



Baker Atlas



FILE NO: \_\_\_\_\_  
 COMPANY: SIERRA GEOTHERMAL POWER, INC.  
 WELL: ALUM 25-29  
 FIELD: ALUM  
 COUNTY: ESMERALDA  
 STATE: NEVADA

Ver. 3.87  
 LOCATION: 2235.18' FSL & 938.11' FWL  
 SW/C  
 SEC 29 TWP 1N RGE 38.SE  
 OTHER SERVICES: HDIL, XMAC, STAR/OBIL

PERMANENT DATUM: G.L. \_\_\_\_\_ ELEVATION: 4903.57 FT  
 LOG MEASURED FROM: K.B. \_\_\_\_\_ 16.0 FT ABOVE P.D.  
 DRILL MEAS. FROM: K.B. \_\_\_\_\_  
 ELEVATIONS: KB 4919.57 FT, DF, GL 4903.57 FT

DATE	15-NOV-2009	
RUN	TRIP	1
SERVICE ORDER	575995	
DEPTH DRILLER	2300 FT	
DEPTH LOGGER	2299 FT	
BOTTOM LOGGED INTERVAL	2218 FT	
TOP LOGGED INTERVAL	571 FT	
CASING DRILLER	16.0 IN @ 571 FT	
CASING LOGGER	571 FT	
BIT SIZE	14.75 IN	
TYPE OF FLUID IN HOLE	LSND	
DENSITY	VISCOSITY	54 S
PH	FLUID LOSS	10.0 CS
SOURCE OF SAMPLE	FLOWLINE	
RM AT MEAS. TEMP.	2.53 OHMM @ 61 DEGF	
RMF AT MEAS. TEMP.	2.36 OHMM @ 60 DEGF	
RMC AT MEAS. TEMP.	2.68 OHMM @ 63 DEGF	
SOURCE OF RMF	RMC	MEASURED
RM AT BHT	1.08 OHMM @ 152 DEGF	
TIME SINCE CIRCULATION	3.5 HOURS	
MAX. RECORDED TEMP.	152 DEGF	
EQUIP. NO.	LOCATION	ML-4232 FALLON, NV
RECORDED BY	VERCIYAK	
WITNESSED BY	JERRY HAMBLIN	

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS

RUN 1 TRIP 1 : CVOL COMPUTED USING 10.75" CASING (BVOL, CVOL UNITS IN CUBIC FEET)  
 CALIPER VERIFIED IN CASING  
 RHO M = 2.65 G/CC RHO F = 1.0 G/CC  
 MATRIX = SANDSTONE  
 THANKS FOR USING BAKER ATLAS  
 CREW: LAPPOINT / HAYCOCK  
 RIG: ENSIGN 561

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	SWL	3944XD	10201370	FREE
1	1	TTRM	3981XB	10203010	FREE
1	1	WTS	3514XB	10200359	FREE
1	1	GR	1329XB	10203000	DECENT
1	1	CN	2446XA	179981	DECENT
1	1	ZDL	2234XA	10334913	PAD DEVICE
1	1	KNCKL	3939XA	10143909	FREE

1	1	HDIL	1515EA / MA	10069826 / 10069832	S/O
1	1	ORIT	4401XB	10165246	FREE
1	1	XMAC	1677EA / 1678MC	10337574 / 370238	CENT
1	1	ISO	1678PB	10213117	CENT
1	1	XMAC XTR	1678BA / 1678FA	370234 / 10199668	CENT

**MAIN LOG 5"/100FT SCALE**

ECLIPS 6.0i Feb 21, 2008  
Updates: 1

Sun Nov 15 21:07:49 2009

Pcrplt /main/62      Cplot      Pdf\_Cpp /main/16      Fileview 5.42

**PARAMETER AND FILTER SUMMARY REPORT**

File: /dat1a/575995/k771104.prm  
 LOGGING MODE: DEPTH      DIRECTION: UP  
 TOP DEPTH: 492.500 ft      BOTTOM DEPTH: 2309.750 ft

**SYMMETRIC FILTER**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
Y AXIS CALIPER	FILTER ( )	medium (1)		TOP	BOTTOM
TENSION	FILTER ( )	medium (1)		"	"
GR	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 (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"
	FILTER (soft*)	medium		"	"
ZDL HIGH RES	FILTER (hrd1*)	light		"	"
	FILTER (hrd1s*)	light		"	"
	FILTER (hrd2*)	light		"	"
	FILTER (hrd2s*)	light		"	"

**BOREHOLE & CEMENT**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	10.750	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	14.750	in	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (cnbh*)	14.750	in	"	"

**CN PROCESSING**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
2446 CN MATRIX	2446 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	0	ppm	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	7.875	in	"	"

**ZDL PROCESSING**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DENSITY POROSITY	RHOmatrix	2.650	g/cm3	TOP	BOTTOM
	RHOfluid	1.000	g/cm3	"	"
ZDL	DENX TRACKING	ON		"	"

**CURVE DESCRIPTION REPORT**

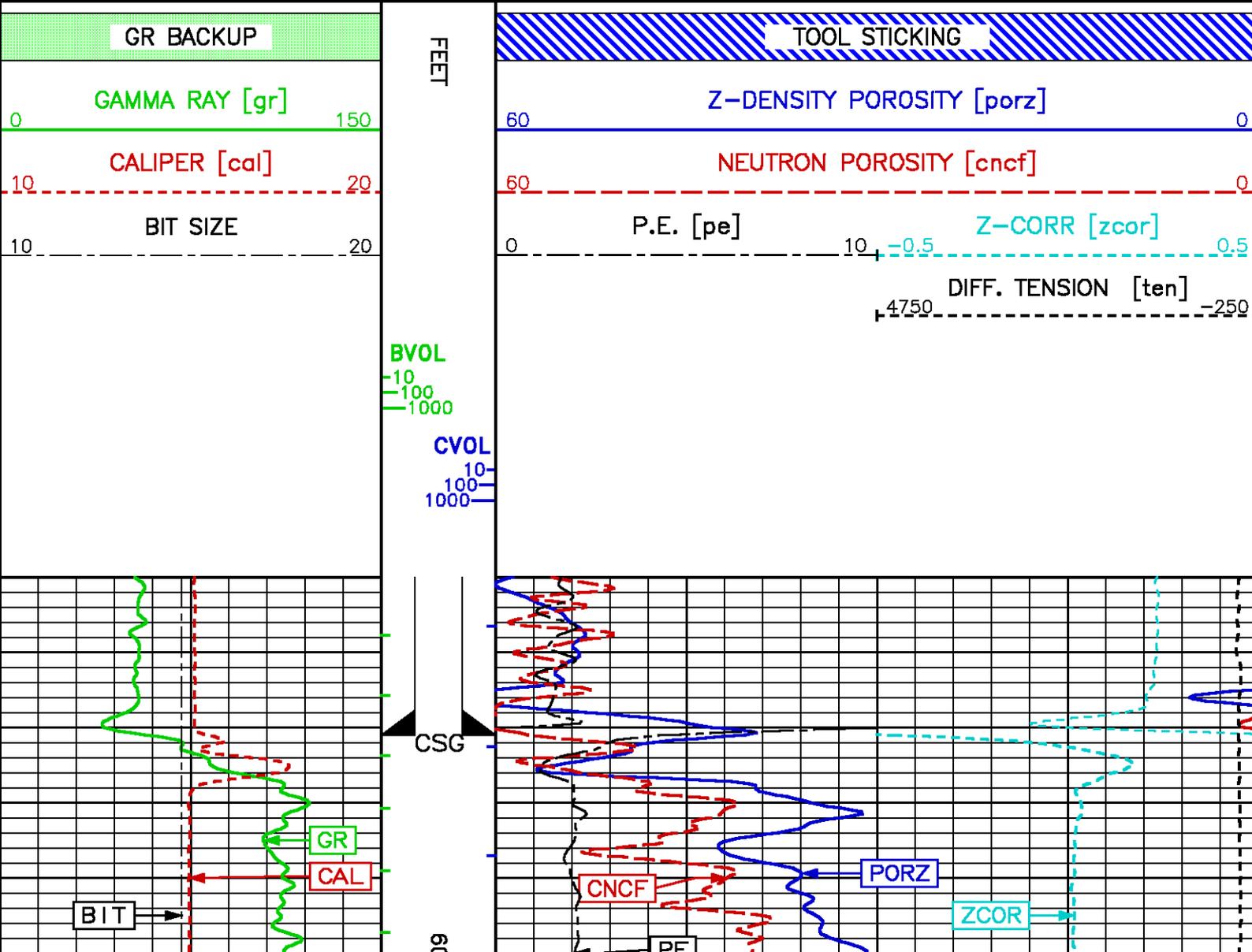
**CURVE DESCRIPTION REPORT**

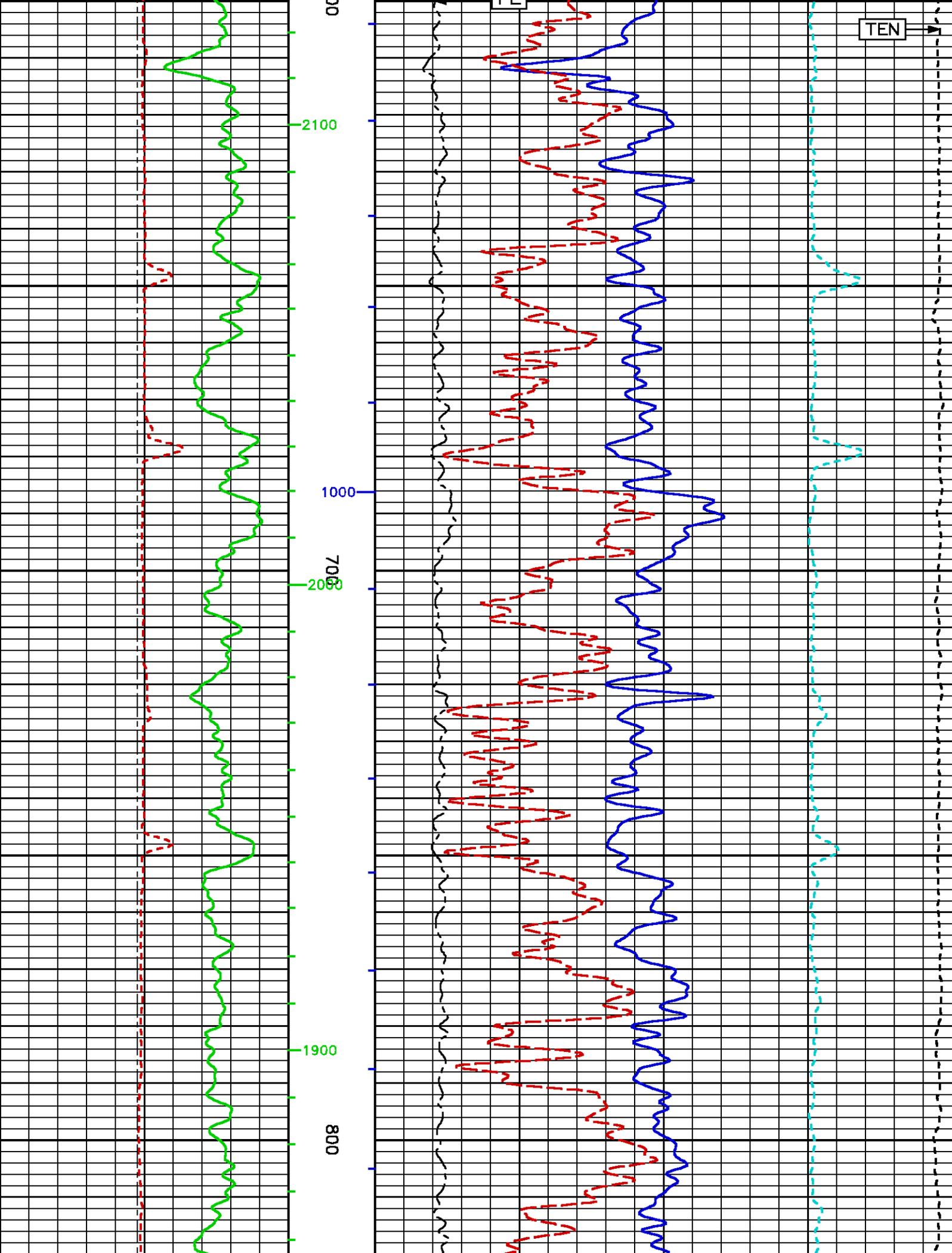
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 15 12:51:25 2009	BIT SIZE
F1:BVOL	BVOL	Nov 15 12:51:25 2009	BOREHOLE VOLUME
F1:CAL	CAL	Nov 15 12:51:25 2009	CALIPER
F1:CNCF	CNCF	Nov 15 12:51:25 2009	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	CVOL	Nov 15 12:51:25 2009	CEMENT VOLUME
F1:GR	GR	Nov 15 12:51:25 2009	GAMMA RAY
F1:PE	PE	Nov 15 12:51:25 2009	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	PORZ	Nov 15 12:51:25 2009	POROSITY FOR SELECTABLE MATRIX
F1:TEN	TEN	Nov 15 12:51:25 2009	DIFFERENTIAL TENSION
F1:ZCOR	ZCOR	Nov 15 12:51:25 2009	DENSITY CORRECTION

