

**BAKER
HUGHES**



ALIGNED BOREHOLE PROFILE LOG

Baker Atlas

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

Ver. 3.07 LOCATION: **2235.18' FSL & 938.11' PML**
SW/C SEC: **29** TWP: **1N** RGE: **3E, SE**
 TITLE HOLE

PERMANENT DATUM: **G.L.** ELEVATION: **4803.57 FT**
 LOG MEASURED FROM: **K.B.** **18.0 FT** ABOVE P.D.
 DRILL MEAS. FROM: **K.B.** OTHER SERVICES:
 H/L
 Z/L/CN
 X/MAC
 STAR/CBLL
 ELEVATIONS:
 KB 4919.57 FT
 DF
 OL 4803.57 FT

DATE	15-NOV-2008	
RUN	TRIP	2
SERVICE ORDER	572896	
DEPTH DRILLER	2300 FT	
DEPTH LOGGER	2289 FT	
BOTTOM LOGGED INTERVAL	2285 FT	
TOP LOGGED INTERVAL	571 FT	
CASING DRILLER	16.0 IN	
CASING LOGGER	571 FT	
BIT SIZE	14.75 IN	
TYPE OF FLUID IN HOLE	LSD	
DENSITY	9.0 LB/G	54 S
PH	9.0	10.0 C3
SOURCE OF SAMPLE	FLOWLINE	
RM AT MEAS. TEMP.	2.53 OHM	61 DEGF
RM AT MEAS. TEMP.	2.36 OHM	80 DEGF
RMG AT MEAS. TEMP.	2.89 OHM	83 DEGF
SOURCE OF RMF	MEASURED	MEASURED
RM AT BHT	1.08 OHM	152 DEGF
TIME SINCE CIRCULATION	9.5 HOURS	
MAX. RECORDED TEMP.	180 DEGF	
EQUIP. NO.	IN-4232	FALLON, NV
RECORDED BY	VENCIMAK	
WITNESSED BY	JERRY HAWKIN	

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 2 : CCVO COMPUTED USING 10.75' CASING (BVOL, CVOL UNITS IN CUBIC FEET)

THANKS FOR USING BAKER ATLAS
 CREW: LAPOINT / HAYCOCK
 RIG: ENSIGN 581

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	2	PWR ADAPT	4430KB	10161078	FREE
1	2	SNVL	3844KD	10201370	FREE
1	2	TRM	3881KB	10203010	FREE
1	2	WTS	3514KB	10200359	FREE
1	2	GR	1328KB	10203000	FREE
1	2	CAP SLR	1022PA	10565885	FREE
1	2	STAR	1038FA / 4238MA	10482331 / 10488537	R-ARM
1	2	STAR	3822VA	10348282	FREE

