



Baker Atlas

FILE NO: _____ COMPANY: **SIERRA GEOTHERMAL POWER, INC.**
 APN NO: **27-008-90074** WELL: **ALUM 25-29**
 FIELD: **ALUM**
 COUNTY: **ESMERALDA** STATE: **NEVADA**

Ver: 3.87 LOCATION: _____
 TIGHT HOLE SHL: 2235.18' FSL & 938.11' FNL
 SEC 29 TWP 1N RGE 28.5 E
 SW/C OTHER SERVICES: HDL, ZDL/CM, XMAC, STAR/CBLL, TEMP

PERMANENT DATUM G.L. _____ ELEVATION **4803.57 FT**
 LOG MEASURED FROM K.B. _____ 18.0 FT ABOVE P.D.
 DRILL MEAS. FROM K.B. _____

DATE	25-NOV-2008	TRIP	5
SERVICE ORDER	5728996		
DEPTH DRILLER	3314 FT		
DEPTH LOGGER	3311 FT		
BOTTOM LOGGED INTERVAL	3308 FT		
TOP LOGGED INTERVAL	2280 FT		
CASING DRILLER	10.75 IN	Ø	2300 FT
CASING LOGGER	2280 FT		
BIT SIZE	9.875 IN		
TYPE OF FLUID IN HOLE	LSND		
DENSITY	8.8 LB/G	40 S	
PH	9.7	8 G3	
SOURCE OF SAMPLE	FLGMLINE		
RM AT MEAS. TEMP.	0.885 G/HM	Ø	67.72 DEGF
RMF AT MEAS. TEMP.	0.826 G/HM	Ø	87.54 DEGF
RMG AT MEAS. TEMP.	1.018 G/HM	Ø	88.90 DEGF
SOURCE OF RMF	MEASURED	MEASURED	
RM AT BHT	0.282 G/HM	Ø	227 DEGF
TIME SINCE CIRCULATION	31 HOURS		
MAX. RECORDED TEMP.	227 DEGF		
EQUIP. NO.	M-4232	FALLON, NV	
RECORDED BY	C. PEAVEY		
WITNESSED BY	J. HAMBLEN		

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 2 TRIP 5 : CYVOL WAS COMPUTED USING 8.625" CASING (BVOL AND CYVOL UNITS ARE IN CUBIC FEET) CALIPER WAS VERIFIED IN CASING.

A MAXIMUM READING THERMOMETER WAS RUN AS WELL AND THE MAXIMUM TEMPERATURE IT REACHED WAS: 227 DEGF

THANK YOU FOR CHOOSING BAKER ATLAS!
 CREW: R. DANKLEFSEN AND J. HAYCOCK
 RIG: ENSIGN 561

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	5	PWR	4430KB	370550	FBFF
2	5	SNPL	3844KD	10201370	FBFF
2	5	TRM	3681XA	10203010	FBFF
2	5	WTS	3514KB	10200389	FBFF
2	5	SEZ	1328VA	10203000	FBFF

2	5	CRS	4401KB	10080238	FREE
2	5	STAR_PNR	1022PA	10565885	FREE
2	5	STAR_EA	1038EA	10402331	FREE
2	5	STAR_MA	4238MA	1173888	BAD-DEVICE
2	5	ISO	38822A	10348282	FREE
2	5	KMT	38382A	10200308	FREE
2	5	CR	1671EB/ME	154383/183418	CENTRALIZED

MAIN LOG 5"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008
Updates: 1,43

Thu Nov 26 05:14:18 2009

Perplf /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/575998/k857n03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2274.500 ft BOTTOM DEPTH: 3315.884 ft

SYMMETRIC FILTER

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

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	8.625	1in	TOP	BOTTOM
BIT SIZE	BIT SIZE	9.875	1in	"	"

