



Baker Atlas



FILE NO:

COMPANY

SIERRA GEOTHERMAL POWER, INC.

WELL

ALUM 25-29

API NO:

FIELD

ALUM

27-009-90074

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

ZDL/CN

STAR/CBIL

ELEVATIONS:

KB 4919.57 FT

DF

GL 4903.57 FT

G.L.

ELEVATION

4903.57 FT

K.B.

16.0 FT

ABOVE P.D.

K.B.

DATE 15-NOV-2009

RUN TRIP

1

1

SERVICE ORDER

575895

DEPTH DRILLER

2300 FT

DEPTH LOGGER

2299 FT

BOTTOM LOGGED INTERVAL

2285 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

9.0 LB/G

54 S

PH

9.0

10.0 CS

SOURCE OF SAMPLE

FLOWLINE

RM AT MEAS. TEMP.

2.53 OHMM

61 DEGF

RM 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.

ML-4232

FALLON, NV

VERCINAK

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

DELT M = 51.3 MICS/FT

THANKS FOR USING BAKER ATLAS
CREW: LAPOINT / 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	ORI	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 20:56:23 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)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.l)	medium (1)		"	"
DT24	FILTER ()	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	14.750	in	TOP	BOTTOM
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (acbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (acbh*)	14.750	in	"	"

ACOUSTIC POROSITY

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACOUSTIC POROSITY	POROSITY TYPE	WYLLIE		TOP	BOTTOM
	DTmatrix	51.30	us/ft	"	"
	DTfluid	190.00	us/ft	"	"
	DTshale	100.00	us/ft	"	"
	MOD. WYLLIE 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 (ft)	
DELTA-T REJECTION RANGE	REJECTION DTmin	40	us/ft	TOP	BOTTOM
	REJECTION DTmax	180	us/ft	"	"
FIRST ARRIVAL PICK	SEARCH START OFFSET (sfan1*)	29	us	"	"
	SEARCH START OFFSET (sfan2*)	29	us	"	"
	SEARCH START OFFSET (sfan3*)	29	us	"	"
	SEARCH START OFFSET (sfan4*)	29	us	"	"
	SEARCH WINDOW LENGTH	1400	us	TOP	882.250
		1200	us	882.250	BOTTOM
	THRESHOLD FACTOR	0.45		TOP	495.250
		0.30		495.250	BOTTOM
	THRESHOLD MINIMUM (sfan1*)	3.0	pct	TOP	489.250
		1.8	pct	489.250	BOTTOM
	THRESHOLD MINIMUM (sfan2*)	3.0	pct	TOP	488.750
		1.8	pct	488.750	BOTTOM
	THRESHOLD MINIMUM (sfan3*)	3.0	pct	TOP	488.250
		1.8	pct	488.250	BOTTOM

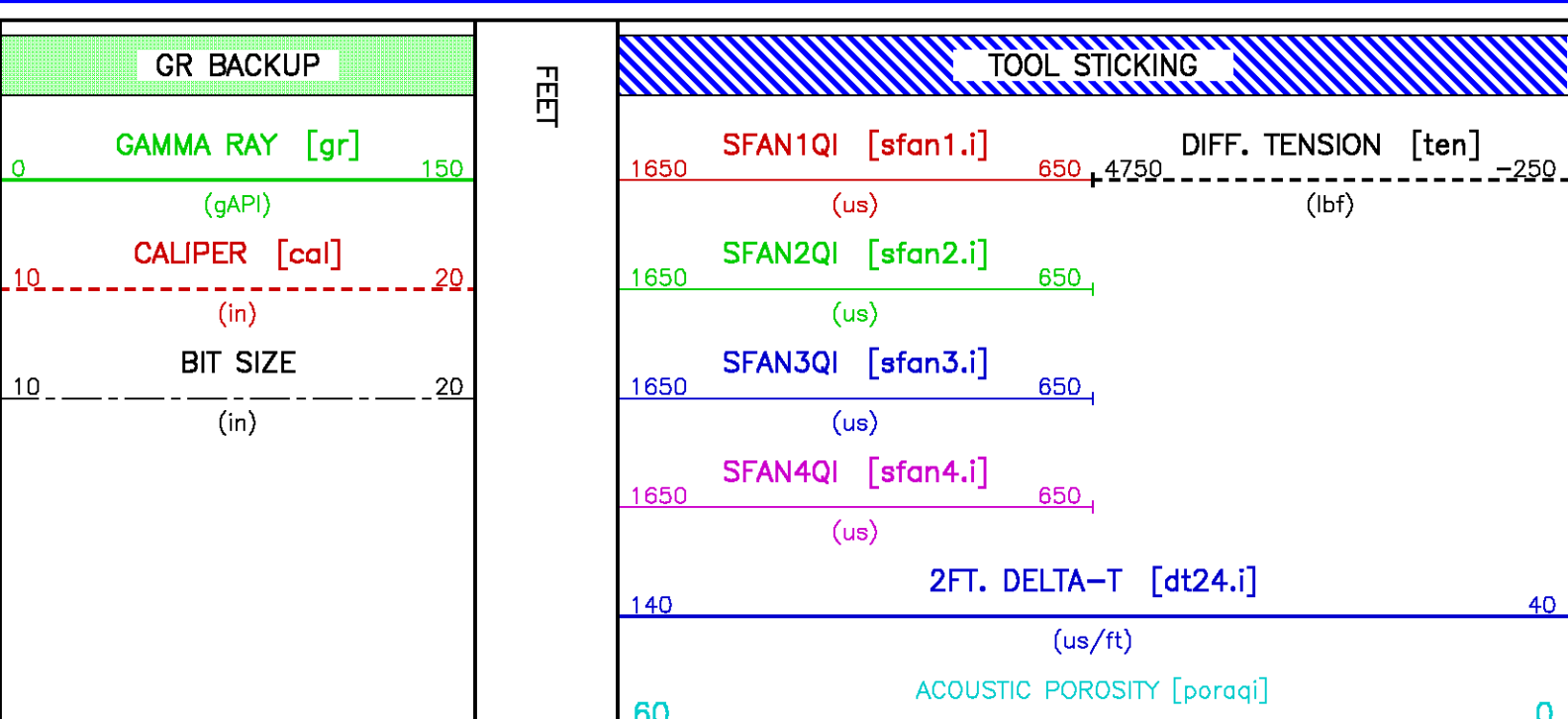
ACOUSTIC QUALITY CONTROL				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
CYCLE SKIP LIMIT	CYCLE SKIP LIMIT	100	us	TOP BOTTOM

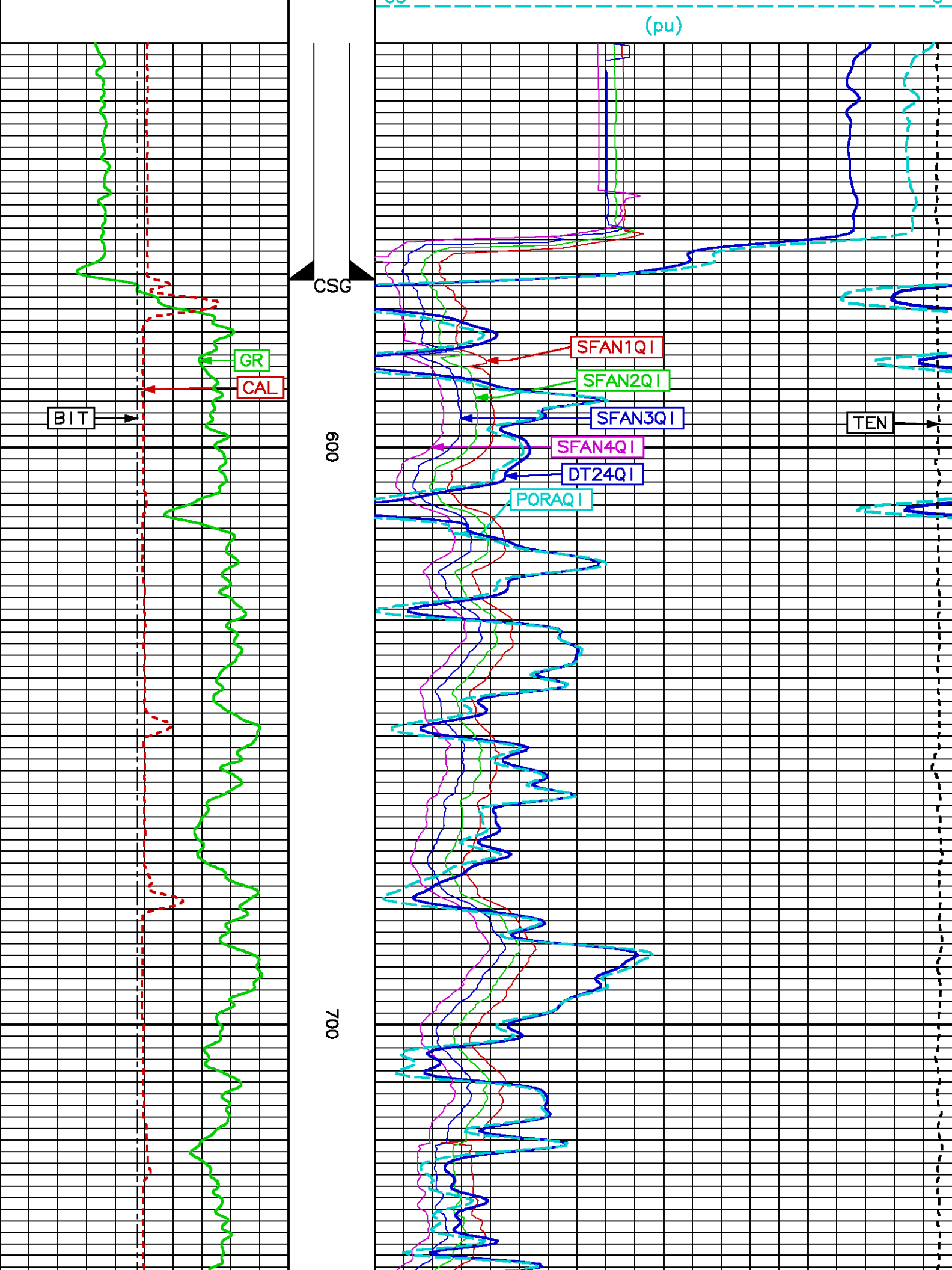
ACOUSTIC WAVEFORM FILTER				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP '' ''
	LOW FREQ CUTOFF	4000	Hz	'' ''
	HIGH FREQ CUTOFF	20000	Hz	'' ''

