BAKER HUGHES

Baker Atlas

X-MULTIPOLE ARRAY ACOUSTILOG ®1
GAMMA RAY LOG
CALIPER LOG

FOXPS

FILE NO:	COMPANY	SIERRA GEOTHERMAL POWER, INC.
	WELL	ALUM 25-29
API NO: 27-009-60074	FIELD	ALUM
	COUNTY	ESMERALDA STATE NEVADA

Ver. 3.87

TIGHT HOLE

LOCATION:
SHL: 2235.16' FSL & 938.11' FWL
SW/C

SEC 29 TWP 1N RGE 38.5 E

OTHER SERVICES
HDIL
ZDL/CN
STAR/CBIL
TEMP

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		25-NOV-2009			
RUN	TRIP	2	2		
SERVICE ORDER		575996			
DEPTH DRILLER		3314 FT			
DEPTH LOGGER		3313 FT			
BOTTOM LOGGED INTERVAL		3301 FT			
TOP LOGGED INTERVAL		2100 FT			
CASING DRILLER		10.75 IN	@ 2300 FT	@	
CASING LOGGER		2290 FT			
BIT SIZE		9.875 IN			
TYPE OF FLUID IN HOLE		LSND			
DENSITY	VISCOSITY	8.8 LB/G	40 S		
PH	FLUID LOSS	9.7	6 C3		
SOURCE OF SAMPLE		FLOWLINE			
RM AT MEAS. TEMP.		0.885 OHMM	@ 67.72 DEGF	@	
RMF AT MEAS. TEMP.		0.826 OHMM	@ 67.54 DEGF	@	
RMC AT MEAS. TEMP.		1.018 OHMM	@ 66.90 DEGF	@	
SOURCE OF RMF	RMC	MEASURED	MEASURED		
RM AT BHT		0.296 OHMM	@ 216 DEGF	@	
TIME SINCE CIRCULATION		14.5 HOURS			
MAX. RECORDED TEMP.		216 DEGF			
EQUIP. NO.	LOCATION	ML-4232	FALLON, NV		
RECORDED BY		C. PEAVEY			
WITNESSED BY		J. HAMBLIN			

REMARKS

RUN 2 TRIP 2: CVOL WAS COMPUTED USING 8.625" CASING (BVOL AND CVOL UNITS ARE IN CUBIC FEET)
CALIPER WAS VERIFIED IN CASING.

DT MATRIX (DOLOMITE) = 42.5 US/FT
DT MATRIX (SANDSTONE) = 51.3 US/FT

A MAXIMUM READING THERMOMETER WAS RUN AS WELL AND THE MAXIMUM TEMPERATURE IT REACHED WAS: 216 DEGF

THANK YOU FOR CHOOSING BAKER ATLAS!
CREW: R. DAMKLEFSEN AND J. HAYCOCK
RIG: ENSIGN 581

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	2	SMVL	3844AD	10168944	BASE
2	2	TTRM	3981YA	10217216	BASE

2	2	MTS	3514XB	10200359	FREE
2	2	DSL	1328XA	10203000	FREE
2	2	HDIL	1515EA/MA	10088628/10088632	STAND-OFF
2	2	CENT	4541XA	10211527	FREE
2	2	ORIT	4401XB	10165246	CENTRALIZED
2	2	XMAC	1677EA/1678MC	10337574/370238	CENTRALIZED
2	2	ISO	1678PB	10213112	CENTRALIZED
2	2	XMAC XTR	1678PA/1678FA	370234/10199666	CENTRALIZED
2	2	CENT	4541XA	10162851	FREE

MAIN LOG 5"/100FT SCALE (DOLOMITE MATRIX)

ECLIPS 6.01 Feb 21, 2008
Updates: 1,43

Thu Nov 26 02:37:08 2009

Perpit /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/575996/k771R17.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2070.125 ft BOTTOM DEPTH: 3323.500 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TENSION	FILTER ()	medium (1)		TOP	BOTTOM
GR	FILTER ()	medium (1)		"	"
DT24	FILTER ()	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	9.875	in	TOP	BOTTOM
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (aabh*)	USE FIXED SIZE		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (aabh*)	9.875	in	"	"

ACOUSTIC POROSITY

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACOUSTIC POROSITY	POROSITY TYPE	WYLLIE		TOP	BOTTOM
	DTmatrix	42.50	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 (sfar1*)	203	us	"	"
	SEARCH START OFFSET (sfar2*)	203	us	"	"
	SEARCH START OFFSET (sfar3*)	203	us	"	"
	SEARCH START OFFSET (sfar4*)	203	us	"	"
	SEARCH WINDOW LENGTH	1015	us	"	"
	THRESHOLD FACTOR	0.30		"	"
	THRESHOLD MINIMUM (sfar1*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfar2*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfar3*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfar4*)	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	''	''

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/575998/k7711R20.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1853.500 ft BOTTOM DEPTH: 3320.250 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 (.l)	medium (1)		''	''

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	9.675	in	TOP	BOTTOM

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 26 01:52:13 2009	BIT SIZE
F1:CAL	CAL	Nov 26 01:52:13 2009	CALIPER
F1:DT24QI	DT24.I	Nov 26 01:52:13 2009	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Nov 26 01:52:13 2009	GAMMA RAY
F1:PORAQI	PORA.I	Nov 26 01:52:13 2009	ACOUSTIC POROSITY
F1:SFAN1QI	SFAN1.I	Nov 26 01:52:13 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R1
F1:SFAN2QI	SFAN2.I	Nov 26 01:52:13 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R2
F1:SFAN3QI	SFAN3.I	Nov 26 01:52:13 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R3
F1:SFAN4QI	SFAN4.I	Nov 26 01:52:13 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R4
F1:TEN	TEN	Nov 26 01:52:13 2009	DIFFERENTIAL TENSION

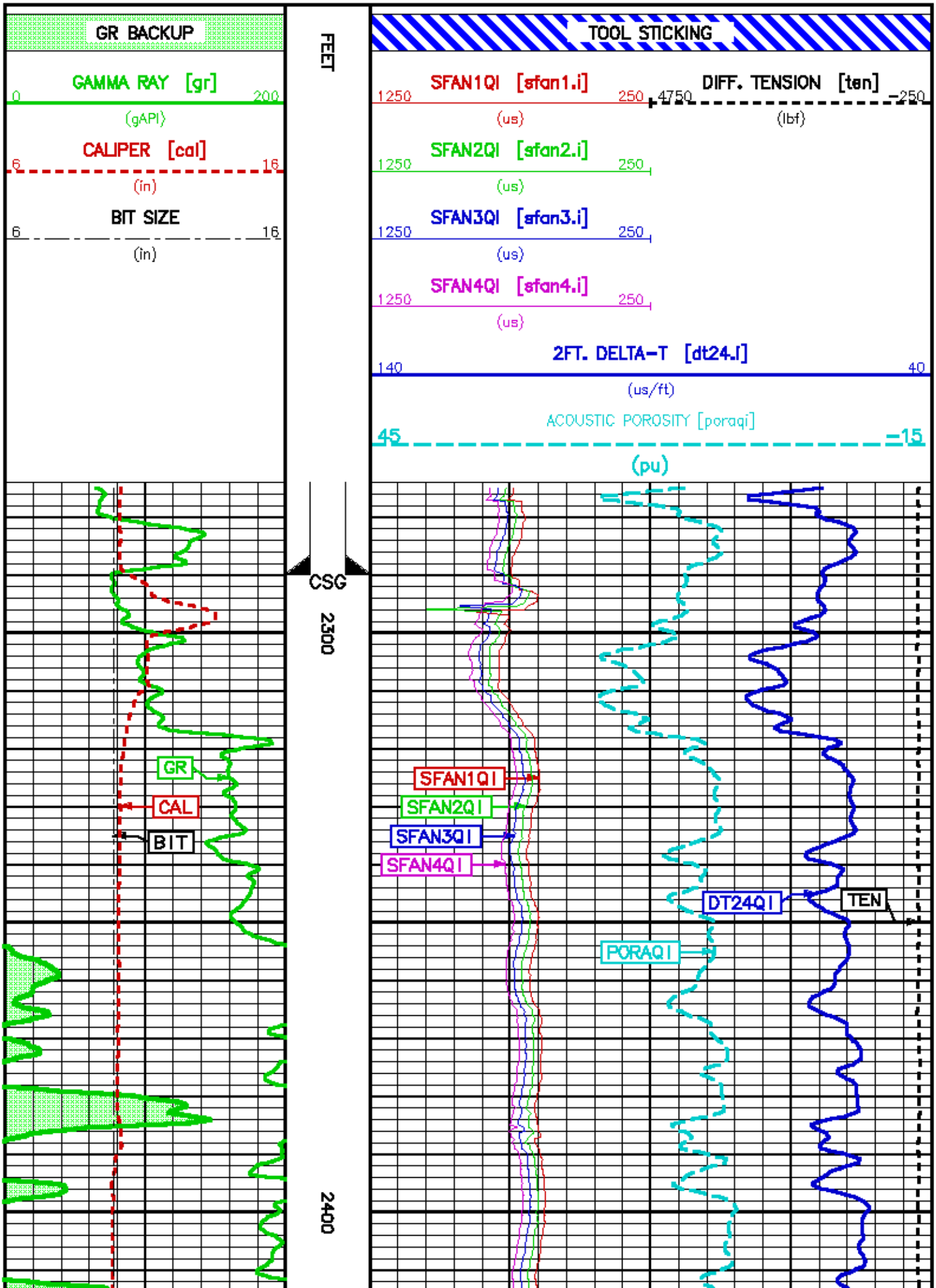
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	83.75	SFAN2QI	19.50	TEN	0.00
CAL	89.50	PORAQI	17.00	SFAN3QI	19.50		
DT24QI	17.00	SFAN1QI	19.00	SFAN4QI	20.00		