CURVE DESCRIPTION REPORT

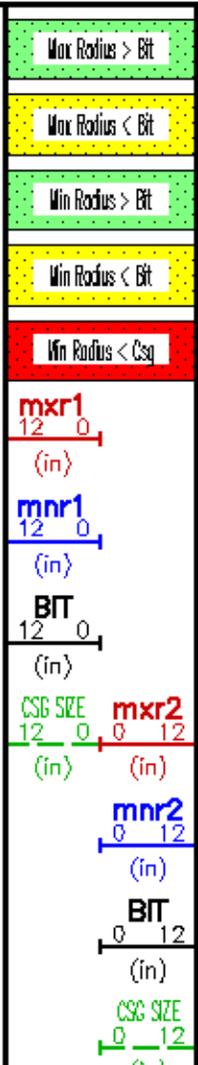
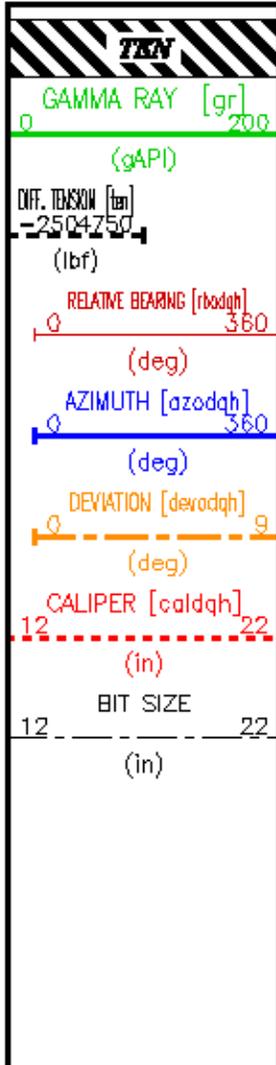
CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:AZ00QH	AZ00.H	Nov 25 22:04:12 2009	AZIMUTH OF REFERENCE PAD
F1:BCVD		Nov 25 22:04:12 2009	BOREHOLE CUMULATIVE VOLUME.
F1:BIT	BIT	Nov 25 22:04:12 2009	BIT SIZE
F1:BRAD	BRAD_1L	Nov 25 22:04:12 2009	BIT RADIUS
F1:CALDQH	CALD.H	Nov 25 22:04:12 2009	BOREHOLE CALIPER FROM MULTI-ARM TOOL
F1:CCVD		Nov 25 22:04:12 2009	CEMENT CUMULATIVE VOLUME.
F1:CRAD	CRAD_L	Nov 25 22:04:12 2009	CASING RADIUS
F1:DEV00QH	DEV00QH	Nov 25 22:04:12 2009	DEVIATION
F1:DFLG	DFLG	Nov 25 22:04:12 2009	DEAD CROSS-SECTIONAL AREA FLAG.
F1:GR	GR	Nov 25 22:04:12 2009	GAMMA RAY
F1:MAXD		Nov 25 22:04:12 2009	MAXIMUM CALIPER DIAMETER.
F1:MIND		Nov 25 22:04:12 2009	MINIMUM CALIPER DIAMETER.
F1:MINR1	MINR1	Nov 25 22:04:12 2009	MINIMUM RADIUS 1.
F1:MINR2	MINR2	Nov 25 22:04:12 2009	MINIMUM RADIUS 2.
F1:MR1	MR1	Nov 25 22:04:12 2009	MAXIMUM RADIUS 1.
F1:MR2	MR2	Nov 25 22:04:12 2009	MAXIMUM RADIUS 2.
F1:RB00QH	RB00.H	Nov 25 22:04:12 2009	RELATIVE BEARING (RELATIVE TO HIGH SIDE OF BOREHOLE)
F1:TEN	TEN	Nov 25 22:04:12 2009	DIFFERENTIAL TENSION

CURVE MEASURE POINT OFFSET

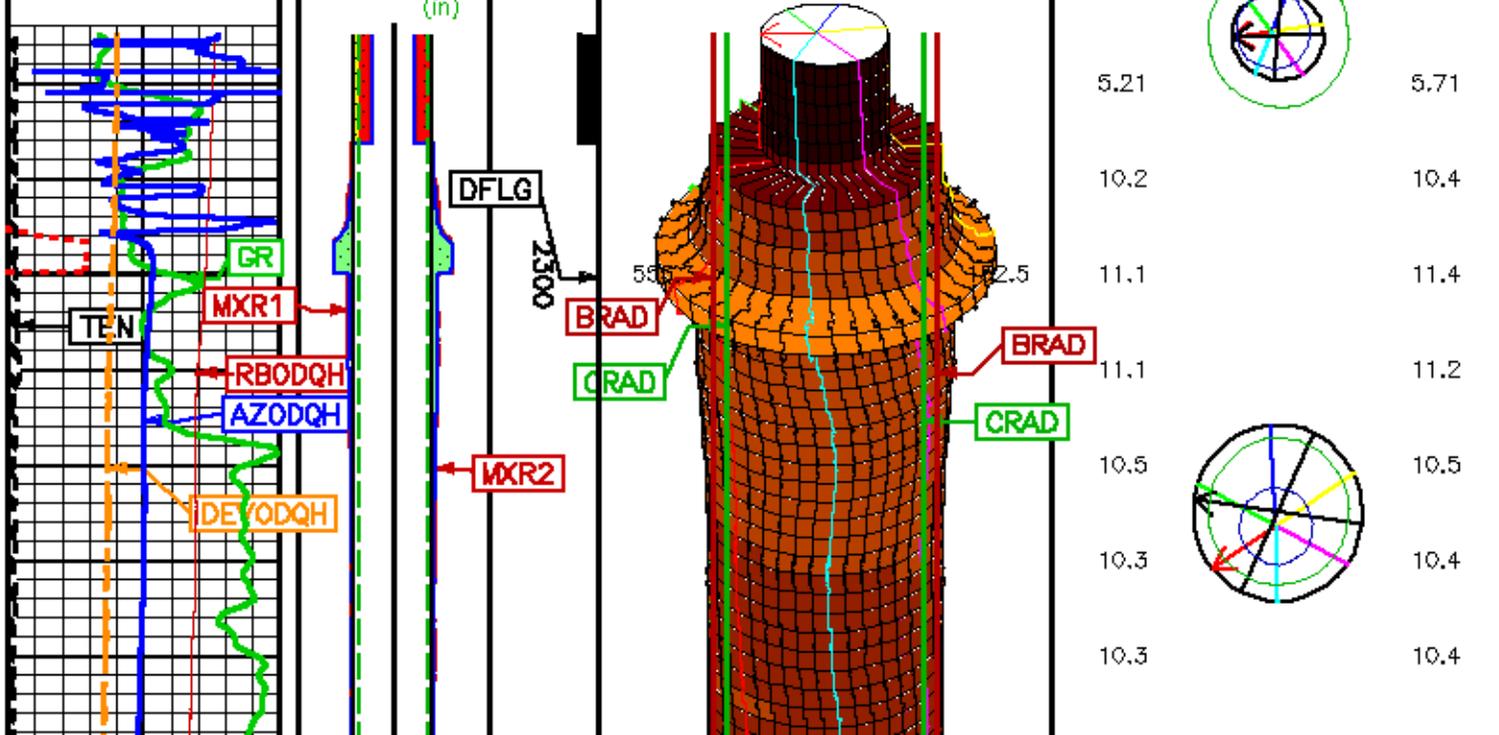
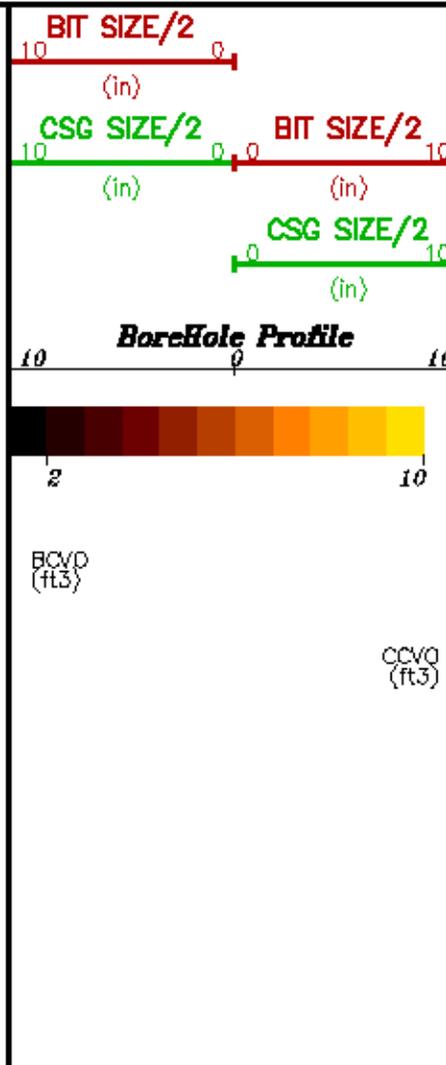
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AZ00QH	52.89	CRAD	25.25	MINR1	25.25	RB00QH	52.89
BIT	0.00	DEV00QH	52.89	MINR2	25.25	TEN	0.00
BRAD	25.25	DFLG	25.25	MR1	25.25		
CALDQH	25.34	GR	85.00	MR2	25.25		