1	2	KNCKL	38382A	10388278	FREE
1	2	ORT	4401XB	10165246	CENT
1	2	CBLL	1871EB / 1871MB	183828 / 187248	CENT

MAIN LOG 5"/100FT SCALE

ECLIPS 6.01 Feb 21, 2008
Updates: 1

Wed Nov 18 16:44:48 2009

Perplt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.42

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/575895/k837m04.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 568.825 ft BOTTOM DEPTH: 2293.300 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.	10.750	1in	TOP	BOTTOM
BIT SIZE	BIT SIZE	14.750	1in	"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CURVE ALIAS	CREATION DATE	CURVE DESCRIPTION
F1:AZ00QH	AZ00.H	Nov 15 18:52:31 2009	AZIMUTH OF REFERENCE PAD
F1:BCVD		Nov 15 18:52:31 2009	BOREHOLE CUMULATIVE VOLUME.
F1:BIT	BIT	Nov 15 18:52:31 2009	BIT SIZE
F1:BRAD	BRAD_1L	Nov 15 18:52:31 2009	BIT RADIUS
F1:CALDQH	CALD.H	Nov 15 18:52:31 2009	BOREHOLE CALIPER FROM MULTI-ARM TOOL
F1:CCVD		Nov 15 18:52:31 2009	CEMENT CUMULATIVE VOLUME.
F1:CRAD	CRAD_L	Nov 15 18:52:31 2009	CASING RADIUS
F1:DEVDQH	DEVDQH	Nov 15 18:52:31 2009	DEVIATION
F1:DFLG	DFLG	Nov 15 18:52:31 2009	DEAD CROSS-SECTIONAL AREA FLAG.
F1:GR	GR	Nov 15 18:52:31 2009	GAMMA RAY
F1:MAXD		Nov 15 18:52:31 2009	MAXIMUM CALIPER DIAMETER.
F1:MIND		Nov 15 18:52:31 2009	MINIMUM CALIPER DIAMETER.
F1:MINR1	MINR1	Nov 15 18:52:31 2009	MINIMUM RADIUS 1.
F1:MINR2	MINR2	Nov 15 18:52:31 2009	MINIMUM RADIUS 2.
F1:MXR1	MXR1	Nov 15 18:52:31 2009	MAXIMUM RADIUS 1.
F1:MXR2	MXR2	Nov 15 18:52:31 2009	MAXIMUM RADIUS 2.
F1:RB00QH	RB00.H	Nov 15 18:52:31 2009	RELATIVE BEARING (RELATIVE TO HIGH SIDE OF BOREHOLE)
F1:TEN	TEN	Nov 15 18:52:31 2009	DIFFERENTIAL TENSION

