CPS	CPS	SSN/LSN	FACTOR	SSN/LSN	(pu)	
LSN	1897.77	1988.39					
SSN	4103.64	4470.68					
RATIO			2.24839	1.04325	2.34692		
CN						15.830	
						13.787	17.787

CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2234XA 173979 DATE/TIME PERFORMED: Thu Apr 29 16:10:41 2010

UNIT #: 3882TE HL6693

	SMALL RING	LARGE RING	MULT	ADD	SMALL RING	LARGE RING
					(in)	(in)
CALIPER	1315.2	1825.2	0.00784	-2.31529	8.000	12.000

CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 173979 DATE/TIME PERFORMED: Mon May 3 10:06:03 2010 DAYS SINCE CAL: 3

UNIT #: 3882TE HL6693

	I.D.	MULT	ADD	I.D.	
					(in)
CALIPER	1508.4	0.00784	-2.82959	9.001	

CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 173979 DATE/TIME PERFORMED: Mon May 3 17:19:33 2010 DAYS SINCE CAL: 4

UNIT #: 3882TE HL6693

	I.D.	MULT	ADD	I.D.	
					(in)
CALIPER	1496.4	0.00784	-2.82959	8.907	
				8.501	9.501

ZDL PRIMARY CALIBRATION SUMMARY

TOOL #: 2234XA 173979 DATE/TIME PERFORMED: Wed Apr 14 10:58:52 2010

UNIT: 3882TE HL6674 CALB BLKS: 2225XA 119086 CS SRC: 4705XA 34650B

SS CS PK (Channel)	LS CS PK (Channel)	SS_BKGD (cps)	LS BKGD (cps)
224.4 220.0 230.0	225.0 220.0 230.0	1308.5	1837.1

	SS (cps)	LS (cps)	SHR	DEN (g/cm ³)	CORR (g/cm ³)	PE (b/e)
MG (LO PE)	28152.5	15131.0	0.657 0.565 0.663	1.702	0.004	2.120
AL	16540.0	1550.3		2.689	-0.005	
AL + SHIM	22697.5	2714.6		2.608	0.157	
MG + SHIM (HI PE)	13799.9	7222.4	0.266 0.210 0.270			8.350
RATIO AL + SHIM/AL	1.37 1.30 1.42	1.75 1.64 1.84				
RATIO MG/AL	1.70 1.65 1.75	9.76 8.40 10.20				

ZDL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 173979 DATE/TIME PERFORMED: Mon May 3 09:34:59 2010 DAYS SINCE CAL: 18

UNIT #: 3882TE HL6693

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1831.7 1737.1 1837.1	226.5 220.0 230.0	1230.0 1100.0 1550.0
SS	1311.0 1208.5 1408.5	224.3 220.0 230.0	1194.0 1100.0 1550.0

LV (V)	PAD CURRENT (mA)
5.0 4.8 5.2	77.3 60.0 120.0

ZDL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 173979 DATE/TIME PERFORMED: Mon May 3 18:17:41 2010 DAYS SINCE CAL: 19

UNIT #: 3882TE HL6693

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1833.1 1737.1 1837.1	224.6 220.0 230.0	1225.4 1100.0 1550.0
SS	1306.5 1208.5 1408.5	223.8 220.0 230.0	1204.0 1100.0 1550.0

LV (V)		PAD CURRENT (mA)	
4.8	5.0	60.0	75.6
	5.2		120.0

MREX_1FSWP PRIMARY CALIBRATION SUMMARY

TOOL #: 3218WB 148892

DATE/TIME PERFORMED: Tue Apr 20 09:51:41 2010

UNIT #: 3882TE HL6693

FREQ No.	1	2	3	4	5	6	7	8	9	10	11	12
PRIMARY kHz	496	556	581	614	648	689	727	769	813	859	910	963
Q ANT.	45.8	51.5	54.2	54.3	56.9	57.0	57.6	60.5	64.7	68.0	70.9	70.1
NOISE mV	3.1	2.9	3.9	3.8	3.5	3.9	4.5	4.0	4.3	5.2	6.9	5.4
CAL mV	235	293	317	343	370	402	429	472	529	589	650	621

MREX_1FSWP BEFORE LOG VERIFICATION SUMMARY

TOOL #: 3218WB 148892

DATE/TIME PERFORMED: Mon May 3 11:37:05 2010

DAYS SINCE CAL: 13

UNIT #: 3882TE HL6693

FREQ No.	1	2	3	4	5	6	7	8	9	10	11	12
BEFORE kHz	495	554	580	613	646	687	725	766	811	857	907	960
Q	39.5	44.1	43.3	45.1	43.9	44.3	44.5	45.9	48.1	49.0	50.1	47.7
NOISE mV	5.9	6.7	6.7	8.3	7.3	6.9	8.5	6.0	7.0	8.4	10.1	9.1
CAL mV	207	257	269	289	305	325	350	379	422	460	511	485

MREX_1FSWP AFTER LOG VERIFICATION SUMMARY

TOOL #: 3218WB 148892

DATE/TIME PERFORMED: Mon May 3 17:39:02 2010

DAYS SINCE CAL: 13

UNIT #: 3882TE HL6693

FREQ No.	1	2	3	4	5	6	7	8	9	10	11	12
AFTER kHz	495	555	580	613	647	687	725	767	811	857	907	960

DELTA F %	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0	-1.0 1.0
Q	45.6	41.8	42.7	43.8	43.1	42.9	42.0	42.4	45.6	44.9	46.2	42.8			
	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0	8.0 80.0
NOISE mV	18.8	6.7	6.2	6.2	6.2	5.3	6.3	7.0	6.2	6.0	6.8	7.1			
	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0	0.0 20.0
CAL mV	215	237	257	275	288	305	318	343	379	407	450	407			

MREX_2TGN PRIMARY CALIBRATION SUMMARY

TOOL #: 3218MB 148892

DATE/TIME PERFORMED: Tue Apr 20 10:08:19 2010

UNIT #: 3882TE HL6693

FREQ No.	1	2	3	4	5	6	7	8	9	10	11	12
TX FREQ kHz	496	556	581	614	648	689	727	769	813	859	910	963
Vtx kV	1.05	1.13	1.16	1.18	1.18	1.18	1.18	1.18	1.19	1.20	1.20	1.21
TAU 90 us	52.3	48.2	46.7	44.8	44.0	43.0	42.4	41.8	40.8	39.7	39.1	38.5
	42.0 57.0	39.0 53.0	38.0 52.0	35.0 50.0	35.0 49.0	34.0 48.0	33.0 47.0	32.0 46.0	32.0 46.0	32.0 46.0	31.0 45.0	30.0 45.0

MREX_3RGN PRIMARY CALIBRATION SUMMARY

TOOL #: 3218MB 148892

DATE/TIME PERFORMED: Tue Apr 20 10:12:26 2010

UNIT #: 3882TE HL6693

CAL TEMP
(degF)

77.0

FREQ No.	1	2	3	4	5	6	7	8	9	10	11	12
Gr	1.09	1.23	1.29	1.36	1.41	1.47	1.54	1.63	1.70	1.77	1.87	1.99
T2LM ms	127	127	127	127	126	124	125	126	126	127	126	125
	100 200	100 200	100 200	100 200	100 200	100 200	100 200	100 200	100 200	100 200	100 200	100 200

MREX_3RGN PRIMARY VERIFICATION SUMMARY

TOOL #: 3218MB 148892

DATE/TIME PERFORMED: Tue Apr 20 10:25:33 2010

UNIT #: 3882TE HL6693

CAL TEMP

CAL TEM (degF)
77.0

FREQ No.	1	2	3	4	5	6	7	8	9	10	11	12
TE ms	0.40											
POROSITY pu	100.8 97.0 103.0	101.5 97.0 103.0	101.3 90.0 110.0	100.5 97.0 103.0	101.0 90.0 110.0	100.5 97.0 103.0	100.4 90.0 110.0	100.2 97.0 103.0	100.7 90.0 110.0	101.1 97.0 103.0	97.2 90.0 110.0	99.7 97.0 103.0
NOISE pu	5.07 0.00 8.40	4.30 0.00 7.00	4.07 0.00 6.50	3.89 0.00 6.40	3.68 0.00 6.20	3.60 0.00 5.80	3.54 0.00 5.60	3.15 0.00 5.10	2.96 0.00 4.80	2.93 0.00 4.90	3.32 0.00 4.50	2.69 0.00 4.30
RINGING pu	17.7 0.0 30.0	5.2 0.0 30.0	6.5 0.0 30.0	7.4 0.0 30.0	3.5 0.0 30.0	3.7 0.0 30.0	2.4 0.0 30.0	3.3 0.0 30.0	2.8 0.0 30.0	2.9 0.0 30.0	2.2 0.0 30.0	3.4 0.0 30.0
TE ms	0.30											
POROSITY pu	143.0	140.9	139.3	139.7	142.7	145.6	145.9	143.5	146.8	145.6	140.2	142.5
NOISE pu	10.21	6.82	6.02	5.57	6.25	5.24	4.95	6.58	4.50	4.07	3.98	5.16
RINGING pu	28.0	23.7	5.7	9.8	6.1	15.7	15.3	29.5	7.7	5.9	2.7	5.9

HDIL PRIMARY CALIBRATION SUMMARY

TOOL #: 1515MA 10394167

DATE/TIME PERFORMED: Thu Mar 25 14:35:44 2010

UNIT #: 3880TC HL6566

GRCOND ID & DATE: 65 083096

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

Coil 0 R	-0.006 -0.200 0.200	-0.002 -0.100 0.100	-0.000 -0.100 0.100	-0.001 -0.100 0.100	-0.003 -0.100 0.100	0.000 -0.100 0.100	0.000 -0.100 0.100	-0.001 -0.100 0.100
Coil 0 Q	0.007 -1.000 1.000	0.010 -0.200 0.200	0.002 -0.100 0.100	0.000 -0.100 0.100	0.001 -0.100 0.100	0.000 -0.100 0.100	-0.000 -0.100 0.100	0.001 -0.100 0.100
Coil 1 R	-0.004 -0.200 0.200	-0.001 -0.100 0.100	0.002 -0.100 0.100	0.002 -0.100 0.100	0.001 -0.100 0.100	0.000 -0.100 0.100	0.000 -0.100 0.100	-0.001 -0.100 0.100
Coil 1 Q	0.002 -1.000 1.000	0.003 -0.200 0.200	0.000 -0.100 0.100	-0.001 -0.100 0.100	0.001 -0.100 0.100	0.001 -0.100 0.100	0.000 -0.100 0.100	0.001 -0.100 0.100
Coil 2 R	0.007 -0.200 0.200	0.002 -0.100 0.100	-0.004 -0.100 0.100	-0.002 -0.100 0.100	-0.002 -0.100 0.100	-0.000 -0.100 0.100	0.004 -0.100 0.100	0.008 -0.100 0.100
Coil 2 Q	-0.008 -1.000 1.000	-0.006 -0.200 0.200	-0.004 -0.100 0.100	-0.003 -0.100 0.100	-0.008 -0.100 0.100	-0.007 -0.100 0.100	-0.005 -0.100 0.100	-0.004 -0.100 0.100
Coil 3 R	0.002 -0.100 0.100	0.003 -0.100 0.100	-0.001 -0.100 0.100	0.003 -0.100 0.100	0.005 -0.100 0.100	-0.001 -0.100 0.100	0.001 -0.100 0.100	0.002 -0.100 0.100
Coil 3 Q	-0.012 -0.500 0.500	-0.013 -0.200 0.200	-0.003 -0.100 0.100	-0.000 -0.100 0.100	-0.001 -0.100 0.100	-0.003 -0.100 0.100	0.000 -0.100 0.100	-0.002 -0.100 0.100
Coil 4 R	-0.004 -0.200 0.200	0.004 -0.200 0.200	0.001 -0.200 0.200	-0.002 -0.200 0.200	-0.003 -0.200 0.200	0.004 -0.200 0.200	0.007 -0.200 0.200	0.004 -0.200 0.200
Coil 4 Q	-0.007 -1.000 1.000	0.004 -0.400 0.400	-0.001 -0.200 0.200	-0.001 -0.200 0.200	-0.007 -0.200 0.200	-0.008 -0.200 0.200	-0.004 -0.200 0.200	-0.002 -0.200 0.200
Coil 5 R	-0.017 -0.400 0.400	0.001 -0.400 0.400	-0.004 -0.400 0.400	0.009 -0.400 0.400	0.002 -0.400 0.400	0.005 -0.400 0.400	0.001 -0.400 0.400	-0.004 -0.400 0.400

Coil 5 Q	-0.004 -2.000 2.000	0.003 -0.800 0.800	-0.007 -0.400 0.400	0.001 -0.400 0.400	-0.004 -0.400 0.400	0.002 -0.400 0.400	0.004 -0.400 0.400	0.006 -0.400 0.400
Coil 6 R	-0.023 -1.000 1.000	0.002 -1.000 1.000	-0.004 -1.000 1.000	-0.008 -1.000 1.000	0.007 -1.000 1.000	0.003 -1.000 1.000	-0.005 -1.000 1.000	0.005 -1.000 1.000
Coil 6 Q	-0.016 -6.000 6.000	-0.011 -2.000 2.000	-0.009 -1.000 1.000	0.012 -1.000 1.000	0.021 -1.000 1.000	-0.009 -1.000 1.000	-0.018 -1.000 1.000	-0.006 -1.000 1.000

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

Coil 0 M	126.05 100.00 150.00	124.60 100.00 150.00	121.65 98.00 150.00	117.45 96.00 140.00	111.98 92.00 140.00	105.53 87.00 130.00	98.11 82.00 120.00	89.98 76.00 110.00
Coil 0 P	7.793 6.000 9.000	24.474 18.000 28.000	40.871 32.000 47.000	57.145 44.000 66.000	73.314 57.000 85.000	89.199 70.000 100.000	105.131 82.000 120.000	120.540 95.000 140.000
Coil 1 M	221.96 180.00 270.00	219.47 180.00 270.00	214.41 170.00 260.00	207.29 170.00 250.00	197.80 160.00 250.00	186.68 160.00 230.00	173.73 150.00 220.00	159.30 140.00 200.00
Coil 1 P	7.843 6.000 9.000	24.594 18.000 28.000	41.087 32.000 48.000	57.441 45.000 67.000	73.777 57.000 86.000	89.810 70.000 110.000	105.880 83.000 120.000	121.448 96.000 140.000
Coil 2 M	440.50 360.00 540.00	437.00 360.00 540.00	429.55 350.00 530.00	419.05 340.00 510.00	403.96 330.00 500.00	385.37 310.00 470.00	362.47 300.00 440.00	335.65 270.00 410.00
Coil 2 P	7.731 6.000 9.000	24.308 18.000 28.000	40.708 32.000 48.000	57.115 45.000 67.000	73.635 58.000 87.000	90.138 71.000 110.000	106.834 84.000 130.000	123.275 96.000 140.000
Coil 3 M	708.28 590.00 820.00	700.89 580.00 870.00	685.75 570.00 850.00	664.61 560.00 830.00	636.04 530.00 800.00	601.93 500.00 760.00	561.36 470.00 710.00	515.55 440.00 650.00
Coil 3 P	8.140 6.000 10.000	25.515 20.000 29.000	42.650 33.000 49.000	59.705 46.000 68.000	76.776 59.000 89.000	93.724 72.000 110.000	110.764 85.000 130.000	127.494 98.000 150.000
Coil 4 M	1125.2 900.0 1400.0	1111.6 900.0 1300.0	1084.3 900.0 1300.0	1046.6 850.0 1300.0	997.0 800.0 1200.0	939.0 800.0 1200.0	871.7 750.0 1100.0	797.3 700.0 1000.0
Coil 4 P	8.402 6.000 10.000	26.371 20.000 30.000	43.983 33.000 50.000	61.519 46.000 70.000	78.931 60.000 80.000	96.179 73.000 110.000	113.473 86.000 130.000	130.405 98.000 150.000
Coil 5 M	2286.0 1800.0 2800.0	2270.0 1800.0 2800.0	2236.3 1800.0 2700.0	2189.3 1800.0 2600.0	2120.4 1700.0 2500.0	2036.4 1600.0 2400.0	1931.6 1500.0 2200.0	1808.5 1400.0 2100.0
Coil 5 P	7.748 6.000 10.000	24.384 20.000 31.000	40.831 34.000 51.000	57.286 48.000 72.000	73.879 62.000 93.000	90.451 76.000 110.000	107.244 89.000 130.000	123.893 100.000 150.000
Coil 6 M	6024.3 4700.0 7100.0	5949.4 4700.0 7000.0	5798.4 4600.0 6900.0	5590.9 4400.0 6600.0	5317.0 4200.0 6400.0	4995.5 4000.0 6000.0	4620.1 3700.0 5600.0	4207.9 3400.0 5100.0
Coil 6 P	8.609 7.000 10.000	27.232 22.000 32.000	45.500 36.000 54.000	63.633 51.000 76.000	81.725 65.000 98.000	99.586 80.000 120.000	117.514 94.000 140.000	135.015 110.000 160.000