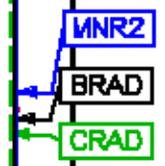
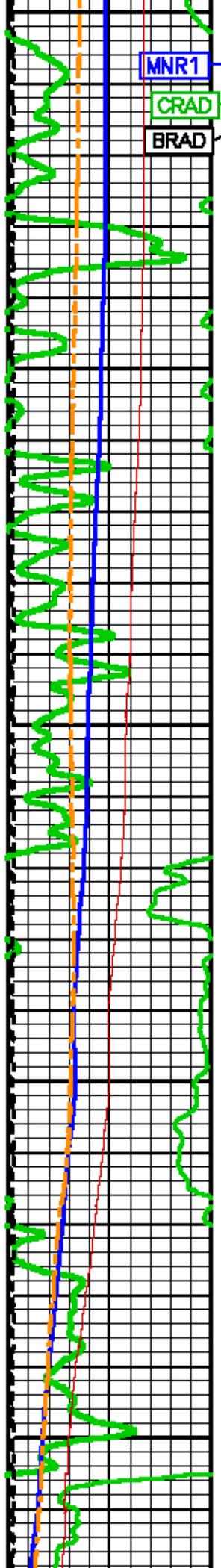
Presentation : epul:/data/575986/bhp_align-real.pdf [5"/100' Scale]
 Plot Interval : 2275 - 3313.25 Feet

Data File 1 : F1 : epul:/data/575986/BHP_ALIGN.xtf
 Created On : Nov 25 22:04:12 2008
 Company : SIERRA GEOTHERMAL POWER, INC.
 Well : ALUM 25-29
 Field : ALUM
 File Interval : 2196.75 - 3313.5 Feet
 Oct : k857m



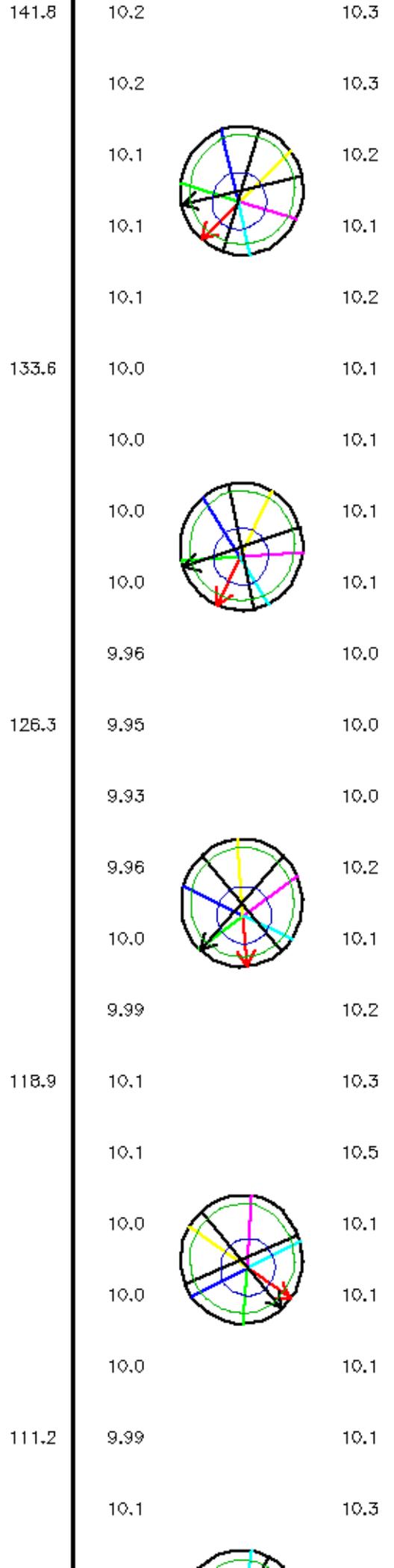
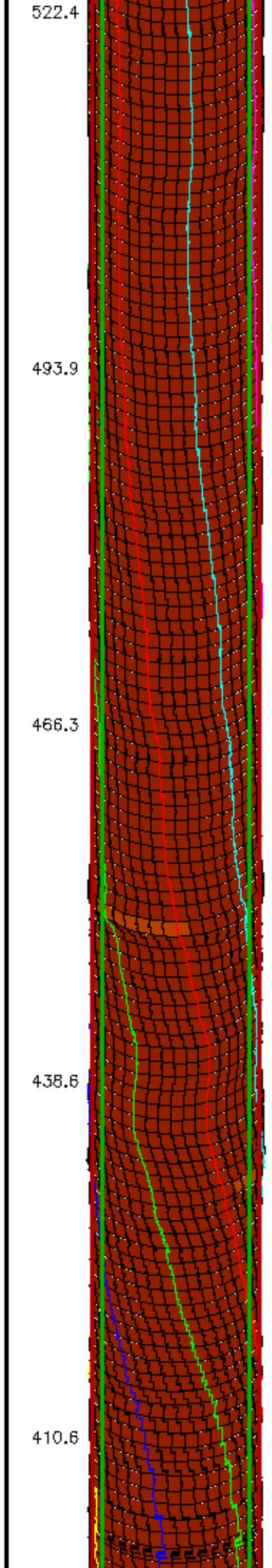
FEET