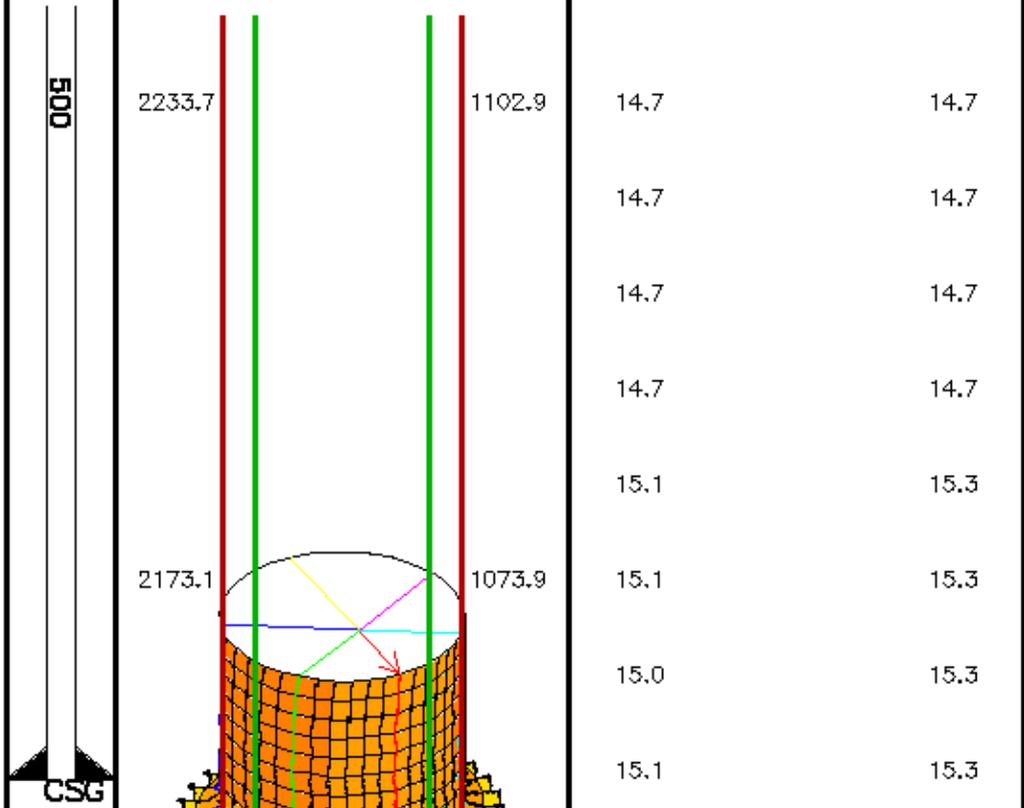
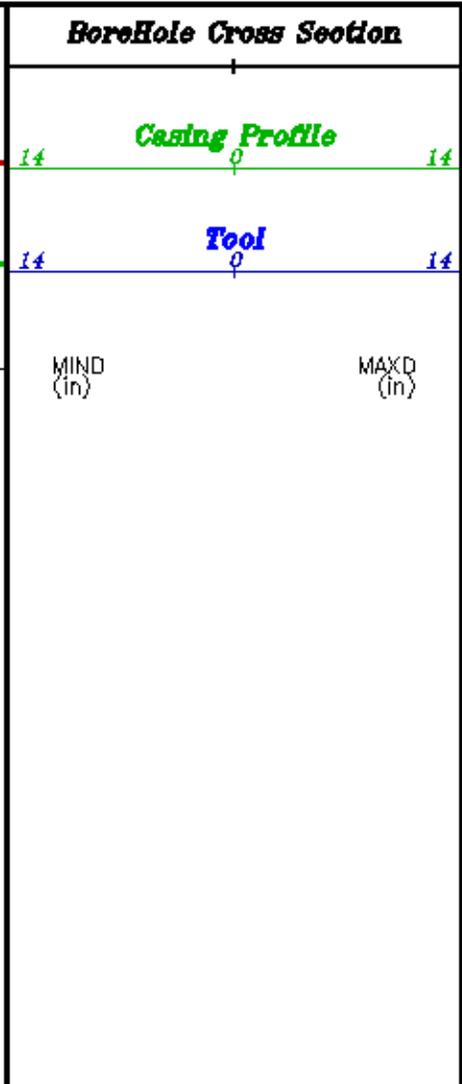
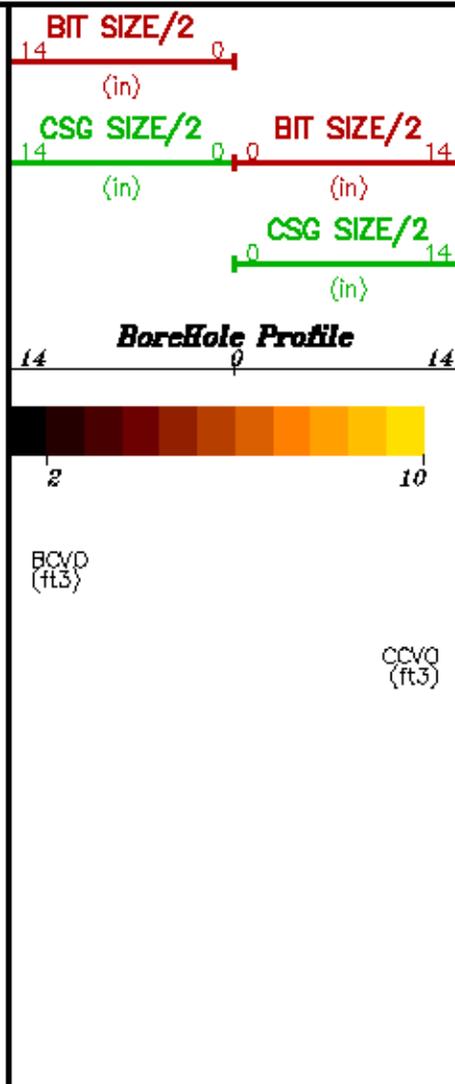
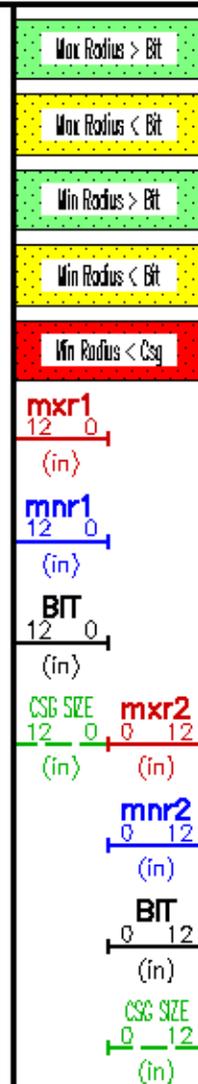
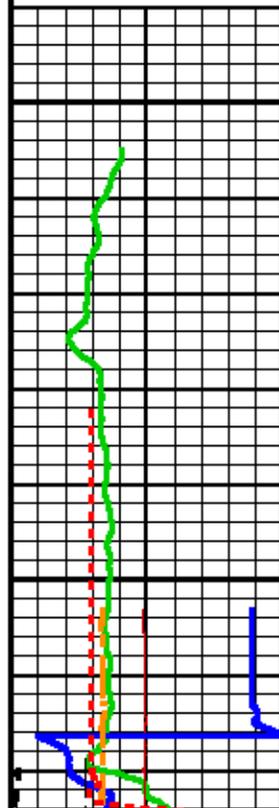
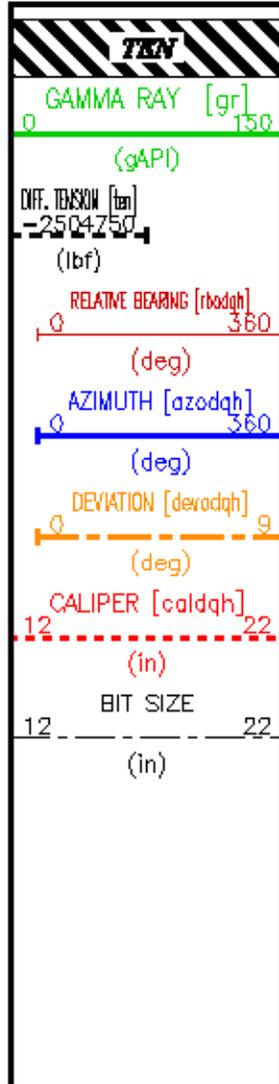
CURVE MEASURE POINT OFFSET