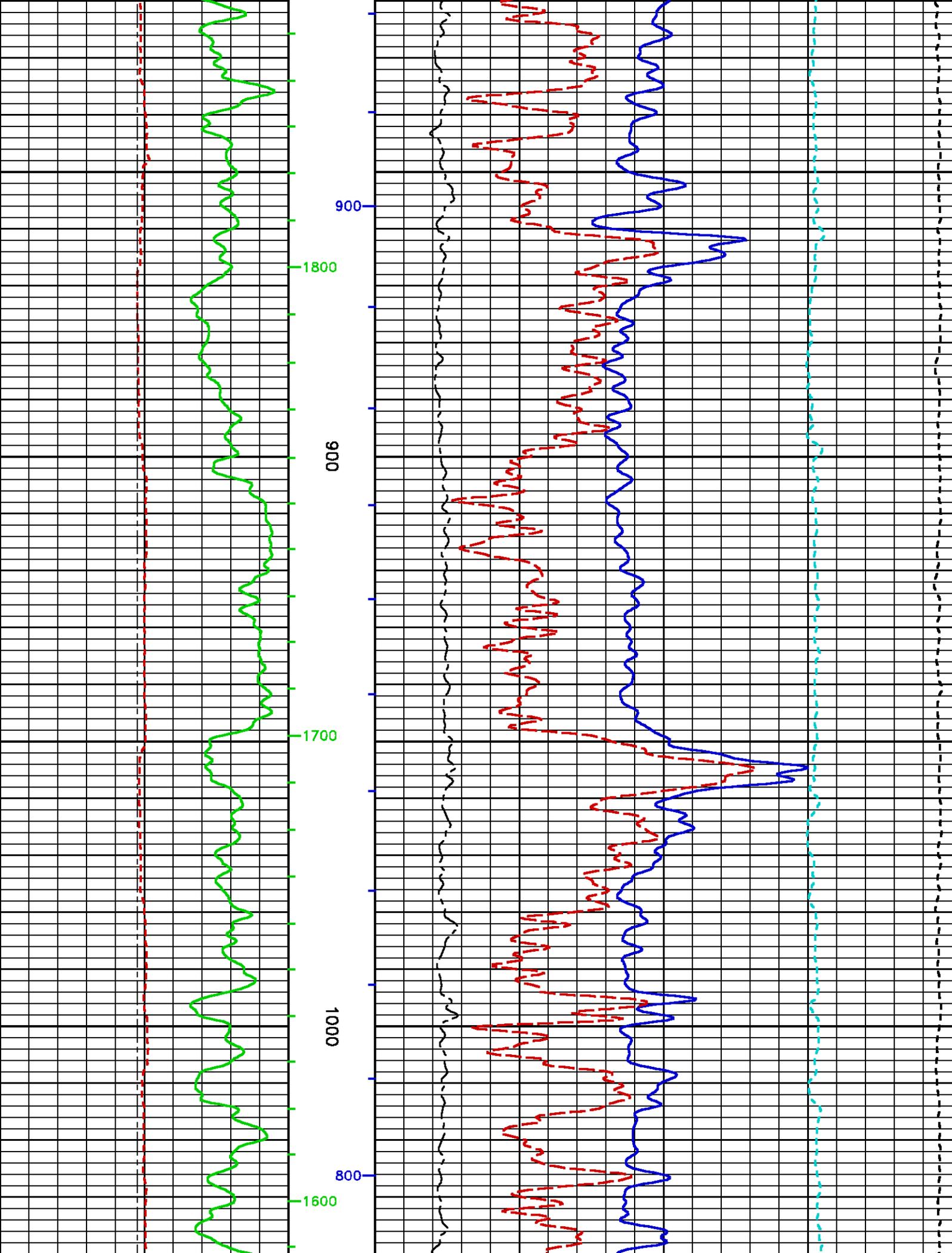
**CURVE MEASURE POINT OFFSET**

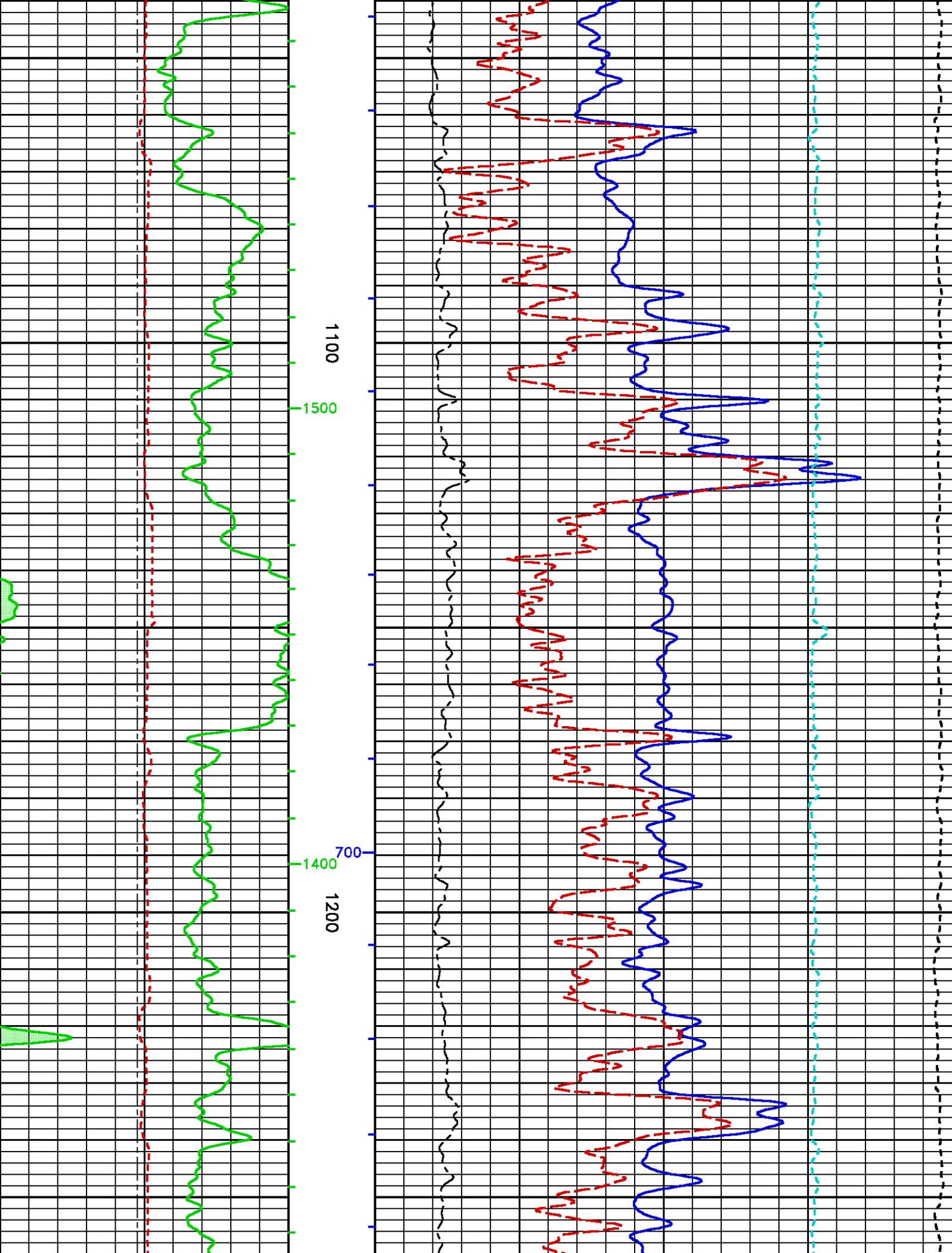
CURVE	OFFSET (ft)						
BIT	0.00	CNCF	92.00	PE	81.00	TEN	0.00
CAL	81.50	GR	99.00	PORZ	81.00	ZCOR	81.00

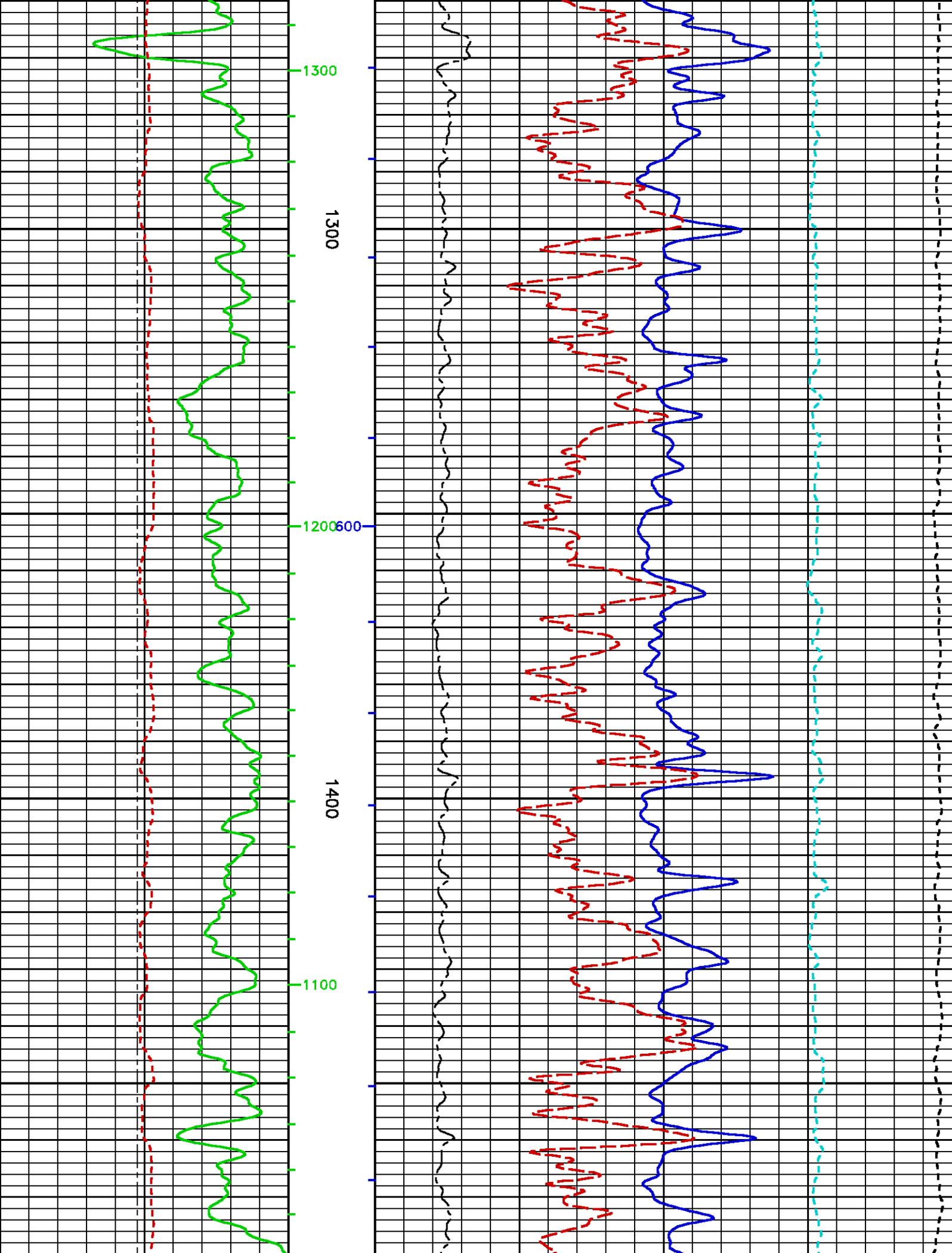
Presentation : cpu1:/dat1a/575995/ZDLCN\_MAIN.pdf [5"/100' Scale]  
 Plot Interval : 550 - 2310 Feet  
  
 Data File 1 : F1 : cpu1:/dat1a/575995/k771104.aff  
 Created On : Nov 15 12:51:25 2009  
 Company : SIERRA GEOTHERMAL POWER, INC.  
 Well : ALUM 25-29  
 Field : ALUM  
 File Interval : 380.25 - 2310 Feet  
 Oct : k7711