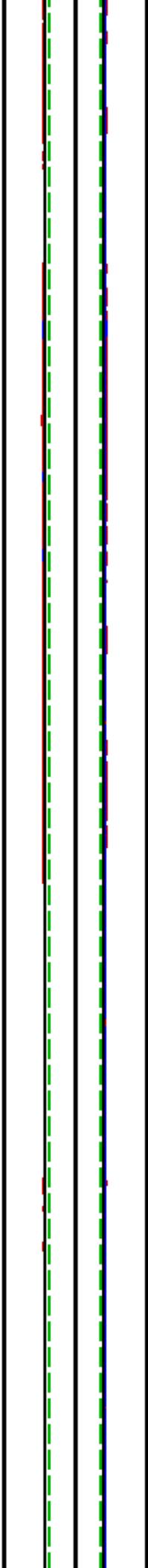
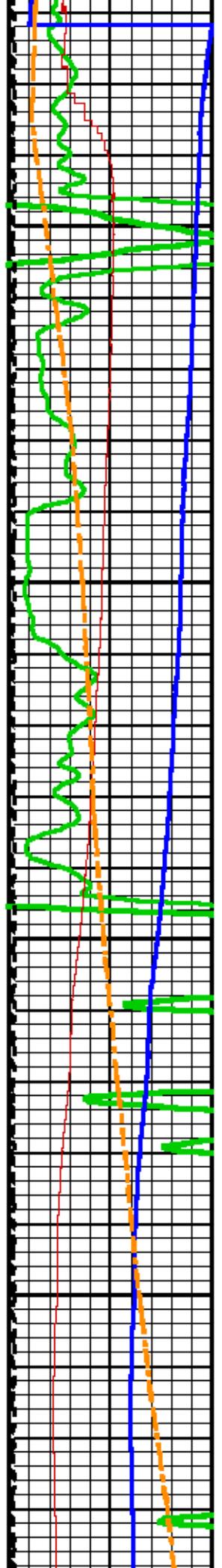