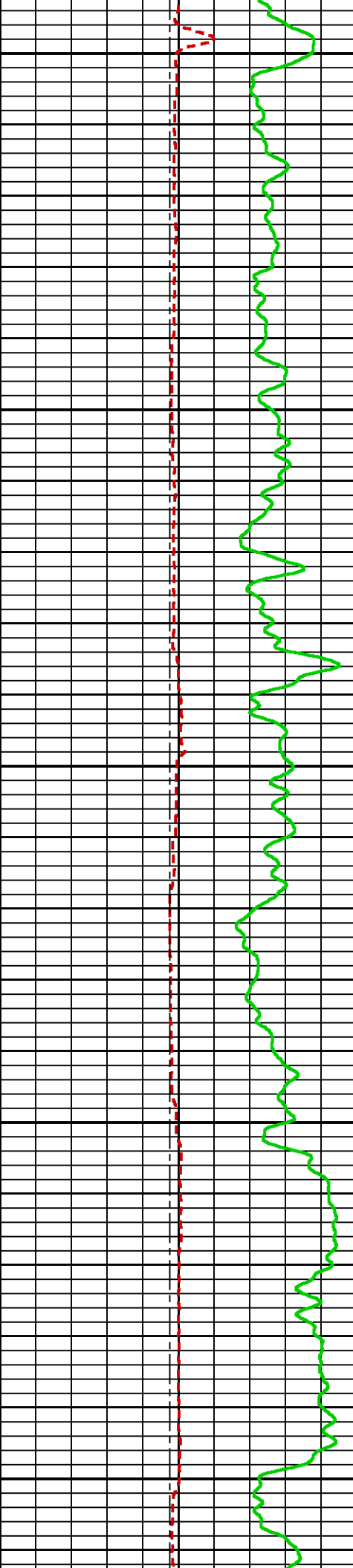
CURVE DESCRIPTION REPORT			
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 15 12:51:25 2009	BIT SIZE
F1:CAL	CAL	Nov 15 12:51:25 2009	CALIPER
F1:DT24QI	DT24.I	Nov 15 12:51:25 2009	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Nov 15 12:51:25 2009	GAMMA RAY
F1:PORAQI	PORA.I	Nov 15 12:51:25 2009	ACOUSTIC POROSITY
F1:SFAN1QI	SFAN1.I	Nov 15 12:51:25 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R1
F1:SFAN2QI	SFAN2.I	Nov 15 12:51:25 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R2
F1:SFAN3QI	SFAN3.I	Nov 15 12:51:25 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R3
F1:SFAN4QI	SFAN4.I	Nov 15 12:51:25 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R4
F1:TEN	TEN	Nov 15 12:51:25 2009	DIFFERENTIAL TENSION

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	99.00	SFAN2QI	15.00	TEN	0.00
CAL	81.50	PORAQI	12.50	SFAN3QI	15.00		
DT24QI	12.50	SFAN1QI	14.50	SFAN4QI	15.50		

Presentation	: cpu1:/dat1a/575995/XMAC_MAIN.pdf [5"/100' Scale]
Plot Interval	: 530 - 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