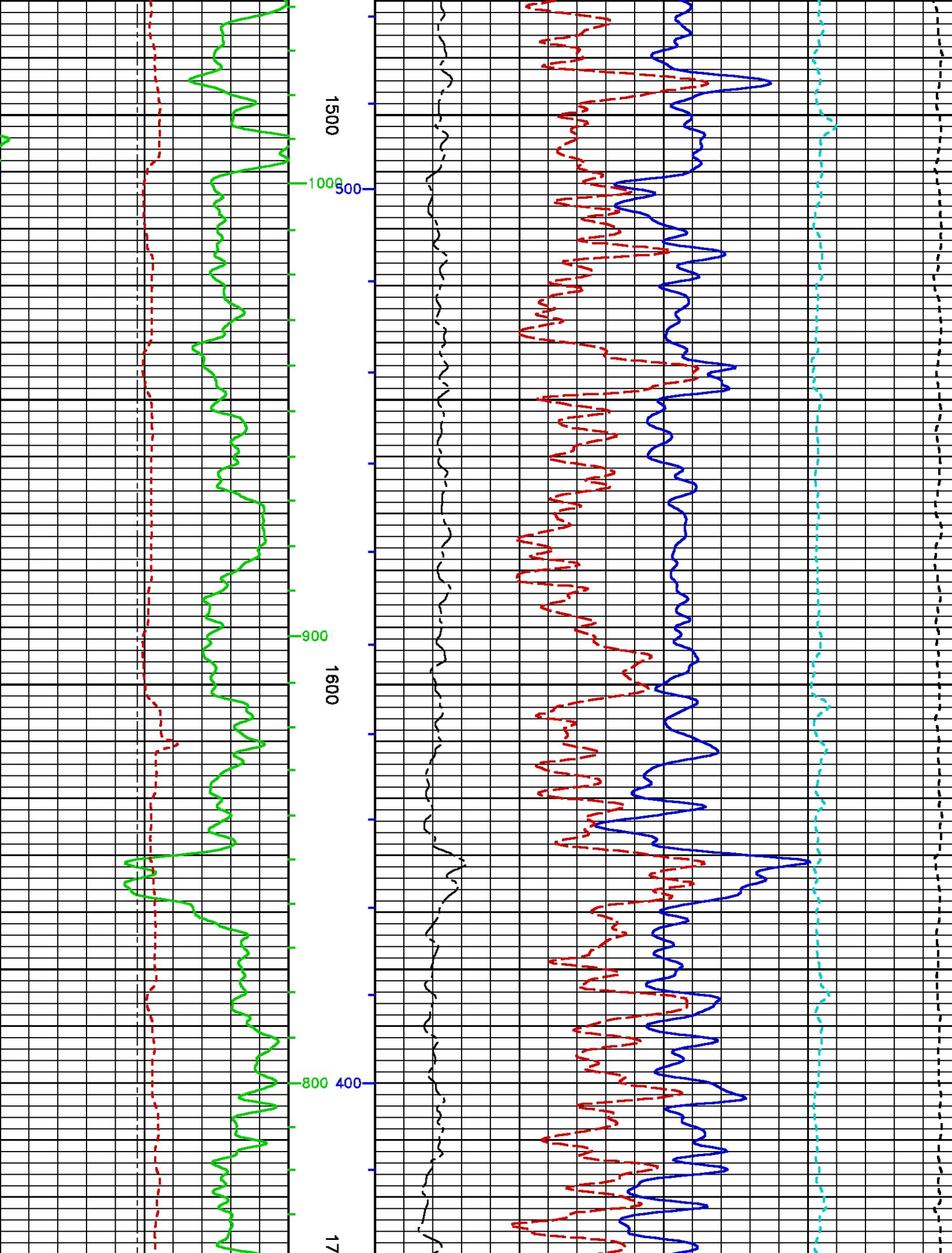


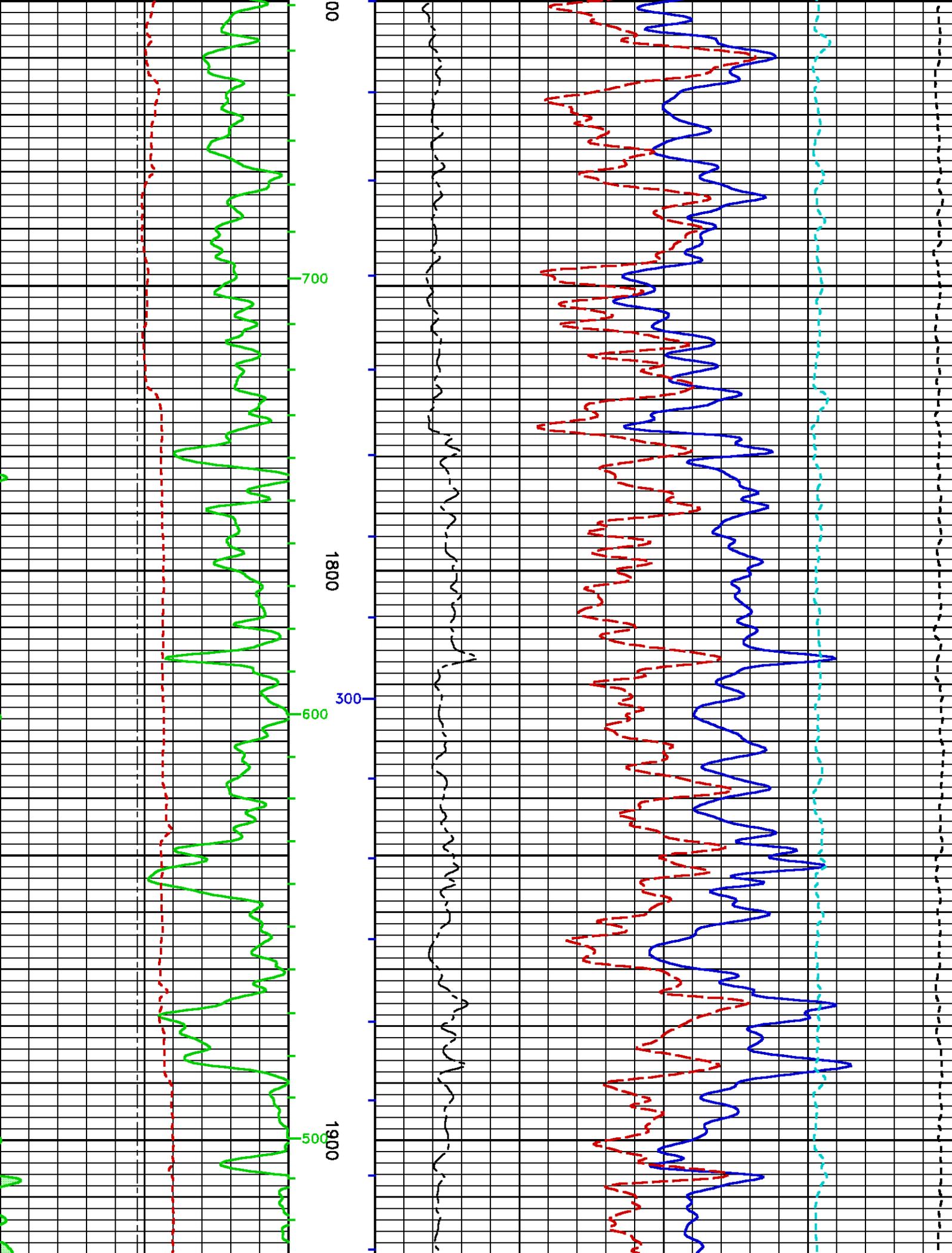


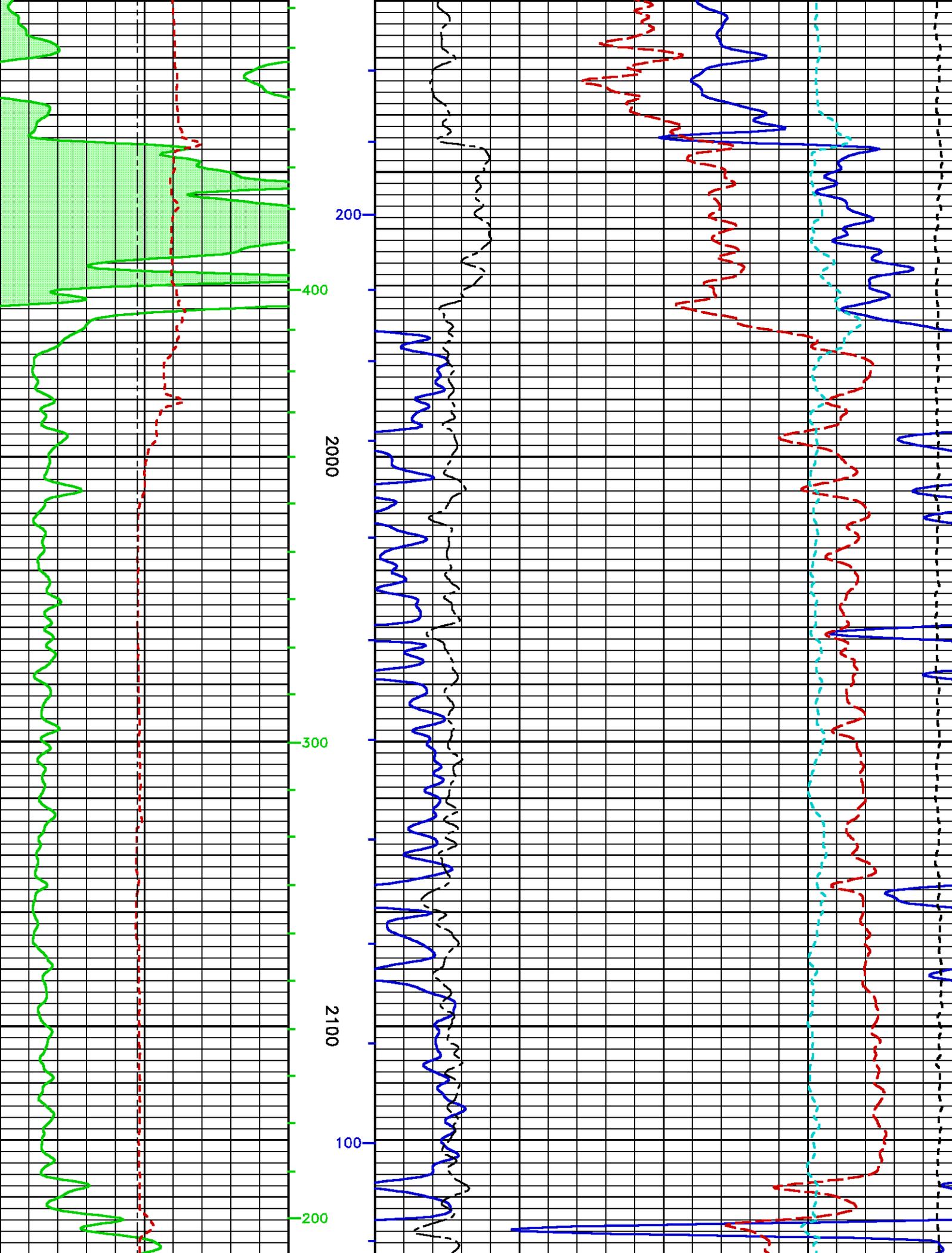


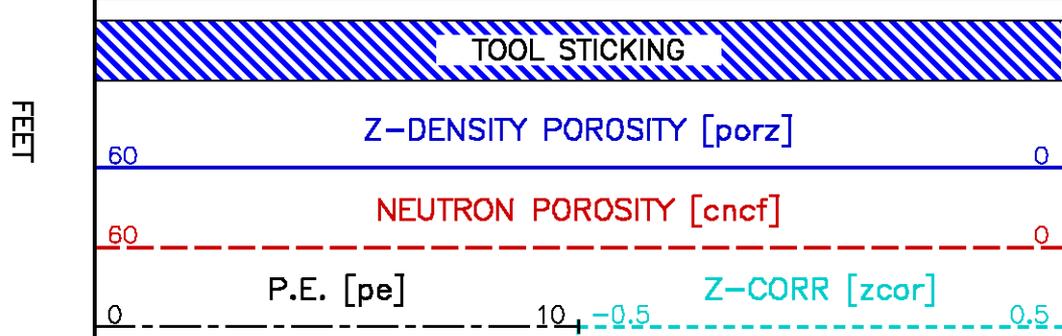
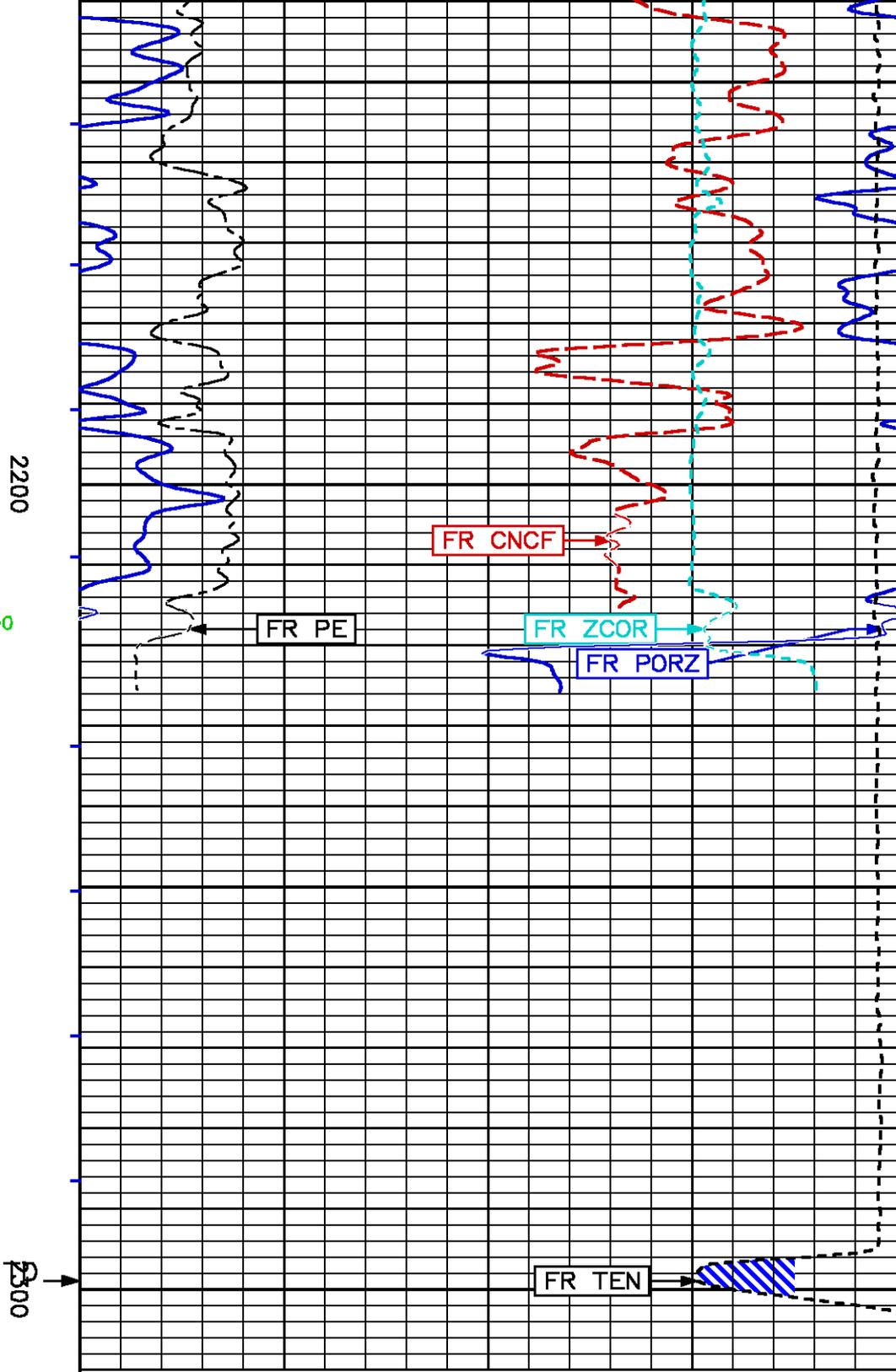
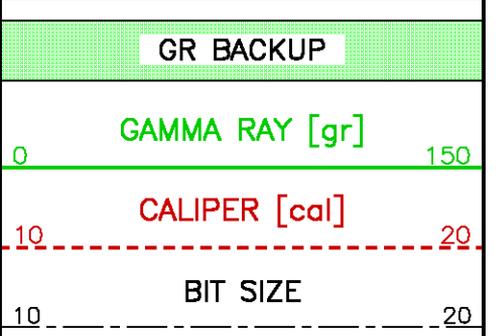
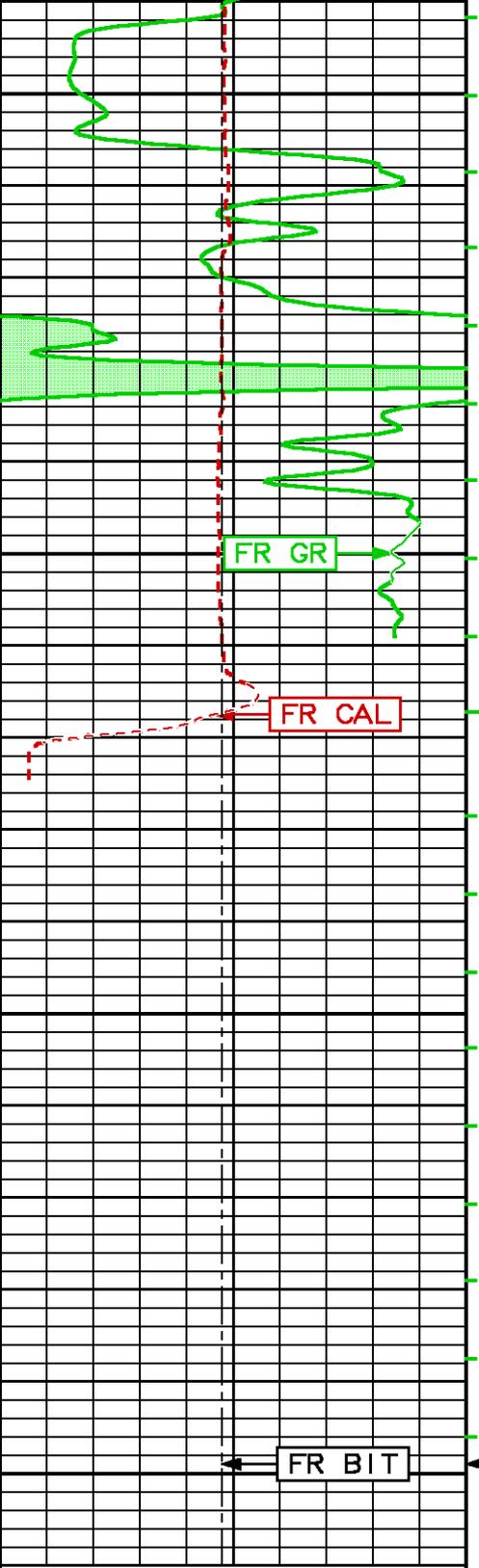