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

Coil 0 R	502 -200 800	-75 -500 100	-137 -600 0	-152 -600 0	-158 -500 0	-161 -500 0	-162 -500 0	-162 -500 0
Coil 0 Q	2163 -3000 6000	784 -1000 2000	441 -1000 1200	280 -500 800	180 -400 600	109 -400 500	54 -400 400	7 -400 300
Coil 1 R	581 450 650	85 20 115	21 -30 45	-1 -50 20	-11 -50 0	-17 -60 0	-21 -60 0	-23 -60 0
Coil 1 Q	764 0 2500	339 0 900	215 0 600	155 0 400	119 0 300	94 0 250	75 0 200	61 0 200
Coil 2 R	197.0 140.0 230.0	30.9 0.0 61.0	9.3 -10.0 25.0	1.9 -15.0 15.0	-1.5 -16.0 10.0	-3.4 -16.0 7.0	-5.0 -16.0 5.0	-5.7 -16.0 3.0
Coil 2 Q	424.6 -200.0 1000.0	173.7 0.0 360.0	112.0 0.0 220.0	84.5 0.0 160.0	69.2 0.0 130.0	60.1 0.0 110.0	54.1 0.0 100.0	49.7 0.0 80.0
Coil 3 R	48.4 37.0 62.0	5.5 0.0 12.0	0.3 -3.0 6.0	-1.3 -4.0 4.0	-2.0 -5.0 2.0	-2.4 -6.0 1.0	-2.7 -6.0 1.0	-2.7 -6.0 1.0
Coil 3 Q	86.1 -140.0 280.0	38.4 -40.0 100.0	27.4 -20.0 70.0	23.6 -10.0 60.0	22.4 -10.0 50.0	22.1 -10.0 50.0	22.8 -10.0 50.0	23.3 -10.0 50.0

Coil 4 R	9.51	-0.84	-1.84	-2.20	-2.15	-2.16	-2.18	-2.19
	2.00 16.00	-3.00 6.00	-3.50 3.00	-3.80 2.00	-4.20 2.00	-4.50 2.00	-4.70 2.00	-5.00 2.00
Coil 4 Q	17.53	10.55	10.15	11.23	12.84	14.71	16.74	18.86
	-100.00 100.00	-30.00 50.00	-20.00 40.00	-10.00 40.00	-10.00 40.00	-10.00 45.00	-10.00 50.00	-10.00 60.00
Coil 5 R	-0.58	-2.04	-2.11	-2.11	-1.99	-1.96	-1.89	-1.80
	-2.00 5.80	-3.20 2.40	-4.50 3.10	-4.70 3.20	-4.80 3.20	-5.00 3.30	-5.20 3.40	-5.40 3.50
Coil 5 Q	-3.11	2.02	4.61	7.12	9.35	11.77	14.12	16.47
	-60.00 70.00	-20.00 30.00	-20.00 30.00	-20.00 35.00	-20.00 45.00	-20.00 50.00	-20.00 60.00	-30.00 70.00
Coil 6 R	-4.42	-2.70	-2.19	-1.99	-1.78	-1.67	-1.57	-1.38
	-4.80 1.00	-5.70 3.80	-6.50 4.90	-6.90 5.40	-7.30 5.80	-7.50 6.00	-7.70 6.10	-7.90 6.30
Coil 6 Q	-7.89	-0.51	2.82	5.59	8.22	10.59	12.99	15.37
	-30.00 30.00	-20.00 25.00	-20.00 35.00	-30.00 50.00	-35.00 60.00	-40.00 70.00	-50.00 80.00	-60.00 100.00

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

Coil 0 M	0.992	0.991	0.988	0.987	0.986	0.985	0.986	0.986
	0.900 1.100	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 0 P	0.098	0.151	0.248	0.222	0.178	0.074	0.145	0.108
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 1 M	0.989	0.987	0.983	0.982	0.981	0.981	0.980	0.980
	0.900 1.100	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 1 P	0.082	0.221	0.294	0.286	0.271	0.174	0.175	0.094
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 2 M	0.995	0.992	0.991	0.990	0.989	0.988	0.988	0.987
	0.900 1.100	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 2 P	0.031	0.068	0.107	0.146	0.155	0.154	0.120	0.088
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 3 M	0.996	0.994	0.994	0.993	0.992	0.992	0.992	0.993
	0.900 1.100	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 3 P	0.144	0.087	0.099	0.102	0.059	0.016	-0.028	0.028
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 4 M	1.006	1.005	1.005	1.004	1.003	1.002	1.001	1.000
	0.900 1.100	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 4 P	0.025	0.090	0.083	0.166	0.136	0.130	0.153	0.114
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 5 M	1.015	1.015	1.015	1.014	1.013	1.014	1.013	1.014
	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 5 P	-0.008	-0.061	-0.029	-0.038	-0.081	-0.167	-0.142	-0.212
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 6 M	1.006	1.008	1.007	1.007	1.008	1.015	1.015	1.016
	0.900 1.100	0.900 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.800 1.100	0.900 1.100
Coil 6 P	-0.045	-0.004	-0.147	-0.104	-0.239	-0.393	-0.342	-0.566
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000

PARMS TCID 0 TCID 1 Cal Temp T Factor

(degF)

IDs

1.486

0.869

70.3

1.04

HDIL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1515MA 10394167 DATE/TIME PERFORMED: Mon May 3 11:34:14 2010 DAYS SINCE CAL: 38

UNIT #: 3882TE HL6693

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

Coil 0 R	-0.003	0.002	0.002	0.001	-0.001	0.001	0.001	-0.001
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 0 Q	0.007	0.011	0.004	0.002	0.003	0.002	0.000	-0.000
	-1.000 1.000	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 1 R	0.000	0.002	0.003	0.002	0.001	0.000	-0.000	-0.002
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 1 Q	0.003	0.004	0.003	0.000	0.002	0.003	0.003	0.000
	-1.000 1.000	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 2 R	0.005	0.003	-0.001	-0.001	-0.000	0.003	0.008	0.011
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 2 Q	-0.008	-0.007	-0.002	-0.003	-0.006	-0.008	-0.006	-0.002
	-1.000 1.000	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 3 R	0.009	0.003	0.002	0.003	0.001	0.001	0.000	0.006
	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 3 Q	-0.016	-0.012	-0.004	-0.003	-0.001	-0.002	-0.001	-0.000
	-0.500 0.500	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 4 R	-0.002	0.002	0.002	-0.001	-0.001	0.007	0.002	0.001
	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200
Coil 4 Q	-0.011	0.013	0.007	0.003	-0.000	-0.004	0.002	-0.002
	-1.000 1.000	-0.400 0.400	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200
Coil 5 R	-0.007	0.007	0.009	-0.006	-0.008	-0.003	-0.000	-0.001
	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400
Coil 5 Q	0.001	0.005	0.003	-0.002	0.001	0.005	0.009	0.000
	-2.000 2.000	-0.800 0.800	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400
Coil 6 R	-0.010	-0.014	0.011	0.032	-0.020	0.012	0.021	0.011
	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000
Coil 6 Q	-0.021	-0.009	-0.016	-0.001	-0.016	0.013	0.021	0.004
	-5.000 5.000	-2.000 2.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000

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

Coil 0 M	126.57	125.08	122.09	117.88	112.33	105.93	98.27	90.07
	100.00 150.00	100.00 150.00	95.00 150.00	95.00 140.00	82.00 140.00	87.00 130.00	82.00 120.00	76.00 110.00
Coil 0 P	7.795	24.523	40.942	57.226	73.453	89.458	105.475	120.966
	5.000 9.000	18.000 28.000	32.000 47.000	44.000 65.000	57.000 85.000	70.000 100.000	82.000 120.000	95.000 140.000
Coil 1 M	221.71	219.20	214.06	206.97	197.52	186.42	173.33	158.86
	180.00 270.00	180.00 270.00	170.00 260.00	170.00 250.00	160.00 250.00	160.00 230.00	150.00 220.00	140.00 200.00
Coil 1 P	7.840	24.619	41.118	57.511	73.854	89.995	106.141	121.862
	5.000 9.000	18.000 28.000	32.000 48.000	45.000 67.000	57.000 86.000	70.000 110.000	83.000 120.000	96.000 140.000
Coil 2 M	440.09	436.52	428.91	418.50	403.30	384.90	361.64	334.56
	360.00 540.00	360.00 540.00	350.00 530.00	340.00 510.00	330.00 500.00	310.00 470.00	300.00 440.00	270.00 410.00
Coil 2 P	7.733	24.347	40.771	57.194	73.792	90.367	107.140	123.729
	5.000 9.000	18.000 28.000	32.000 48.000	45.000 67.000	58.000 87.000	71.000 110.000	84.000 130.000	96.000 140.000
Coil 3 M	708.66	701.15	685.76	664.58	635.88	601.93	560.98	514.73
	580.00 880.00	580.00 870.00	570.00 850.00	560.00 830.00	530.00 800.00	500.00 760.00	470.00 710.00	440.00 660.00
Coil 3 P	8.146	25.554	42.707	59.781	76.896	93.924	111.039	127.898
	5.000 10.000	20.000 29.000	33.000 49.000	46.000 68.000	59.000 88.000	72.000 110.000	85.000 130.000	98.000 150.000
Coil 4 M	1123.9	1110.2	1082.6	1045.0	995.2	937.3	870.3	794.6
	900.0 1400.0	900.0 1300.0	900.0 1300.0	850.0 1300.0	800.0 1200.0	800.0 1200.0	750.0 1100.0	700.0 1000.0
Coil 4 P	8.411	26.411	44.043	61.605	79.070	96.400	113.790	130.854
	5.000 10.000	20.000 30.000	33.000 50.000	46.000 70.000	60.000 80.000	73.000 110.000	86.000 130.000	98.000 150.000
Coil 5 M	2291.3	2274.8	2240.3	2192.4	2122.8	2038.6	1931.9	1805.9
	1900.0 2800.0	1800.0 2800.0	1800.0 2700.0	1800.0 2600.0	1700.0 2500.0	1600.0 2400.0	1500.0 2200.0	1400.0 2100.0
Coil 5 P	7.769	24.470	40.964	57.478	74.147	90.820	107.745	124.549

	5.000	10.000	20.000	31.000	34.000	51.000	48.000	72.000	62.000	93.000	76.000	110.000	89.000	130.000	100.000	150.000								
Coil 6 M	6048.3	5971.4	5818.2	5608.6	5328.7	5008.2	4629.9	4207.6	4700.0	7100.0	4700.0	7000.0	4600.0	6900.0	4400.0	6600.0	4200.0	6400.0	4000.0	6000.0	3700.0	5600.0	3400.0	5100.0
Coil 6 P	8.626	27.304	45.606	63.783	81.923	99.885	117.886	135.561	7.000	10.000	22.000	32.000	36.000	54.000	51.000	76.000	65.000	96.000	80.000	120.000	84.000	140.000	110.000	160.000

HDIL AFTER LOG VERIFICATION SUMMARY

TOOL #: 1515MA 10394167 DATE/TIME PERFORMED: Mon May 3 18:06:33 2010 DAYS SINCE CAL: 39

UNIT #: 3882TE HL6693

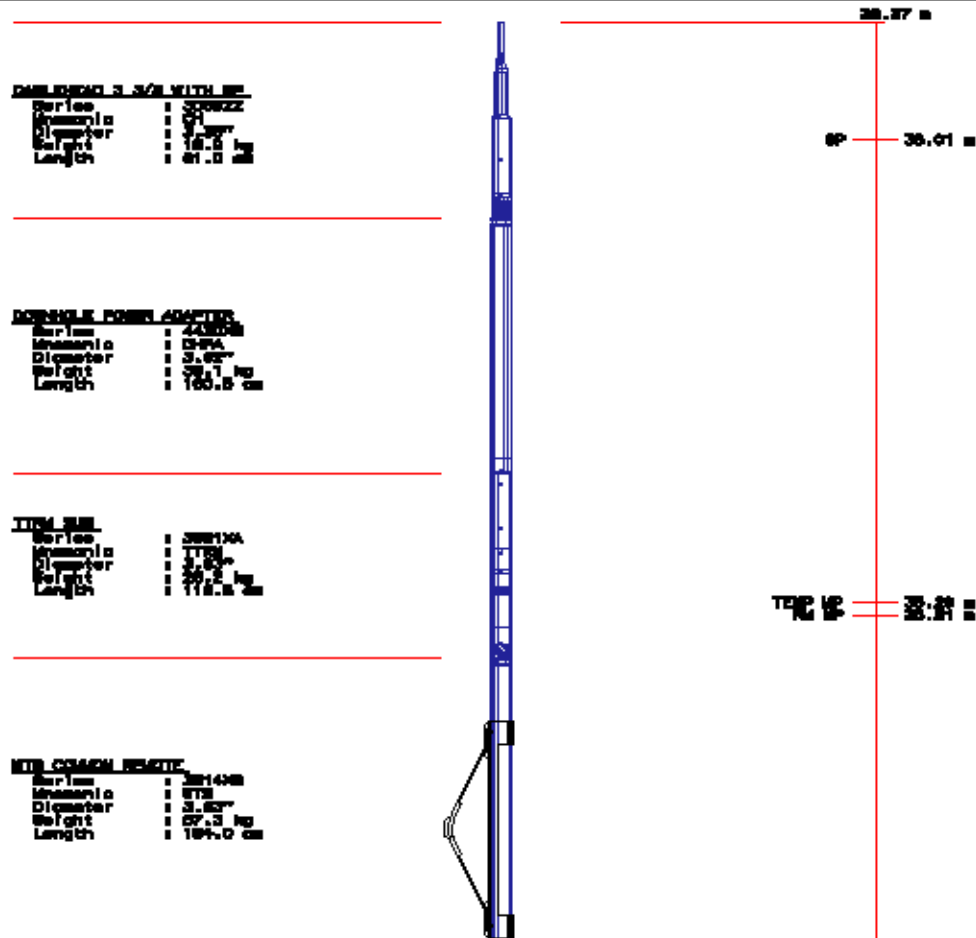
ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	-0.003 -0.083 0.077	0.002 -0.008 0.062	0.002 -0.028 0.032	-0.003 -0.028 0.031	-0.004 -0.031 0.028	-0.000 -0.028 0.031	0.000 -0.028 0.031	-0.001 -0.031 0.028
Coil 0 Q	0.007 -0.033 0.047	0.013 -0.109 0.131	0.005 -0.026 0.034	0.002 -0.028 0.032	0.002 -0.027 0.033	-0.000 -0.028 0.032	-0.001 -0.030 0.030	0.000 -0.030 0.030
Coil 1 R	-0.001 -0.080 0.080	0.003 -0.048 0.062	0.002 -0.027 0.033	-0.003 -0.028 0.032	-0.002 -0.029 0.031	-0.000 -0.030 0.030	0.000 -0.030 0.030	-0.002 -0.032 0.028
Coil 1 Q	0.005 -0.397 0.403	0.005 -0.086 0.104	0.007 -0.027 0.033	0.002 -0.030 0.030	0.001 -0.028 0.032	-0.000 -0.027 0.033	0.000 -0.027 0.033	0.000 -0.030 0.030
Coil 2 R	0.012 -0.066 0.079	0.013 -0.027 0.033	0.001 -0.031 0.028	-0.014 -0.031 0.028	-0.005 -0.030 0.030	0.003 -0.027 0.033	0.008 -0.022 0.038	0.011 -0.019 0.041
Coil 2 Q	-0.005 -0.328 0.342	-0.004 -0.107 0.093	0.014 -0.032 0.028	0.002 -0.033 0.027	-0.010 -0.036 0.024	-0.013 -0.038 0.022	-0.007 -0.036 0.024	-0.004 -0.032 0.028
Coil 3 R	0.007 -0.031 0.049	0.011 -0.037 0.043	-0.001 -0.038 0.042	-0.012 -0.037 0.043	-0.002 -0.039 0.041	0.001 -0.039 0.041	0.001 -0.040 0.040	0.002 -0.034 0.046
Coil 3 Q	-0.013 -0.216 0.184	-0.012 -0.082 0.068	0.016 -0.044 0.036	-0.000 -0.043 0.037	-0.006 -0.041 0.038	-0.006 -0.042 0.039	-0.005 -0.041 0.039	-0.001 -0.040 0.040
Coil 4 R	0.008 -0.062 0.058	0.019 -0.058 0.062	-0.004 -0.058 0.062	-0.037 -0.061 0.059	-0.014 -0.061 0.058	0.001 -0.053 0.057	0.007 -0.058 0.062	0.003 -0.069 0.061
Coil 4 Q	-0.015 -0.311 0.289	0.015 -0.087 0.113	0.032 -0.053 0.067	0.004 -0.057 0.063	-0.016 -0.060 0.060	-0.013 -0.064 0.056	-0.004 -0.058 0.062	0.001 -0.062 0.058
Coil 5 R	0.019 -0.127 0.113	0.028 -0.113 0.127	0.013 -0.111 0.128	-0.044 -0.126 0.114	-0.012 -0.128 0.112	0.003 -0.123 0.117	-0.005 -0.120 0.120	0.001 -0.121 0.118
Coil 5 Q	-0.008 -0.599 0.601	0.006 -0.245 0.255	0.056 -0.117 0.123	-0.005 -0.122 0.118	-0.023 -0.119 0.121	-0.010 -0.115 0.125	-0.004 -0.111 0.129	-0.002 -0.120 0.120
Coil 6 R	0.034 -0.310 0.290	0.095 -0.314 0.286	-0.006 -0.289 0.311	-0.182 -0.268 0.332	-0.028 -0.320 0.280	0.015 -0.289 0.312	0.026 -0.279 0.321	0.032 -0.289 0.311
Coil 6 Q	-0.060 -1.521 1.478	0.001 -0.609 0.591	0.183 -0.316 0.284	0.005 -0.301 0.289	-0.078 -0.316 0.284	-0.061 -0.287 0.313	-0.028 -0.279 0.321	0.008 -0.296 0.304