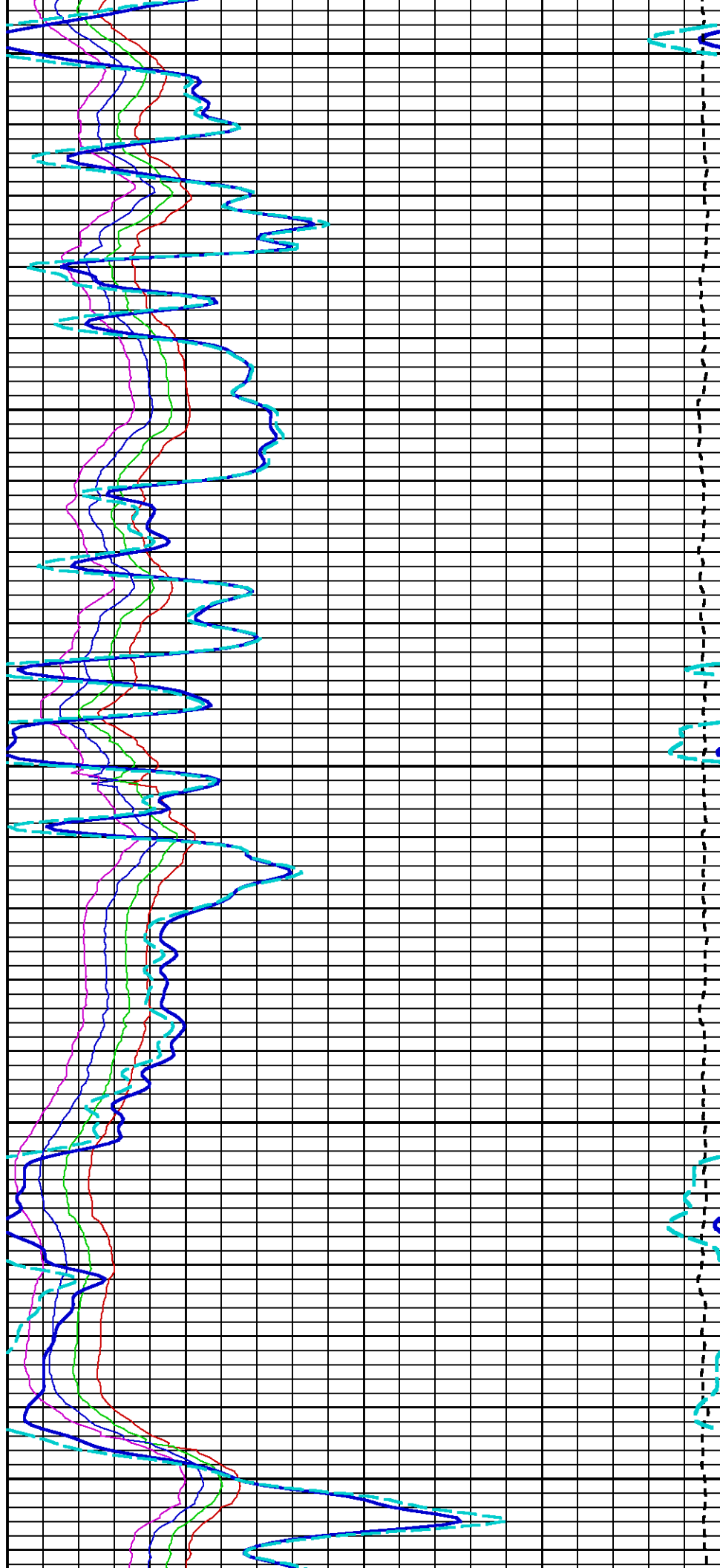


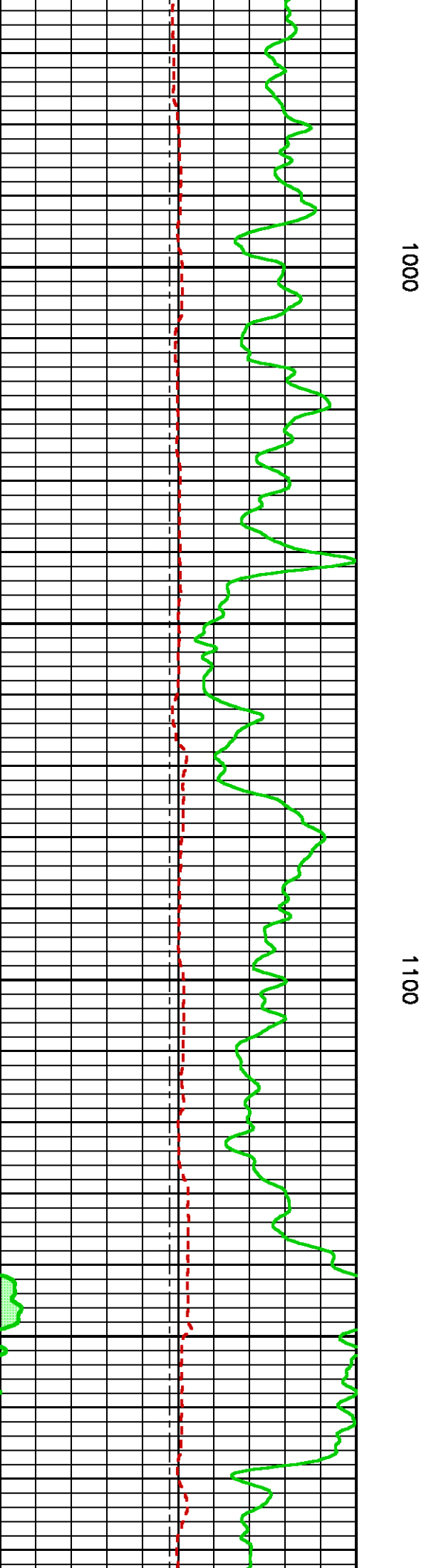
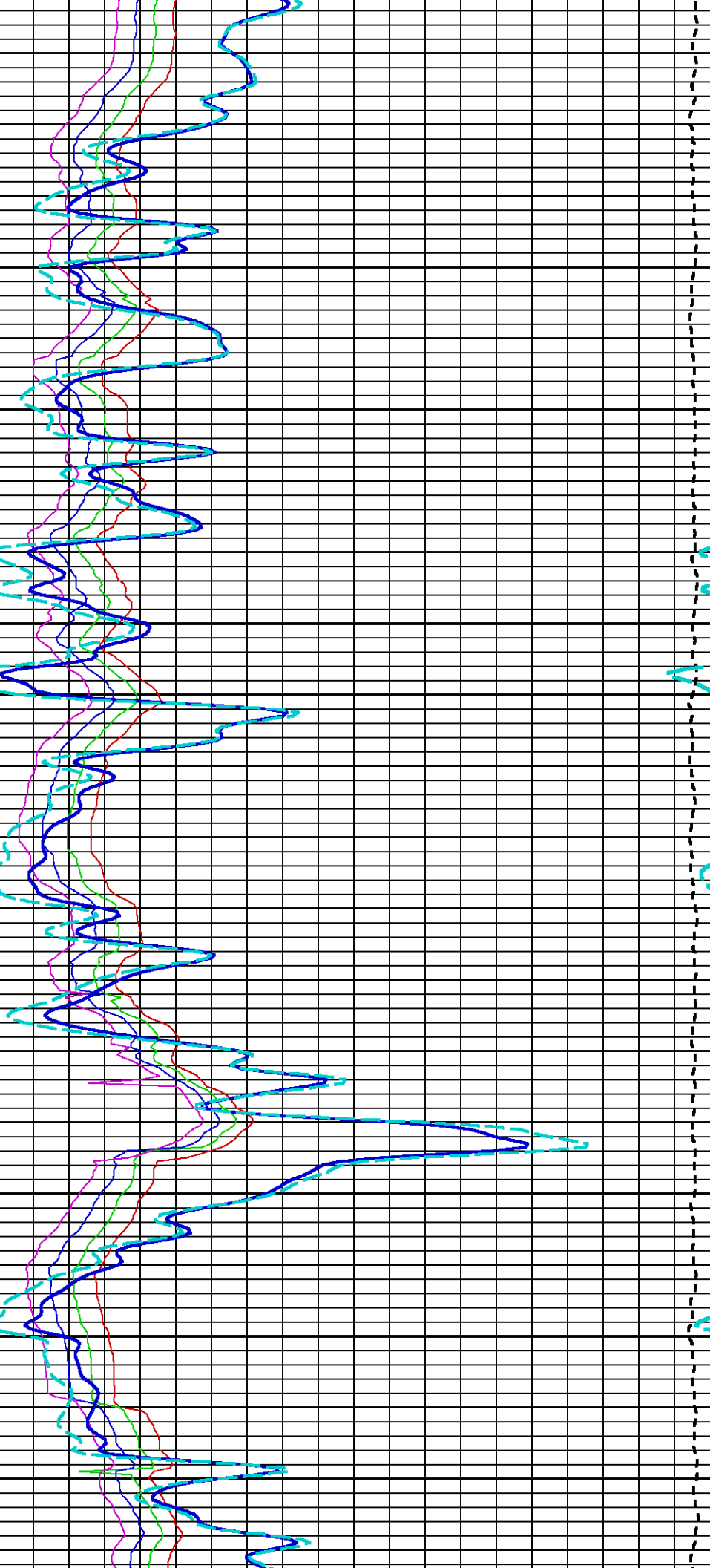