BVOL

10  
100  
1000

CVOL

10  
100  
1000

**BULK DENSITY 5"/100FT SCALE**

ECLIPS 6.0i Feb 21, 2008  
Updates: 1

Sun Nov 15 21:27:12 2009

Pcrplt /main/62

Cplot

Pdf\_Cpp /main/16

Fileview 5.42

**PARAMETER AND FILTER SUMMARY REPORT**

File: /data/575995/k771104.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 492.500 ft BOTTOM DEPTH: 2309.750 ft

**SYMMETRIC FILTER**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
Y AXIS CALIPER	FILTER ( )	medium (1)		TOP	BOTTOM
TENSION	FILTER ( )	medium (1)		"	"
GR	FILTER ( )	medium (1)		"	"
CALIPER	FILTER ( )	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
ZDL MED RES	FILTER (hrd1*)	medium		"	"
	FILTER (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"
	FILTER (soft*)	medium		"	"
ZDL HIGH RES	FILTER (hrd1*)	light		"	"
	FILTER (hrd1s*)	light		"	"
	FILTER (hrd2*)	light		"	"
	FILTER (hrd2s*)	light		"	"

**BOREHOLE & CEMENT**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	10.750	In	TOP	BOTTOM
BIT SIZE	BIT SIZE	14.750	In	"	"

**ZDL PROCESSING**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ZDL	DENX TRACKING	ON		TOP	BOTTOM

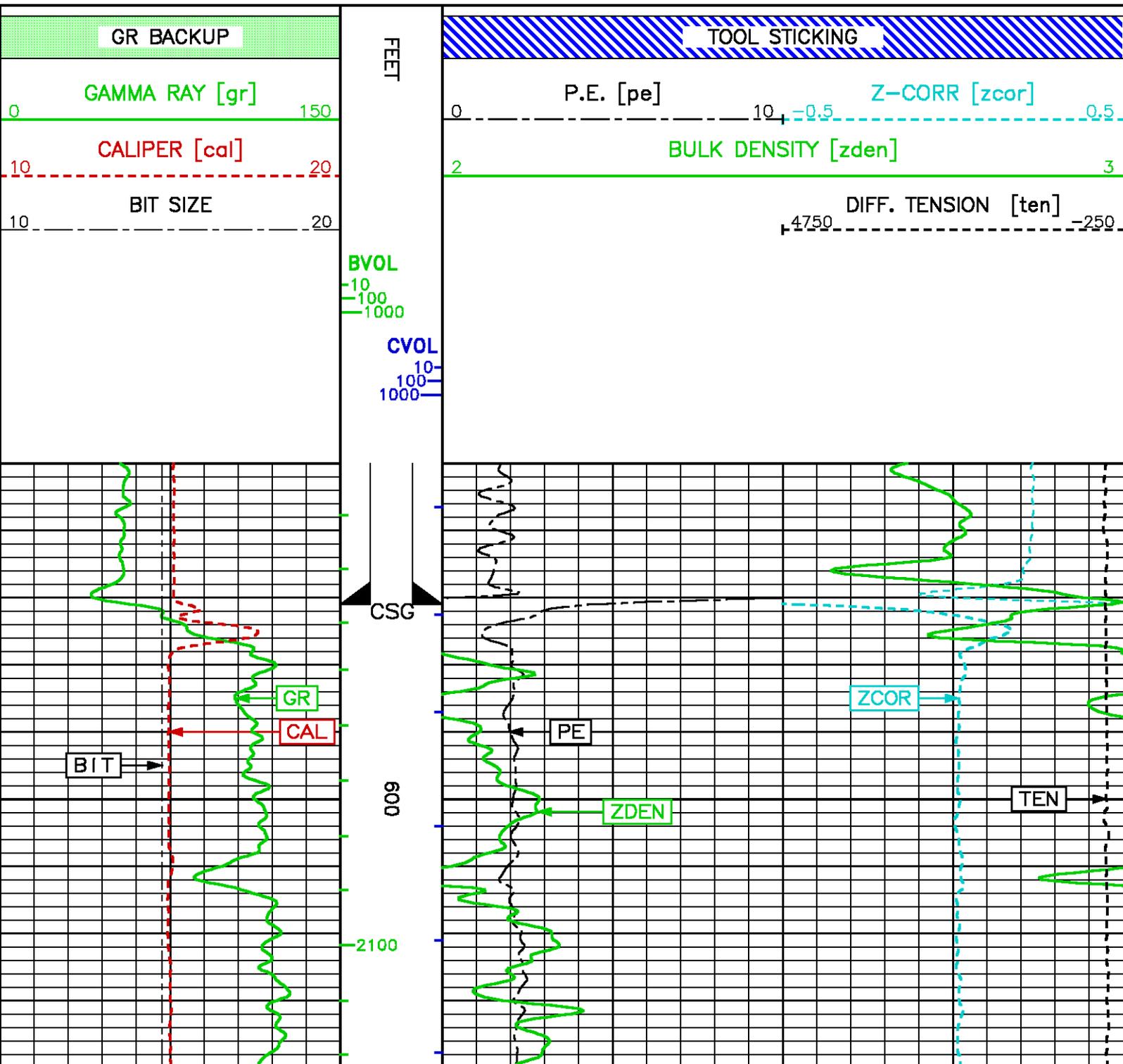
**CURVE DESCRIPTION REPORT**

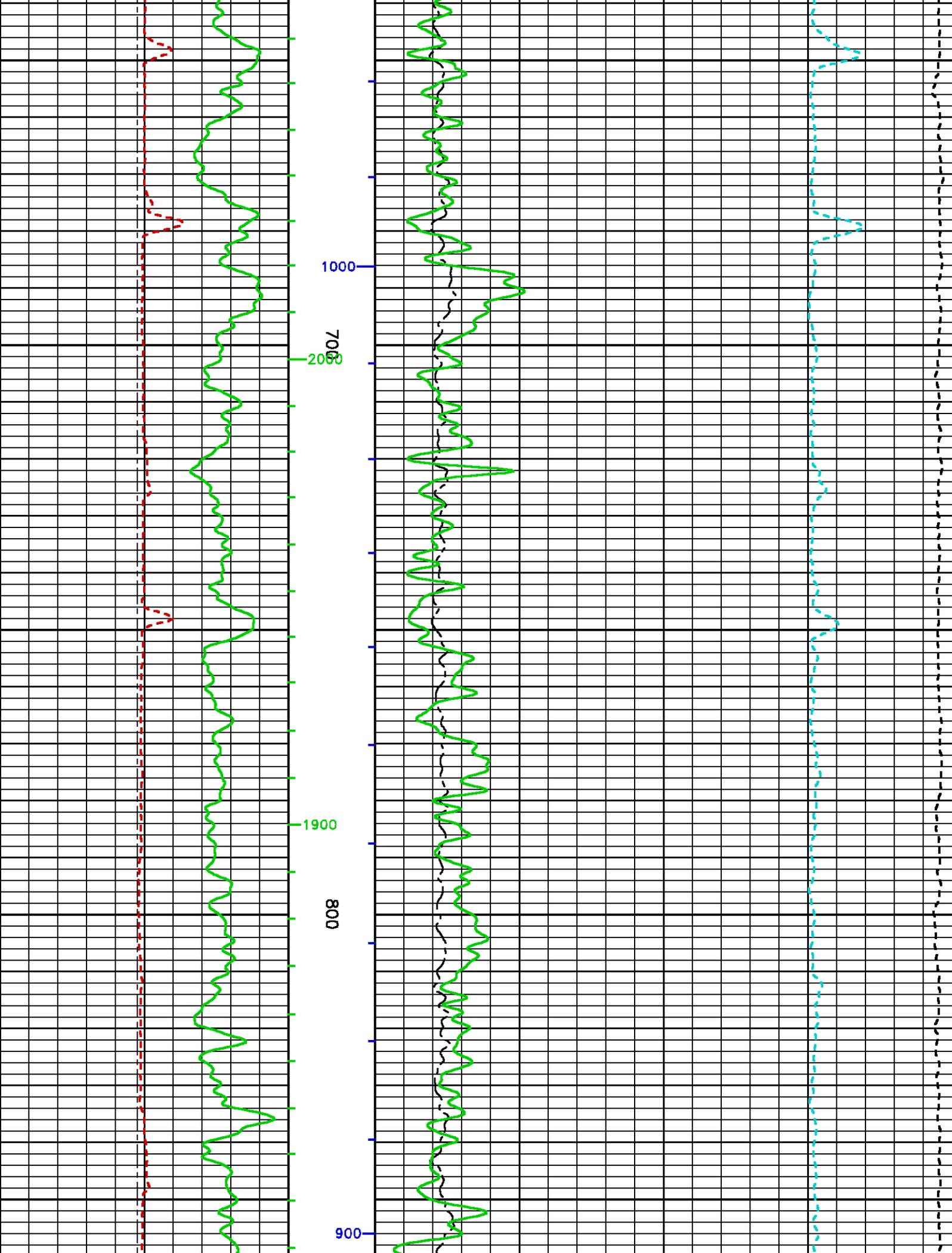
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 15 12:51:25 2009	BIT SIZE
F1:BVOL	BVOL	Nov 15 12:51:25 2009	BOREHOLE VOLUME
F1:CAL	CAL	Nov 15 12:51:25 2009	CALIPER
F1:CVOL	CVOL	Nov 15 12:51:25 2009	CEMENT VOLUME
F1:GR	GR	Nov 15 12:51:25 2009	GAMMA RAY
F1:PE	PE	Nov 15 12:51:25 2009	PHOTO ELECTRIC CROSS-SECTION
F1:TEN	TEN	Nov 15 12:51:25 2009	DIFFERENTIAL TENSION