Presentation : epu1:/dat1a/575998/XMAC_DOL_MAIN.pdf [4.9"/100' Scale]
Plot Interval : 2275 - 3323 Feet

Data File 1 : F1 : epu1:/dat1a/575998/9_XMAC-HDIL-GR_DOL_MAIN.xtf
Created On : Nov 26 01:52:13 2009
Company : SIERRA GEOTHERMAL POWER, INC.
Well : ALUM 25-29
Field : ALUM
File Interval : 1850.25 - 3323.5 Feet
Dat : k7711

Data File 2 : F2 : epu1:/dat1a/575998/9_ZDLCN_DOL_MAIN.xtf
Created On : Nov 25 19:59:01 2009
Company : SIERRA GEOTHERMAL POWER, INC.
Well : ALUM 25-29
Field : ALUM
File Interval : 1818.25 - 3320.25 Feet
Dat : k7711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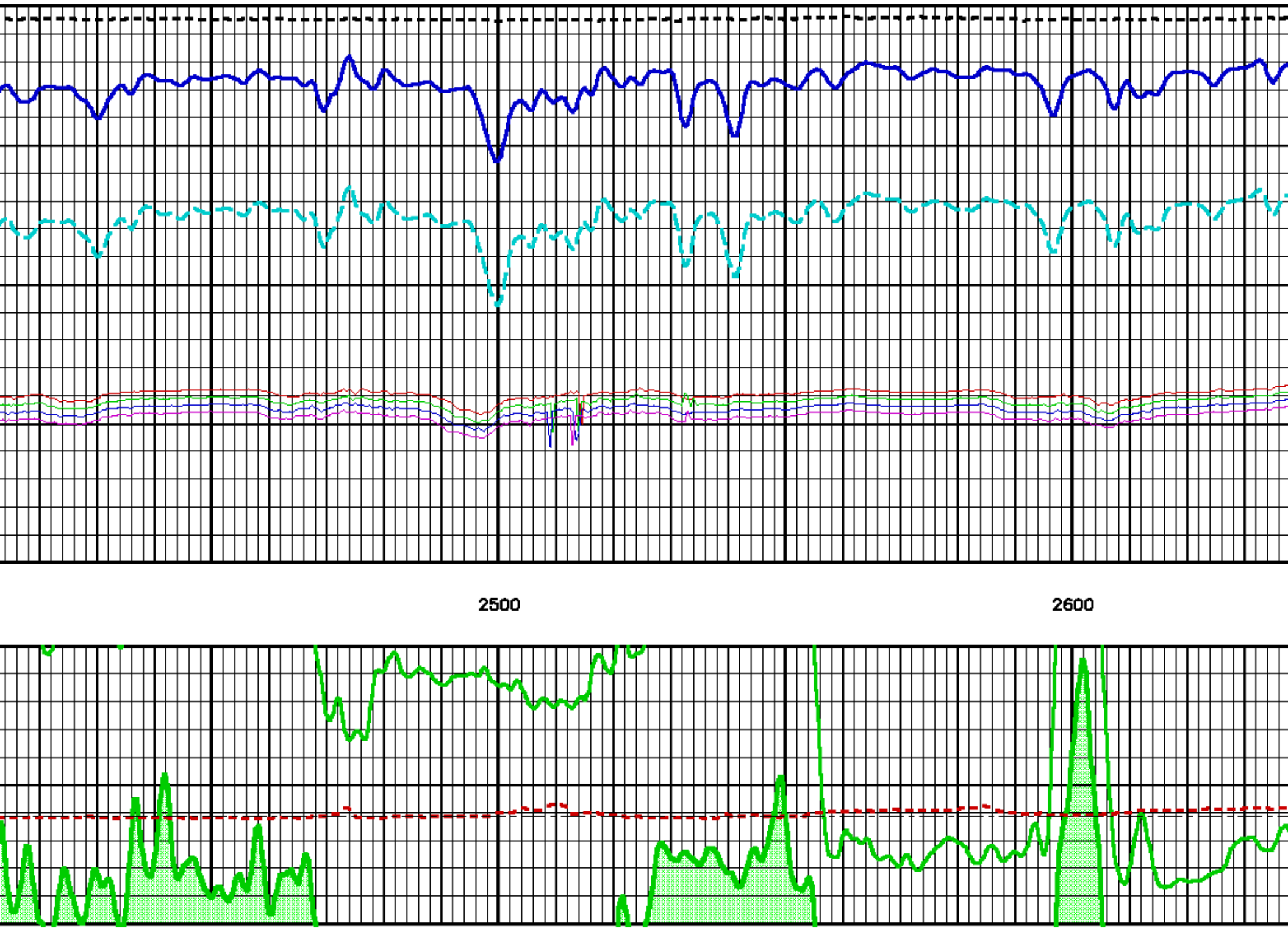
GAMMA RAY [gr]
0
200
(gAPI)
CALIPER [cal]
6
16
(in)
BIT SIZE
6
16
(in)
FEET
TOOL STICKING
SFAN1QI [sfan1.i]
1250
250
(us)
SFAN2QI [sfan2.i]
1250
250
(us)
SFAN3QI [sfan3.i]
1250
250
(us)
SFAN4QI [sfan4.i]
1250
250
(us)
DIFF. TENSION [ten]
4750
-250
(lbf)
2FT. DELTA-T [dt24.i]
140
40
(us/ft)
ACOUSTIC POROSITY [poraqi]
45
-15
(pu)
CSG
2300
2400
GR
CAL
BIT
SFAN1QI
SFAN2QI
SFAN3QI
SFAN4QI
DT24QI
TEN
PORAQI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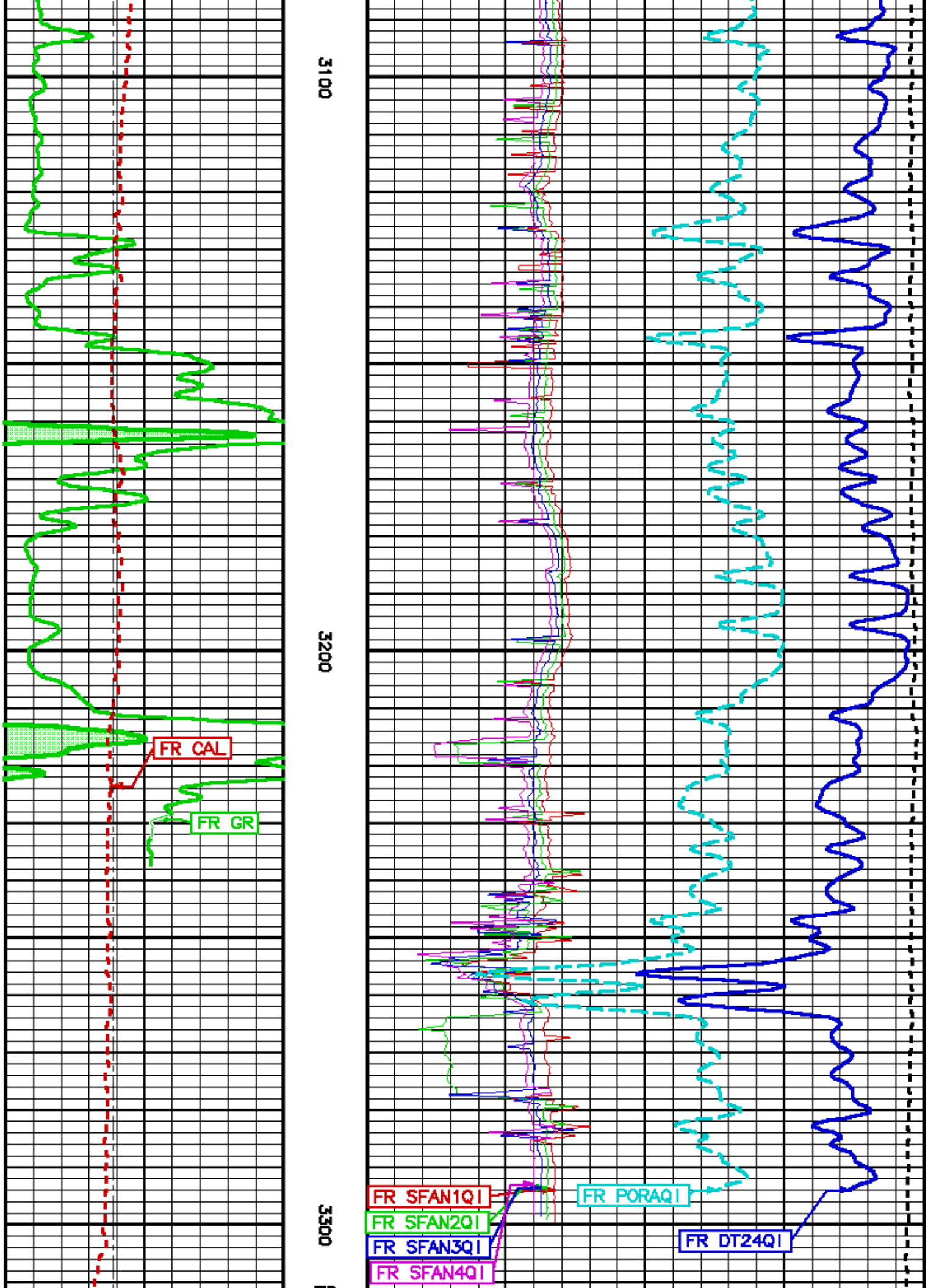
2600