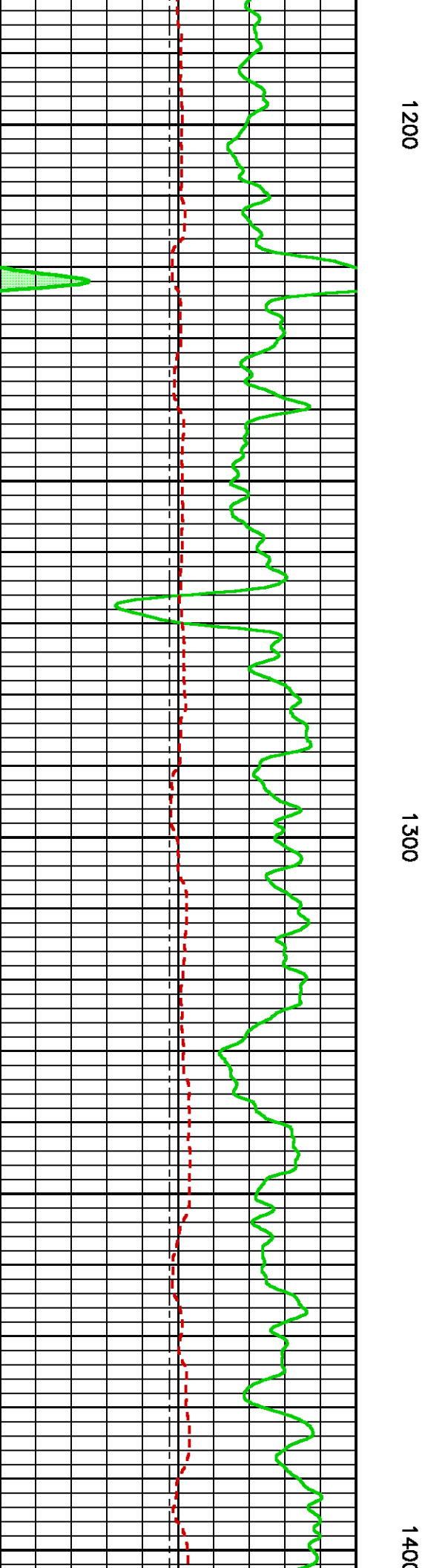
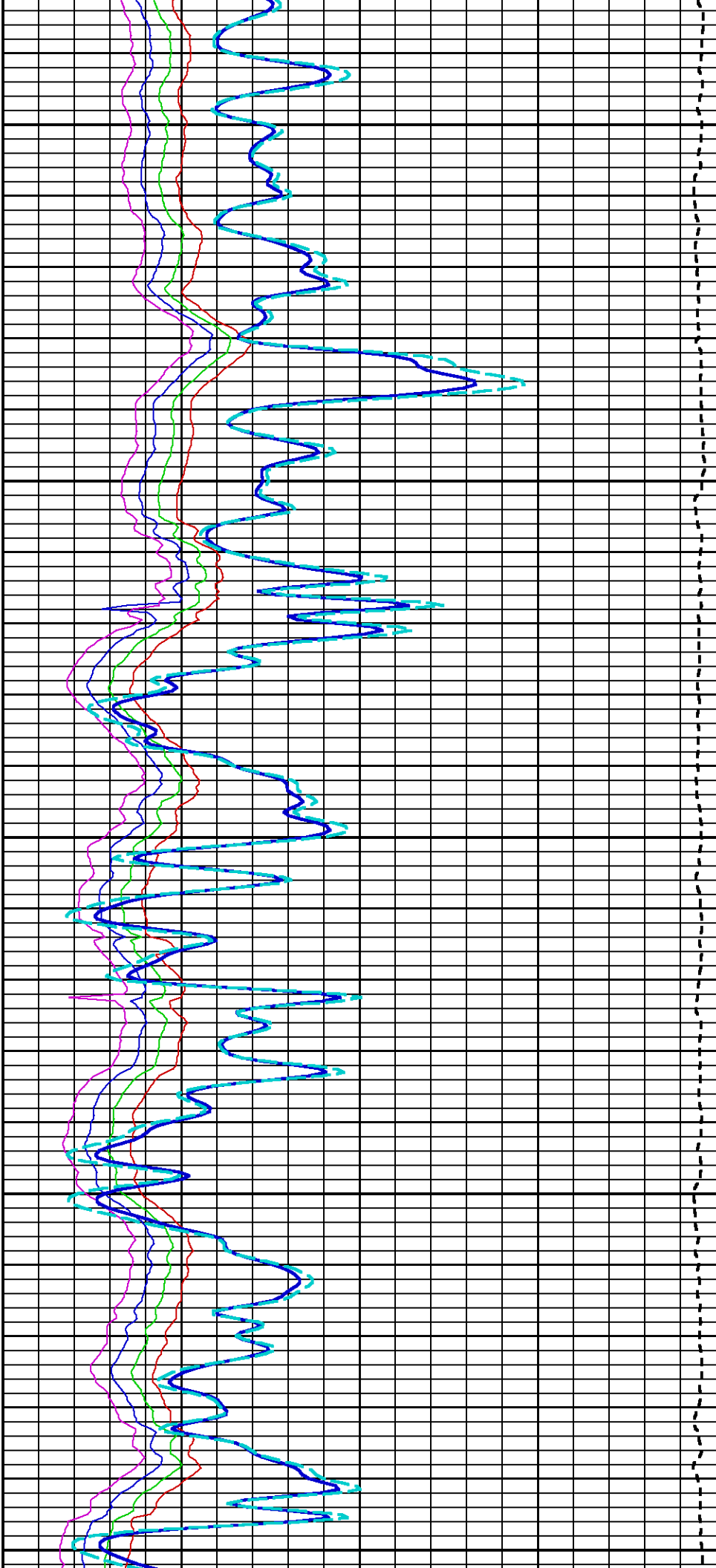