2400

2500





2600

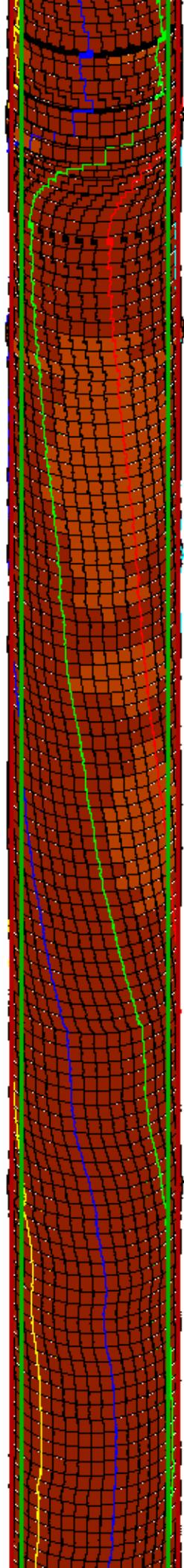
2700

382.1

353.0

324.5

296.8

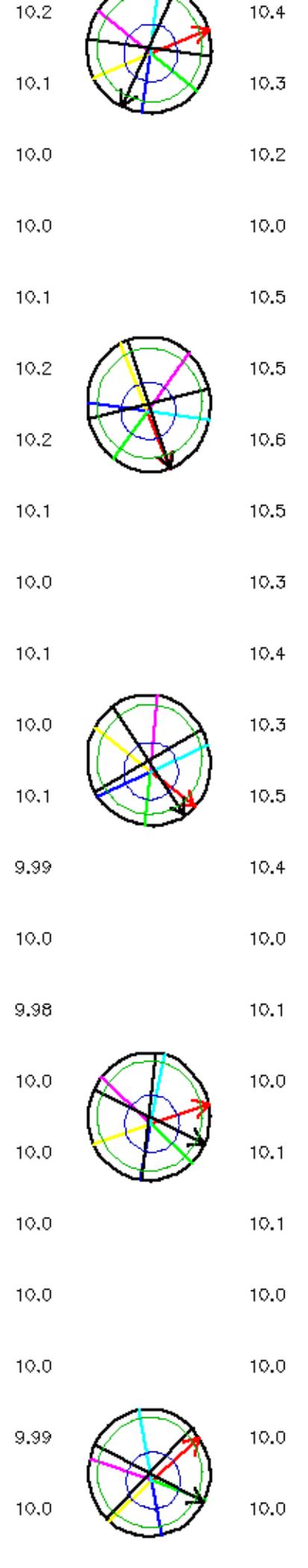


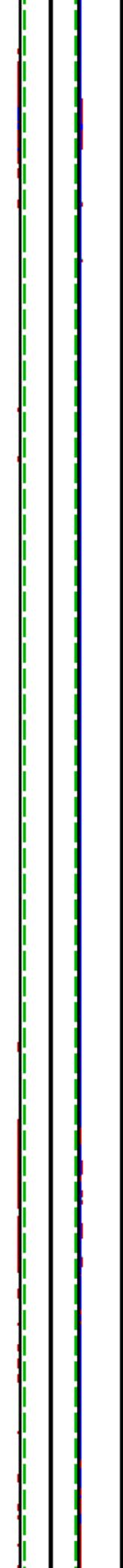
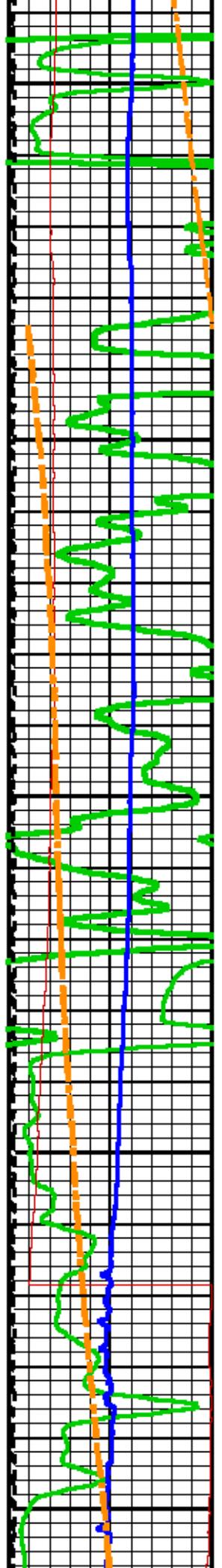
103.0

94.2

85.9

78.5

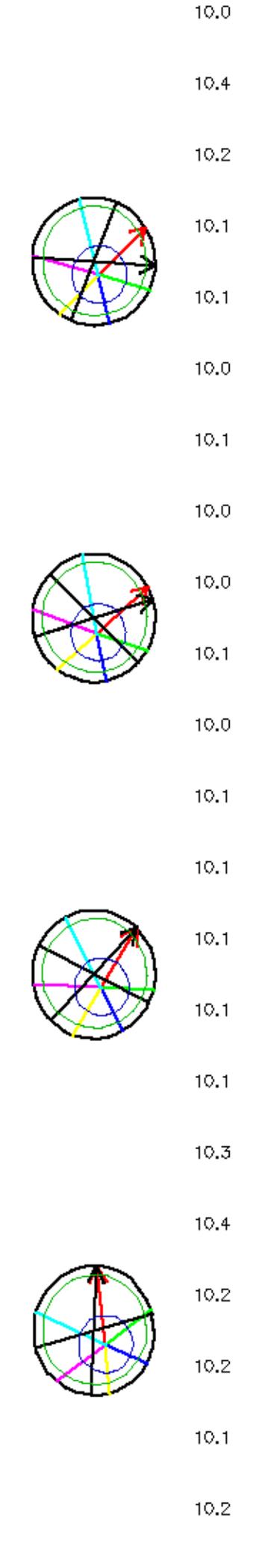
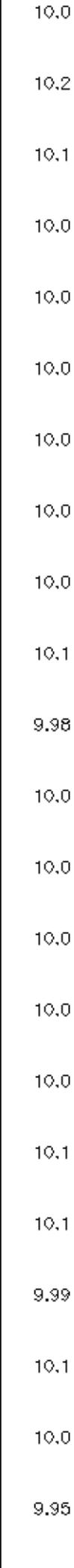
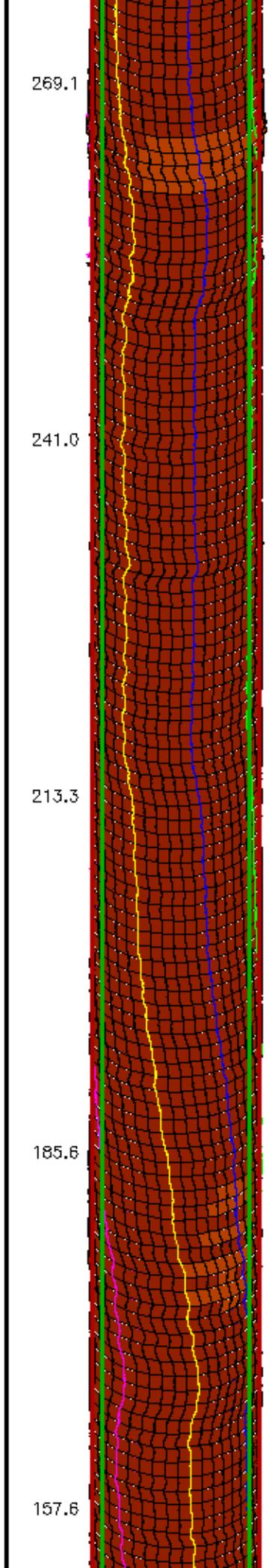