2700
2800

2900
3000


3100
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FR SFAN1Q1
FR SFAN2Q1
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FR SFAN4Q1
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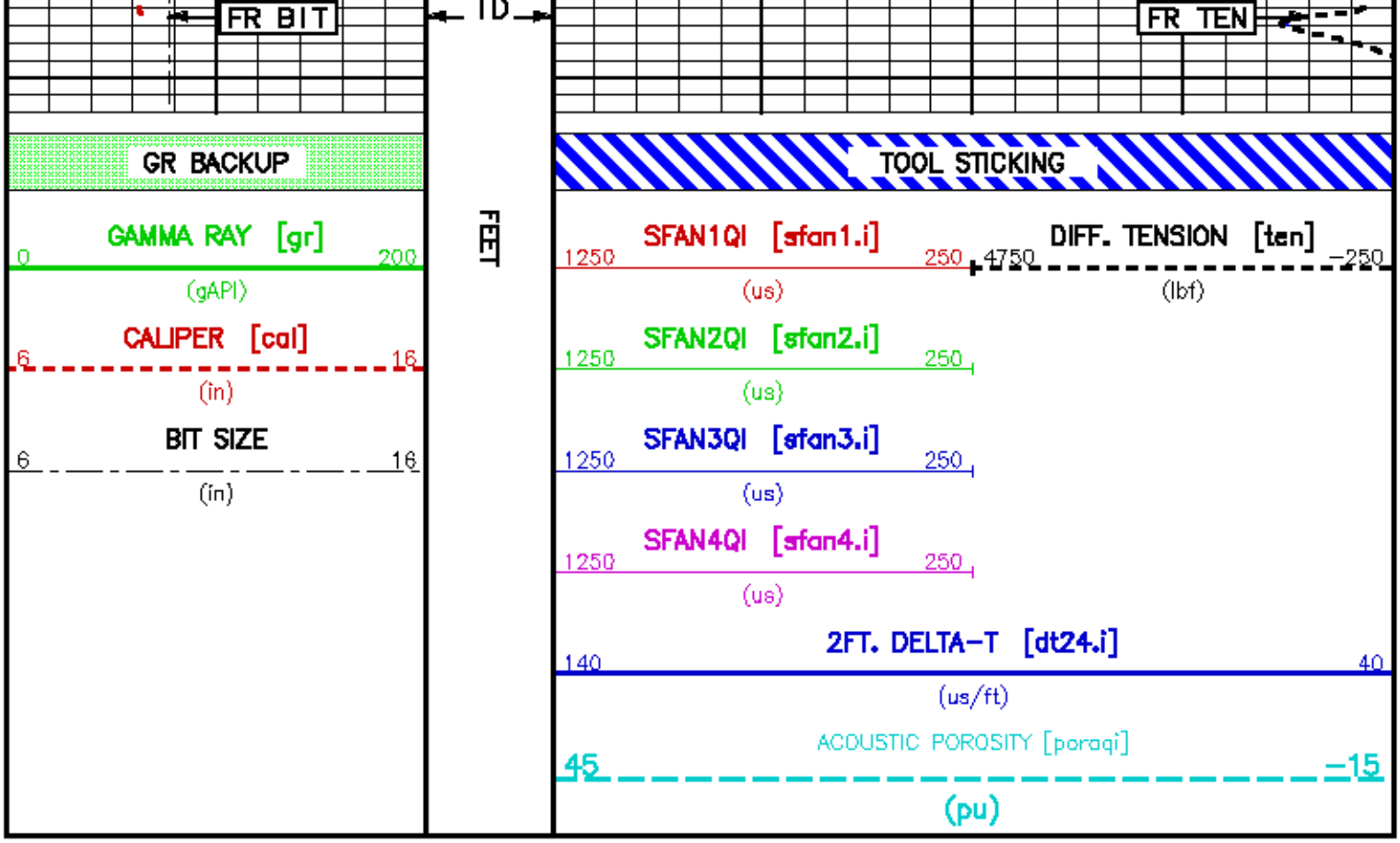


MAIN LOG 5"/100FT SCALE (SANDSTONE MATRIX)

ECLIPS 6.01 Feb 21, 2008
Updates: 1,43

Thu Nov 26 02:49:21 2009

Perplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data1a/575886/k7711R77.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2070.125 ft BOTTOM DEPTH: 3323.500 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TENSION	FILTER ()	medium (1)		TOP	BOTTOM
GR	FILTER ()	medium (1)		"	"
DT24	FILTER ()	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	9.875	in	TOP	BOTTOM
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (acbh*)	USE FIXED SIZE		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (acbh*)	9.875	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°)	203	us	"	"
	SEARCH START OFFSET (sfan2°)	203	us	"	"
	SEARCH START OFFSET (sfan3°)	203	us	"	"
	SEARCH START OFFSET (sfan4°)	203	us	"	"
	SEARCH WINDOW LENGTH	1077	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	"	"

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/575896/k771IR20.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1853.500 ft BOTTOM DEPTH: 3520.250 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 (.l)	medium (1)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	9.875	in	TOP	BOTTOM

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 25 07:10:29 2009	BIT SIZE
F1:CAL	CAL	Nov 25 07:10:29 2009	CALIPER
F1:DT24I	DT24.I	Nov 25 07:10:29 2009	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Nov 25 07:10:29 2009	GAMMA RAY
F1:PORAI	PORA.I	Nov 25 07:10:29 2009	ACOUSTIC POROSITY
F1:SFAN1I	SFAN1.I	Nov 25 07:10:29 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R1
F1:SFAN2I	SFAN2.I	Nov 25 07:10:29 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R2
F1:SFAN3I	SFAN3.I	Nov 25 07:10:29 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R3
F1:SFAN4I	SFAN4.I	Nov 25 07:10:29 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R4
F1:TEN	TEN	Nov 25 07:10:29 2009	DIFFERENTIAL TENSION