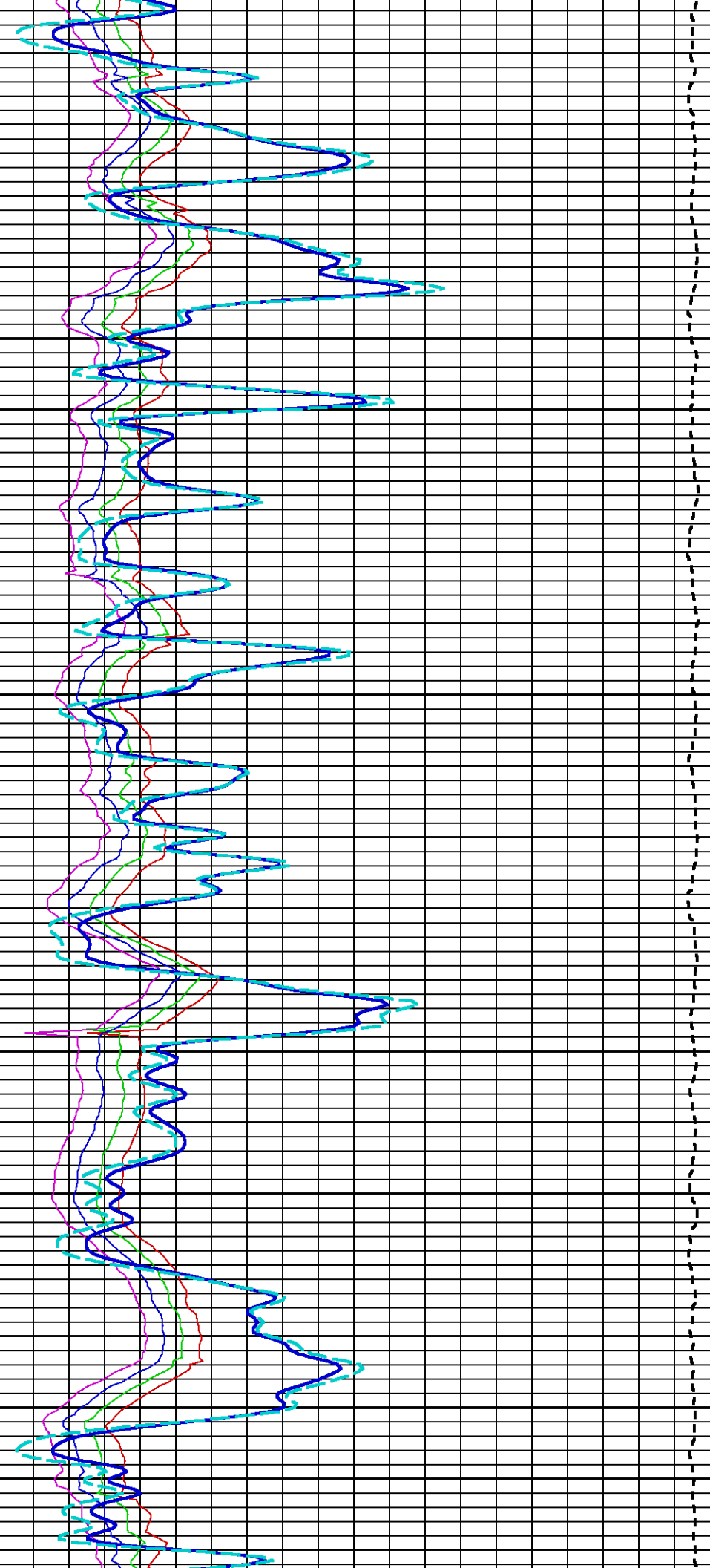
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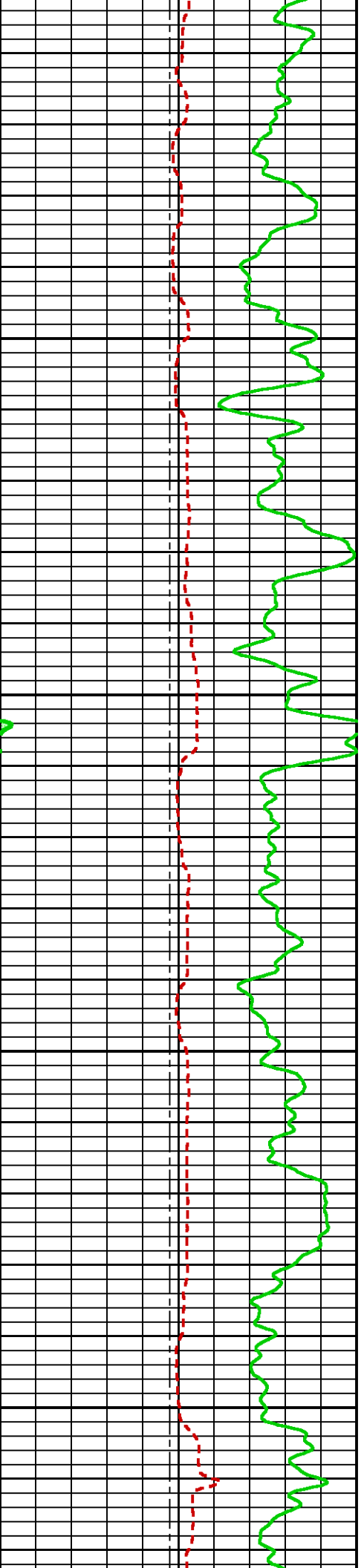