2800

2900

3000

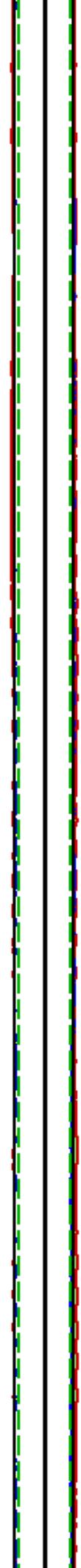
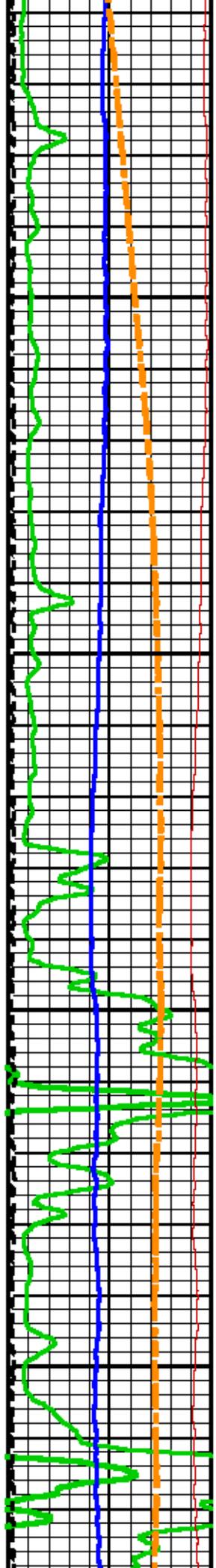


269.1
241.0
213.3
185.6
157.6

71.1
63.3
55.9
48.5
40.8

10.0
10.2
10.1
10.0
10.0
10.0
10.0
10.0
10.1
9.98
10.0
10.0
10.0
10.0
10.0
10.0
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10.0
9.99
10.1
10.0
9.95

10.0
10.4
10.2
10.1
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10.0
10.1
10.1
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10.1
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10.1
10.1
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10.1
10.2



3100

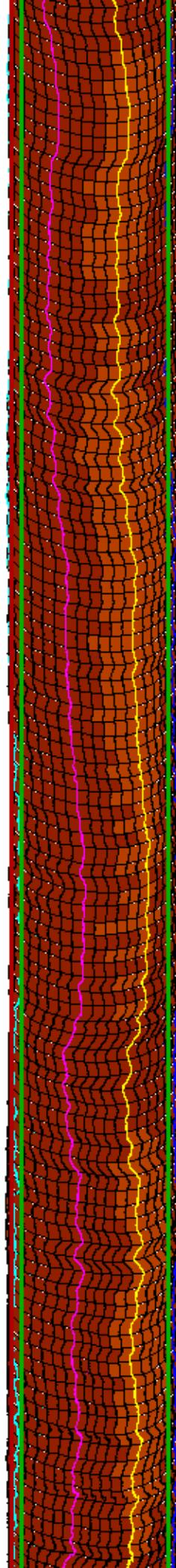
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129.7

101.3

73.6

46.5



33.2

25.0

17.7

10.8

9.69

9.88

9.93

10.0

10.0

10.0

9.97

10.0

9.81

10.0

9.75

9.70

9.93

9.83

9.83

9.43

9.68

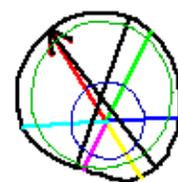
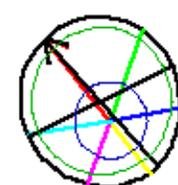
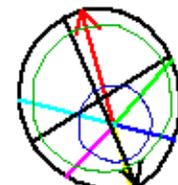
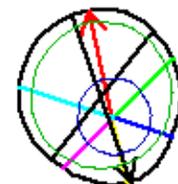
9.46