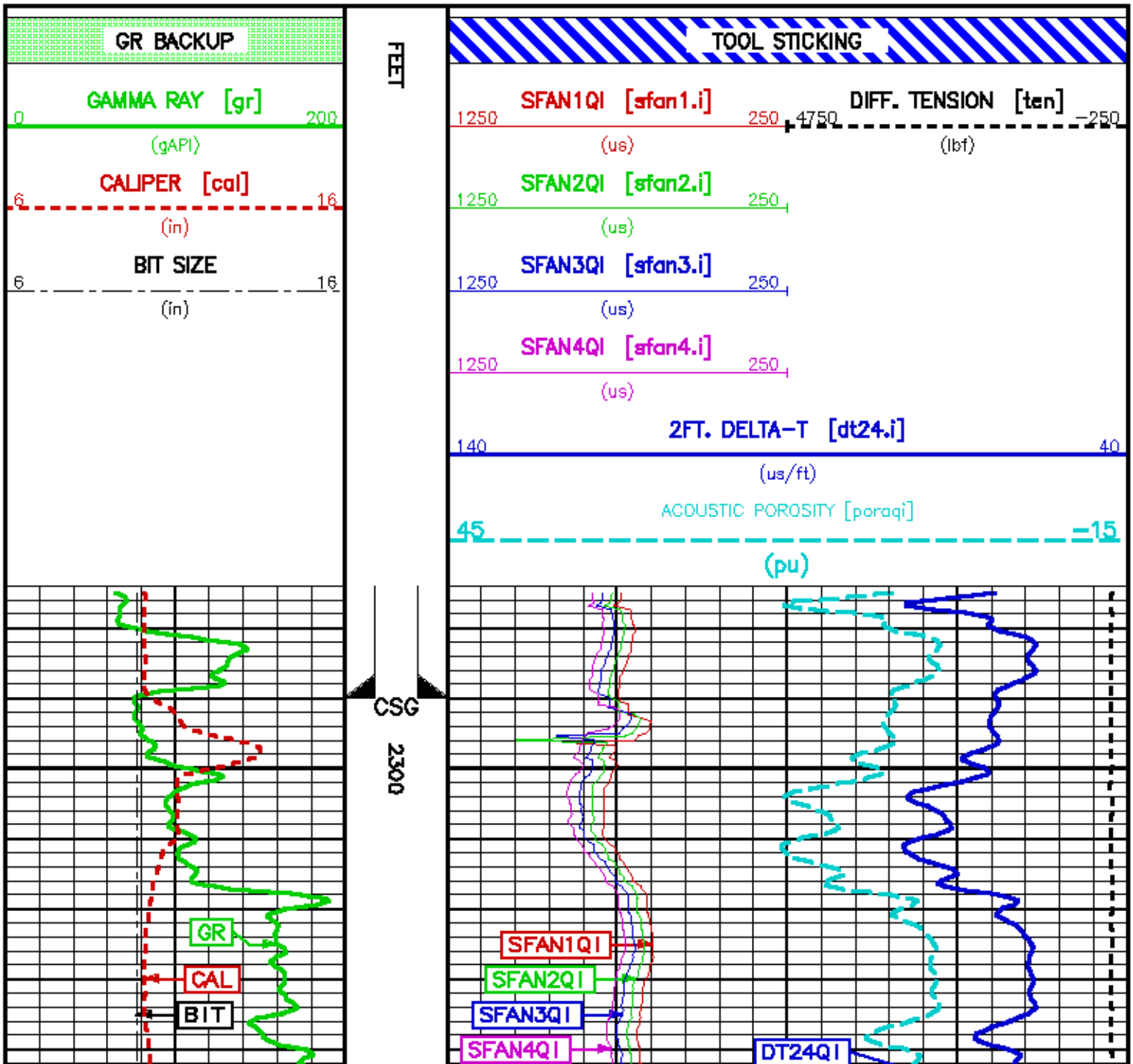
CURVE MEASURE POINT OFFSET

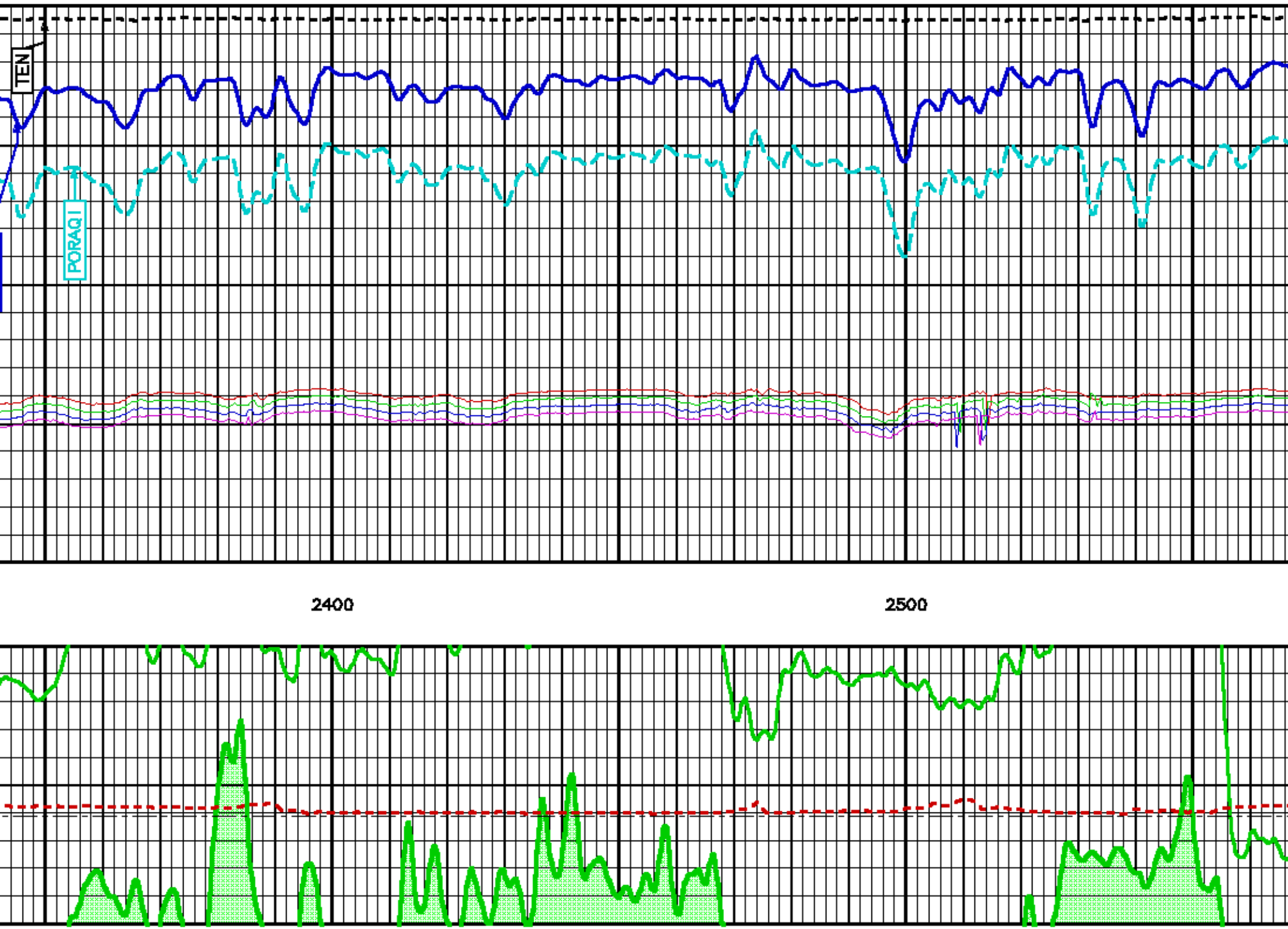
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	65.75	SFAN2QI	19.50	TEN	0.00
CAL	69.50	PORAQI	17.00	SFAN3QI	19.50		
DT24QI	17.00	SFAN1QI	19.00	SFAN4QI	20.00		

Presentation : opu1:/data/375996/XMAC_SS_MAIN.pdf [4.9"/100' Scale]
Plot Interval : 2275 - 3325 Feet

Data File 1 : F1 : opu1:/data/375996/9_XMAC-HDIL-GR_MAIN.xtf
Created On : Nov 25 07:10:29 2009
Company : SIERRA GEOTHERMAL POWER, INC.
Well : ALUM 25-29
Field : ALUM
File Interval : 1850.75 - 3525.5 Feet
Out : k7711

Data File 2 : F2 : opu1:/data/375996/9_ZDLCN_DOL_MAIN.xtf
Created On : Nov 25 19:39:01 2009
Company : SIERRA GEOTHERMAL POWER, INC.
Well : ALUM 25-29
Field : ALUM
File Interval : 1818.25 - 3520.25 Feet
Out : k7711