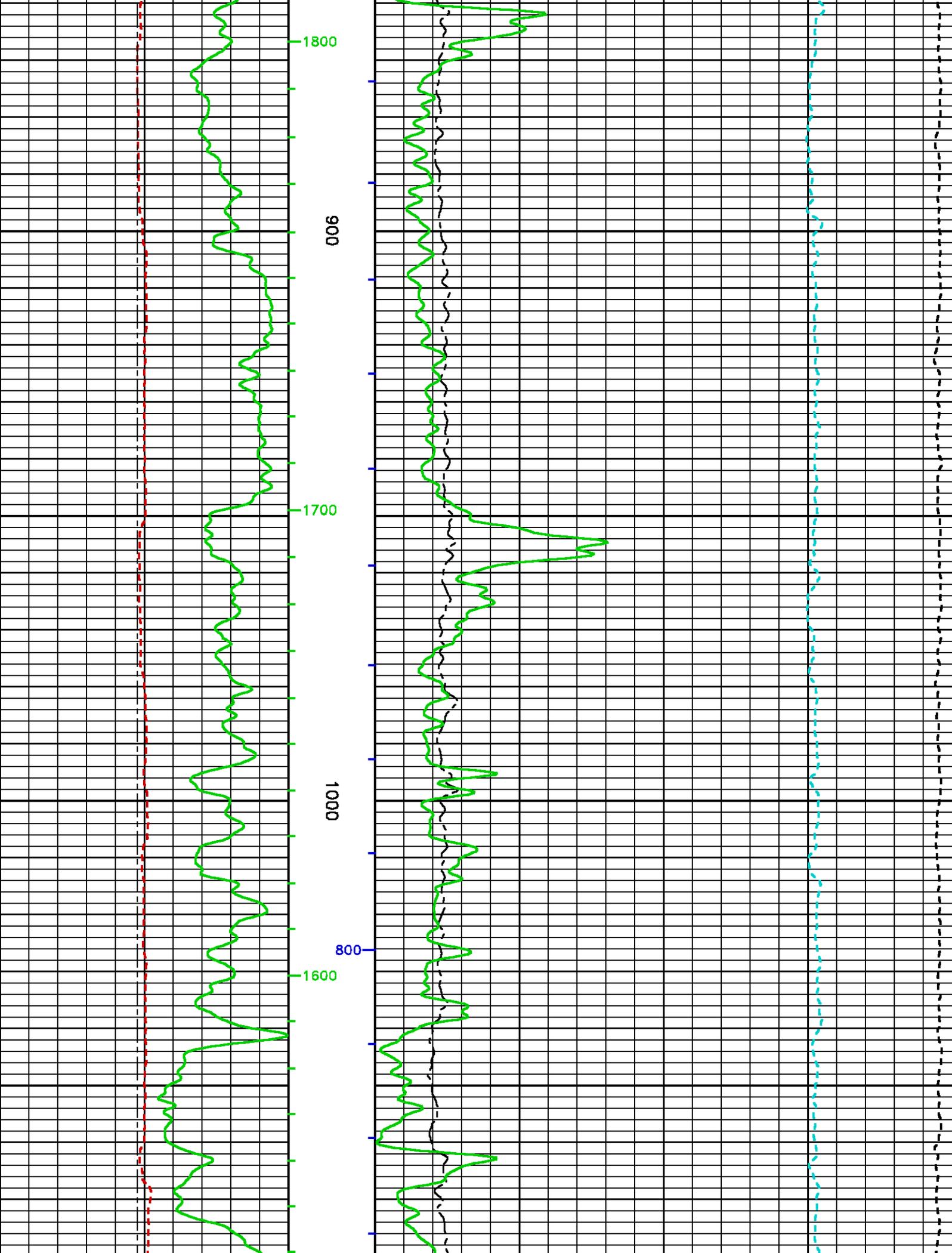
### CURVE MEASURE POINT OFFSET

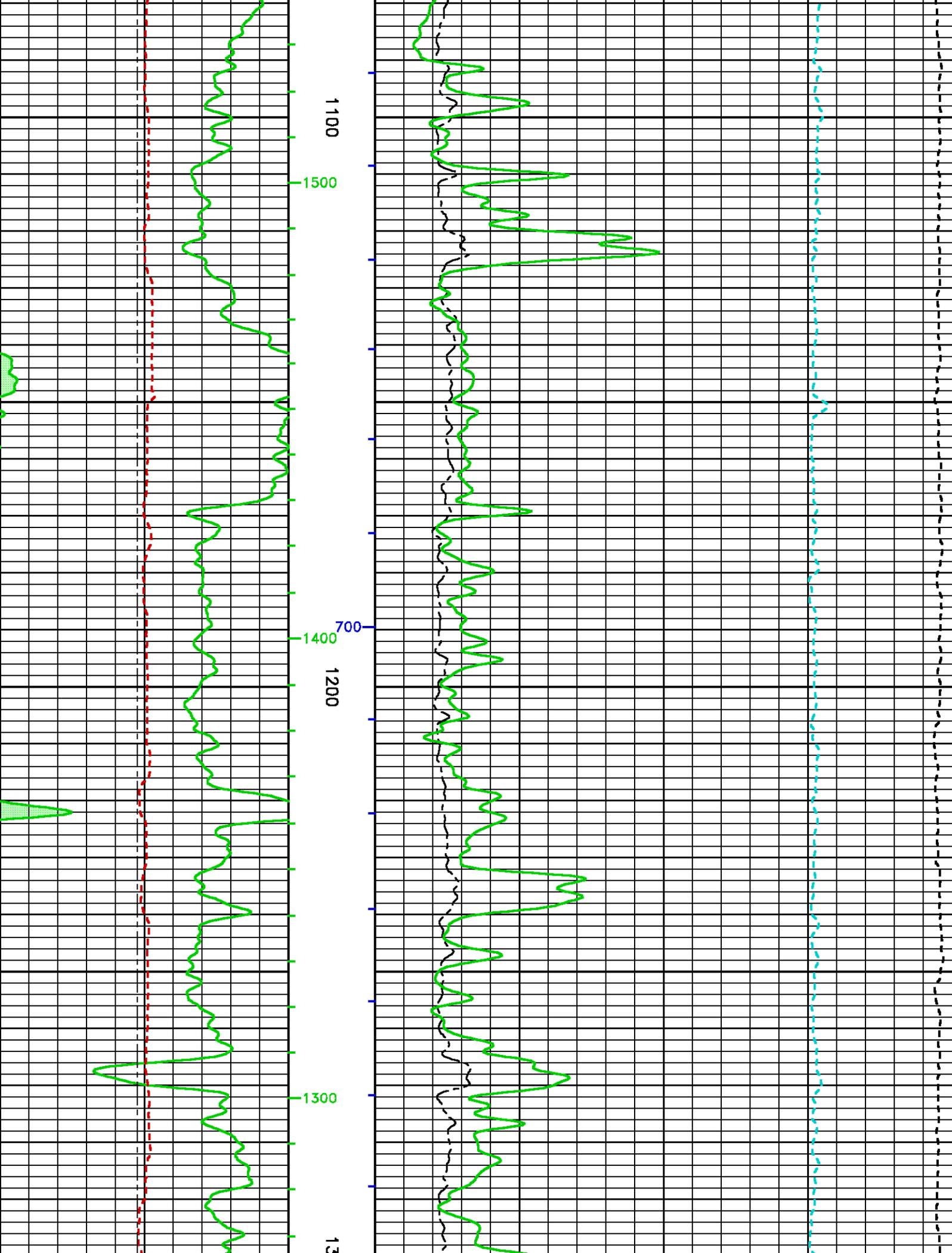
CURVE	OFFSET (ft)						
BIT	0.00	GR	99.00	TEN	0.00	ZDEN	81.00
CAL	81.50	PE	81.00	ZCOR	81.00		

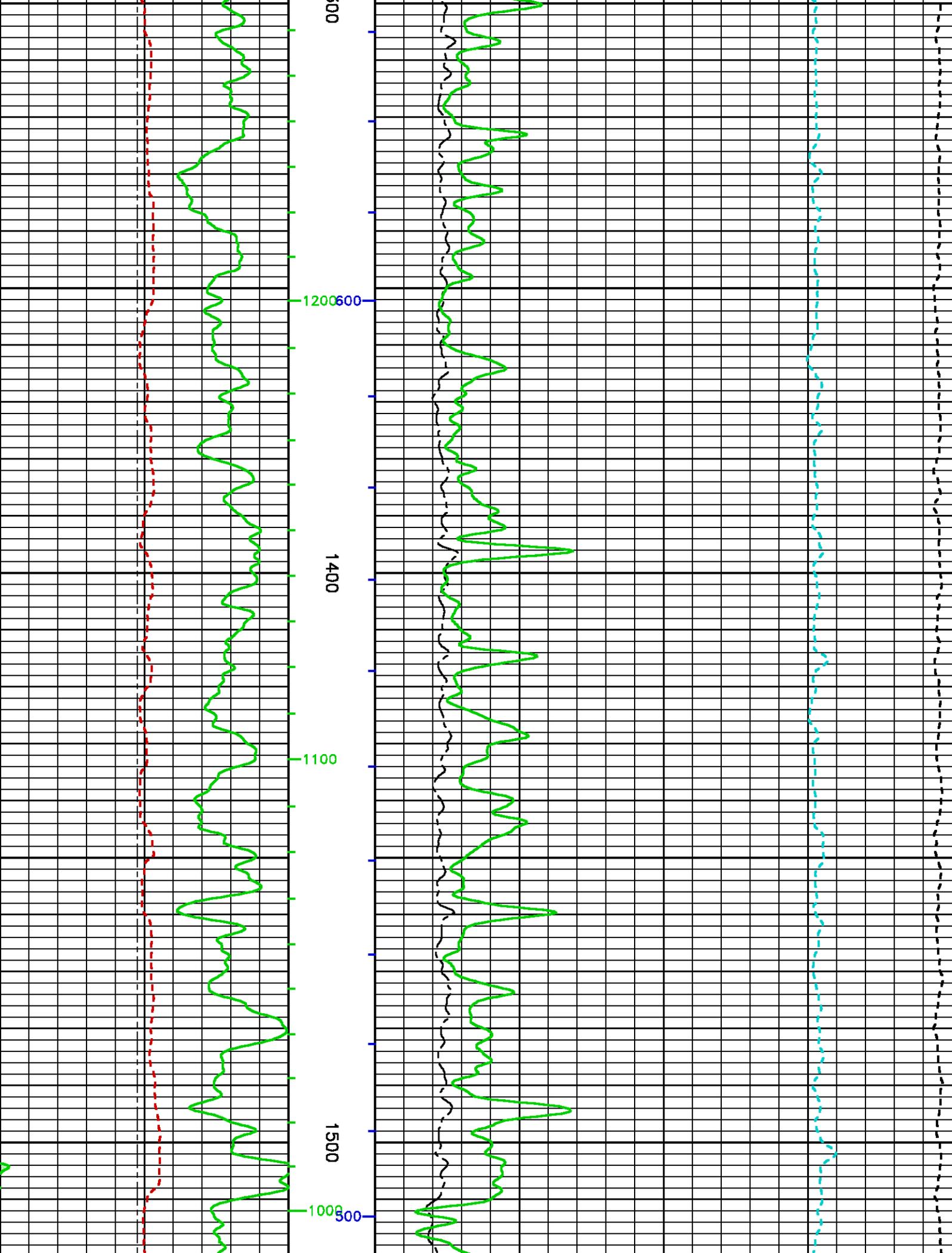
**Presentation** : cpu1:/dat1a/575995/ZDL\_BULK\_MAIN.pdf [5"/100' Scale]  
**Plot Interval** : 550 - 2310 Feet  
  
**Data File 1** : F1 : cpu1:/dat1a/575995/k771104.aff  
**Created On** : Nov 15 12:51:25 2009  
**Company** : SIERRA GEOTHERMAL POWER, INC.  
**Well** : ALUM 25-29  
**Field** : ALUM  
**File Interval** : 380.25 - 2310 Feet  
**Oct** : k7711