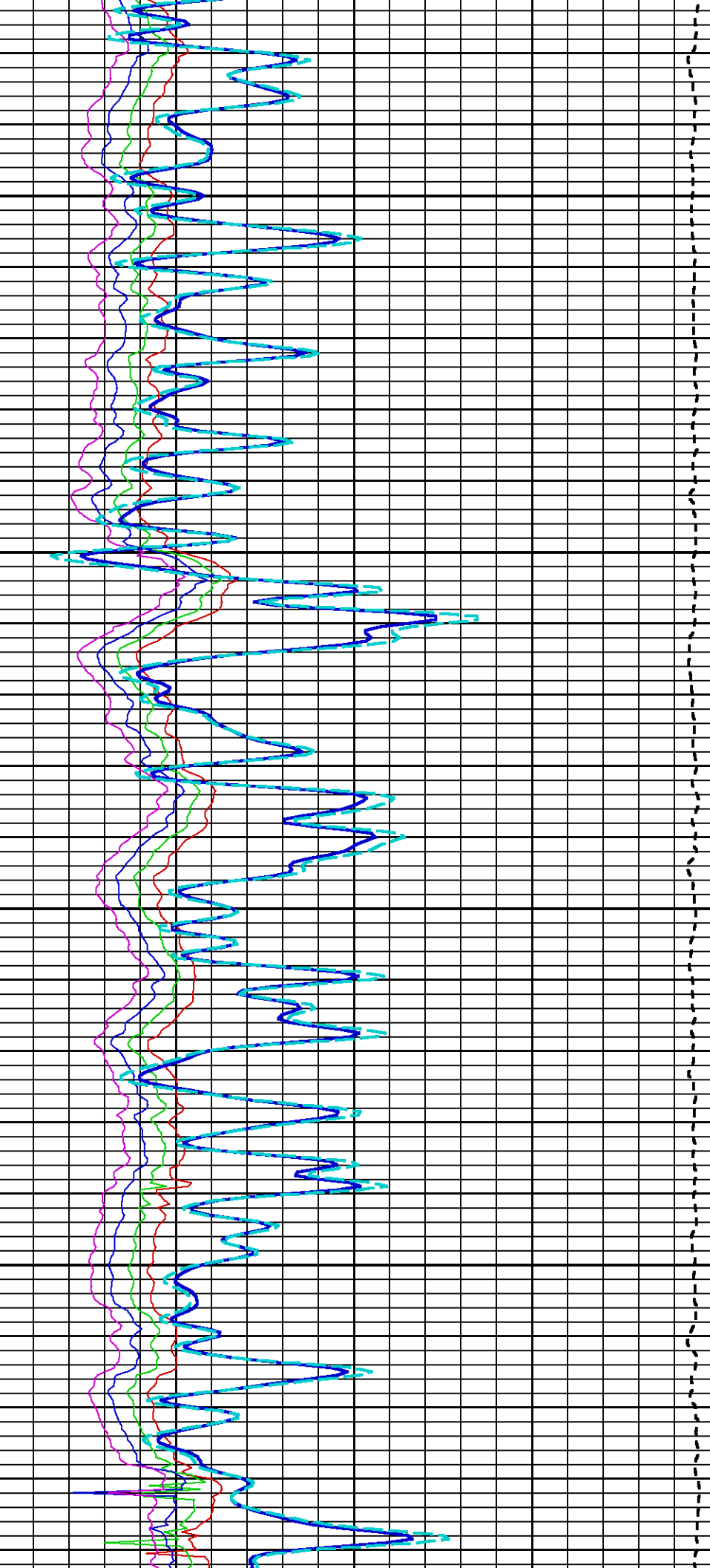






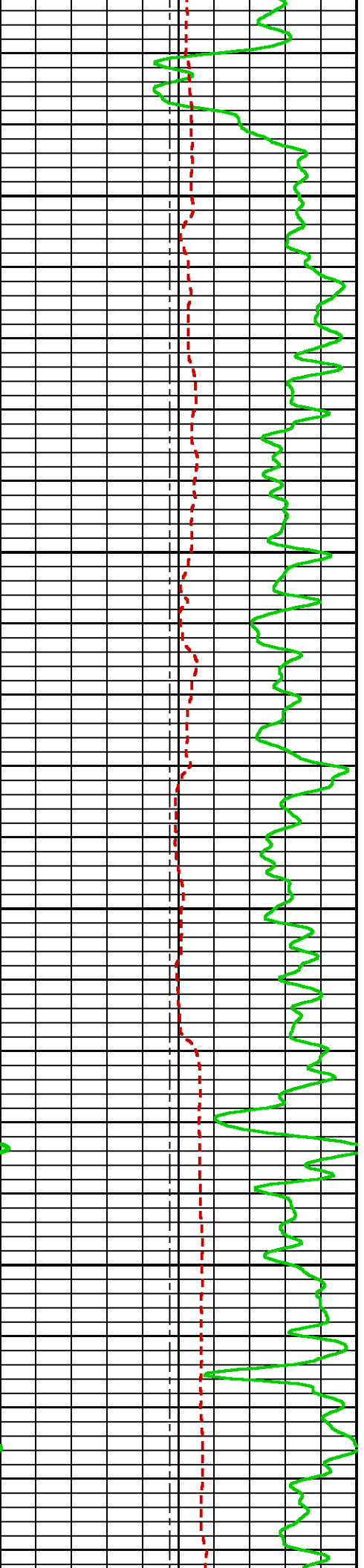
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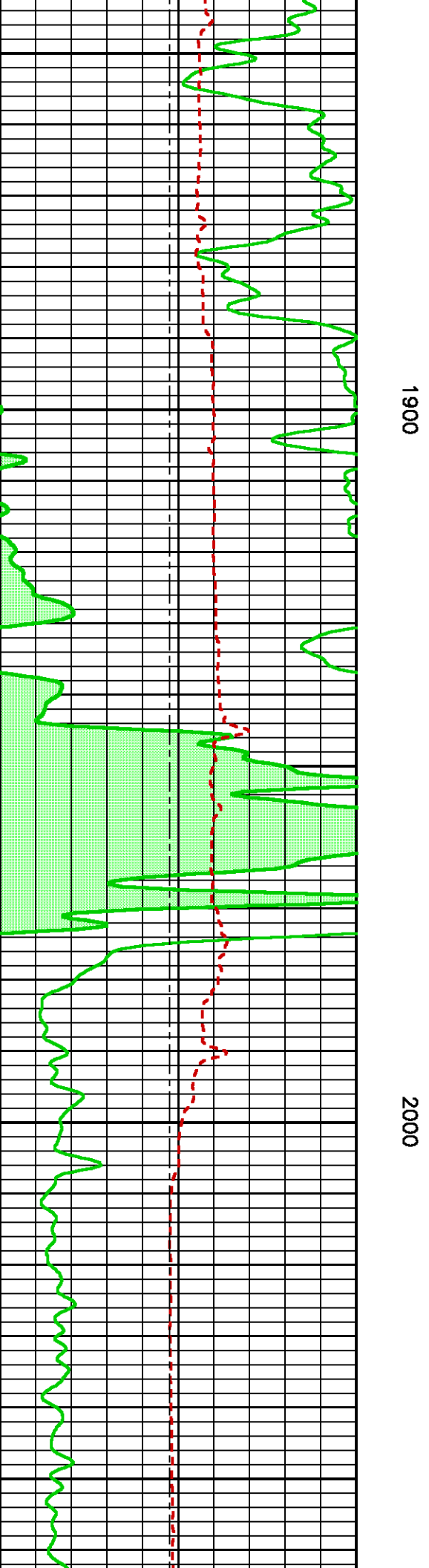
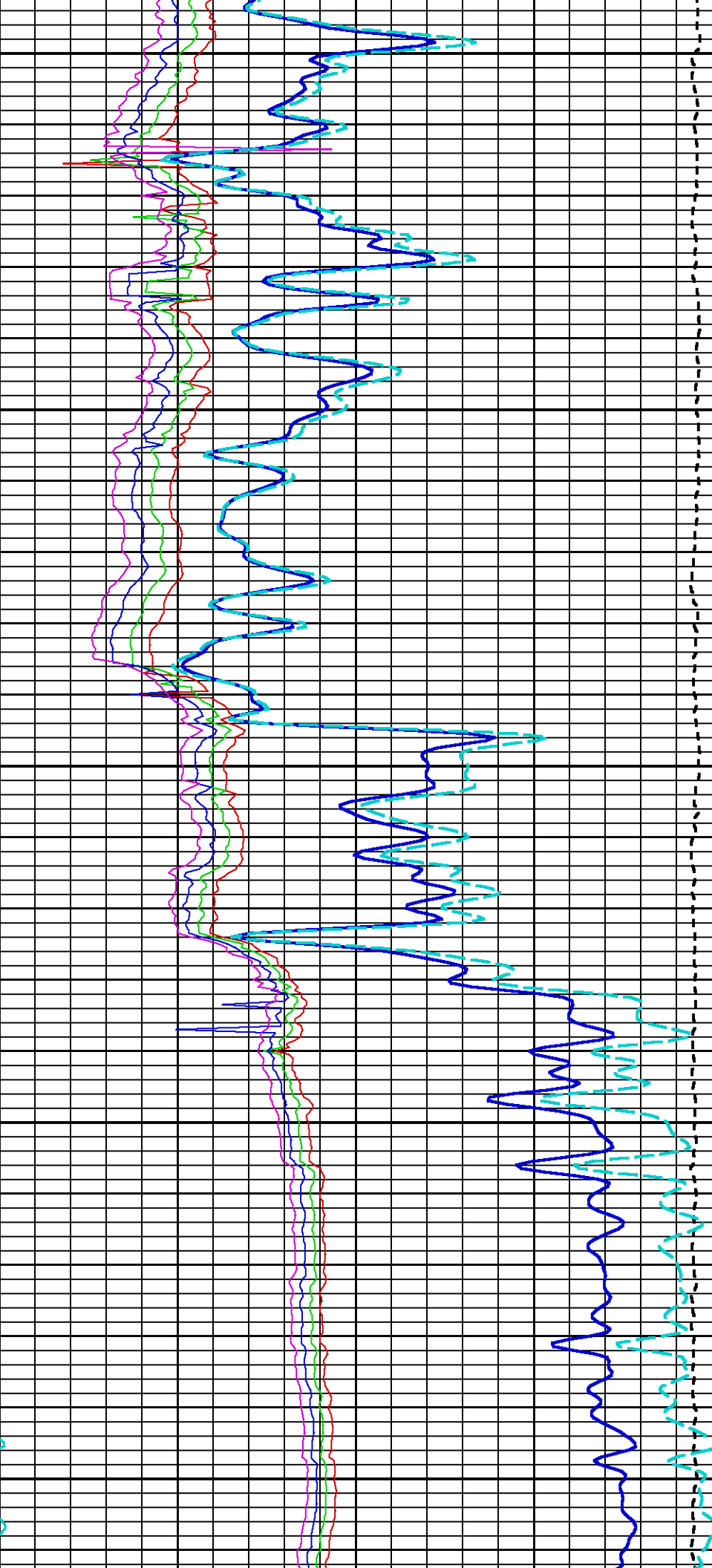