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PORAQ I
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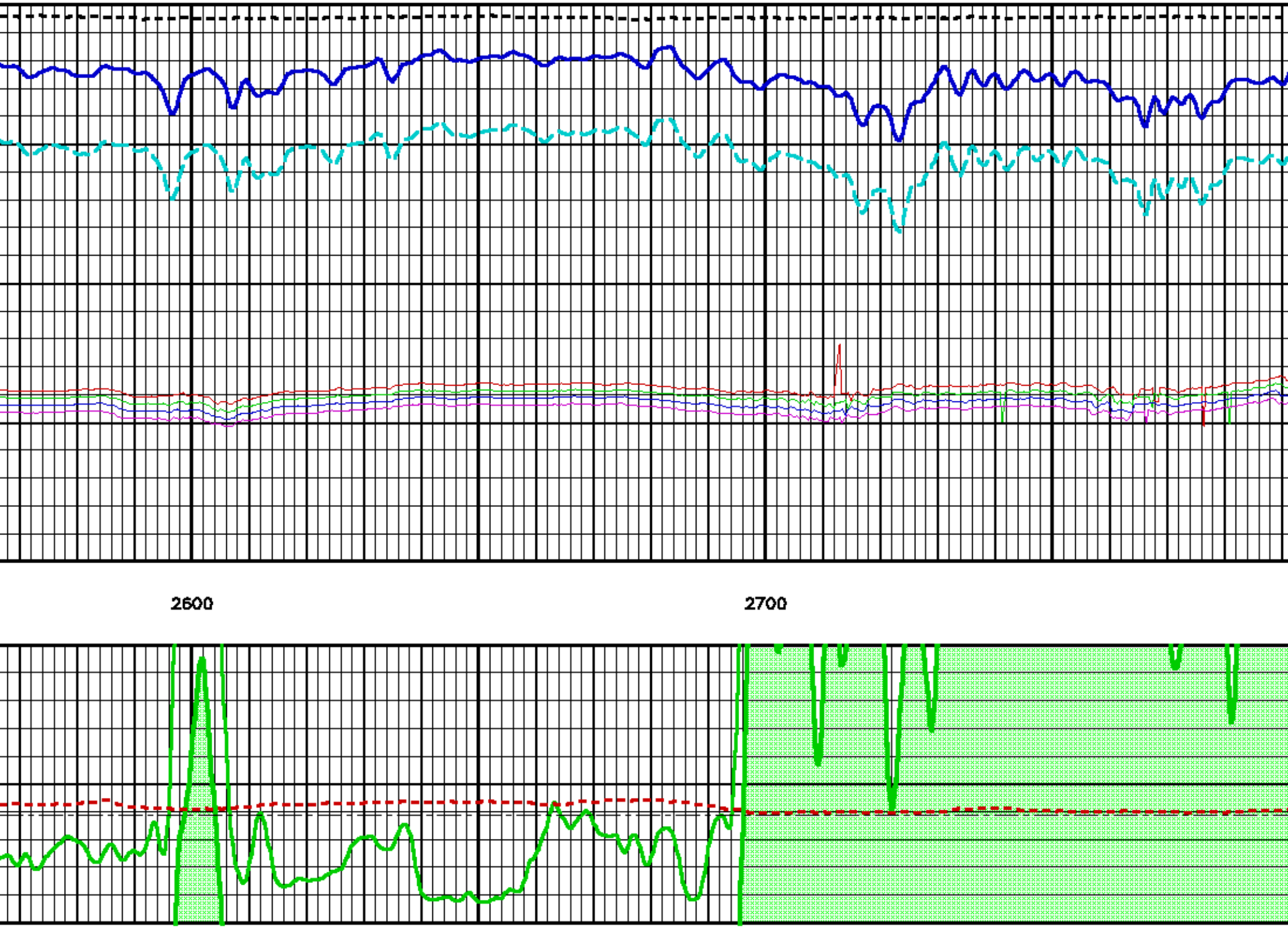
2500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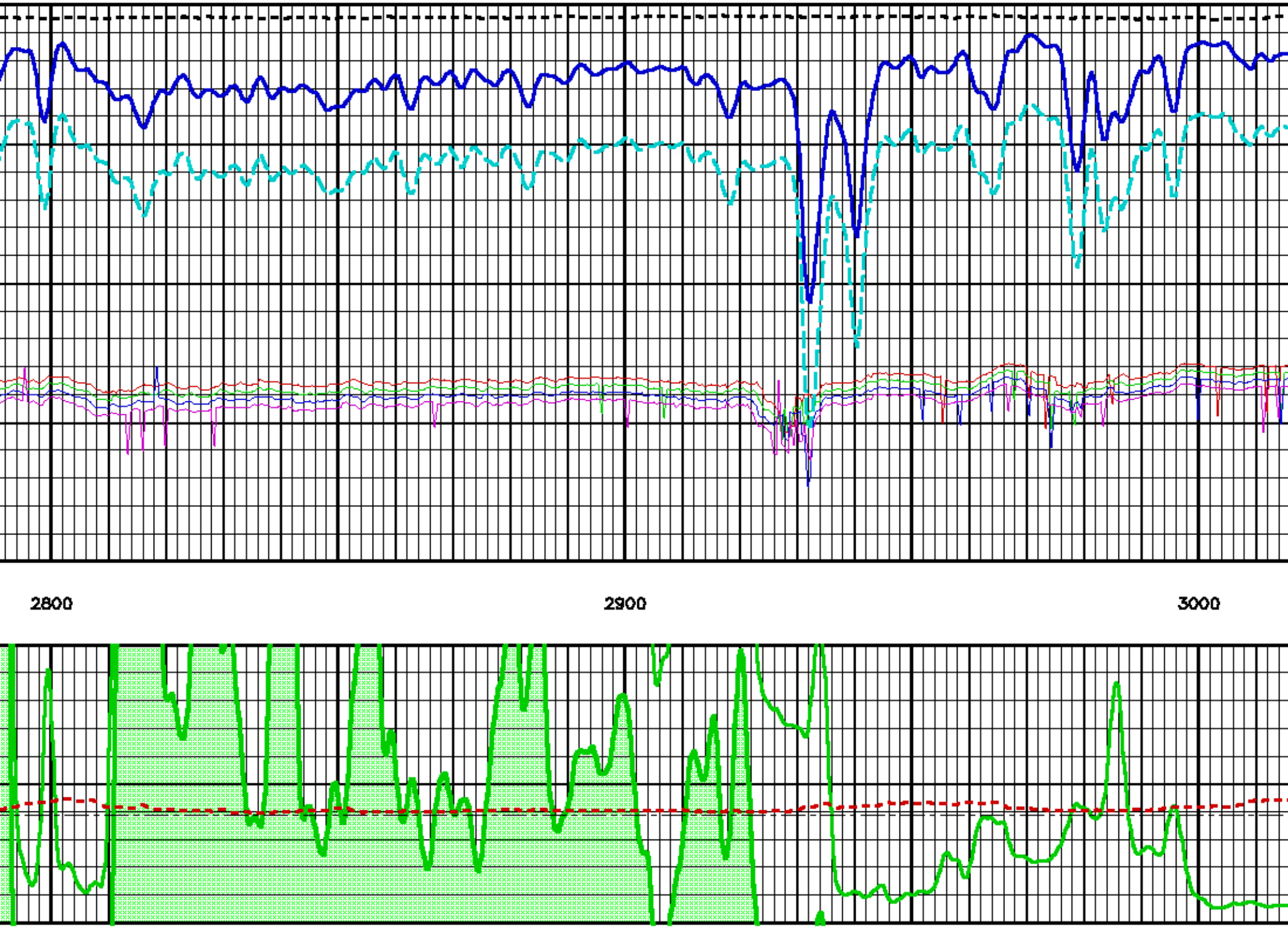
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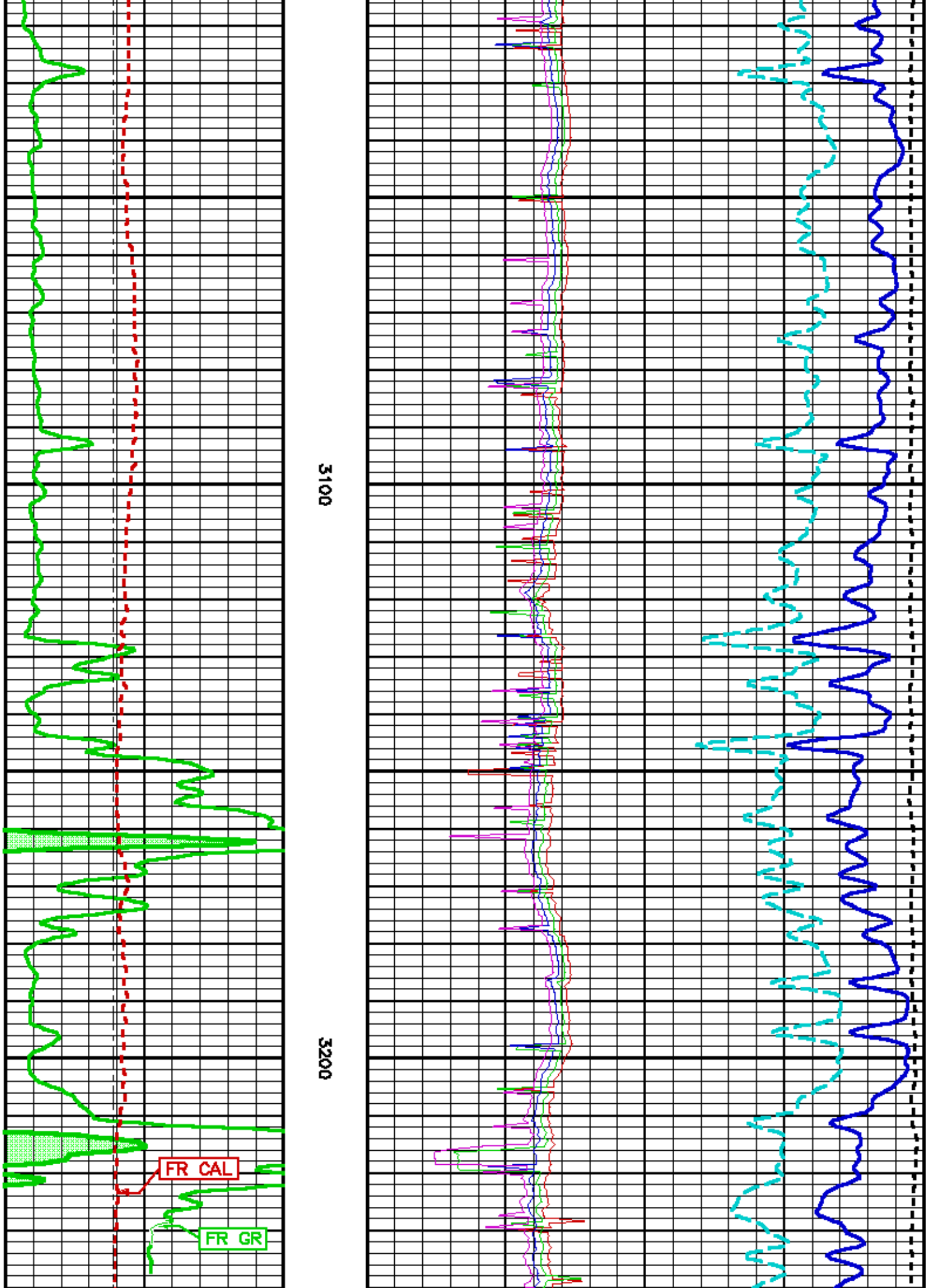
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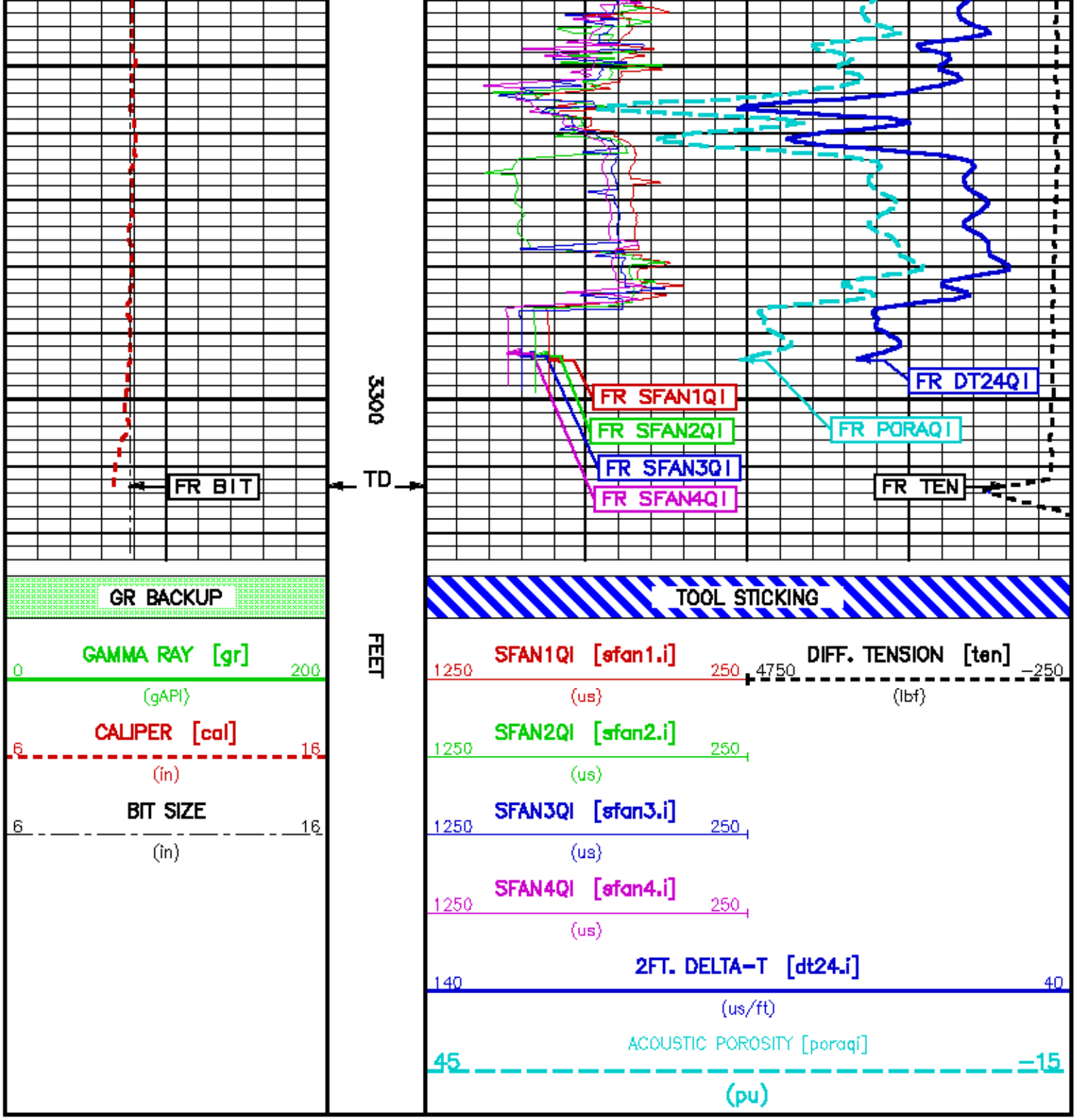