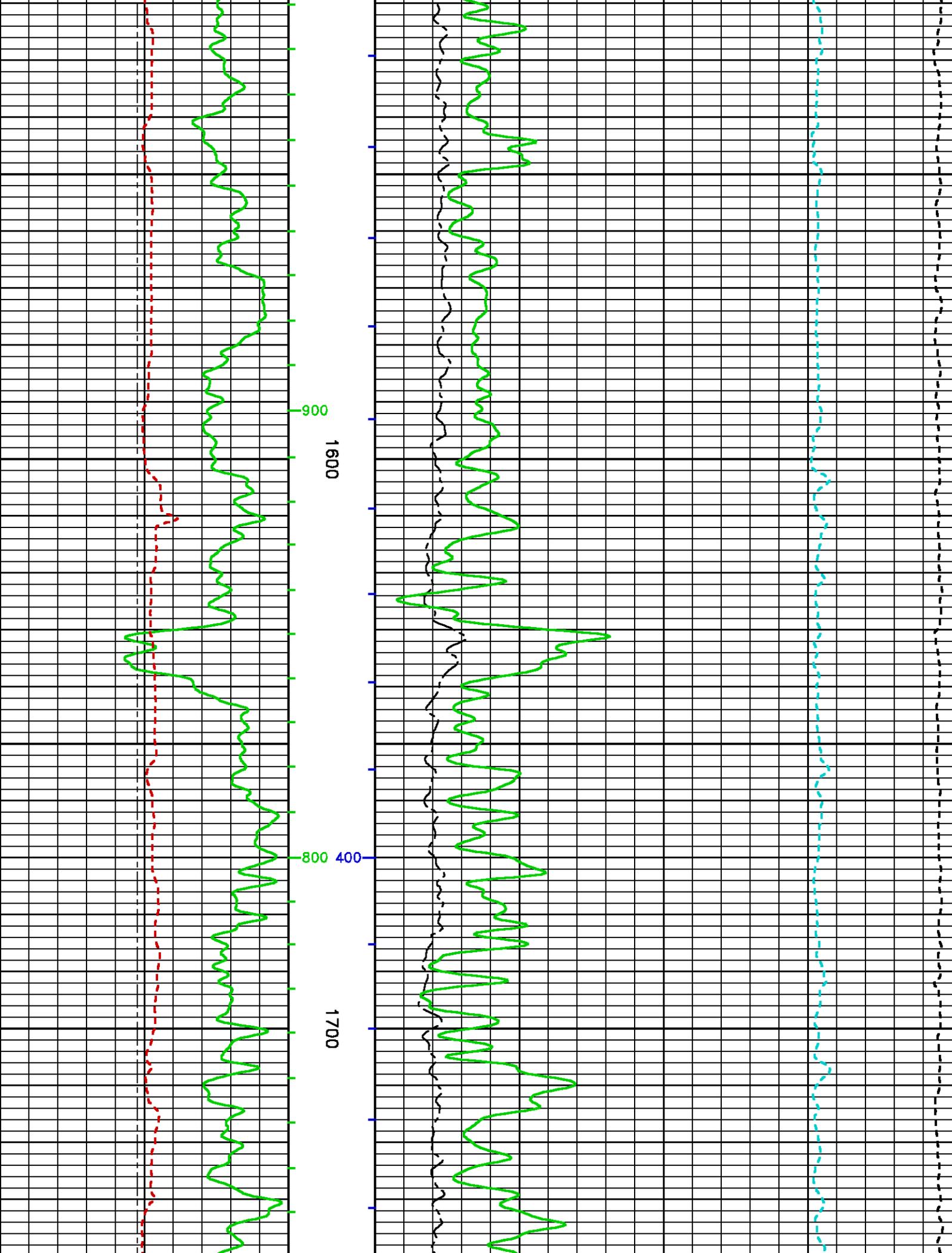


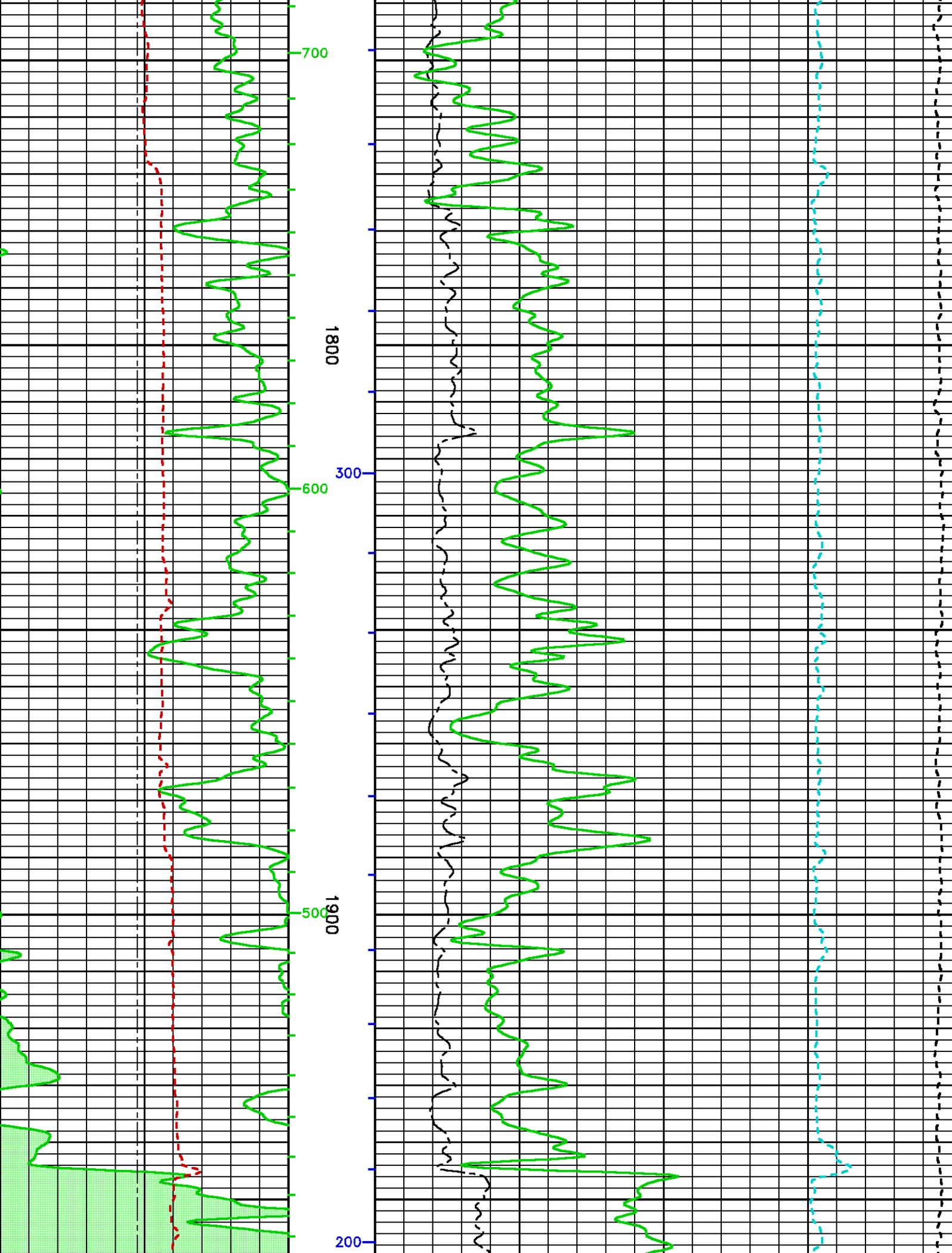


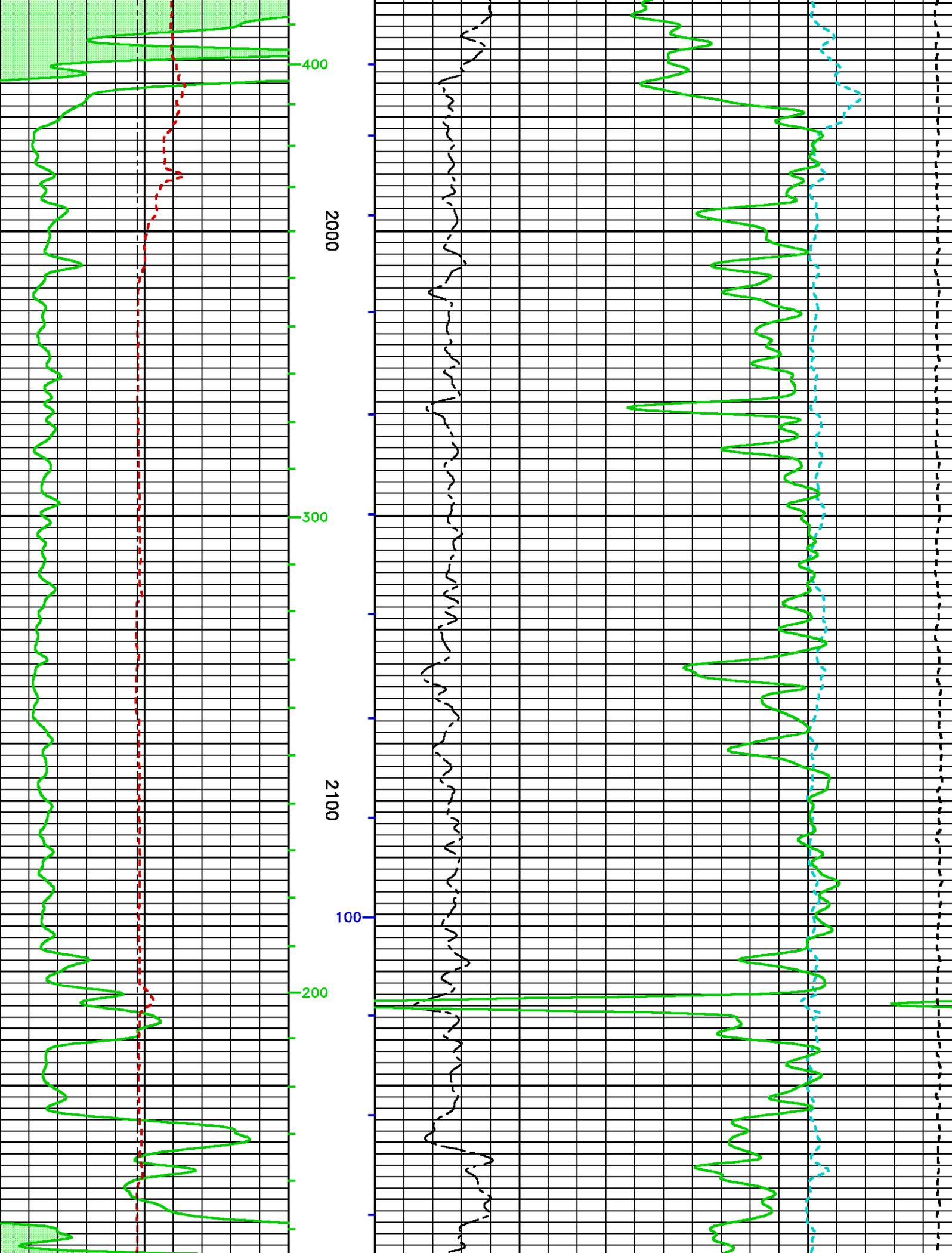


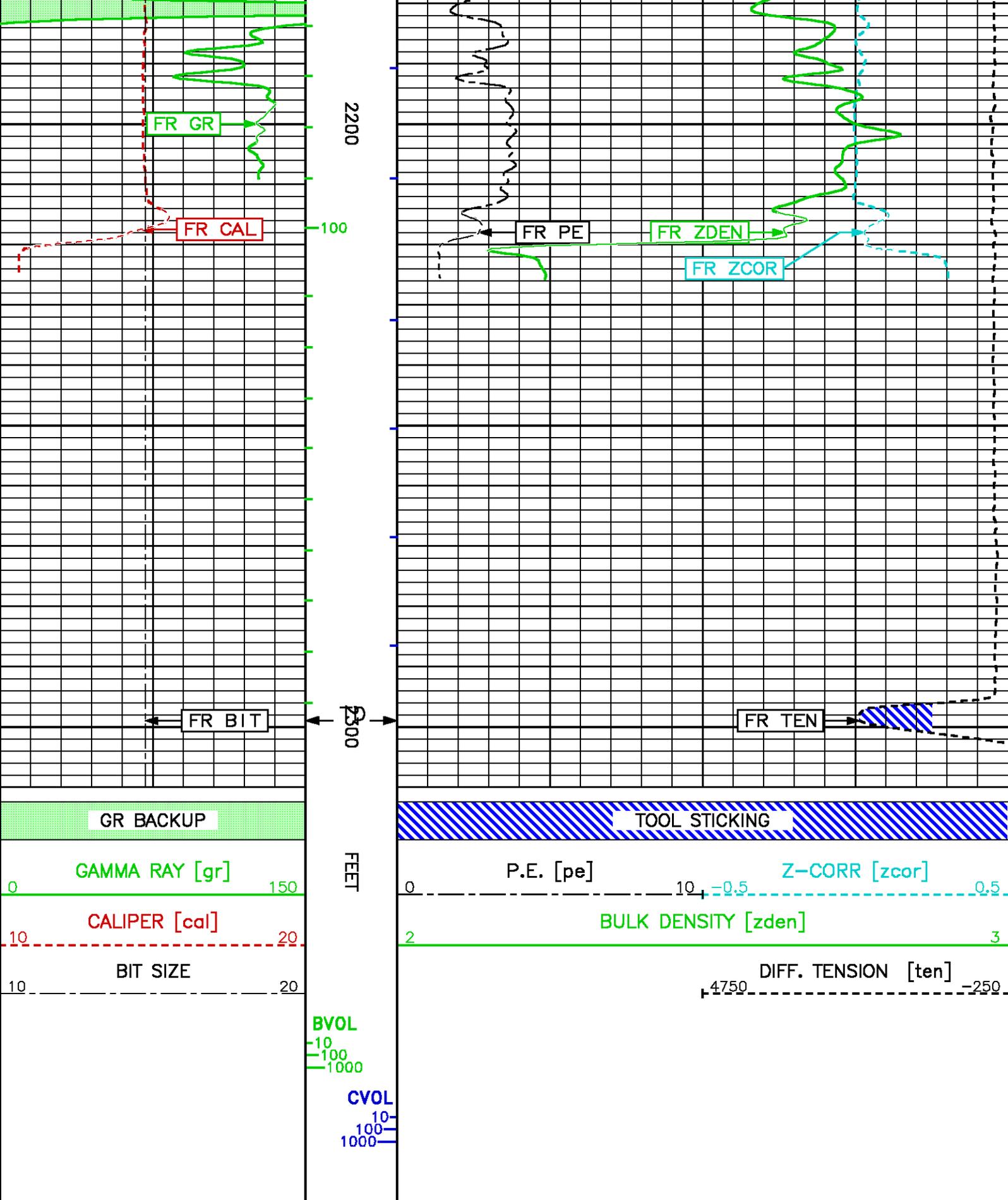












GR BACKUP

GAMMA RAY [gr]

CALIPER [cal]

BIT SIZE

BVOL

-10  
-100  
-1000

CVOL

10  
100  
1000

TOOL STICKING

P.E. [pe]

Z-CORR [zcor]

BULK DENSITY [zden]

DIFF. TENSION [ten]