ELEC. GAINS	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 M	126.23 124.04 129.10	124.78 122.58 127.59	121.79 118.65 124.53	117.61 115.52 120.24	112.05 110.09 114.58	105.60 103.81 108.06	98.06 96.31 100.24	89.93 88.27 91.87
Coil 0 P	7.794 4.795 10.795	24.478 21.523 27.523	40.879 37.942 43.942	57.154 54.226 60.226	73.309 70.453 76.453	89.210 86.458 92.458	105.125 102.475 108.475	120.492 117.966 123.966
Coil 1 M	221.89 217.28 226.15	219.44 214.81 223.56	214.31 209.77 218.34	207.17 202.63 211.11	197.64 193.57 201.47	186.40 182.69 190.15	173.29 169.67 176.80	159.09 156.66 162.04
Coil 1 P	7.841 4.840 10.840	24.589 21.619 27.619	41.080 38.118 44.118	57.433 54.511 60.511	73.753 70.854 76.854	89.797 86.995 92.995	105.817 103.141 108.141	121.338 118.862 124.862
Coil 2 M	440.45 431.28 448.89	437.03 427.79 446.25	429.43 420.33 437.49	418.91 410.13 426.87	403.62 395.23 411.36	385.00 377.20 392.60	361.95 354.41 368.89	335.14 327.87 341.25

Coil 2 P	7.732 4.733 10.733	24.312 21.347 27.347	40.717 37.771 43.771	57.135 54.184 60.184	73.631 70.792 76.792	90.148 87.357 93.357	106.802 104.140 110.140	123.251 120.729 125.729
Coil 3 M	708.72 694.48 722.63	701.36 687.13 715.18	686.00 672.05 699.48	664.79 651.28 677.87	635.91 623.16 648.60	601.56 589.89 613.97	560.86 549.76 572.20	514.79 504.43 525.02
Coil 3 P	8.142 5.146 11.146	25.514 22.554 28.554	42.649 39.707 45.707	59.704 56.781 62.781	76.760 73.896 79.896	93.686 90.924 96.924	110.731 108.039 114.039	127.413 124.889 130.889
Coil 4 M	1125.7 1101.4 1146.4	1112.2 1088.0 1132.4	1084.7 1060.9 1104.2	1046.9 1024.1 1065.8	996.9 975.3 1015.1	938.5 918.6 956.1	871.3 852.6 887.7	796.5 778.7 810.5
Coil 4 P	8.404 5.411 11.411	26.369 23.411 29.411	43.976 41.043 47.043	61.529 58.605 64.605	78.934 76.070 82.070	96.168 93.400 99.400	113.459 110.780 116.780	130.333 127.854 133.854
Coil 5 M	2288.9 2245.4 2337.1	2273.0 2229.3 2320.3	2238.9 2195.5 2285.1	2191.1 2149.6 2236.3	2121.4 2080.4 2165.3	2036.6 1997.8 2079.3	1930.7 1893.3 1970.6	1807.3 1769.8 1842.0
Coil 5 P	7.753 4.769 10.769	24.392 21.470 27.470	40.853 37.954 43.954	57.321 54.478 60.478	73.911 71.147 77.147	90.477 87.820 93.820	107.283 104.745 110.745	123.895 121.549 127.549
Coil 6 M	6031.0 5927.3 6168.2	5956.6 5802.0 6090.8	5804.3 5701.8 5834.6	5595.0 5496.4 5720.8	5317.8 5222.1 5435.2	4993.5 4908.0 5108.3	4617.2 4537.3 4722.5	4204.2 4123.4 4281.7
Coil 6 P	8.613 5.626 11.626	27.228 24.304 30.304	45.510 42.606 48.606	63.655 60.783 66.783	81.723 78.923 84.923	99.584 96.925 102.925	117.483 114.886 120.886	134.966 132.561 138.561

INSTRUMENT CONFIGURATION

Source File: /dall/a/EAJ74/kBTw2"-4dg



DIGITAL SCOTTRALOG

Series : 13800A
Symonid : 02
Diameter : 3.83"
Weight : 29.1 kg
Length : 222.6 cm

DN MP — 24.20 m

COMPACTED NEUTRON

Series : 21400A
Symonid : 01
Diameter : 3.83"
Weight : 21.2 kg
Length : 221.4 cm

LN MP — 25.21 m
BN MP — 25.19 m

Z-COMPILE

Series : 22040A
Symonid : 02
Diameter : 4.25"
Weight : 182.8 kg
Length : 241.8 cm

GAL MP — 25.03 m
LSD MP — 25.24 m
GSD MP — 25.72 m

HTL ALIGNMENT SHEL

Series : 44000A
Symonid : 02
Diameter : 3.83"

MOX CAPACITOR CHARGE SHEL

Series : 38100A
Symonid : 02
Diameter : 3.83"
Weight : 20.0 kg
Length : 221.1 cm

MOX PLUMMERION

Series : 38100B
Symonid : 02
Diameter : 3.83"
Weight : 20.0 kg
Length : 211.8 cm



HEX MOUNT
 Series : 20100
 Diameter : 6.35
 Diameter : 6.35
 Weight : 142.0 kg
 Length : 280.0 cm

ANTENNA — 15.82 m

ISOLATE JOINT (CROSS)
 Series : 20000
 Diameter : 6.35
 Diameter : 6.35
 Weight : 40.0 kg
 Length : 141.0 cm

ARMY ACCENTILON PLATE
 Series : 10000
 Diameter : 6.35
 Diameter : 6.35
 Weight : 21.0 kg
 Length : 200.0 cm

DIGITAL ACCENTILON
 Series : 10000
 Diameter : 6.35
 Diameter : 6.35
 Weight : 21.0 kg
 Length : 200.0 cm

T1 MP — 12.03 m

T2 MP — 11.45 m

R1 MP — 10.81 m



HIGH DEFINITION INDUCTION TOOL

Series : 181100A
 Modelo : HDIL
 Diameter : 3.00"
 Weight : 188.0 kg
 Length : 887.0 cm

OP MP 0.00 m

K01TR MP 3.01 m

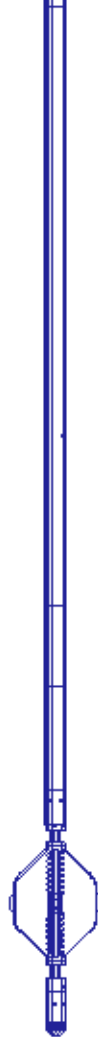
0.00 m

4.00M NEW WELING CENTRALIZER

Series : 404100A
 Modelo : G00T
 Diameter : 3.00"
 Weight : 28.7 kg
 Length : 120.0 cm

WELL PLUS 3 3/8

TOTAL LENGTH : 28.77 m
 TOTAL WEIGHT : 1167.7 kg
 MAX DIAMETER : 0"5.00"



COMPANIA YPF S.A.
 POZO YPF.Ch.EA-774
 YAC. EL ALBA
 PROVINCIA CHUBUT

ARCHIVO NO. _____
 API NO. _____
 UNIT : ARO100008414

Baker Atlas



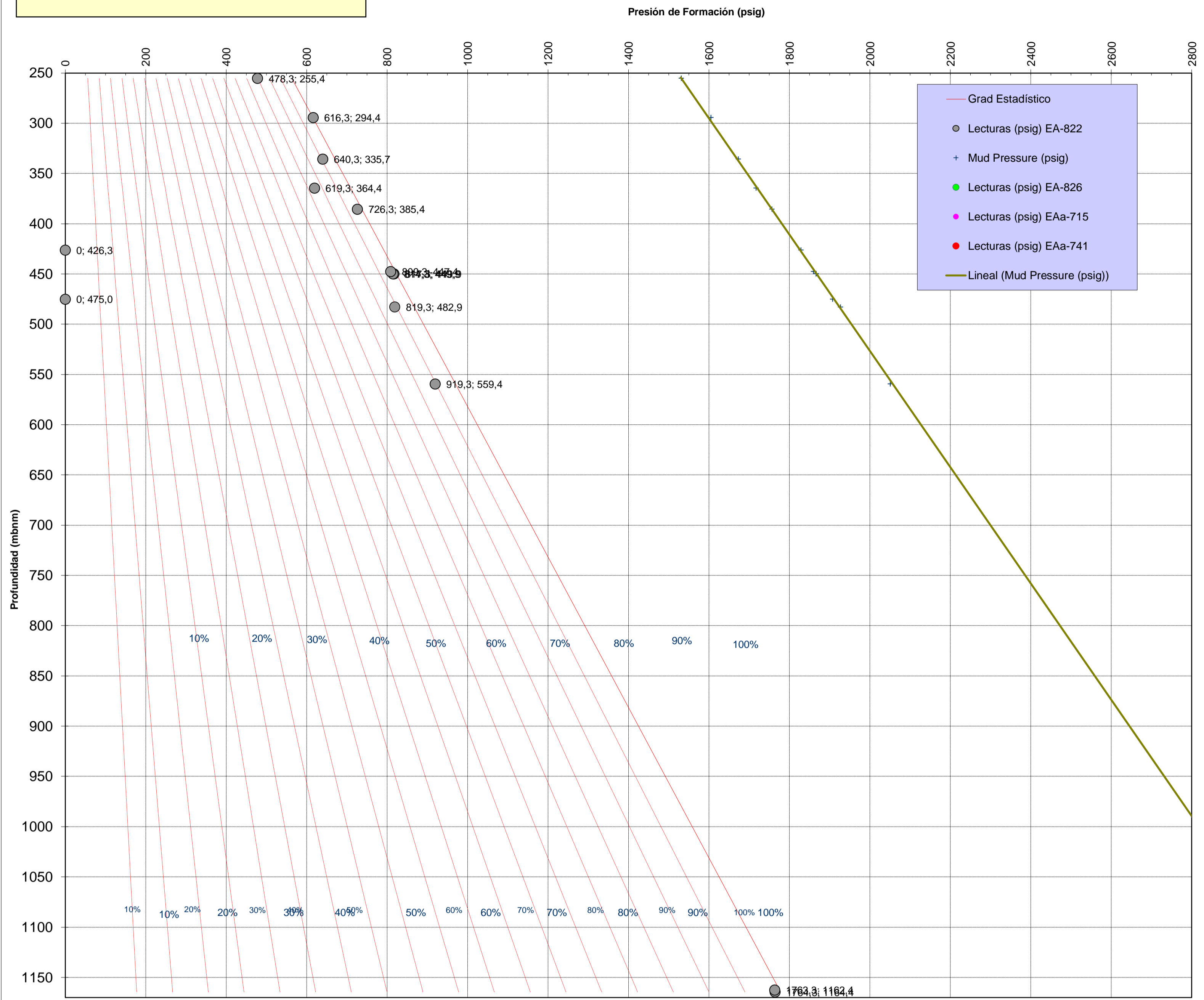
COORDENADAS:
 X: 4.949.454,24
 Y: 2.581.533,31
 Z: 889,08