REPEAT LOG (DOLOMITE MATRIX)

ECLIPS 6.01 Feb 21, 2008
Updates: 1,43

Thu Nov 26 02:39:39 2009

Perplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/575898/k771IR16.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2872.000 ft BOTTOM DEPTH: 3525.500 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
TENSION	FILTER ()	medium (1)		TOP	BOTTOM
GR	FILTER ()	medium (1)		"	"
DT24	FILTER ()	light (2)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
BIT SIZE	BIT SIZE	9.875	in	TOP	BOTTOM
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (acbh*)	USE FIXED SIZE		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (acbh*)	9.875	in	"	"

ACOUSTIC POROSITY

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
ACOUSTIC POROSITY	POROSITY TYPE	WYLLIE		TOP	BOTTOM
	DTmatrix	42.50	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) TOP	BOTTOM
DELTA-T REJECTION RANGE	REJECTION DTmin	40	us/ft	TOP	BOTTOM
	REJECTION DTmax	180	us/ft	"	"
FIRST ARRIVAL PICK	SEARCH START OFFSET (sfar1*)	203	us	"	"
	SEARCH START OFFSET (sfar2*)	203	us	"	"
	SEARCH START OFFSET (sfar3*)	203	us	"	"
	SEARCH START OFFSET (sfar4*)	203	us	"	"
	SEARCH WINDOW LENGTH	1013	us	"	"
	THRESHOLD FACTOR	0.30		"	"
	THRESHOLD MINIMUM (sfar1*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfar2*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfar3*)	1.8	pct	"	"
	THRESHOLD MINIMUM (sfar4*)	1.8	pct	"	"
	E3 THRESHOLD	OFF		"	"

ACOUSTIC QUALITY CONTROL

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

ACOUSTIC WAVEFORM FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
WAVEFORM FILTER - DELTA T	SURFACE WAVE FILTER	ON		TOP	BOTTOM
	LOW FREQ CUTOFF	4000	Hz	"	"
	HIGH FREQ CUTOFF	20000	Hz	"	"

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/575898/k771IR20.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1853.500 ft BOTTOM DEPTH: 3320.250 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
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)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	9.875	in	TOP	BOTTOM

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:BIT	BIT	Nov 26 01:57:04 2009	BIT SIZE
F1:CAL	CAL	Nov 26 01:57:04 2009	CALIPER
F1:DT24QI	DT24.I	Nov 26 01:57:04 2009	INTERVAL TRANSIT TIME OVER 24 INCH INTERVAL
F1:GR	GR	Nov 26 01:57:04 2009	GAMMA RAY
F1:PORAQI	PORA.I	Nov 26 01:57:04 2009	ACOUSTIC POROSITY
F1:SFAN1QI	SFAN1.I	Nov 26 01:57:04 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R1
F1:SFAN2QI	SFAN2.I	Nov 26 01:57:04 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R2
F1:SFAN3QI	SFAN3.I	Nov 26 01:57:04 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R3
F1:SFAN4QI	SFAN4.I	Nov 26 01:57:04 2009	SURFACE PICK FIRST ARRIVAL TIME, T2R4
F1:TEN	TEN	Nov 26 01:57:04 2009	DIFFERENTIAL TENSION