4750

-250

2200

100

2500

FEET

FR GR

FR CAL

FR BIT

FR PE

FR ZDEN

FR ZCOR

FR TEN

# REPEAT LOG

ECLIPS 6.0i Feb 21, 2008  
Updates: 1

Sun Nov 15 21:08:34 2009

Pcrplt /main/62

Cplot

Pdf\_Cpp /main/16

Fileview 5.42

## PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/575995/k771103.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 2073.750 ft BOTTOM DEPTH: 2310.250 ft

### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
Y AXIS CALIPER	FILTER ()	medium (1)		TOP	BOTTOM
TENSION	FILTER ()	medium (1)		"	"
GR	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 (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"
	FILTER (soft*)	medium		"	"
ZDL HIGH RES	FILTER (hrd1*)	light		"	"
	FILTER (hrd1s*)	light		"	"
	FILTER (hrd2*)	light		"	"
	FILTER (hrd2s*)	light		"	"

### BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	10.750	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	14.750	in	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (cnbh*)	14.750	in	"	"

### CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
2446 CN MATRIX	2446 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	0	ppm	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	7.875	in	"	"

### ZDL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DENSITY POROSITY	RHOmatrix	2.650	g/cm3	TOP	BOTTOM
	RHOfluid	1.000	g/cm3	"	"
ZDL	DENX TRACKING	ON		"	"

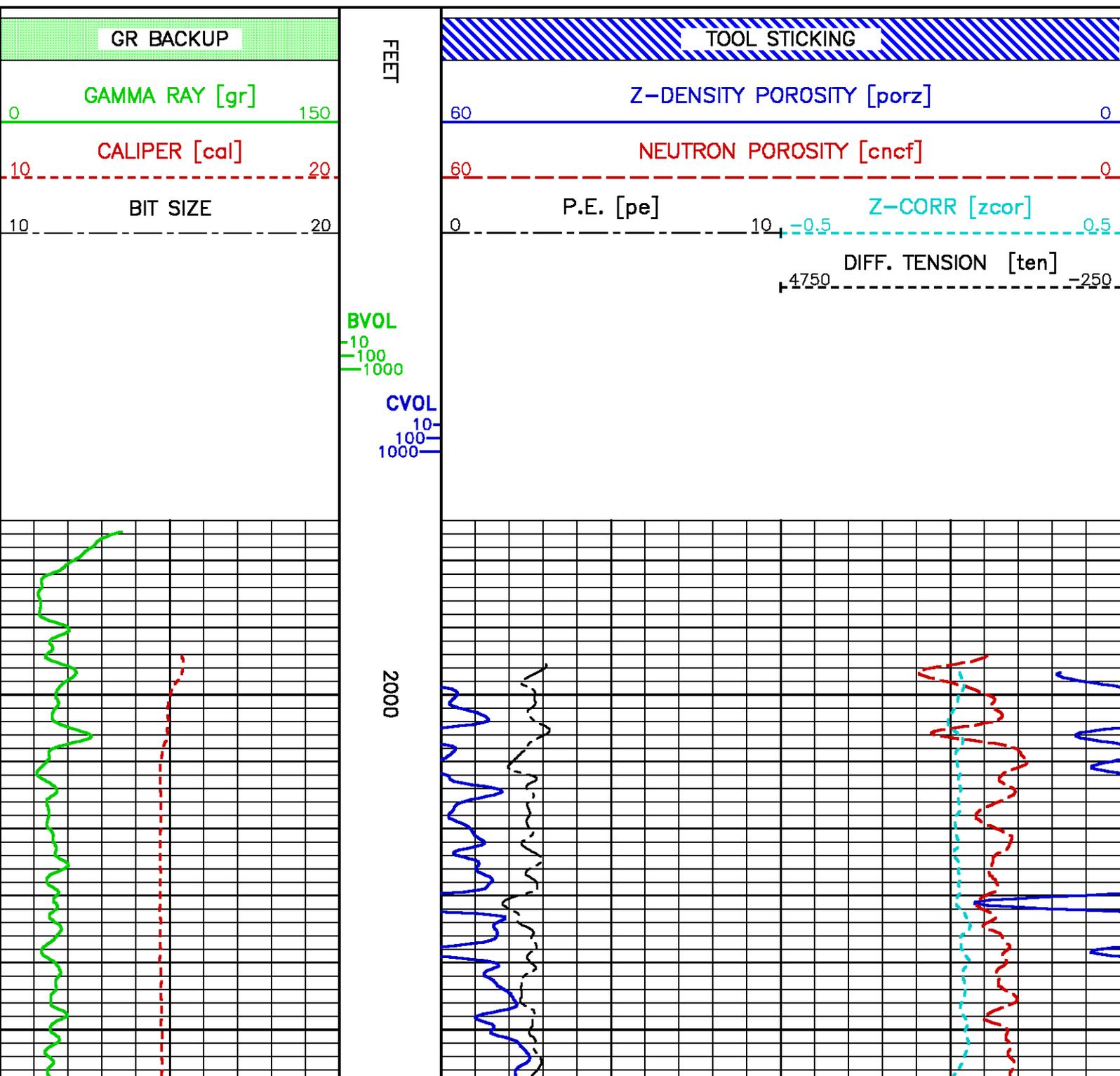
### CURVE DESCRIPTION REPORT

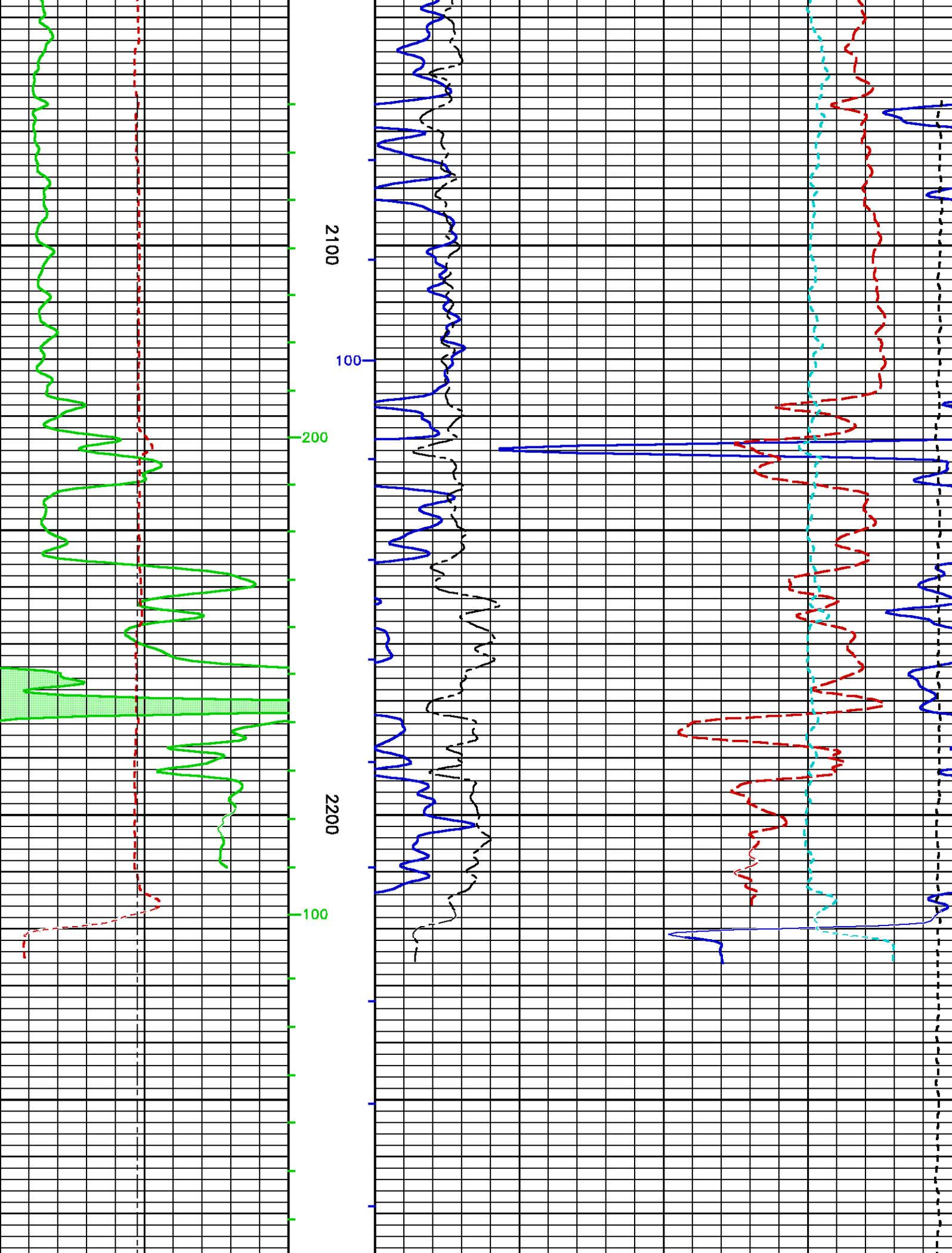
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 15 12:36:34 2009	BIT SIZE
F1:BVOL	BVOL	Nov 15 12:36:34 2009	BOREHOLE VOLUME
F1:CAL	CAL	Nov 15 12:36:34 2009	CALIPER
F1:CNCF	CNCF	Nov 15 12:36:34 2009	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	CVOL	Nov 15 12:36:34 2009	CEMENT VOLUME
F1:GR	GR	Nov 15 12:36:34 2009	GAMMA RAY
F1:PE	PE	Nov 15 12:36:34 2009	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	PORZ	Nov 15 12:36:34 2009	POROSITY FOR SELECTABLE MATRIX
F1:TEN	TEN	Nov 15 12:36:34 2009	DIFFERENTIAL TENSION

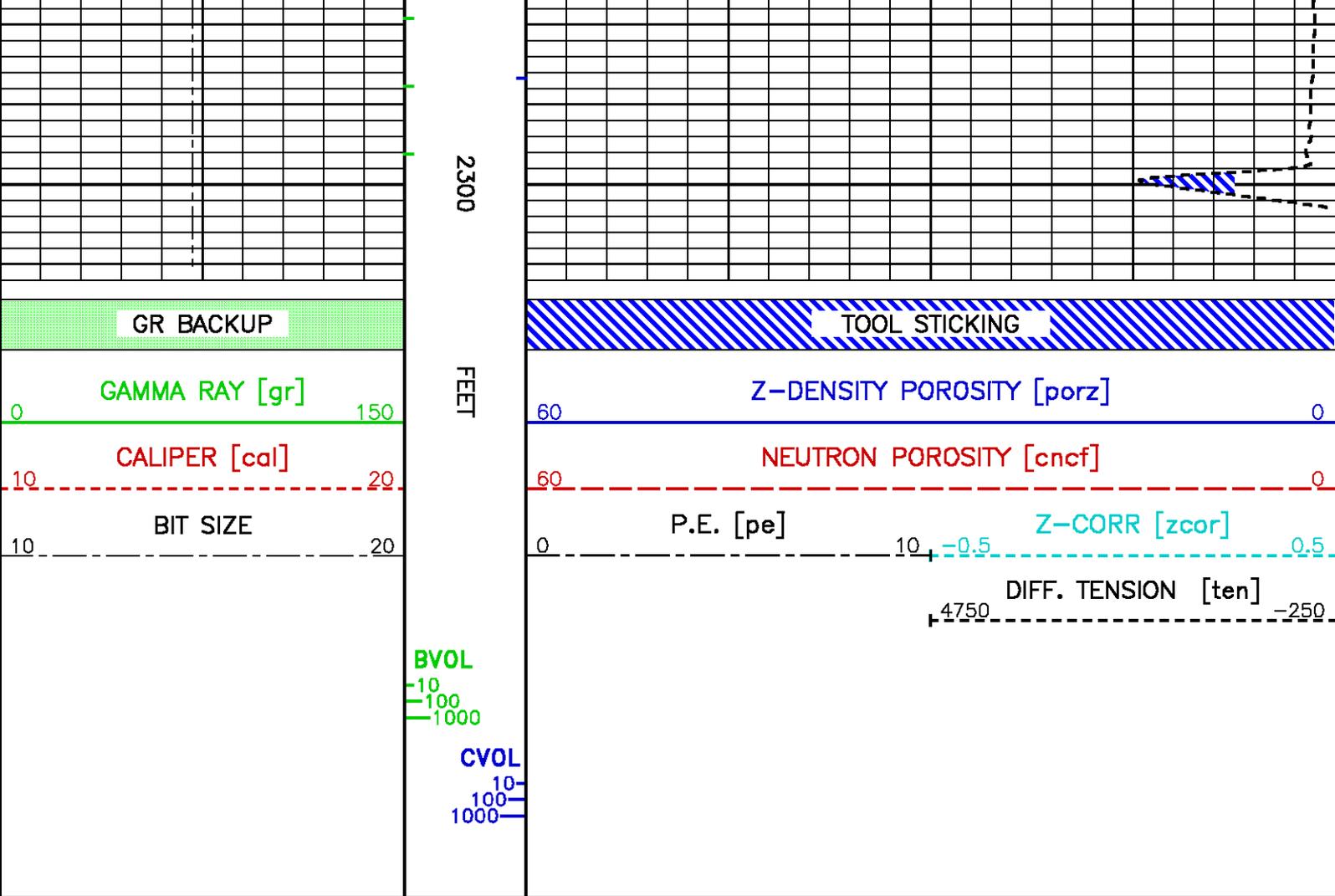
### CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)						
BIT	0.00	CNCF	92.00	PE	81.00	TEN	0.00
CAL	81.50	GR	99.00	PORZ	81.00	ZCOR	81.00