9.54

9.41

9.53

9.54



10.3

10.4

10.5

10.5

10.5

10.6

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10.7

10.5

10.6

10.6

10.2

10.2

10.3

10.1

10.1

10.7

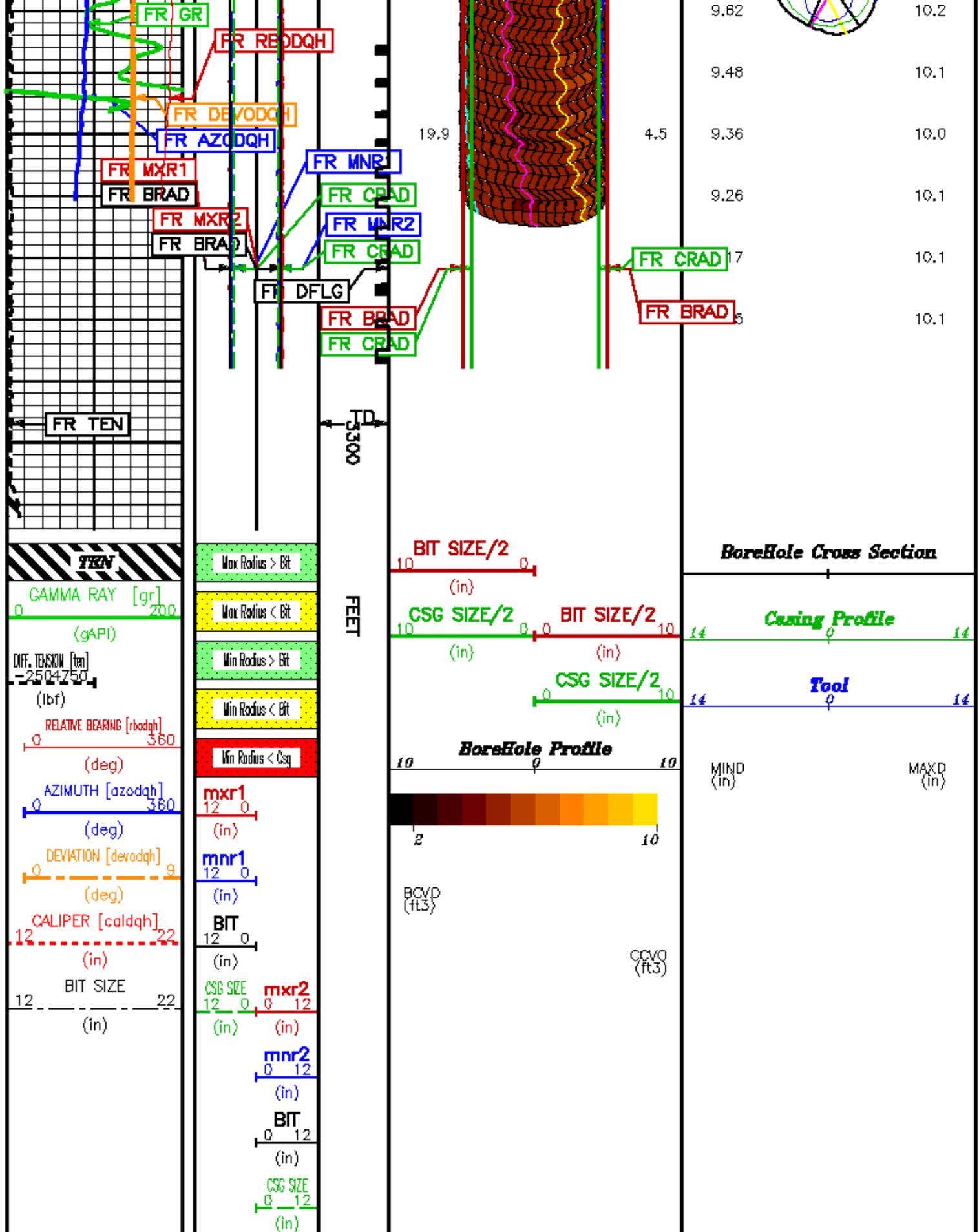
10.3

10.7

10.5

10.2

10.2



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	1162.96	893.9	0.168	45.14	195.14	150
			830.0				980.0

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
						180.00

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
						144.78
						184.78

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	190.06	139.21
						134.81
						104.81

STARCAL PRIMARY CALIBRATION SUMMARY

TOOL #: 4236MA 173868

DATE/TIME PERFORMED: Fri Nov 20 11:48:56 2009

UNIT #: 3885TD ML4232

	SMALL RING (raw)	LARGE RING (raw)	MULT (in/raw)	ADD (in)	SMALL RING (in)	LARGE RING (in)
RADIUS 1	954.6	2363.3	0.0021	1.9671	4.000	7.000
RADIUS 2	1076.7	2485.3	0.0021	1.7071	4.000	7.000
RADIUS 3	995.6	2439.0	0.0021	1.9306	4.000	7.000
RADIUS 4	1005.9	2452.4	0.0021	1.9139	4.000	7.000
RADIUS 5	1059.6	2527.1	0.0020	1.8340	4.000	7.000
RADIUS 6	1110.8	2536.6	0.0021	1.6627	4.000	7.000
CALIPER 1					8.000	14.000
CALIPER 2					8.000	14.000

CALIPER 2
CALIPER 3

8.000 14.000
8.000 14.000

SMALL RING LARGE RING

PAD FORCE % 5.593 5.593
DC MOTOR V 0.1 0.1

STARCAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 4236MA 173868 DATE/TIME PERFORMED: Wed Nov 25 20:37:08 2009 DAYS SINCE CAL: 5
UNIT #: 3885TD ML4232

	I.D. (raw)	MULT	ADD	I.D. (in pct V)	CASING SIZE (in)
RADIUS 1	2011.7	0.00213	1.96707	6.251	
RADIUS 2	2136.5	0.00213	1.70710	6.255	
RADIUS 3	1423.3	0.00208	1.93065	4.889	
RADIUS 4	1008.3	0.00207	1.91392	4.005	
RADIUS 5	1011.0	0.00204	1.83397	3.901	
RADIUS 6	1552.2	0.00210	1.66267	4.929	
CALIPER 1				10.256	10.050
CALIPER 2				10.156	
CALIPER 3				9.818	
PAD FORCE				11.118	
DC MOTOR V				0.0	