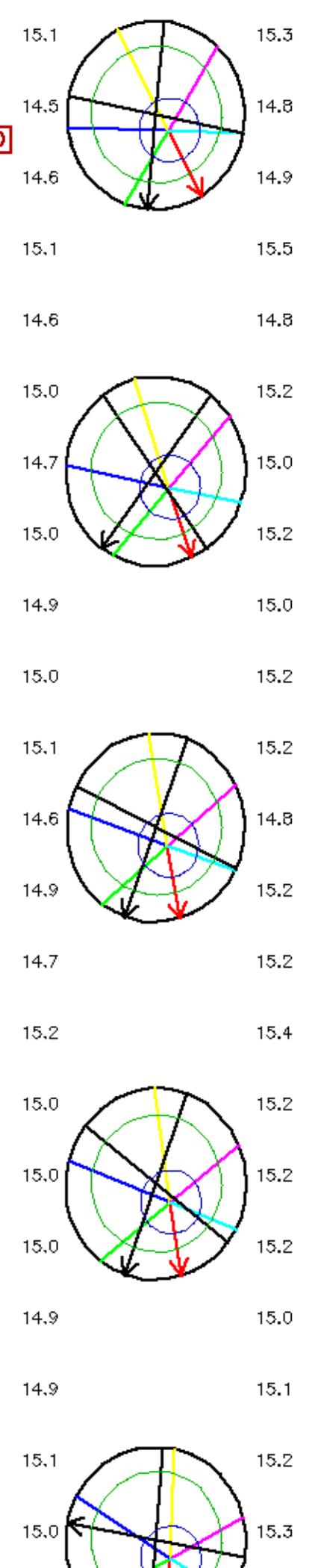
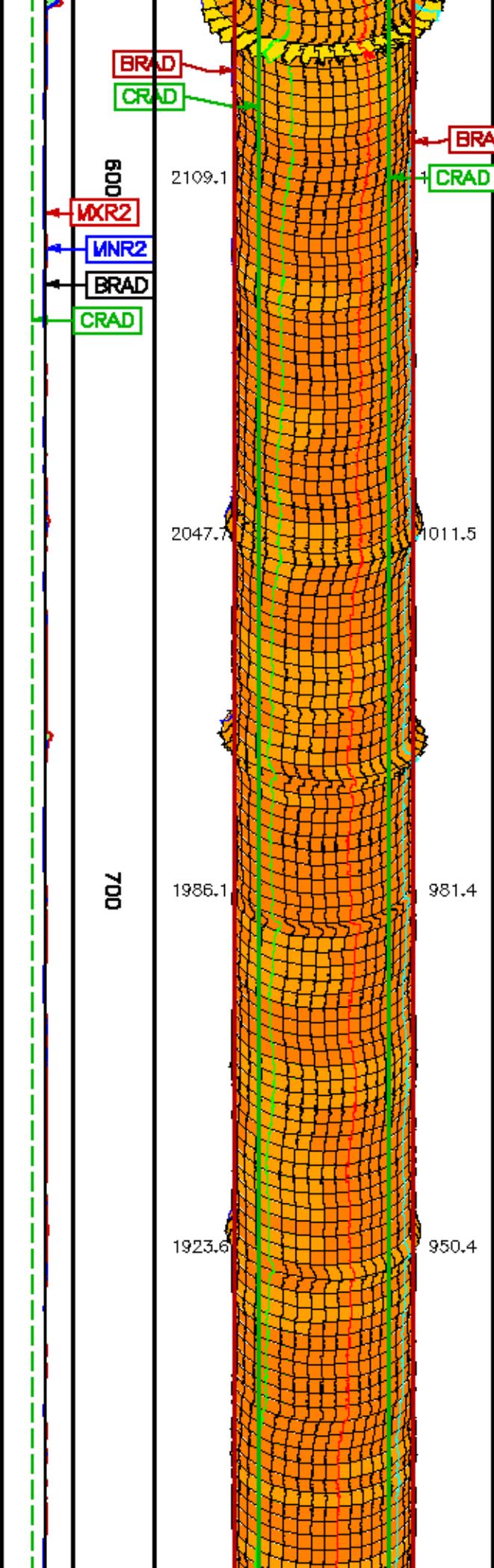
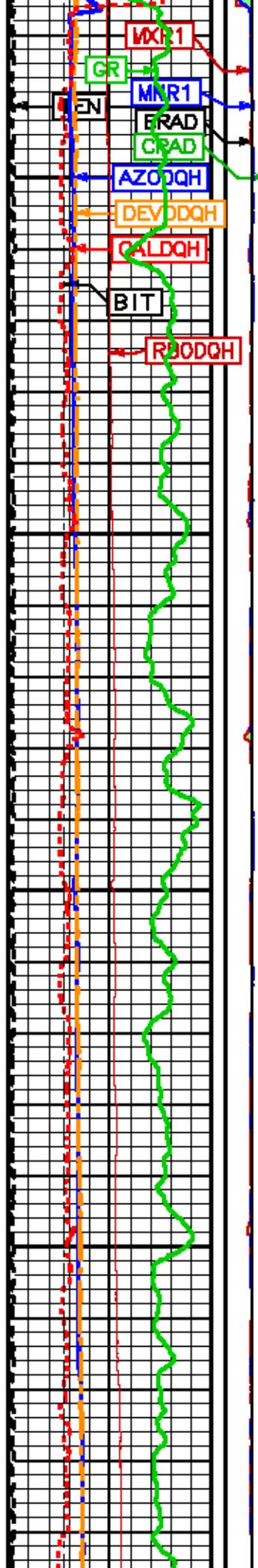
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AZ00QH	15.29	CRAD	38.15	MINR1	38.15	RB00QH	15.29
BIT	0.00	DEVDQH	15.29	MINR2	38.15	TEN	0.00
BRAD	38.15	DFLG	38.15	MXR1	38.15		
CALDQH	38.15	GR	85.00	MXR2	38.15		