**Presentation** : cpu1:/dat1a/575995/ZDLCN\_REPEAT.pdf [5"/100' Scale]  
**Plot Interval** : 1975.75 - 2310.25 Feet  
  
**Data File 1** : F1 : cpu1:/dat1a/575995/k771103.aff  
**Created On** : Nov 15 12:36:34 2009  
**Company** : SIERRA GEOTHERMAL POWER, INC.  
**Well** : ALUM 25-29  
**Field** : ALUM  
**File Interval** : 1961.25 - 2310.25 Feet  
**Oct** : k7711







### CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/575995/k771l.tp1

#### GR PRIMARY CALIBRATION SUMMARY

TOOL #: <b>1329XA 10203000</b>		DATE/TIME PERFORMED: <b>Sun Oct 25 14:28:31 2009</b>				
UNIT #: <b>3885TD ML4232</b>		CALB JIG #: <b>4702NK DA-321</b>				
	BACKGROUND CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND CALBRTR ON (gAPI)	CALBRTR (gAPI)	
GR	<b>269.02</b>	<b>1162.96</b>	<b>0.168</b>	<b>45.14</b>	<b>150</b>	
		<small>830.0 960.0</small>				

#### GR PRIMARY VERIFICATION SUMMARY

TOOL #: <b>1329XA 10203000</b>		DATE/TIME PERFORMED: <b>Sun Oct 25 14:33:28 2009</b>			
UNIT #: <b>3885TD ML4232</b>		VERI JIG #: <b>4702NK DA-321</b>			
	BACKGROUND CALBRTR ON (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	<b>269.44</b>	<b>1191.73</b>	<b>0.168</b>	<b>45.21</b>	<b>154.76</b>
					<small>140.00 160.00</small>

#### GR BEFORE LOG VERIFICATION SUMMARY



## CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2446XA 179981 DATE/TIME PERFORMED: Sun Nov 15 14:40:25 2009 DAYS SINCE CAL: 21

UNIT #: 3885TD ML4232 ICE BLOCK #: 4717ND OD-112

	MEASURED CPS	DEADTM CPS	CORR	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	<span style="border: 1px solid black; padding: 2px;">1675.10</span>	<span style="border: 1px solid black; padding: 2px;">1745.30</span>					
SSN	<span style="border: 1px solid black; padding: 2px;">3945.06</span>	<span style="border: 1px solid black; padding: 2px;">4283.10</span>					
RATIO				<span style="border: 1px solid black; padding: 2px;">2.45408</span>	<span style="border: 1px solid black; padding: 2px;">1.02819</span>	<span style="border: 1px solid black; padding: 2px;">2.52467</span>	
CN							<span style="border: 1px solid black; padding: 2px;">18.195</span> <span style="border: 1px solid black; padding: 2px;">14.378 18.379</span>

## CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2234XA 10334913 DATE/TIME PERFORMED: Sun Oct 25 11:23:52 2009

UNIT #: 3885TD ML4232

	SMALL RING	LARGE RING	MULT	ADD	SMALL RING (In)	LARGE RING (In)
CALIPER	<span style="border: 1px solid black; padding: 2px;">1746.0</span>	<span style="border: 1px solid black; padding: 2px;">2563.6</span>	<span style="border: 1px solid black; padding: 2px;">0.00749</span>	<span style="border: 1px solid black; padding: 2px;">-5.20505</span>	<span style="border: 1px solid black; padding: 2px;">7.875</span>	<span style="border: 1px solid black; padding: 2px;">14.000</span>

## CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10334913 DATE/TIME PERFORMED: Sun Nov 15 12:03:07 2009 DAYS SINCE CAL: 21

UNIT #: 3885TD ML4232

	I.D.	MULT	ADD	I.D. (In)
CALIPER	<span style="border: 1px solid black; padding: 2px;">2729.6</span>	<span style="border: 1px solid black; padding: 2px;">0.00749</span>	<span style="border: 1px solid black; padding: 2px;">-5.43863</span>	<span style="border: 1px solid black; padding: 2px;">15.010</span>

## CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10334913 DATE/TIME PERFORMED: Sun Nov 15 14:09:05 2009 DAYS SINCE CAL: 21

UNIT #: 3885TD ML4232

	I.D.	MULT	ADD	I.D. (In)
CALIPER	<span style="border: 1px solid black; padding: 2px;">2739.2</span>	<span style="border: 1px solid black; padding: 2px;">0.00749</span>	<span style="border: 1px solid black; padding: 2px;">-5.43863</span>	<span style="border: 1px solid black; padding: 2px;">15.082</span> <span style="border: 1px solid black; padding: 2px;">14.510 15.510</span>

## ZDL PRIMARY CALIBRATION SUMMARY

TOOL: 2234XA 10334913 DATE/TIME PERFORMED: Sun Oct 25 11:51:34 2009

UNIT: 3885TD ML4232 CALB BLKS: 2225XA 094299 CS SRC: 4705XA 27781B

	SS CS PK (Channel)	LS CS PK (Channel)	SS_BKGD (cps)	LS BKGD (cps)			
	<span style="border: 1px solid black; padding: 2px;">225.3</span> <span style="border: 1px solid black; padding: 2px;">220.0 230.0</span>	<span style="border: 1px solid black; padding: 2px;">225.1</span> <span style="border: 1px solid black; padding: 2px;">220.0 230.0</span>	<span style="border: 1px solid black; padding: 2px;">1363.3</span>	<span style="border: 1px solid black; padding: 2px;">1697.9</span>			
	SS (cps)	LS (cps)	SHR	DEN (g/cm3)	CORR (g/cm3)	PE (b/e)	
MG (LO PE)	<span style="border: 1px solid black; padding: 2px;">27679.6</span>	<span style="border: 1px solid black; padding: 2px;">14416.8</span>	<span style="border: 1px solid black; padding: 2px;">0.615</span> <span style="border: 1px solid black; padding: 2px;">0.565 0.663</span>	<span style="border: 1px solid black; padding: 2px;">1.699</span>	<span style="border: 1px solid black; padding: 2px;">0.003</span>	<span style="border: 1px solid black; padding: 2px;">2.150</span>	
AL	<span style="border: 1px solid black; padding: 2px;">16156.7</span>	<span style="border: 1px solid black; padding: 2px;">1444.9</span>		<span style="border: 1px solid black; padding: 2px;">2.695</span>	<span style="border: 1px solid black; padding: 2px;">-0.009</span>		
AL + SHIM	<span style="border: 1px solid black; padding: 2px;">22362.0</span>	<span style="border: 1px solid black; padding: 2px;">2545.5</span>		<span style="border: 1px solid black; padding: 2px;">2.613</span>	<span style="border: 1px solid black; padding: 2px;">0.157</span>		
MG + SHIM (HI PE)	<span style="border: 1px solid black; padding: 2px;">13486.0</span>	<span style="border: 1px solid black; padding: 2px;">6894.9</span>	<span style="border: 1px solid black; padding: 2px;">0.248</span>			<span style="border: 1px solid black; padding: 2px;">8.700</span>	

RATIO AL + SHIM/AL

1.38	1.78
1.32	1.42
1.71	9.98
1.65	1.78

RATIO MG/AL

0.210 0.270

### ZDL BEFORE LOG VERIFICATION SUMMARY

TOOL #: **2234XA 10334913** DATE/TIME PERFORMED: **Fri Nov 13 12:30:53 2009** DAYS SINCE CAL: **19**

UNIT #: **3885TD ML4232**

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1703.9	224.6	1278.5
	1597.9 1797.9	220.0 230.0	1100.0 1550.0
SS	1350.5	224.5	1313.6
	1283.3 1483.3	220.0 230.0	1100.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0	76.1	
	4.8 5.2	60.0 120.0	

### ZDL AFTER LOG VERIFICATION SUMMARY

TOOL #: **2234XA 10334913** DATE/TIME PERFORMED: **Sun Nov 15 14:45:51 2009** DAYS SINCE CAL: **21**

UNIT #: **3885TD ML4232**

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1686.1	224.0	1269.9
	1597.9 1797.9	220.0 230.0	1100.0 1550.0
SS	1343.1	223.0	1299.6
	1283.3 1483.3	220.0 230.0	1100.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0	66.7	
	4.8 5.2	60.0 120.0	

## INSTRUMENT CONFIGURATION

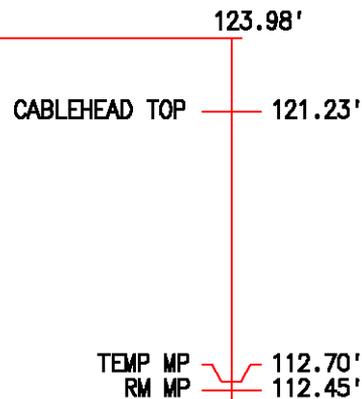
Source File: /dat1a/575995/k7711"-tdg

**CABLEHEAD**  
 Series : CABL338  
 Mnemonic : CBLH  
 Diameter : 3.38"  
 Weight : 24 lbs  
 Length : 5.50'

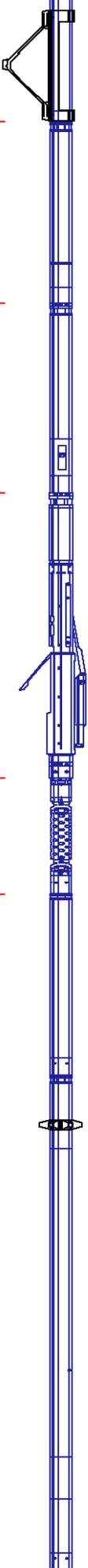
**SWIVEL**  
 Series : 3944XD  
 Mnemonic : SWVL

**TTRM SUB**  
 Series : 3981XA  
 Mnemonic : TTRM  
 Diameter : 3.63"

**WTS COMMON REMOTE**



Series : 3514XB  
Mnemonic : WTS  
Diameter : 3.63"  
Weight : 126 lbs  
Length : 6.36'



DIGITAL SPECTRALOG

Series : 1329XA  
Mnemonic : DSL  
Diameter : 3.63"  
Weight : 130 lbs  
Length : 7.31'

GR MP — 99.24'

COMPENSATED NEUTRON

Series : 2446XA  
Mnemonic : CN  
Diameter : 3.63"  
Weight : 150 lbs  
Length : 7.59'

LSN MP — 92.68'  
SSN MP — 92.29'

Z-DENSILOG

Series : 2234XA  
Mnemonic : ZDL  
Diameter : 4.88"  
Weight : 360 lbs  
Length : 11.22'

CAL MP — 82.02'  
LSD MP — 81.31'  
SSD MP — 80.91'

KNUCKLE JOINT (DOUBLE)

Series : 3939XA  
Mnemonic : KNJT  
Diameter : 3.38"  
Weight : 90 lbs

HIGH DEFINITION INDUCTION TOOL

Series : 1515XA  
Mnemonic : HDIL  
Diameter : 3.62"  
Weight : 415 lbs  
Length : 27.13'

SP MP — 60.95'

XMTR MP — 54.49'

DIGITAL ORIENTATION

Series : 4401XB  
 Mnemonic : ORIT  
 Diameter : 3.38"  
 Weight : 110 lbs  
 Length : 10.81'

**ARRAY ACOUSTILOG ELECTRONICS, 8 CHANNEL**

Series : 1677EA  
 Mnemonic : XMAC  
 Diameter : 3.38"  
 Weight : 102 lbs  
 Length : 7.82'

**CROSS MULTIPOLE ARRAY ACOUSTILOG**

Series : 1678MC  
 Mnemonic : XMF1  
 Diameter : 3.75"  
 Weight : 224 lbs  
 Length : 10.91'

**SHEAR WAVE ACOUSTILOG**

Series : 1678PB  
 Mnemonic : XMAC  
 Diameter : 3.63"  
 Weight : 135 lbs

**MULTI-POLE ARRAY ACOUSTIC**

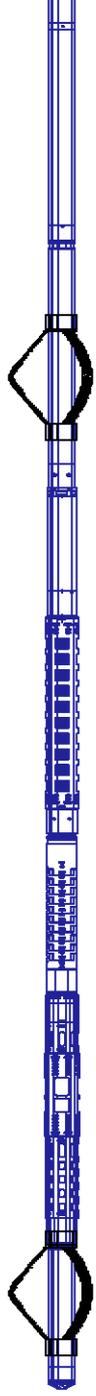
Series : 1678BA  
 Mnemonic : XMAC  
 Diameter : 3.88"  
 Weight : 170 lbs  
 Length : 7.92'

**MULTI-POLE ARRAY ACOUSTIC**

Series : 1678FA  
 Mnemonic : MAC  
 Diameter : 3.38"  
 Weight : 58 lbs

**BULL PLUG 3 3/8**

TOTAL LENGTH: 123.98'  
 TOTAL WEIGHT: 2257 lbs  
 MAX DIAMETER: 0'4.88"



ORIENT MP — 36.24'

R8 — 23.01'  
 R7 — 22.51'  
 R6 — 22.01'  
 R5 — 21.51'  
 R4 — 21.01'  
 R3 — 20.51'  
 R2 — 20.01'  
 R1 — 19.51'

MONOPOLE T2 — 11.01'  
 QUADRUPOLE T5 — 11.01'  
 X-DIPOLE T3 — 9.26'  
 Y-DIPOLE T4 — 9.26'  
 MONOPOLE T1 — 7.52'

0.00'



COMPANY SIERRA GEOTHERMAL POWER, INC.  
 WELL ALUM 25-29  
 FIELD ALUM  
 COUNTY ESMERALDA STATE NEVADA

FILE NO: \_\_\_\_\_  
 API NO: 27-009-90074



LOCATION:  
2235.18' FSL & 938.11' FWL  
SW/C  
 SEC 29 TWP 1N RGE 38.5E

ELEVATIONS:  
 KB 4919.57 FT  
 DF \_\_\_\_\_  
 GL 4903.57 FT  
 DATE 15-NOV-2009