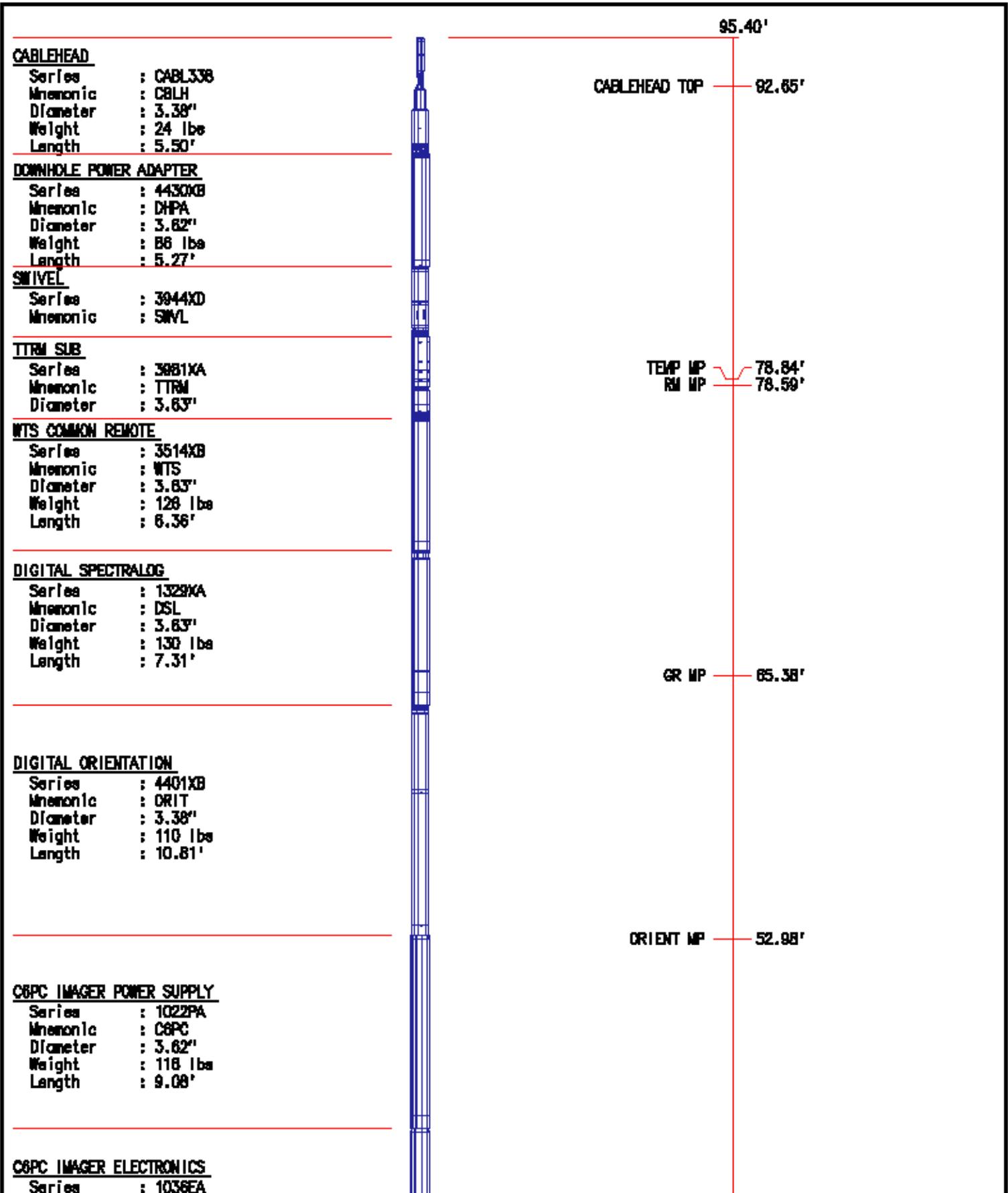
STARCAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 4236MA 173868 DATE/TIME PERFORMED: Thu Nov 26 00:30:12 2009 DAYS SINCE CAL: 5
UNIT #: 3885TD ML4232

	I.D. (raw)	MULT	ADD	I.D. (in pct V)	CASING SIZE (in)
RADIUS 1	1367.4	0.00213	1.96707	4.879	
RADIUS 2	2158.2	0.00213	1.70710	6.303	
RADIUS 3	2074.9	0.00208	1.93065	6.243	
RADIUS 4	1445.3	0.00207	1.91392	4.911	
RADIUS 5	959.5	0.00204	1.83397	3.785	
RADIUS 6	1042.2	0.00210	1.66267	3.856	
CALIPER 1				9.791	10.050
CALIPER 2				10.099	
CALIPER 3				10.099	
PAD FORCE				11.234	
DC MOTOR V				1.6	

INSTRUMENT CONFIGURATION

Source File: /dall/a/575896/k837m/C090-tdg



Mnemonic : C8PC
 Diameter : 3.82"
 Weight : 94 lbs
 Length : 9.08'



C8PC IMAGER MANDREL

Series : 4236MA
 Mnemonic : C8PC
 Diameter : 5.25"
 Weight : 278 lbs
 Length : 12.50'

PAD MP — 25.62'

ISOLATION RETURN SUB

Series : 3992XA

KNUCKLE JOINT (DOUBLE)

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

DIGITAL CBIL ELECTRONICS

Series : 1671EB
 Mnemonic : CBIL
 Diameter : 3.38"
 Weight : 120 lbs
 Length : 7.48'

DIGITAL CBIL MANDREL

Series : 1671MB
 Mnemonic : CBIL
 Diameter : 3.63"
 Weight : 150 lbs
 Length : 7.81'

MUD MP — 3.55'

IMAGE MP — 1.81'

BULL PLUG 3 3/8

0.00'

TOTAL LENGTH: 95.40'
 TOTAL WEIGHT: 1481 lbs
 MAX DIAMETER: 0'5.25"

 BAKER HUGHES	COMPANY <u>SIERRA GEOTHERMAL POWER, INC.</u> WELL <u>ALUM 25-29</u> FIELD <u>ALUM</u> COUNTY <u>ESMERALDA</u> STATE <u>NEVADA</u>	FILE NO: _____ API NO: <u>27-009-90074</u>
	Baker Atlas 	LOCATION: SHL: <u>2235.18'</u> FSL & <u>938.11'</u> PWL SW/C _____ SEC <u>29</u> TWP <u>1N</u> RGE <u>38.5 E</u>
DATE <u>25-NOV-2009</u>		