ALTURAS:
 KB 674.88 M
 MR 674.58 M
 NT 689.08 M
 FECHA 03-MAY-2010

ESCALA 1:200
 EQ.: SAI-390

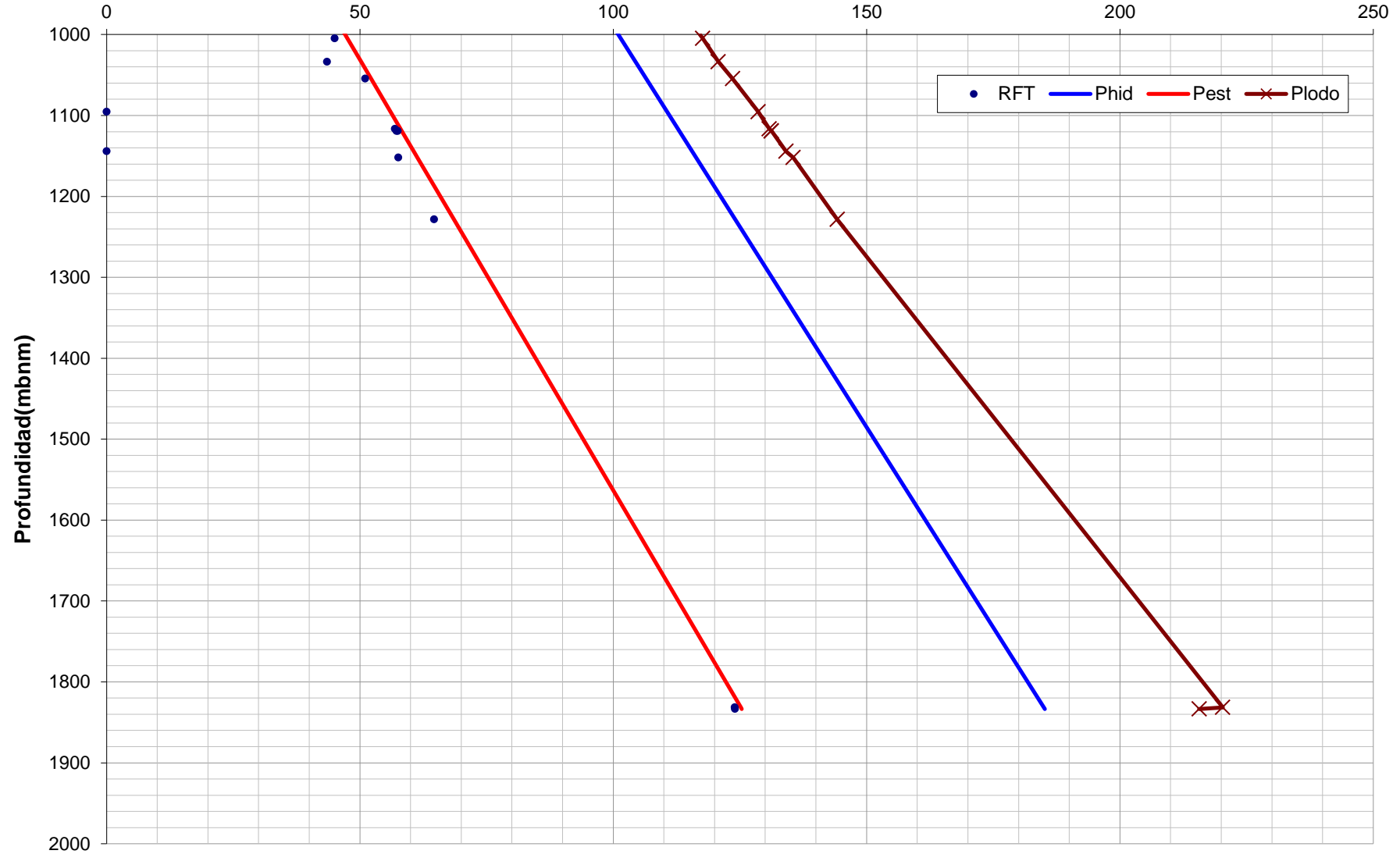
Correlación:
 $P[\text{psig}] = 1.336 * Z[\text{mbnm}] + 222.37$
Grad P = 0.407 [psi/ft]

EA-774 (04/05/2010)

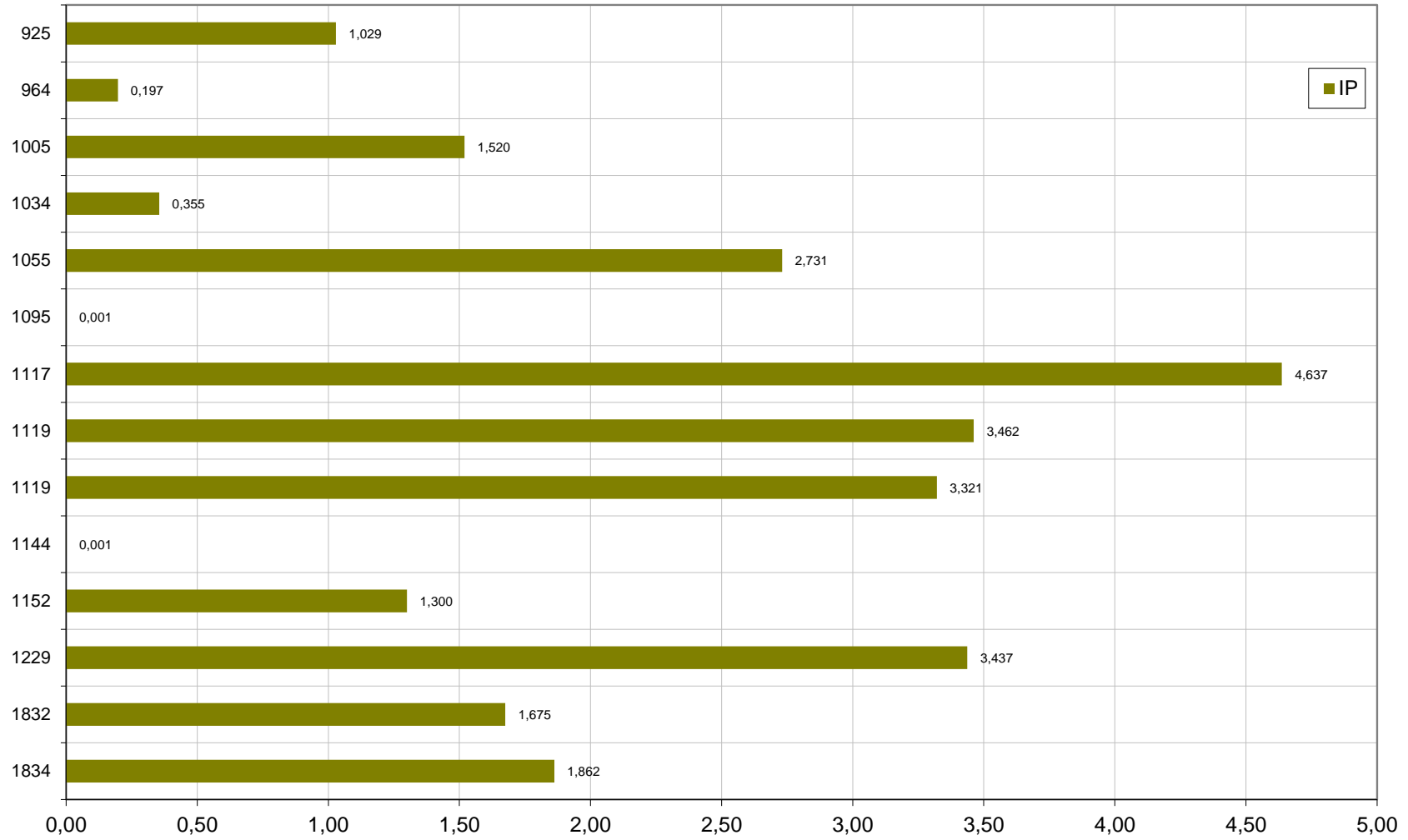


Presión medida pozo vs Pi Ech y vs Phids

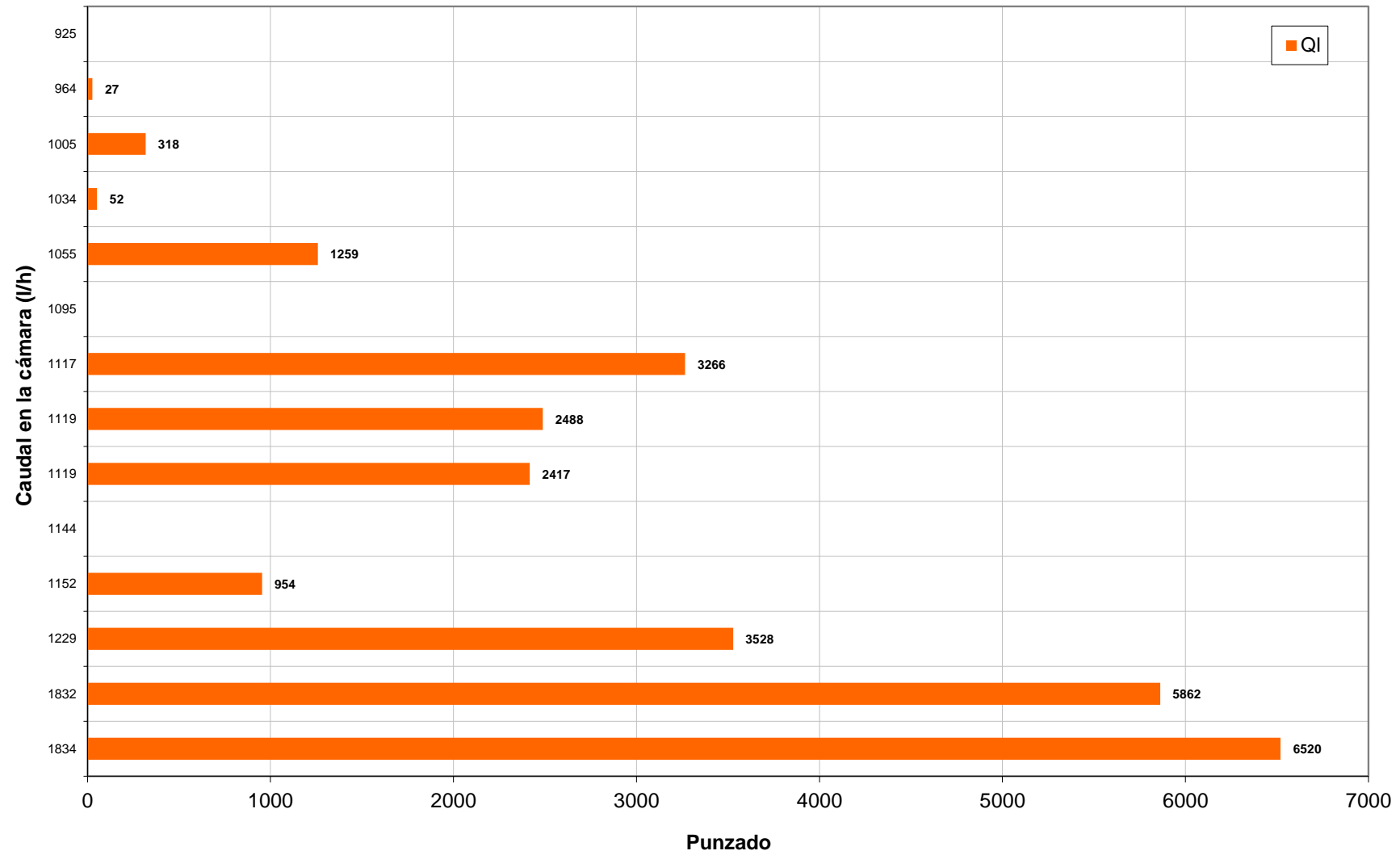
PRESIÓN (Kg/cm²)



IP (m3/d / Kg/cm2)



CAUDAL (l/h) Flujo desde capa por cámara del FMT @ pwf 35 Kg/cm2 en flujo transiente del RFT



Scale : 1 : 200

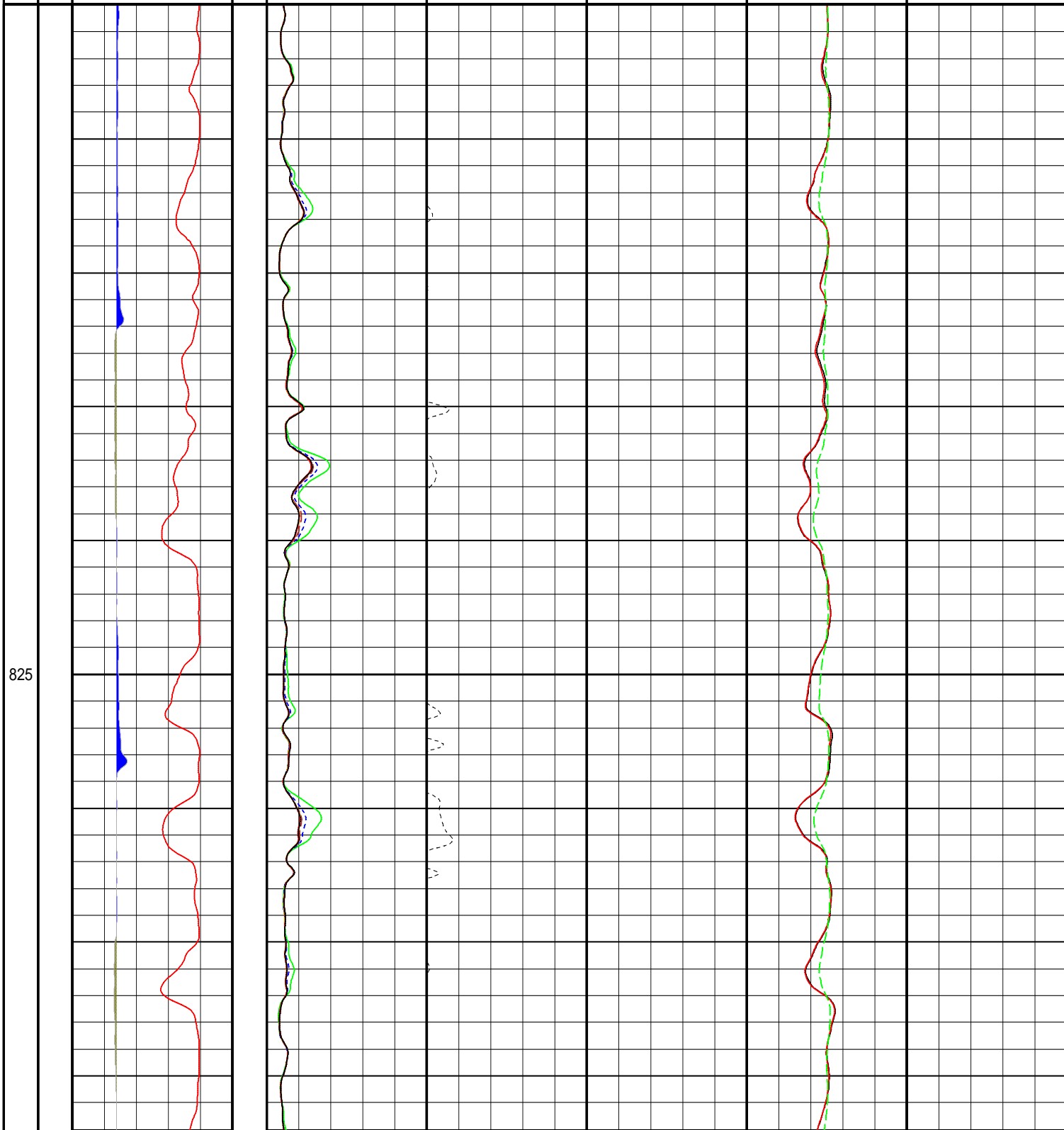
EA-774

DB : Petrofísica EL ALBA (32)

DEPTH (800.02M - 1850.97M)

05/05/2010 14:25

Depth (M)	Zonas	SP-RWA-PE-CAL	Punz	Resistividad	Porosidad	Saturacion	Quik	Litología
DEP (M) Porosity / Sw	SP (MV) 20. RWAC (OHMM) -1. CAL (IN) 16. PE (B/E) 5. REVOQUE CAVERNA	M2R1 (OHMM) 10. M2R2 (OHMM) 10. M2R3 (OHMM) 10. M2R6 (OHMM) 10. M2R9 (OHMM) 10. M2RX (OHMM) 10.	PRZC (PU) 40. CNCF (dec) 0.4 PORA (PU) 40. PHIE (Dec) 0.4 BVW (Dec) 0.4 GAS TOBA SE Agua Oil	SW (Dec) 1. SW < 60 %	RWAC (OHMM) -1. R2X1 () -2. R291 () -2. R292 () -2.	VWCL (Dec) -1. PHIE (Dec) 1. VCOAL (Dec) -1. Arcilla - Toba Porosity SANDSTONE		