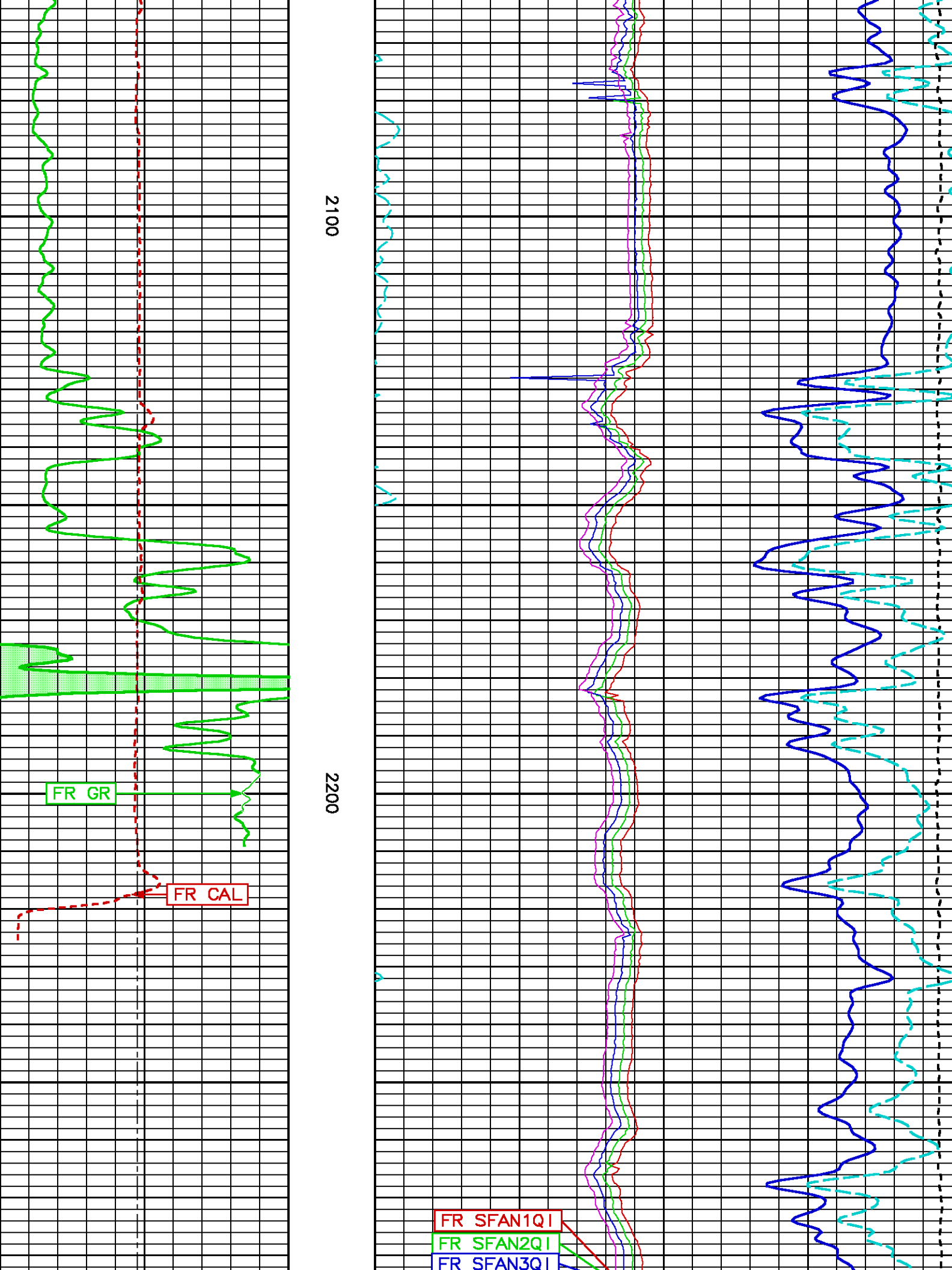


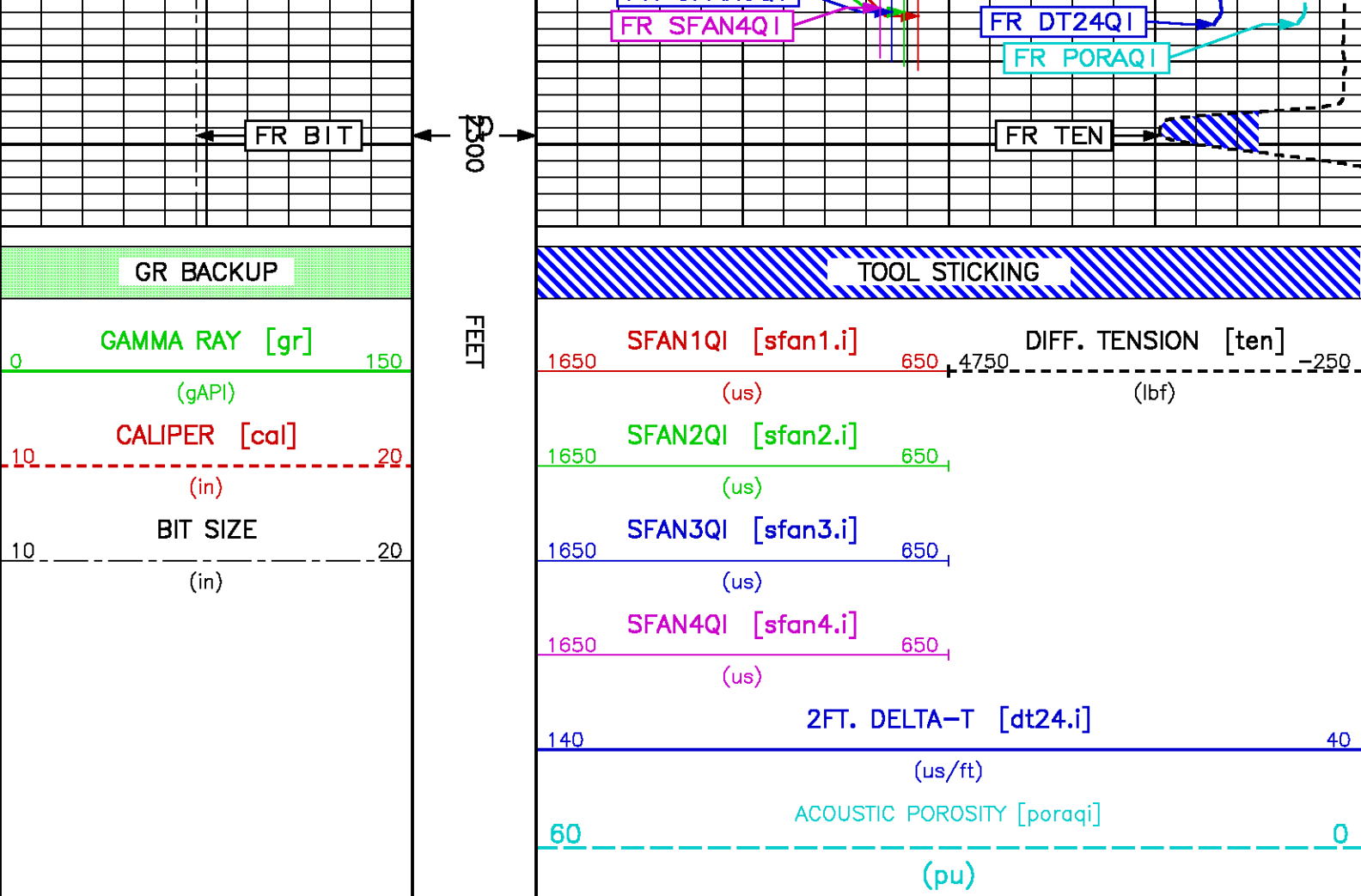
1700

1800









REPEAT LOG

ECLIPS 6.0i Feb 21, 2008
Updates: 1

Sun Nov 15 20:58:56 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)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
DT24	FILTER ()	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
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BIT SIZE	BIT SIZE	14.750	In	TOP	BOTTOM
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (acbh*)	USE CALIPER		''	''
BOREHOLE CORR DIAMETER	FIXED DIAMETER (acbh*)	14.750	In	''	''

ACOUSTIC POROSITY					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACOUSTIC POROSITY	POROSITY TYPE	WYLLIE		TOP	BOTTOM
	DTmatrix	51.30	us/ft	''	''
	DTfluid	190.00	us/ft	''	''
	DTshale	100.00	us/ft	''	''
	MOD. WYLLIE 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 (ft)	
DELTA-T REJECTION RANGE	REJECTION DTmin	40	us/ft	TOP	BOTTOM
	REJECTION DTmax	180	us/ft	''	''
FIRST ARRIVAL PICK	SEARCH START OFFSET {sfan1*}	29	us	''	''
	SEARCH START OFFSET {sfan2*}	29	us	''	''
	SEARCH START OFFSET {sfan3*}	29	us	''	''
	SEARCH START OFFSET {sfan4*}	29	us	''	''
	SEARCH WINDOW LENGTH	1200	us	''	''
	THRESHOLD FACTOR	0.30		''	''
	THRESHOLD MINIMUM {sfan1*}	1.8	pct	''	''
	THRESHOLD MINIMUM {sfan2*}	1.8	pct	''	''
	THRESHOLD MINIMUM {sfan3*}	1.8	pct	''	''
	THRESHOLD MINIMUM {sfan4*}	1.8	pct	''	''
	E3 THRESHOLD	OFF		''	''

ACOUSTIC QUALITY CONTROL					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CYCLE SKIP LIMIT	CYCLE SKIP LIMIT	100	us	TOP	BOTTOM

ACOUSTIC WAVEFORM FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP	BOTTOM
	LOW FREQ CUTOFF	4000	Hz	''	''
	HIGH FREQ CUTOFF	20000	Hz	''	''

CURVE DESCRIPTION REPORT			
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 15 12:36:34 2009	BIT SIZE
F1:CAL	CAL	Nov 15 12:36:34 2009	CALIPER
F1:DT24QI	DT24.I	Nov 15 12:36:34 2009	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Nov 15 12:36:34 2009	GAMMA RAY
F1:PORAQI	PORA.I	Nov 15 12:36:34 2009	ACOUSTIC POROSITY
F1:SFAN1QI	SFAN1.I	Nov 15 12:36:34 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R1
F1:SFAN2QI	SFAN2.I	Nov 15 12:36:34 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R2
F1:SFAN3QI	SFAN3.I	Nov 15 12:36:34 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R3
F1:SFAN4QI	SFAN4.I	Nov 15 12:36:34 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R4
F1:TEN	TEN	Nov 15 12:36:34 2009	DIFFERENTIAL TENSION

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	99.00	SFAN2QI	15.00	TEN	0.00
CAL	81.50	PORAQI	12.50	SFAN3QI	15.00		
DT24QI	12.50	SFAN1QI	14.50	SFAN4QI	15.50		

Presentation	: cpu1:/dat1a/575995/XMAC_REPEAT.pdf [5"/100' Scale]
Plot Interval	: 2050 - 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 : k771l

GR BACKUP

GAMMA RAY [gr]

(gAPI)

CALIPER [cal]

(in)

BIT SIZE

(in)

FEET

2100

TOOL STICKING

SFAN1QI [sfan1.i]

(us)

SFAN2QI [sfan2.i]

(us)

SFAN3QI [sfan3.i]

(us)

SFAN4QI [sfan4.i]

(us)

2FT. DELTA-T [dt24.i]

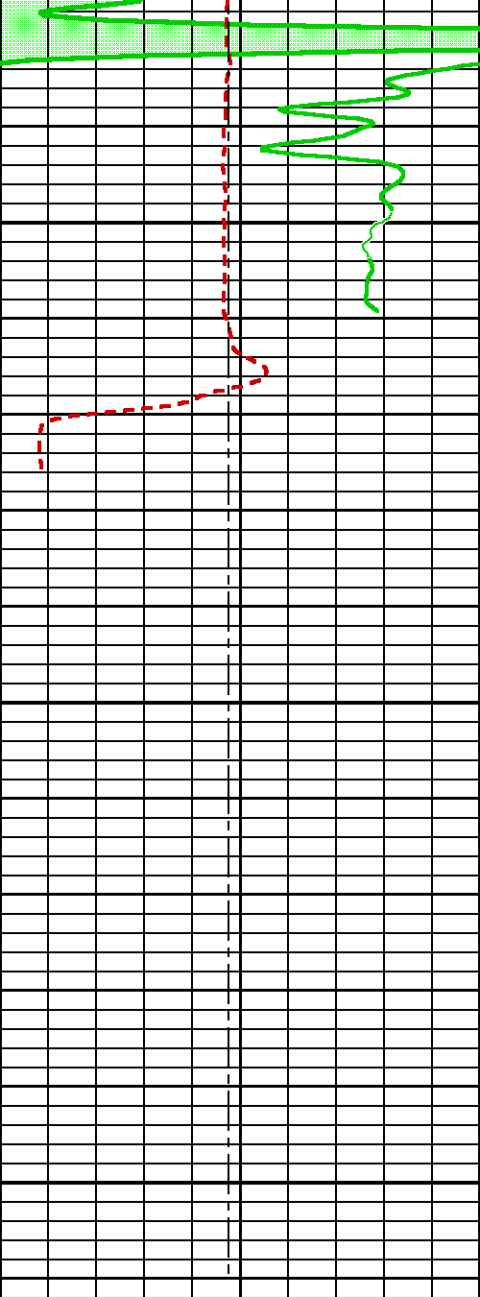
(us/ft)

ACOUSTIC POROSITY [poraqi]

(pu)

DIFF. TENSION [ten]