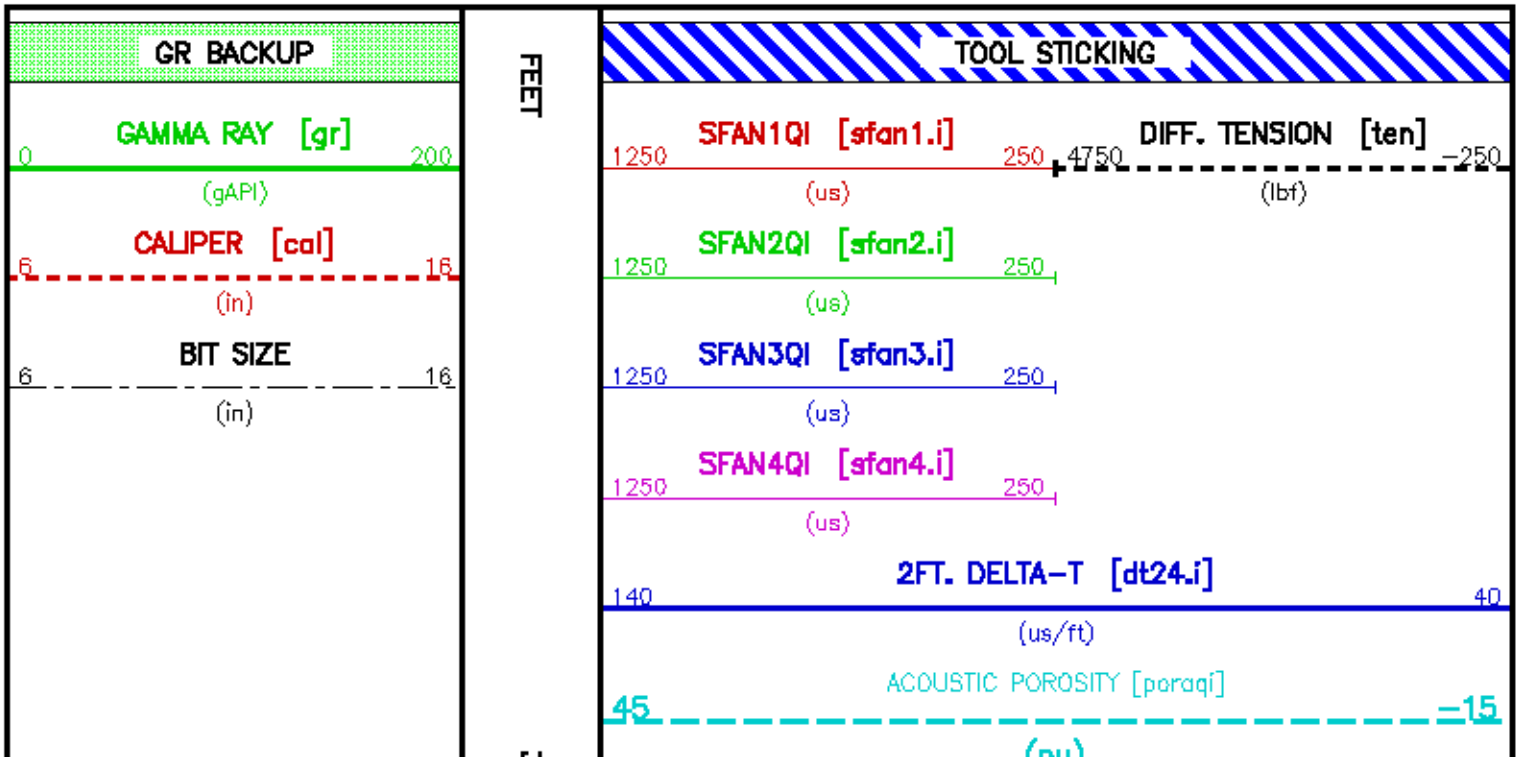
CURVE MEASURE POINT OFFSET

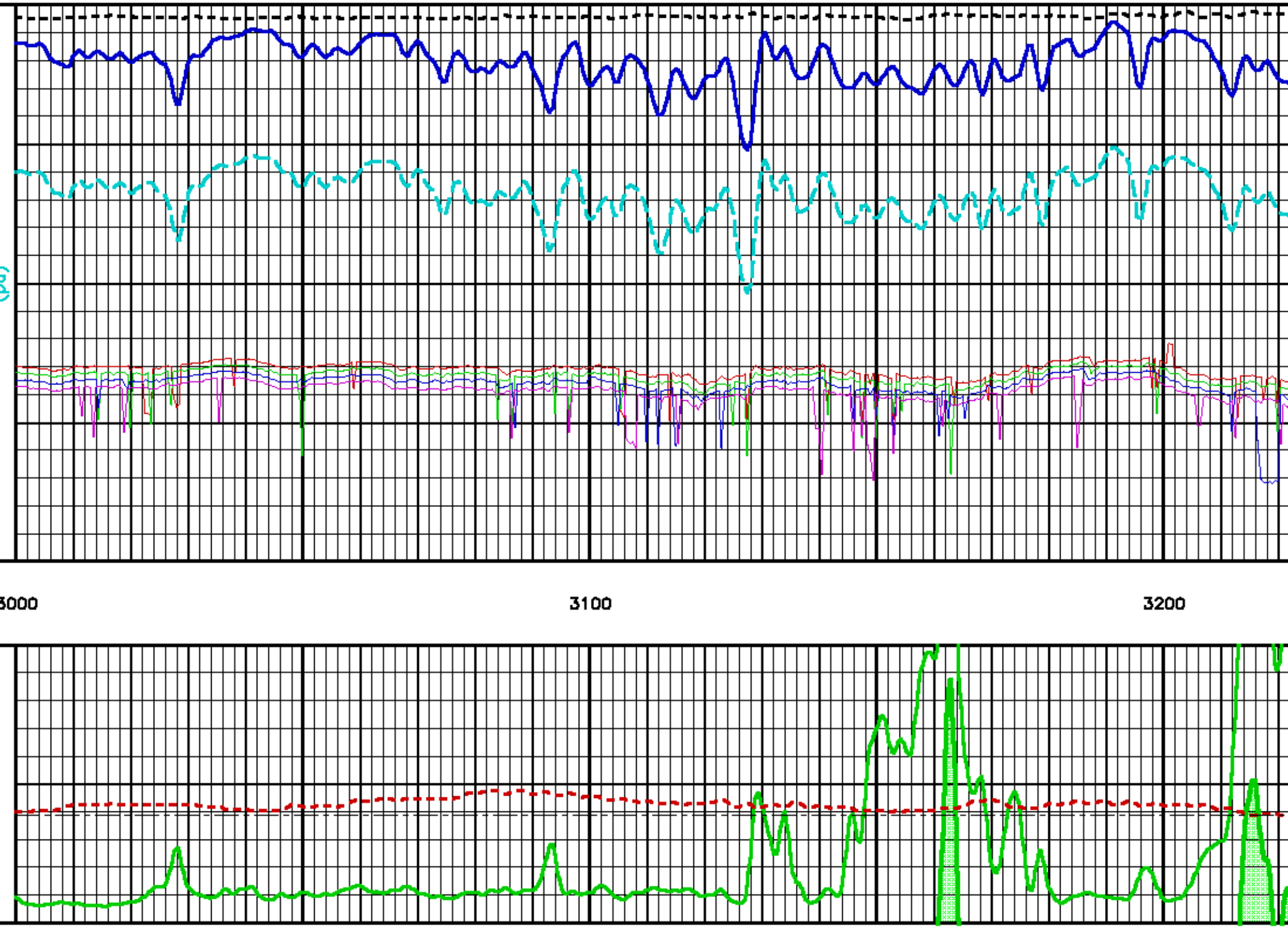
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	83.75	SFAN2QI	19.50	TEN	0.00
CAL	89.50	PORAQI	17.00	SFAN3QI	19.50		
DT24QI	17.00	SFAN1QI	19.00	SFAN4QI	20.00		

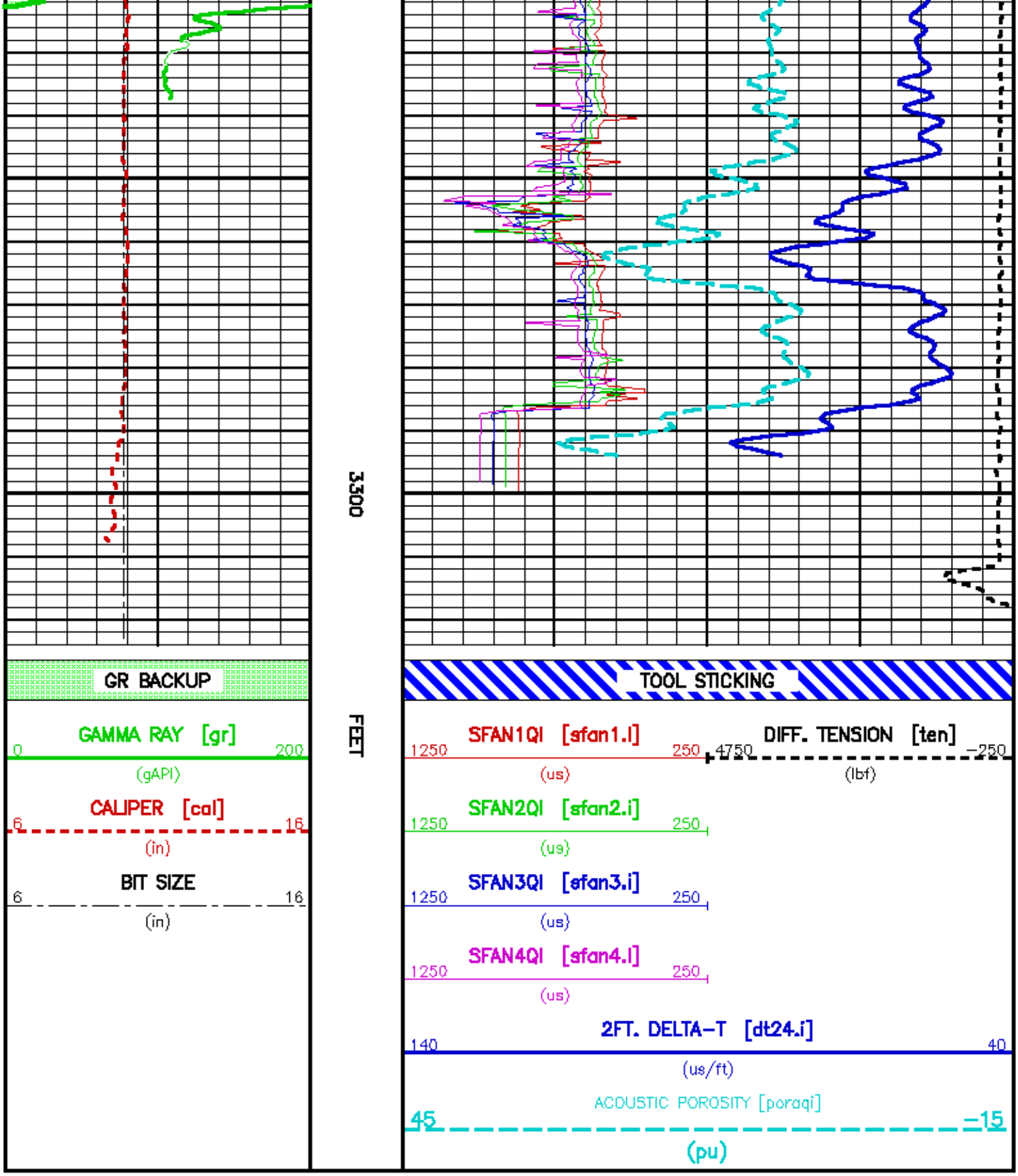
Presentation : cpu1:/data/575898/XMAC_DOL_REPEAT.pdf [4.9"/100' Scale]
Plot Interval : 3000 - 3323 Feet