825

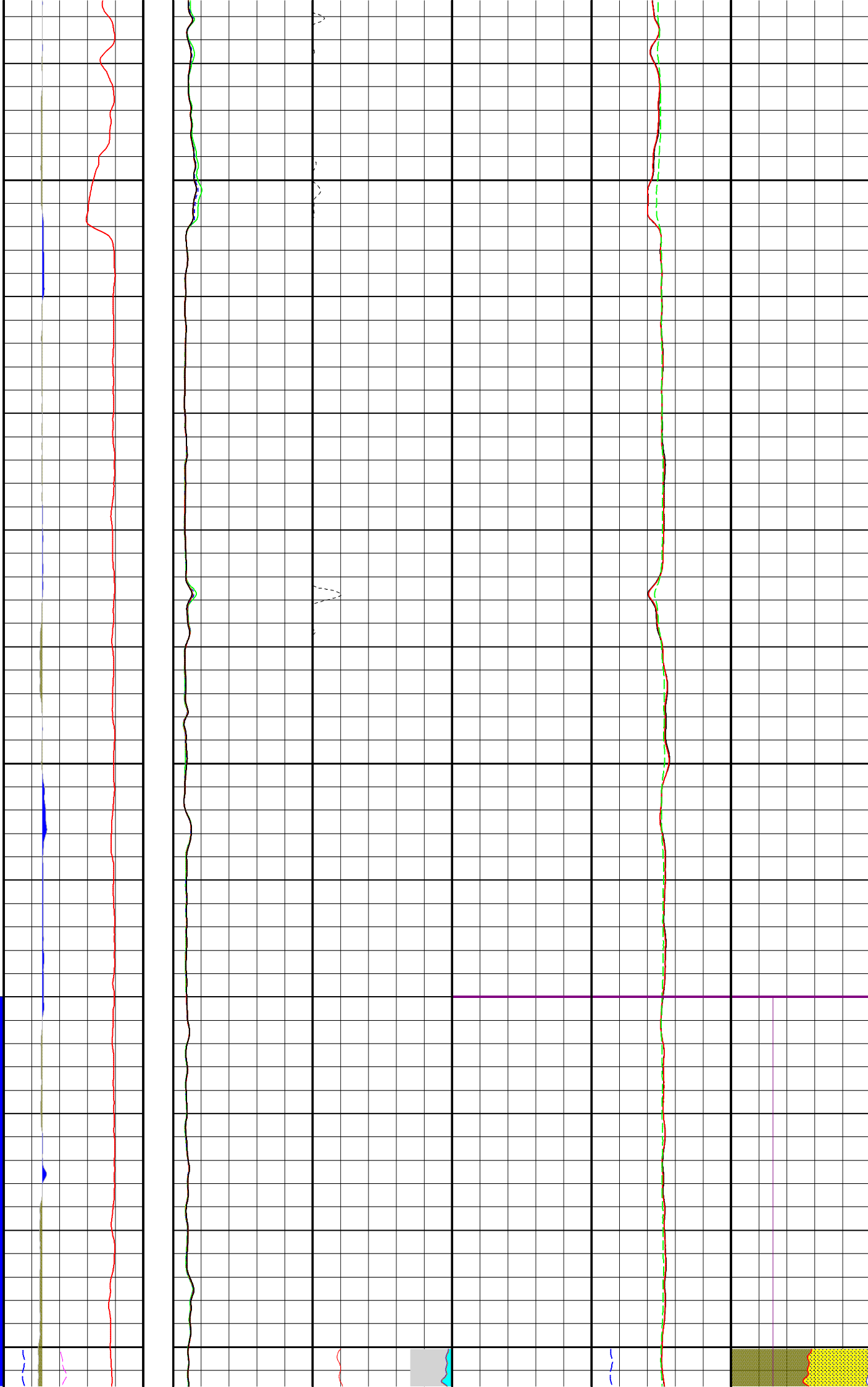
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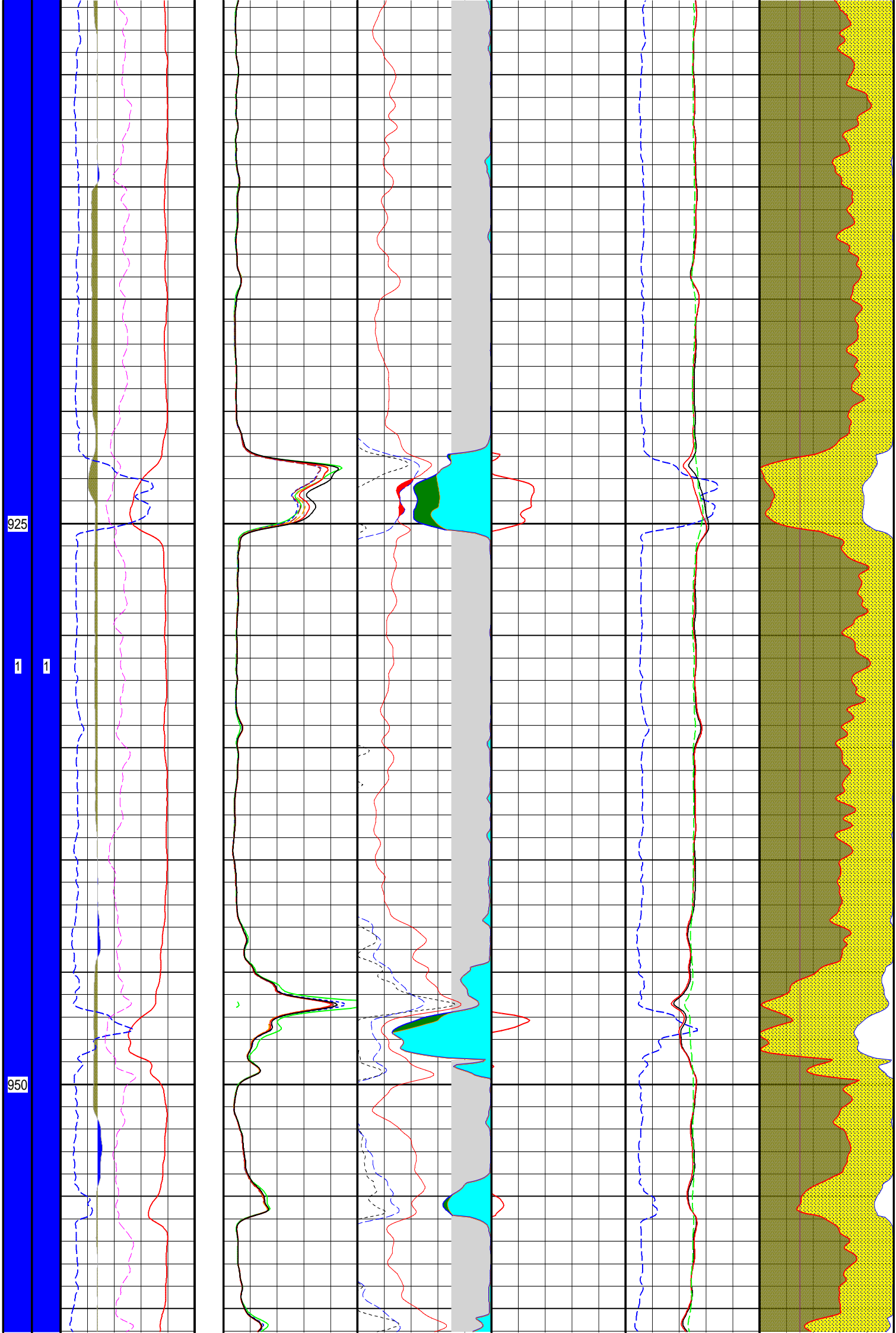
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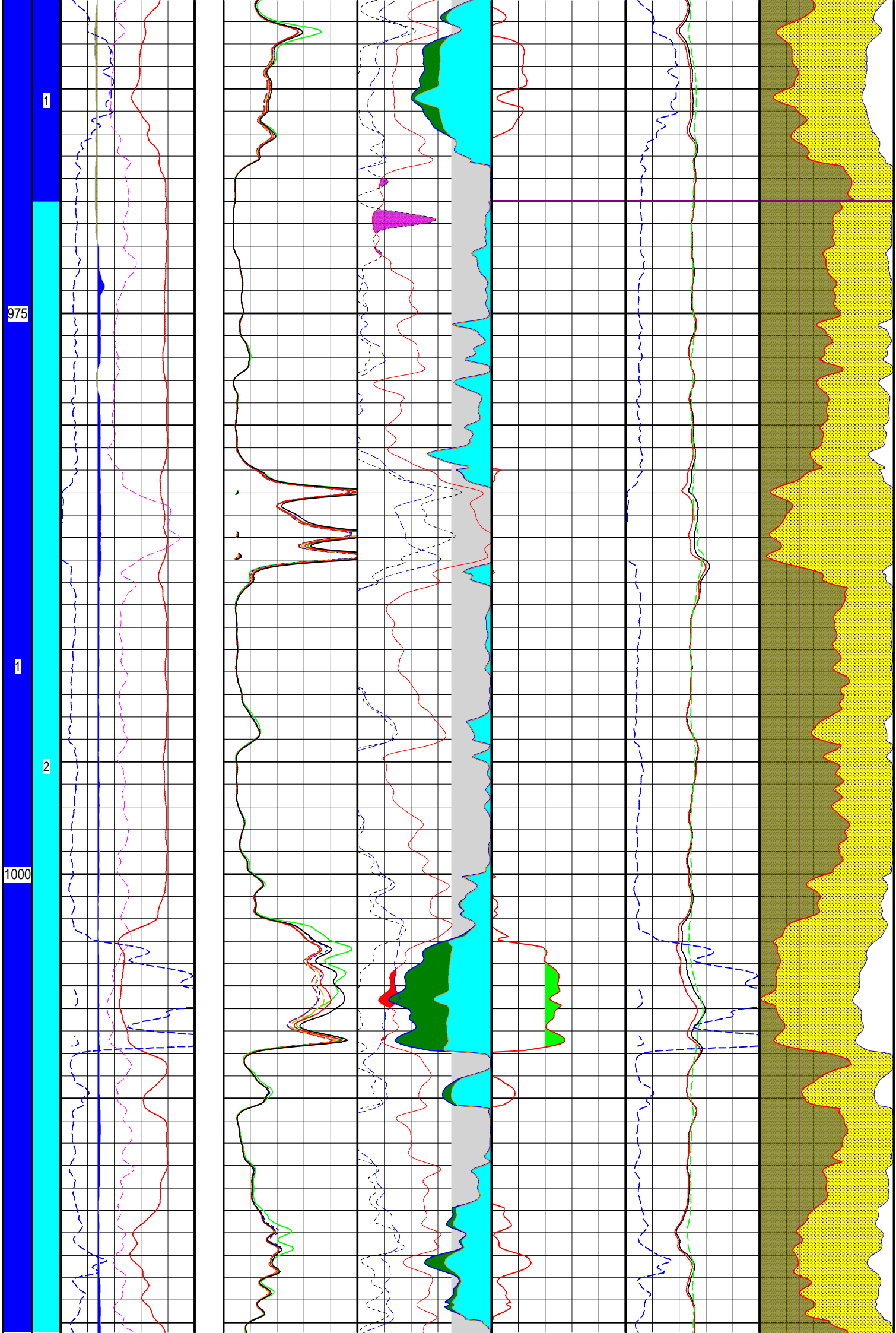
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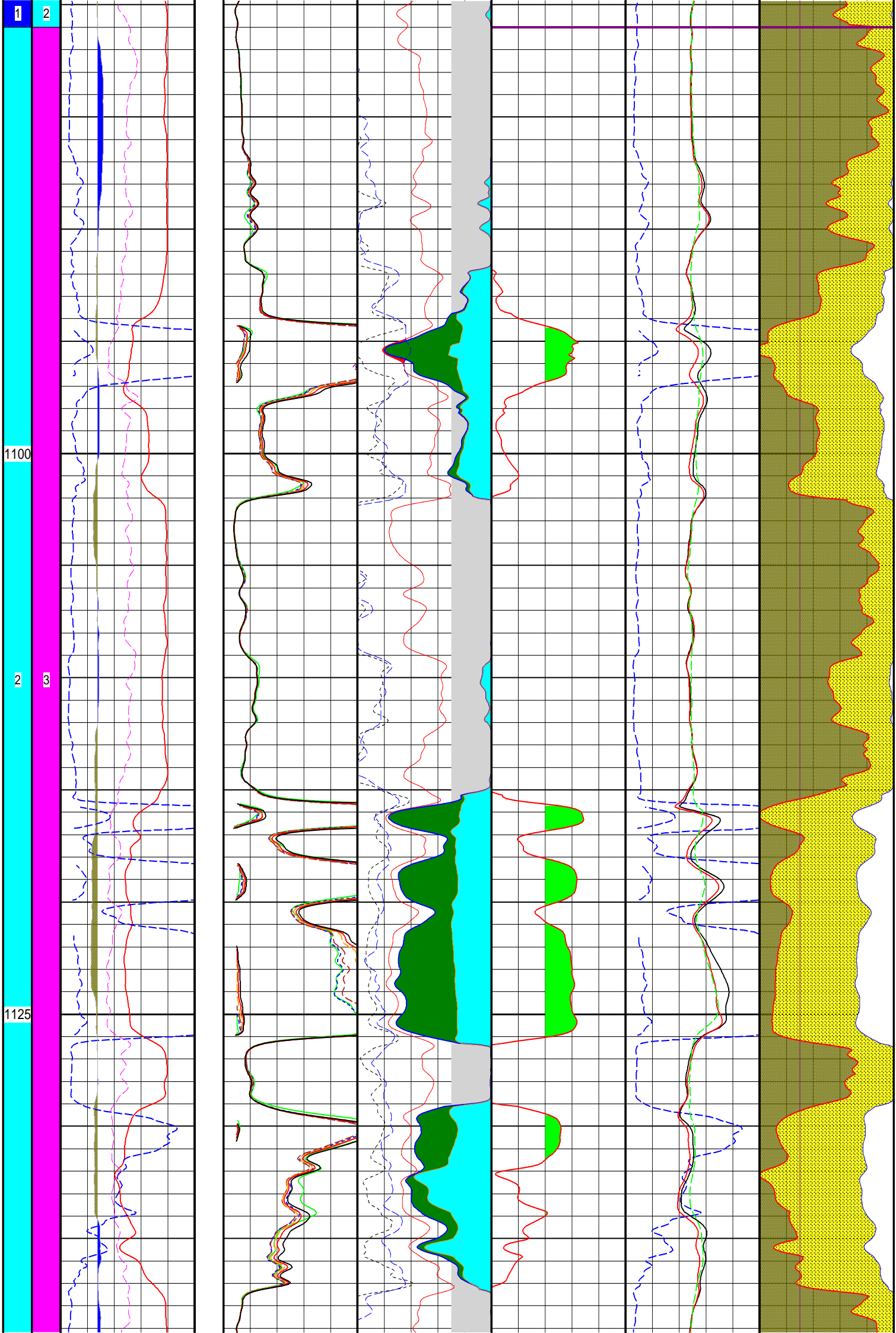
1