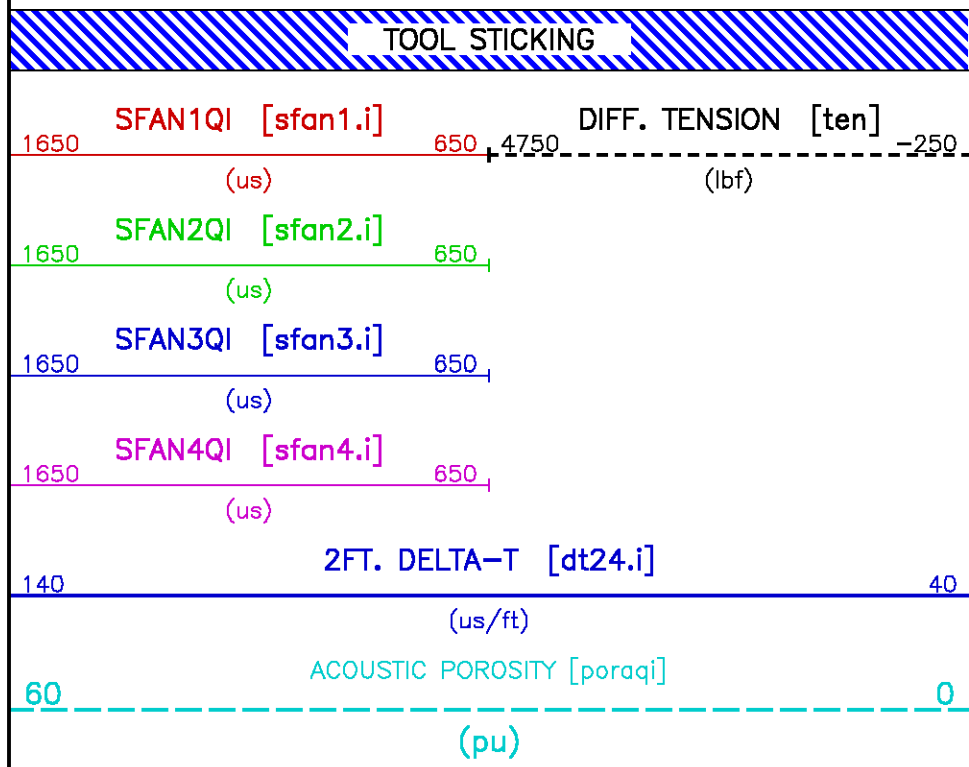
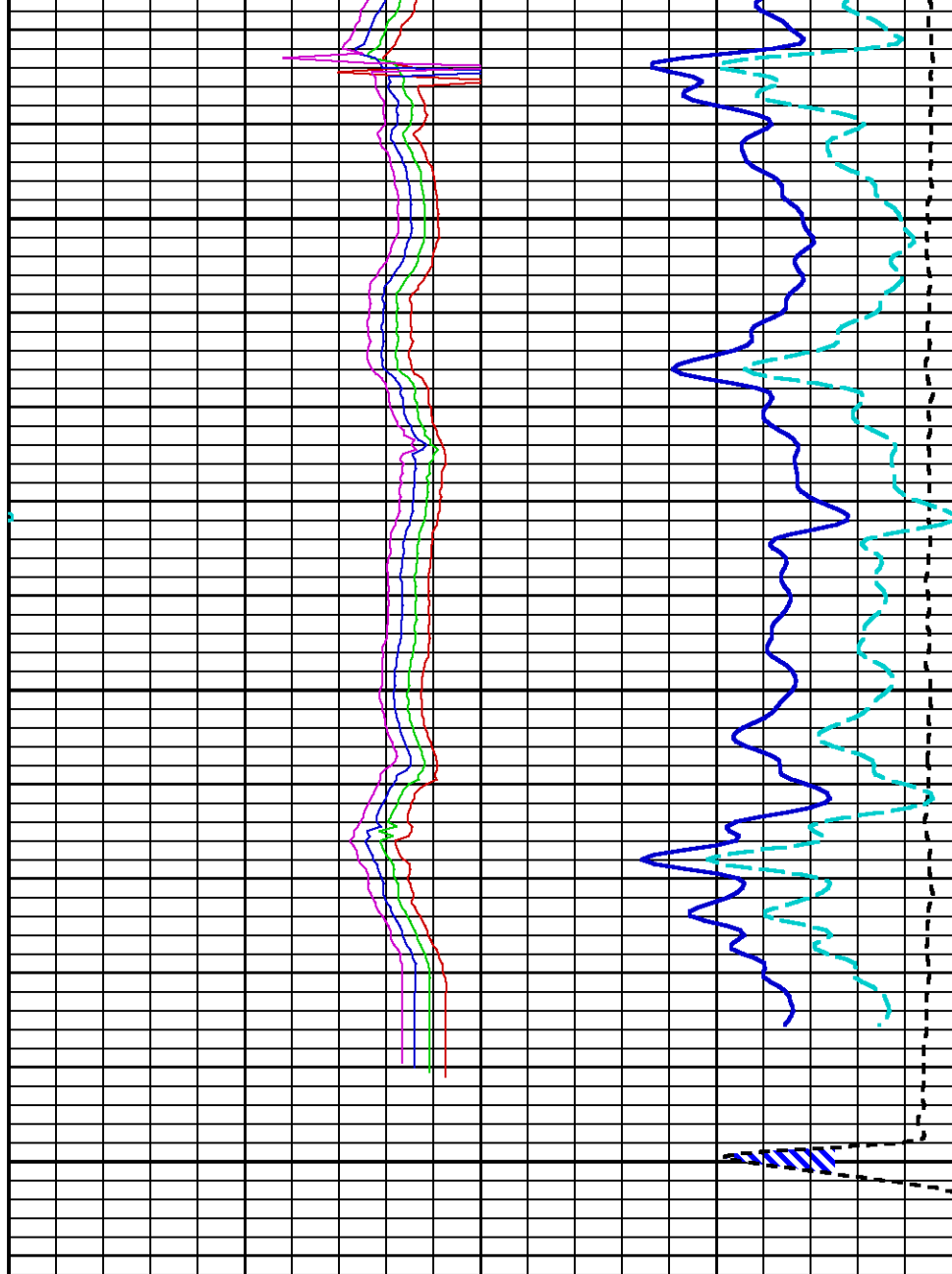
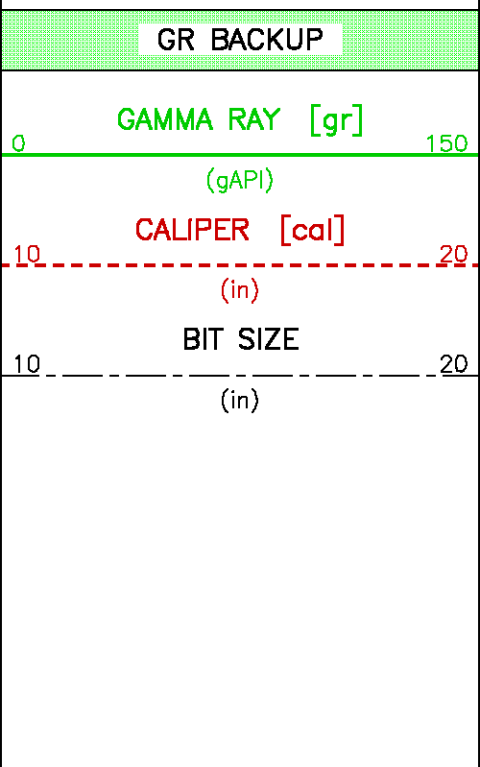
(lbf)



2200

2300

FEET



CALIBRATION / VERIFICATION SUMMARY

Source File: /data/575995/k7711.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Sun Oct 25 14:28:31 2009

UNIT #: 3885TD ML4232

CALB JIG #: 4702NK DA-321

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	269.02	1182.98	893.9 830.0 960.0	0.168	45.14	195.14	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Sun Oct 25 14:33:28 2009

UNIT #: 3885TD ML4232

VERI JIG #: 4702NK DA-321

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	269.44	1191.73	0.168	45.21	199.97	154.76 140.00 160.00

GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Fri Nov 13 13:34:23 2009

DAYS SINCE CAL: 19

UNIT #: 3885TD ML4232

VERI JIG #: 4702NK DA-321

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	337.67	1213.93	0.168	56.66	203.70	147.04 144.76 164.78

GR AFTER LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10203000

DATE/TIME PERFORMED: Sun Nov 15 14:45:39 2009

DAYS SINCE CAL: 21

UNIT #: 3885TD ML4232

VERI JIG #: 4702NK DA-321

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	263.49	1169.18	0.168	44.21	196.18	151.97 137.04 167.04

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	1746.0	2563.6	0.00749	-5.20505	7.875	14.000

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	2729.6	0.00749	-5.43863	15.010

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	2739.2	0.00749	-5.43863	15.082
				14.510 15.510

INSTRUMENT CONFIGURATION

Source File: /dat1a/575995/k771I"-tdg

123.98'

CABLEHEAD

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

CABLEHEAD TOP 121.23'

SWIVEL

Series : 3944XD
Mnemonic : SWVL

TTRM SUB

Series : 3981XA
Mnemonic : TTRM
Diameter : 3.63"

TEMP MP 112.70'
RM MP 112.45'

WTS COMMON REMOTE

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

GR MP 99.24'

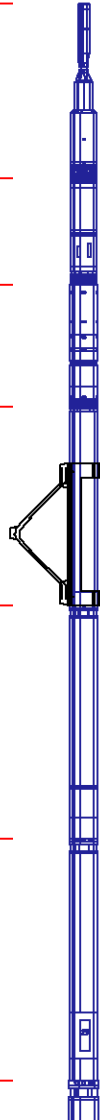
DIGITAL SPECTRALOG

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

LSN MP 92.68'
SSN MP 92.29'

COMPENSATED NEUTRON

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



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'

ORIENT MP 36.24'

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"

R8 23.01'
R7 22.51'
R6 22.01'

Weight : 224 lbs
Length : 10.91'

R5 21.51'
R4 21.01'
R3 20.51'
R2 20.01'
R1 19.51'

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"

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
WELL
FIELD
COUNTY

SIERRA GEOTHERMAL POWER, INC.
ALUM 25-29
ALUM
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