Data File 1 : F1 : cpu1:/data/575898/8_XMAC-HDIL-GR_DOL_REPEAT.dlis
Created On : Nov 26 01:57:04 2009
Company : SIERRA GEOTHERMAL POWER, INC.
Well : ALUM 25-29
Field : ALUM
File Interval : 2775.5 - 3323.5 Feet
Dct : k7711

Data File 2 : F2 : cpu1:/data/575898/8_ZDLCN_DOL_MAIN.dlis
Created On : Nov 25 19:38:01 2009
Company : SIERRA GEOTHERMAL POWER, INC.
Well : ALUM 25-29
Field : ALUM
File Interval : 1818.25 - 3320.25 Feet
Dct : k7711




3000
3100
3200



CALIBRATION / VERIFICATION SUMMARY

Source File: /dell1s/979996/XMAC_HDIL.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10203000 DATE/TIME PERFORMED: Sun Oct 25 14:26:31 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	1162.96	893.9 (850.0 860.0)	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: Tue Nov 24 23:50:39 2009 DAYS SINCE CAL: 30

UNIT #: 3885TD ML4232 VERI JIG #: 4702NK DA-321

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	255.24	1118.22	0.168	42.83	187.64	144.81 (144.79 154.79)

GR AFTER LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10203000 DATE/TIME PERFORMED: Wed Nov 25 02:09:11 2009 DAYS SINCE CAL: 30

UNIT #: 3885TD ML4232 VERI JIG #: 4702NK DA-321

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	303.09	1132.69	0.168	50.86	190.08	139.21 (134.81 154.81)

XMACE_OR PRIMARY CALIBRATION SUMMARY

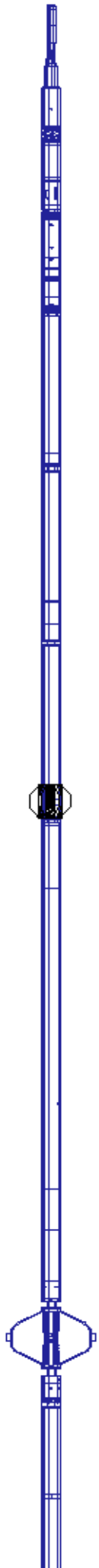
TOOL #: 1678MC 370238 DATE/TIME PERFORMED: Tue Nov 24 14:45:41 2009

UNIT #: 3885TD ML4232 ORIENTATION #: 4401XB 10165246

	DEV (deg)	QA (mG)	MEAS RB (deg)	RB OFFSET (deg)	ROTATED RB (deg)
ORIT TBM CHECK	90.1	1001.1 (990.0 1010.0)	0.9		
XMAC-F1 ORIENT			131.2	131.2	0.0

INSTRUMENT CONFIGURATION

Source File: /dall1a/575896/k77111-kdg



108.75'

CABLEHEAD TOP — 106.00'

TEMP MP — 97.47'

RM MP — 97.22'

GR MP — 84.01'

SP MP — 69.19'

XMTR MP — 62.72'

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"

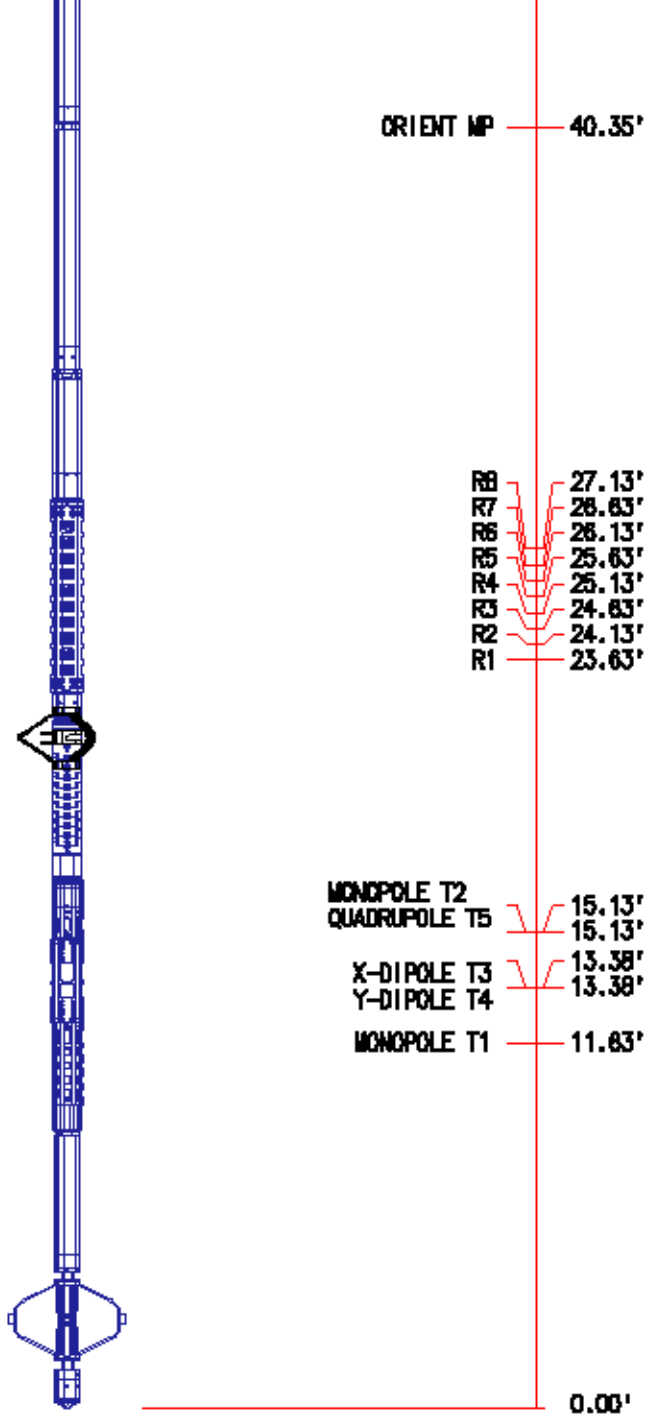
WTS COMMON REMOTE
- Series : 3514XB
- Mnemonic : WTS
- Diameter : 3.63"
- Weight : 126 lbs
- Length : 6.36'

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

HIGH DEFINITION INDUCTION TOOL
- Series : 1515XA
- Mnemonic : HDIL
- Diameter : 3.62"
- Weight : 415 lbs
- Length : 27.13'

4 ARM BOW SPRING CENTRALIZER
- Series : 4341XA
- Mnemonic : CENT
- Diameter : 3.38"

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

4 ARM BOW SPRING CENTRALIZER
Series : 4341XA
Mnemonic : CENT
Diameter : 3.38"

BULL PLUG 3 3/8

TOTAL LENGTH: 108.75'
TOTAL WEIGHT: 1779 lbs
MAX DIAMETER: 0'4.25"

BAKER HUGHES

Baker Atlas

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

FILE NO:
API NO: 27-009-90074

LOCATION:
SHL: 2235.16' FSL & 938.11' FWL
SW/C
SEC 29 TWP 1N RGE 38.5 E

ELEVATIONS:
KB 4919.57 FT
DF
GL 4903.57 FT

TIGHT HOLE

DATE 25-NOV-2009