900







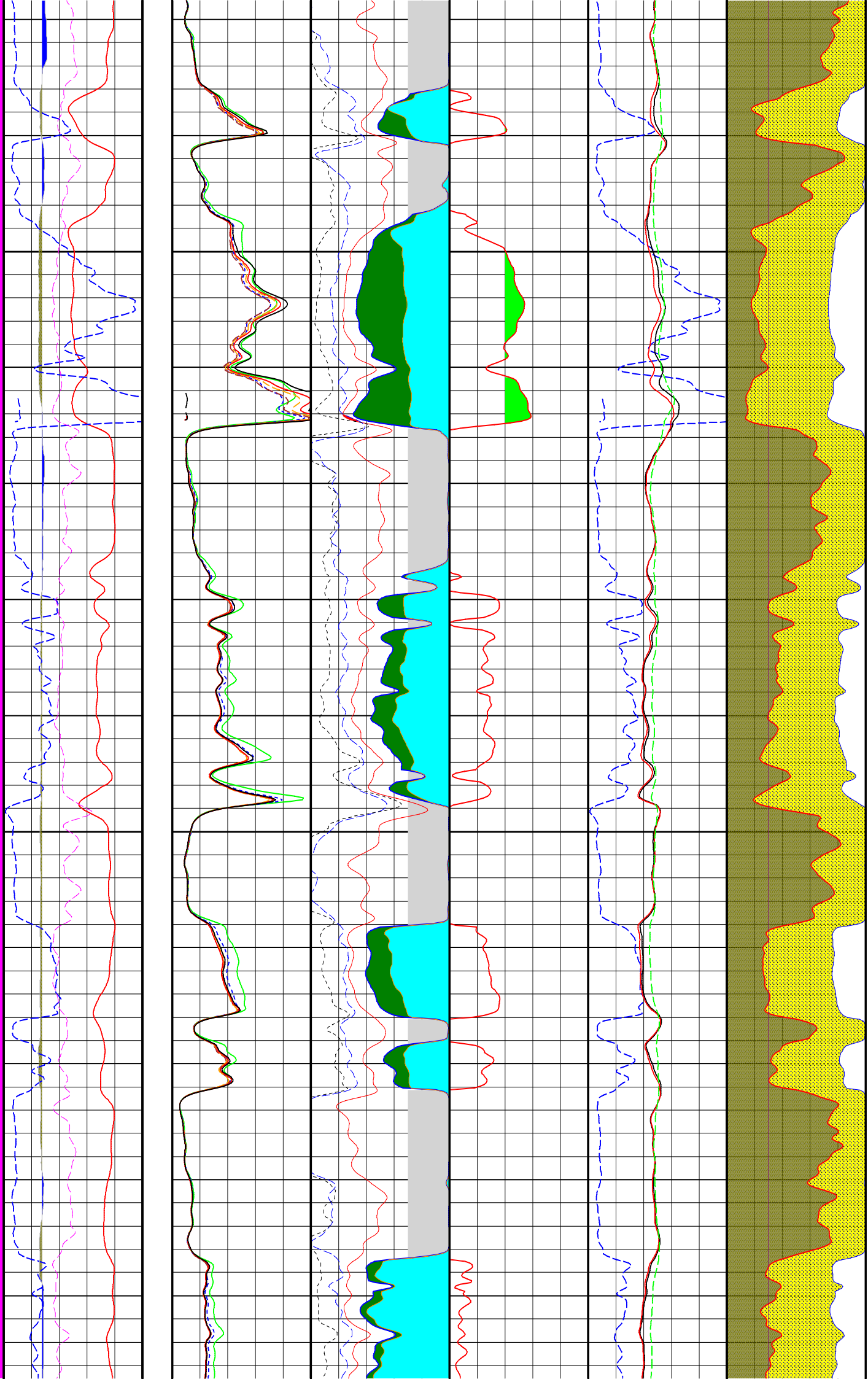


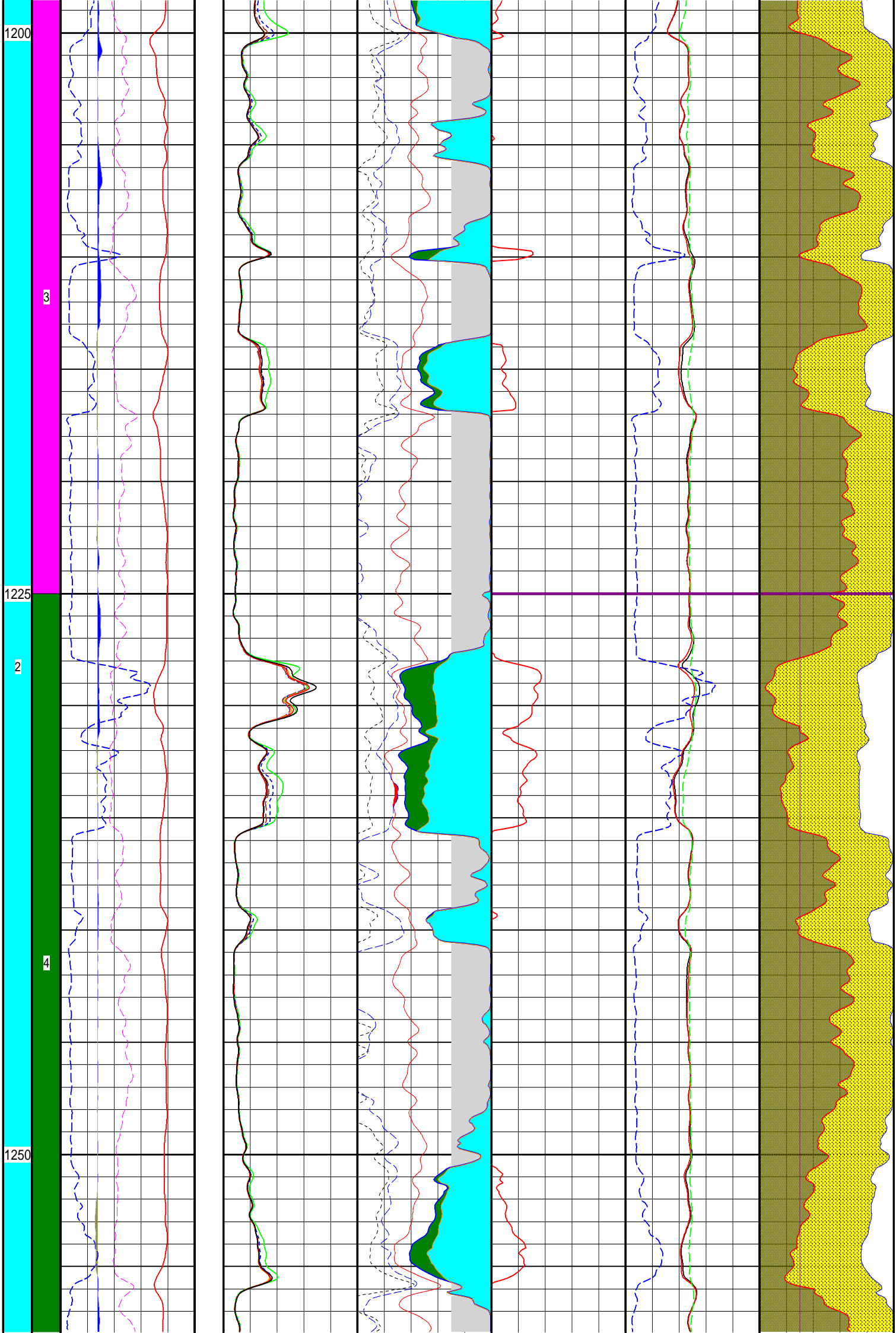
1150

2

3

1175



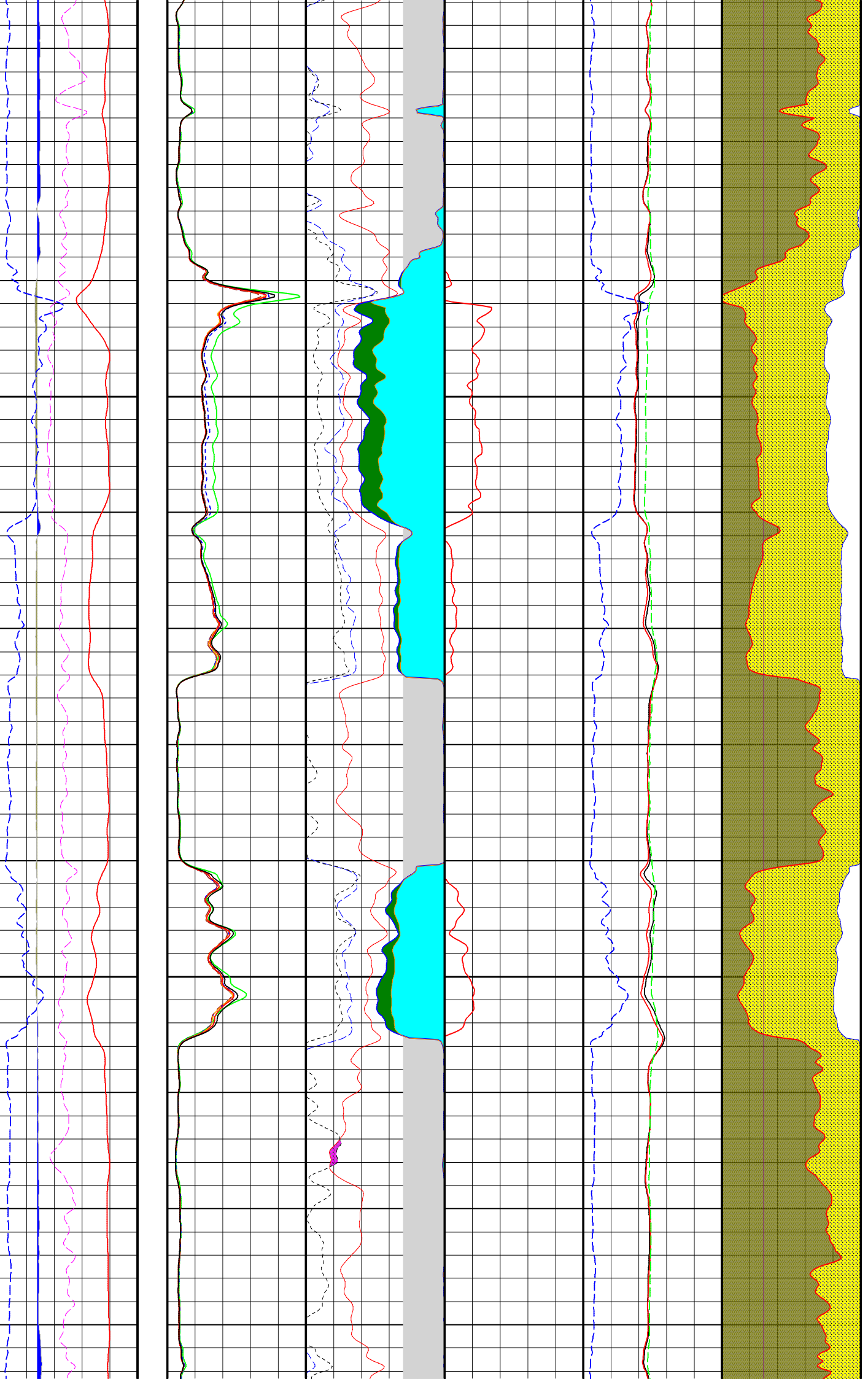


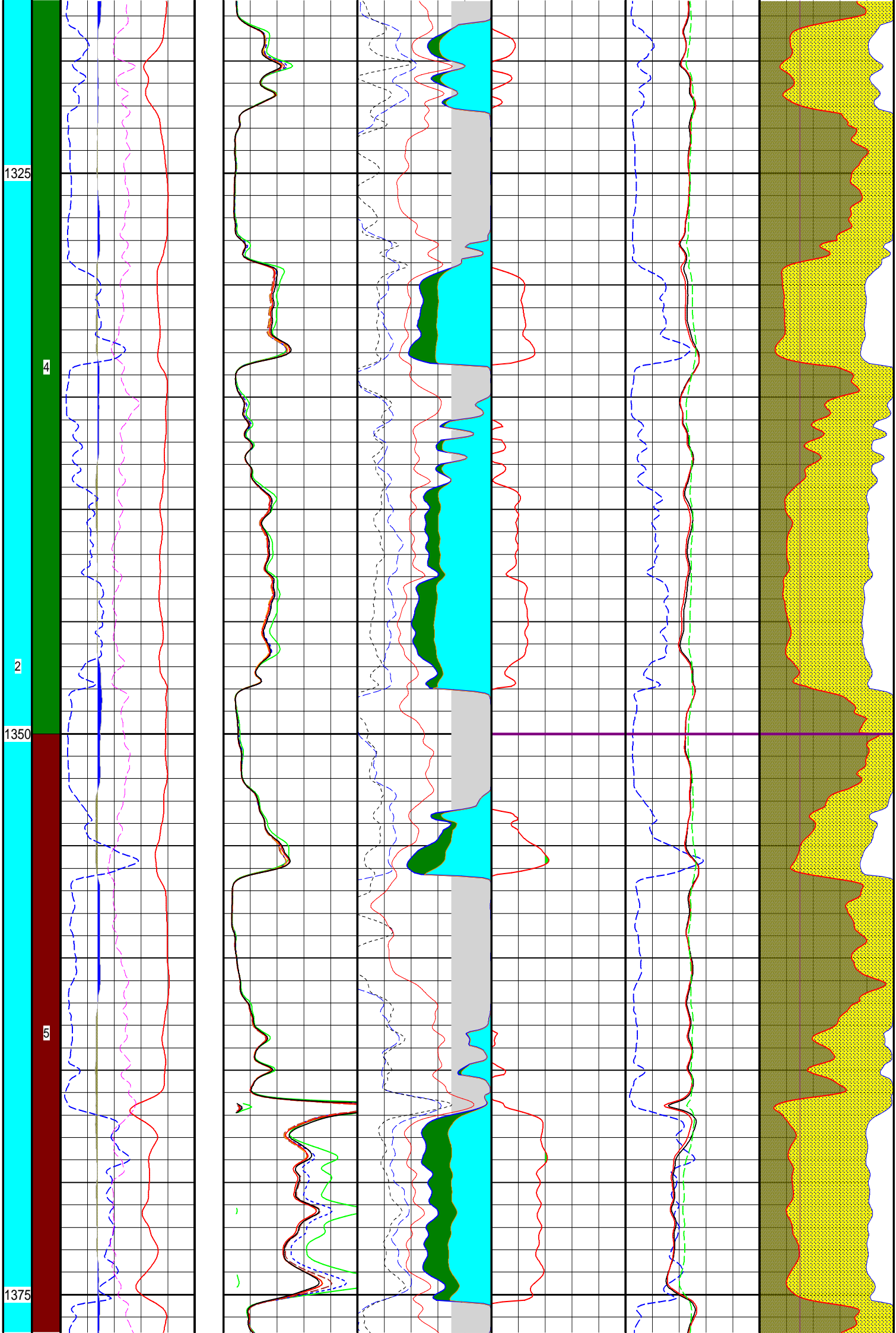
1275

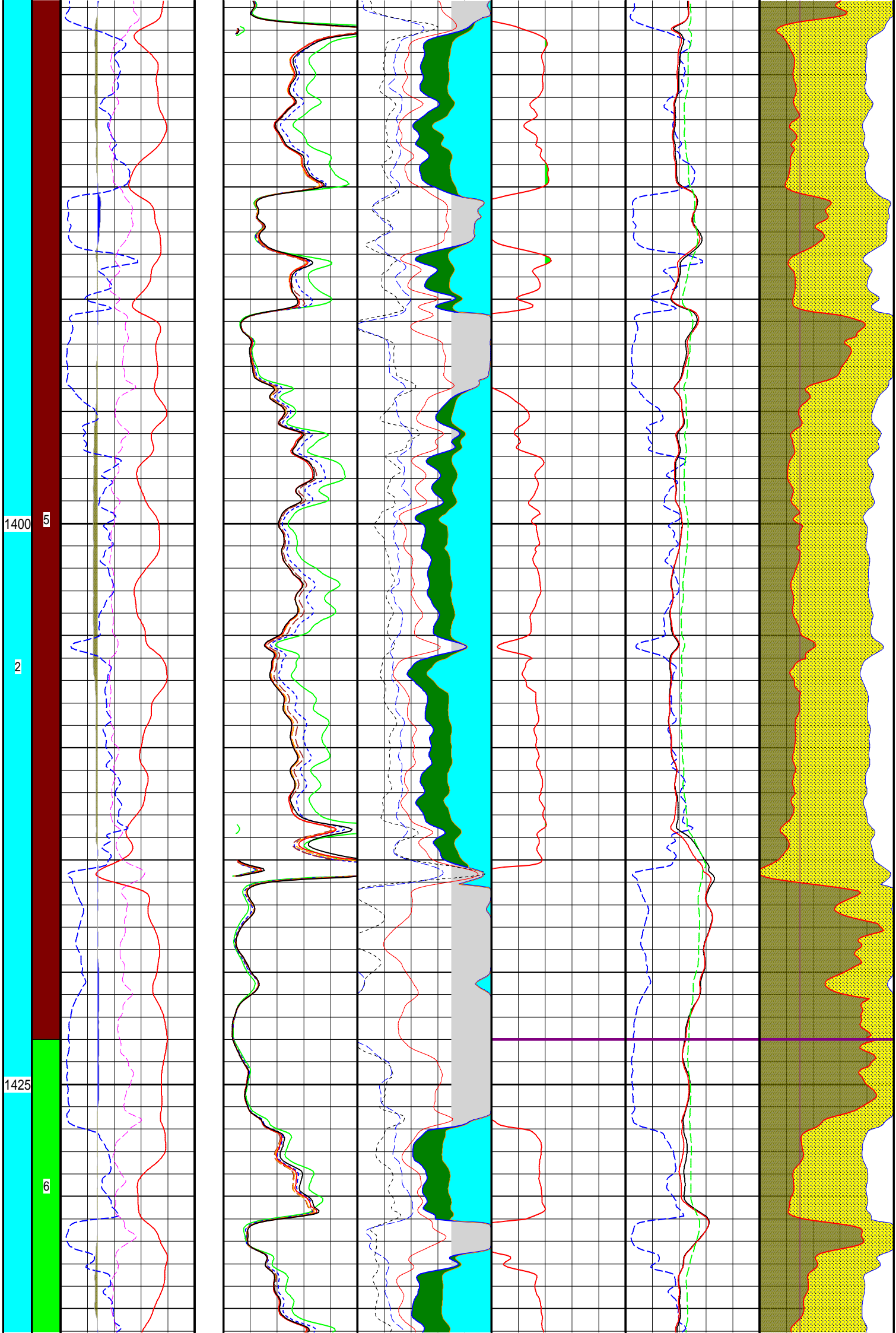
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4