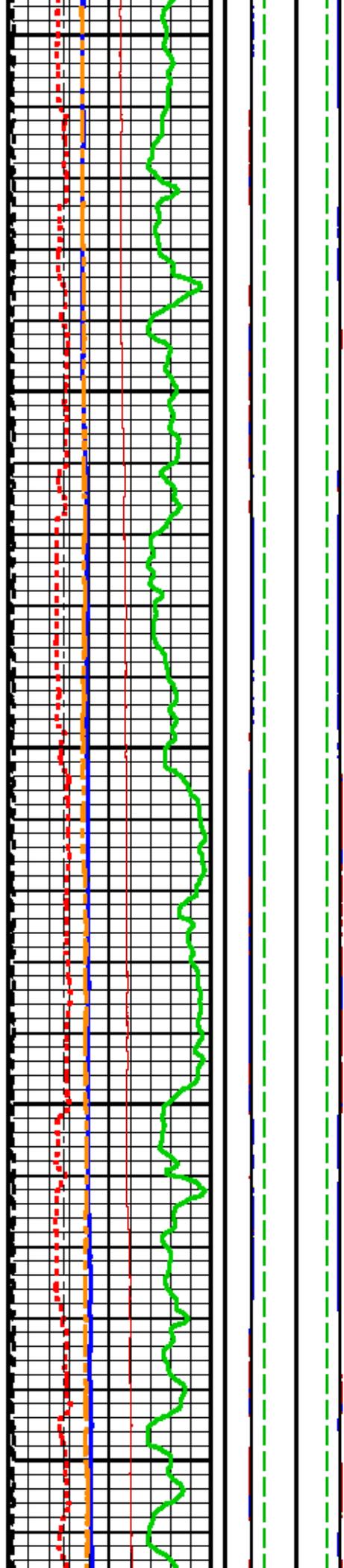
Presentation : cpu1:/dat1a/575895/bhp_align-wcaL.pdf [5"/100' Scale]
 Plot Interval : 491.25 - 2310 Feet