1300





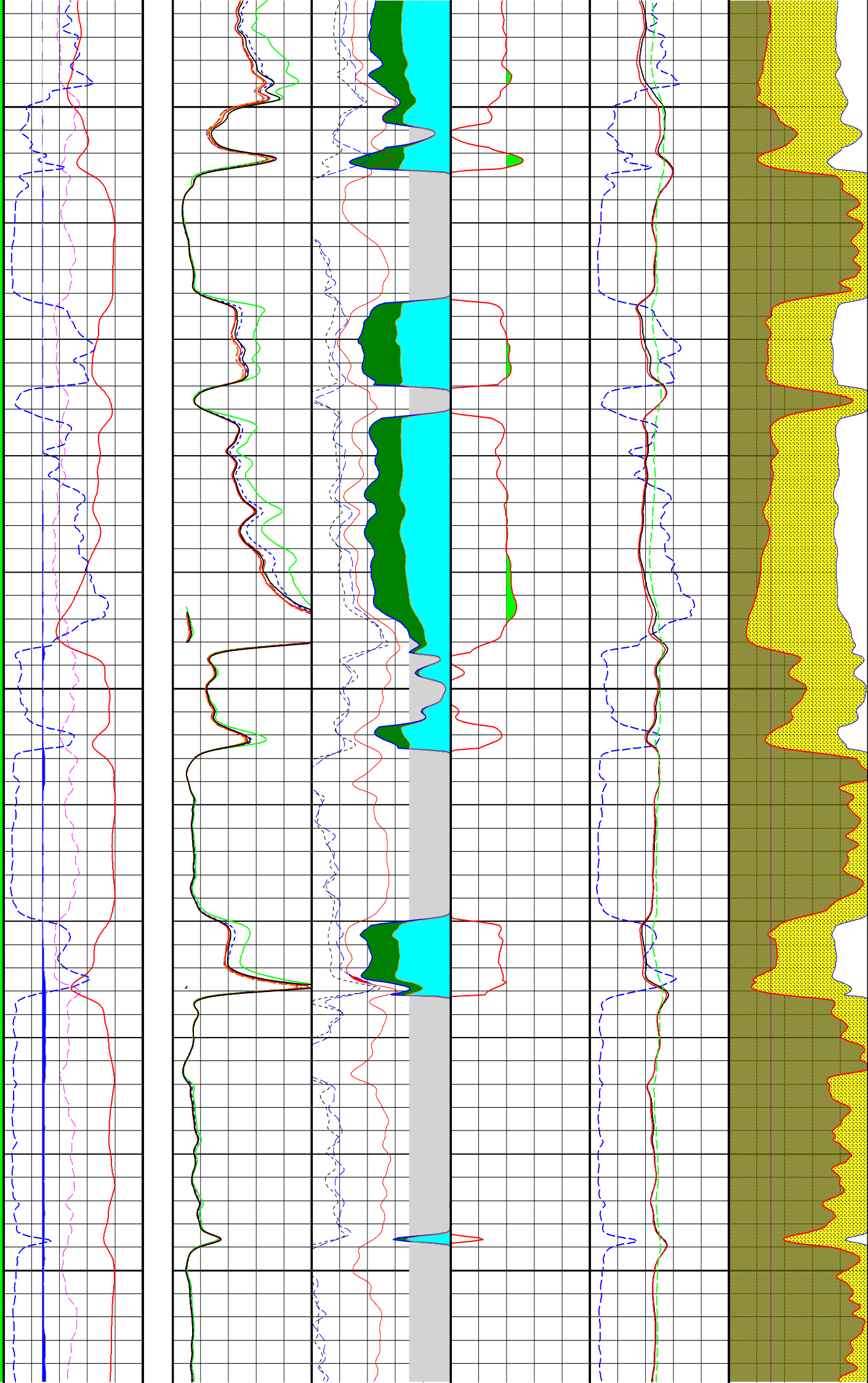


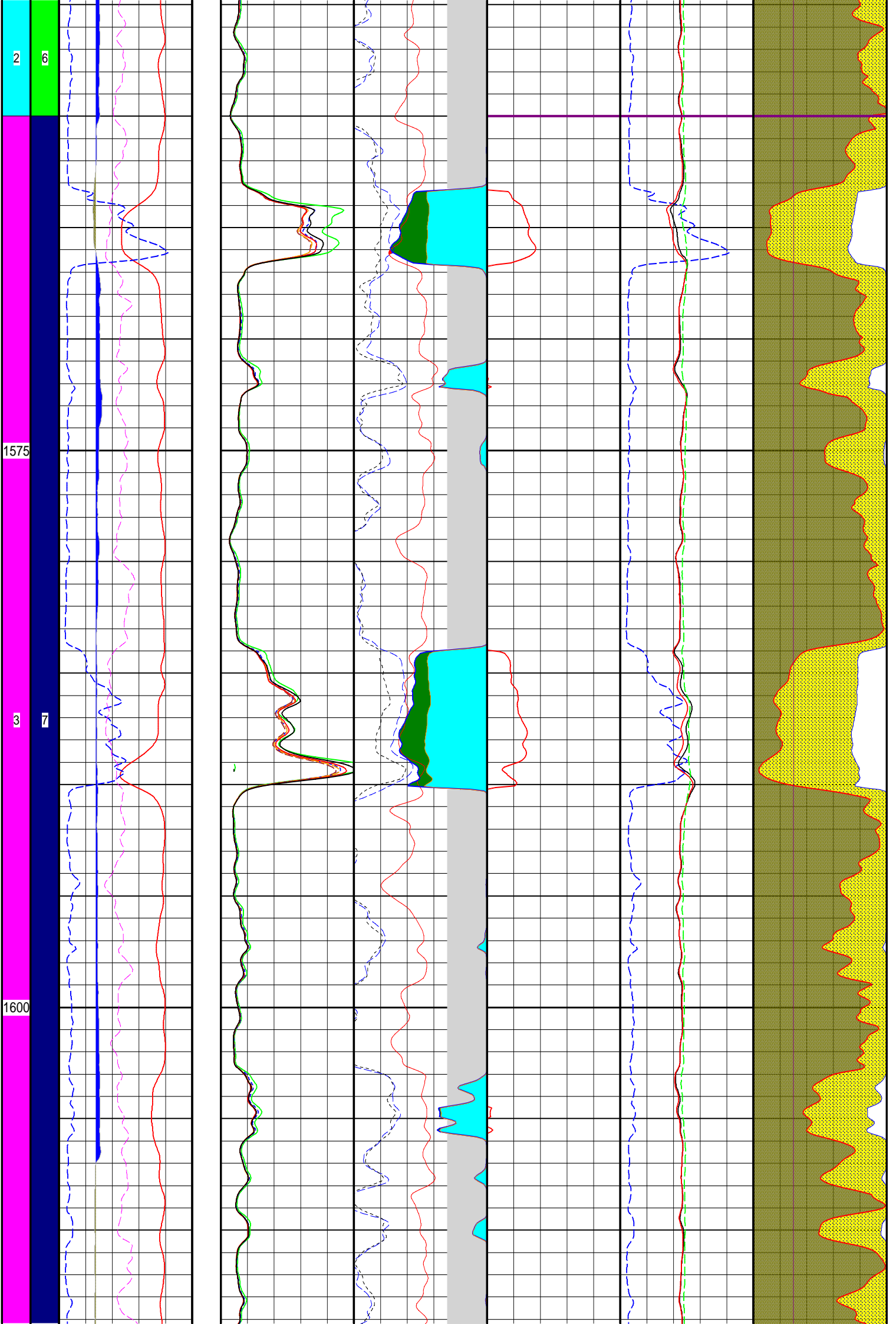
1500

1525

1550

6



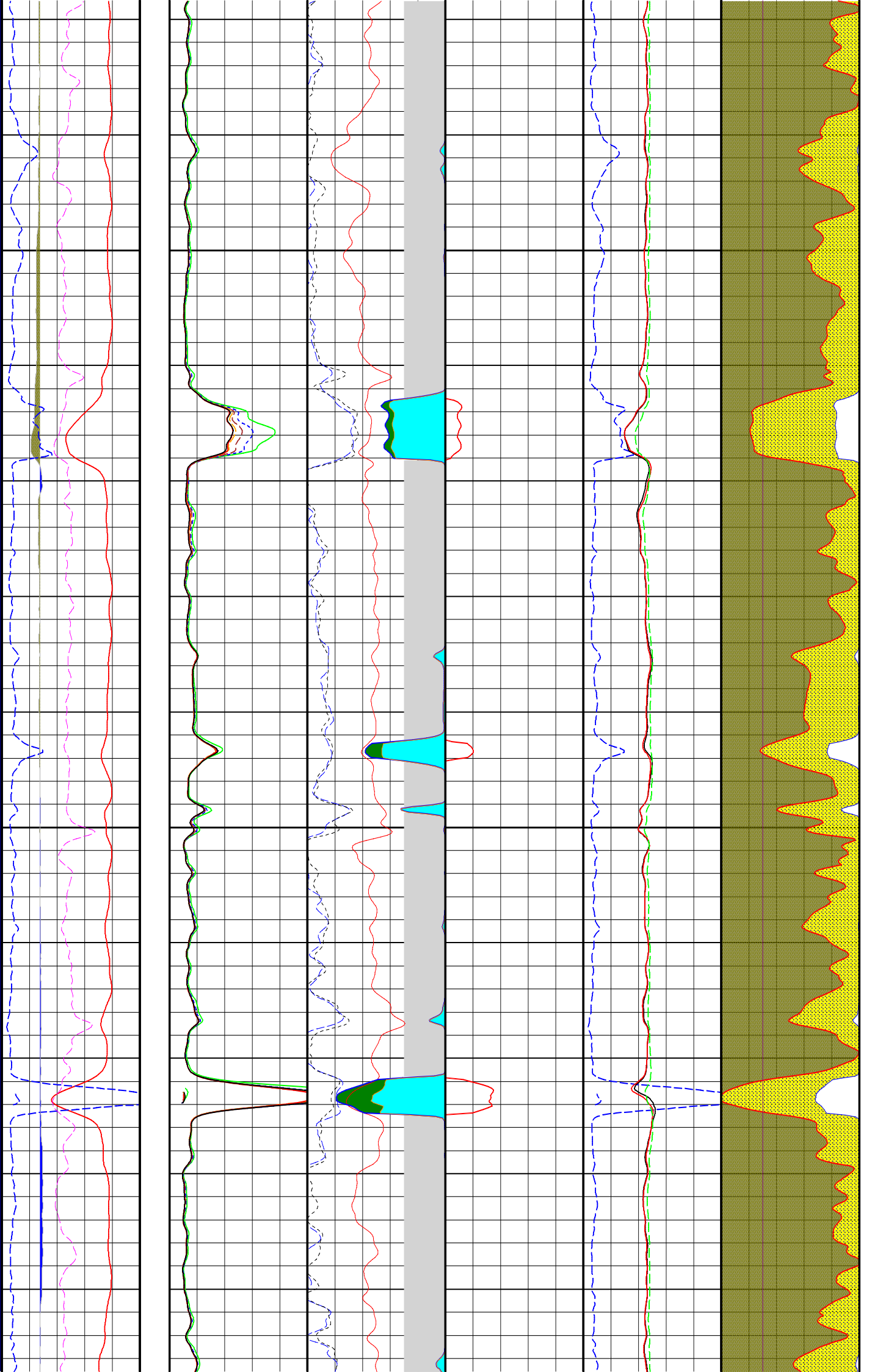


1625

3

7

1650



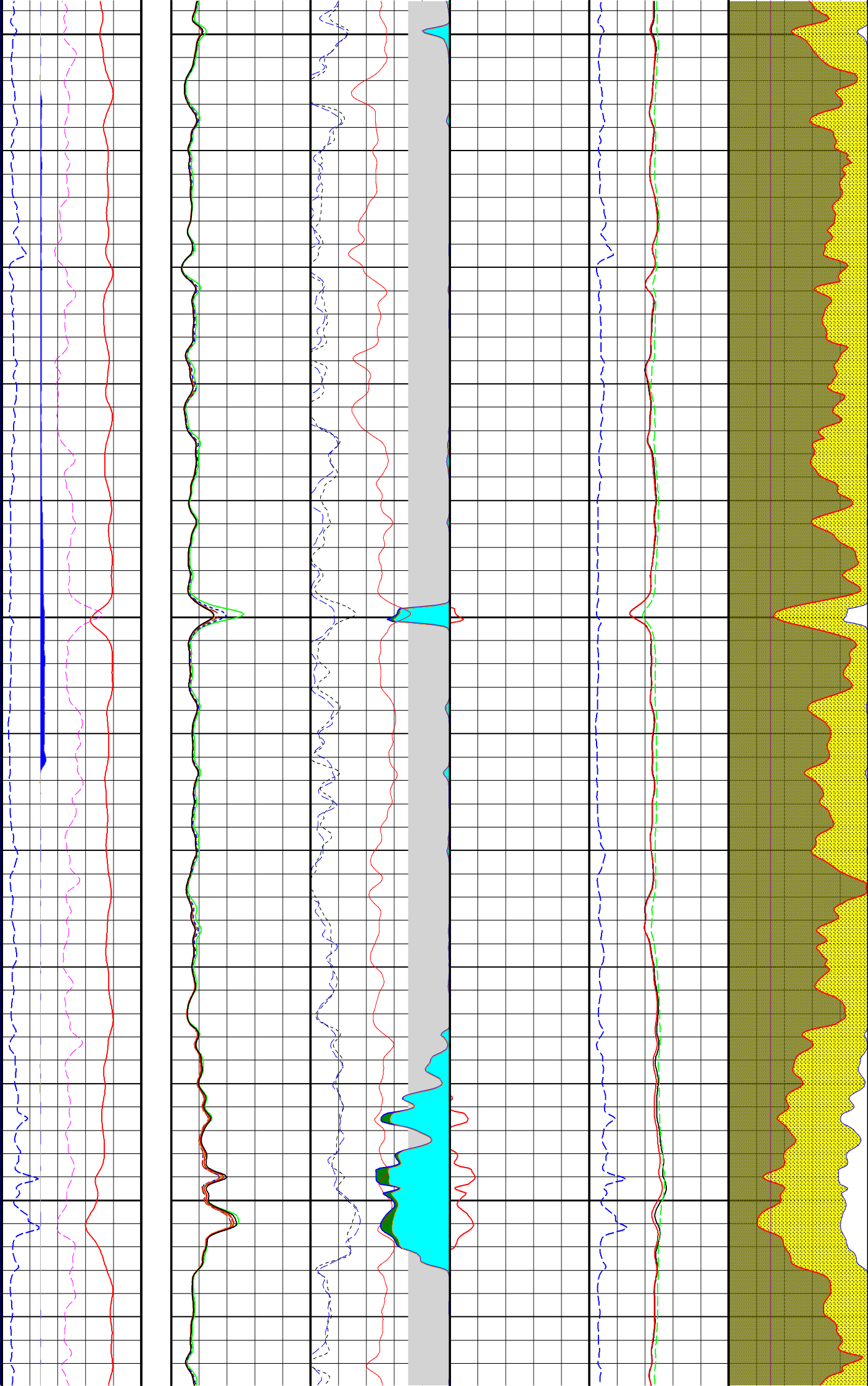
1675

1700

1725

3

7

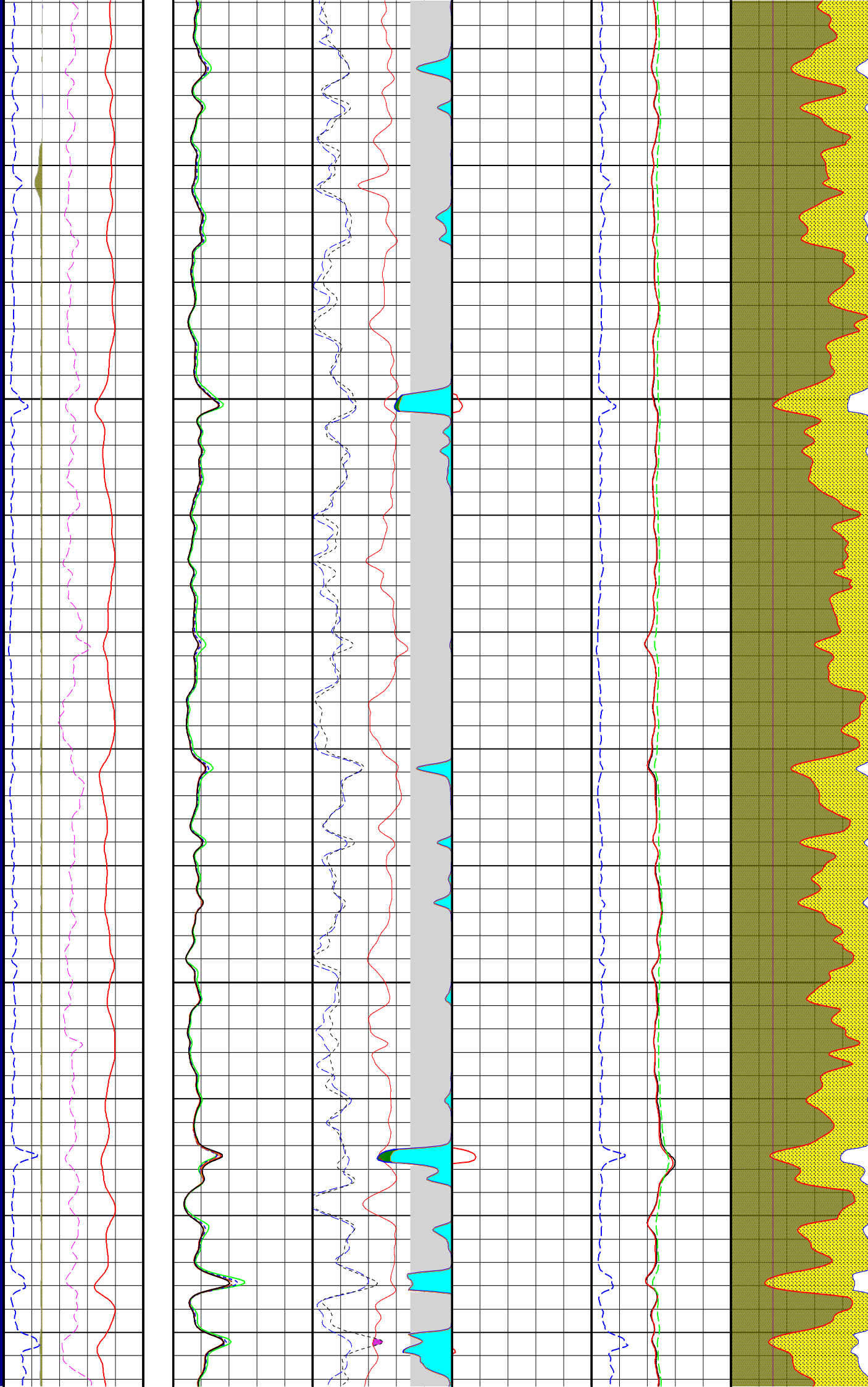


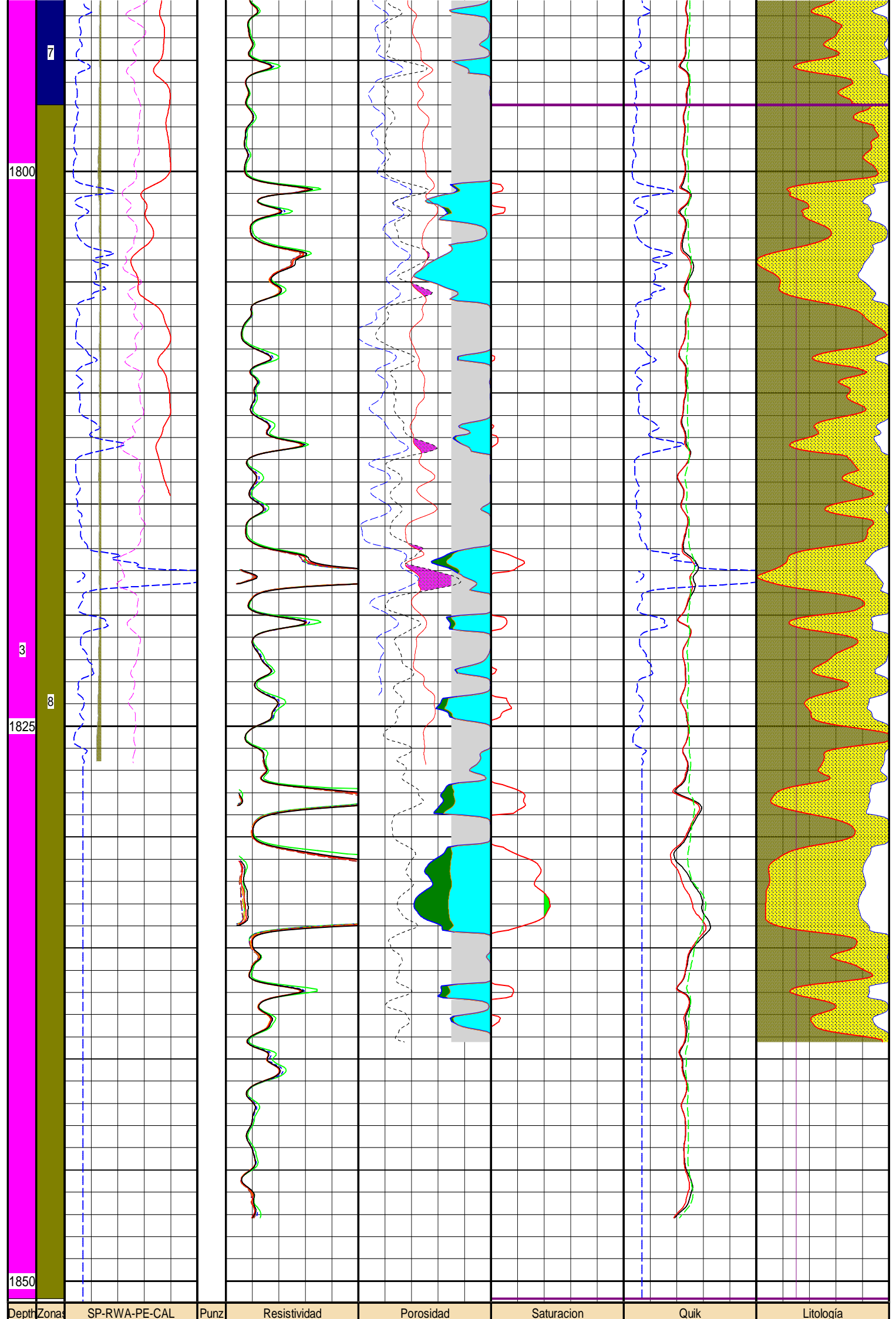
1750

3

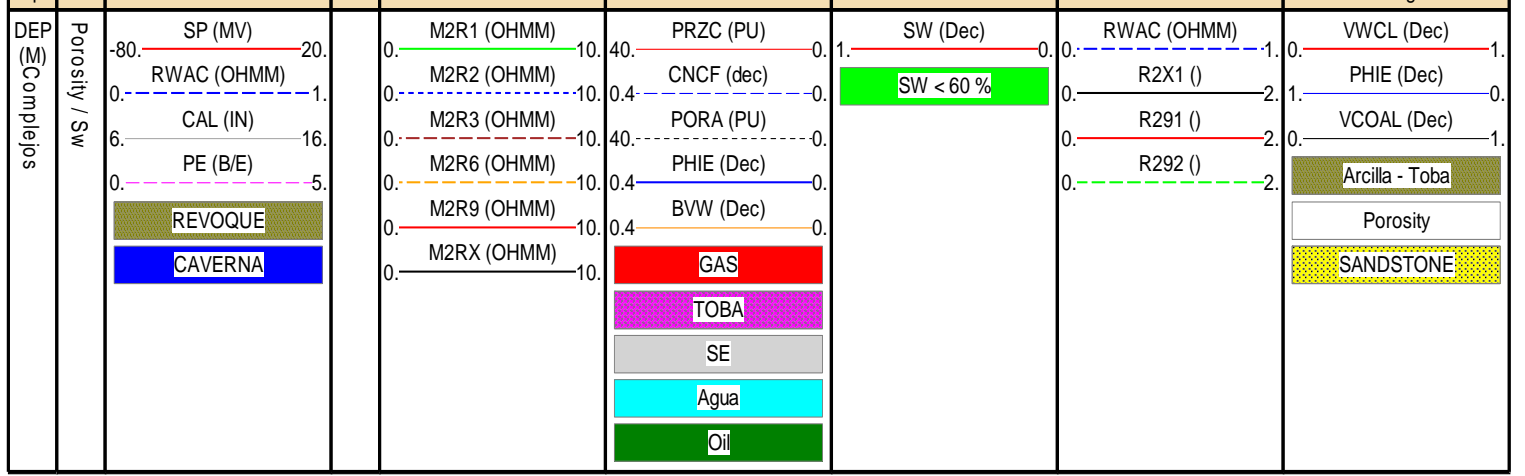
7

1775





Depth	Zonas	SP-RWA-PE-CAL	Punz	Resistividad	Porosidad	Saturacion	Quik	Litología
1800	7							
1825	3							
1850	8							



Scale : 1 : 200

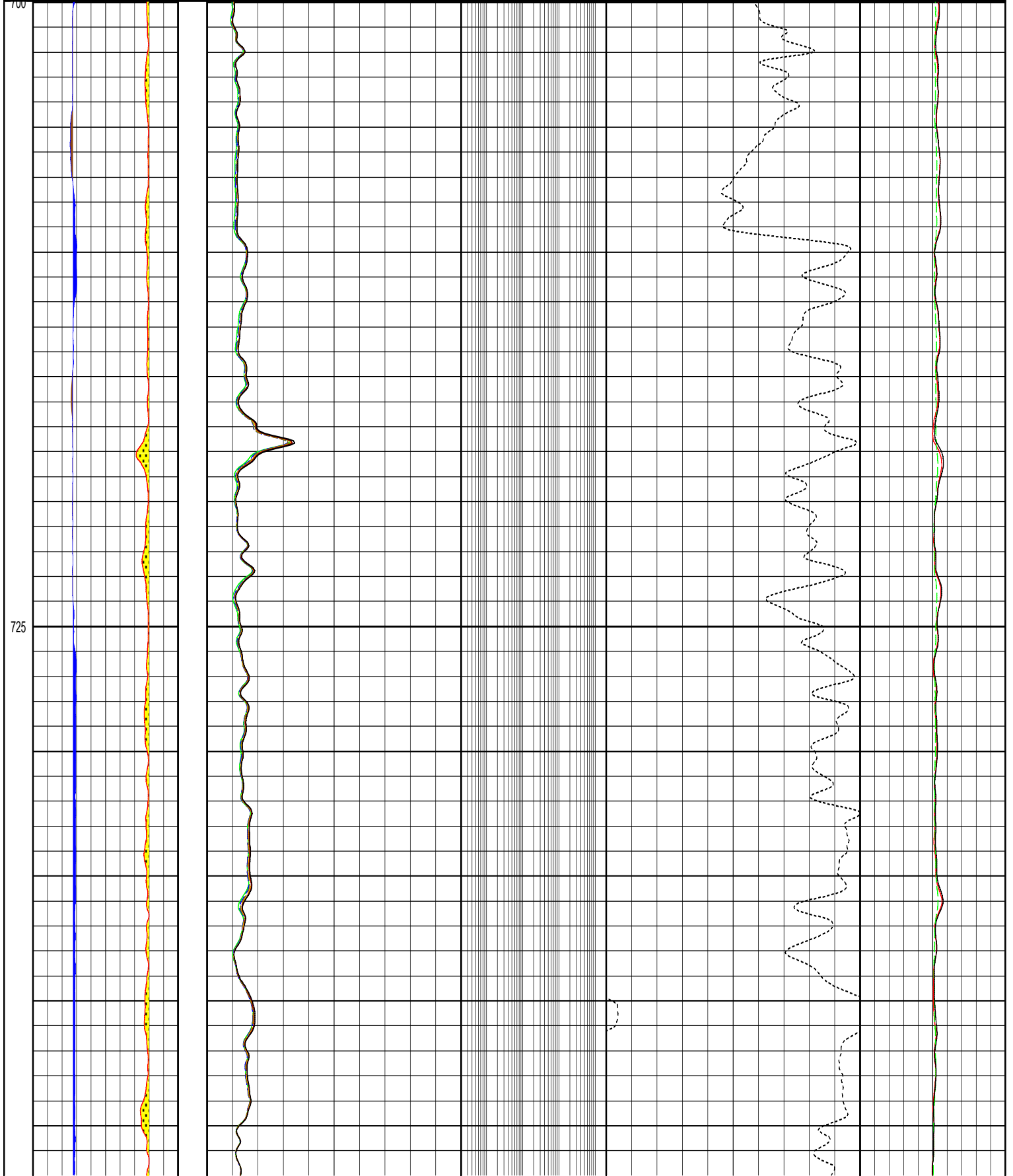
EA-774

DB : Petrofisica EL ALBA (32)

DEPTH (699.97M - 1850.97M)

05/05/2010 13:06

Depth	Litologia	Punz.	Resistividad	Permeabilidad	Porosidad	Quick
6.	CAL (IN)	16.	M2R1 (OHMM)	MPRM (MD)	PRZC (PU)	RWAC (OHMM)
-80.	SP (MV)	20.	M2R2 (OHMM)	Perm1 (md)	PORA (PU)	R291 ()
0.	PE (B/E)	5.	M2R3 (OHMM)	Perm (md)	CNCF (dec)	R292 ()
0.	RWAC (OHMM)	1.	M2R6 (OHMM)	● ● ●	MPHE (PU)	R2X1 ()
			M2R9 (OHMM)		MBVI (PU)	
			M2RX (OHMM)		MPHS (PU)	



725