Data File 1 : F1 : cpu1:/dat1a/575895/k837m04.yff

Created On : Nov 15 18:52:31 2008
 Company : SIERRA GEOTHERMAL POWER, INC.
 Well : ALLUM 25-29
 Field : ALLUM
 File Interval : 491.25 - 2293.25 Feet
 Def : L837m







B00

1862.0

920.4

900

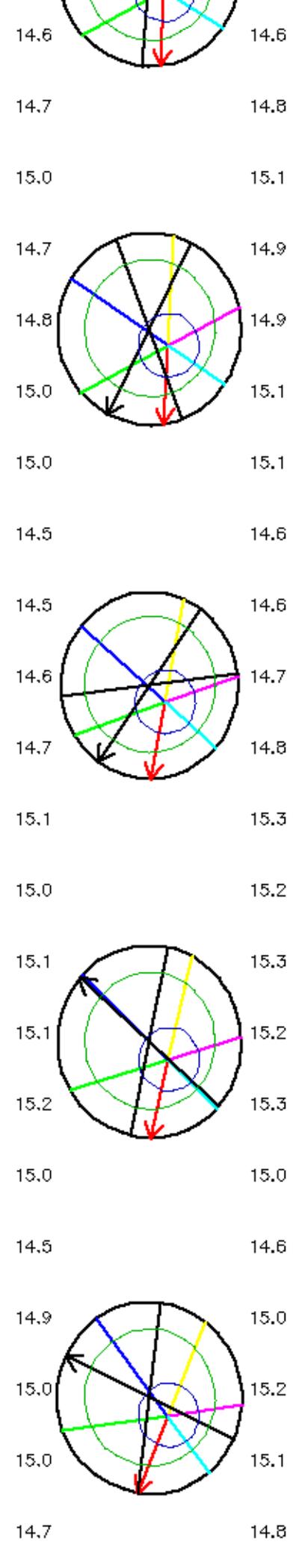
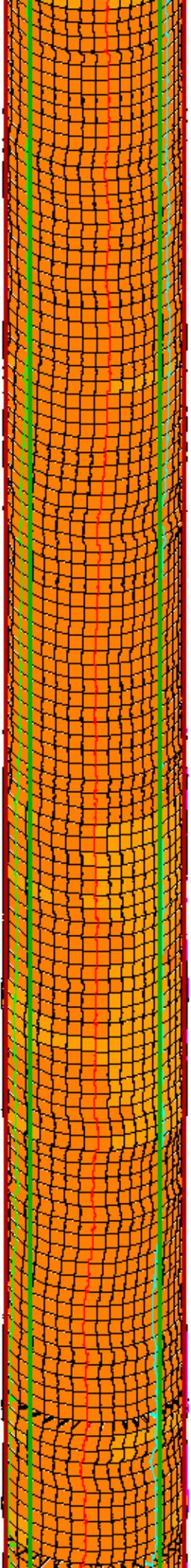
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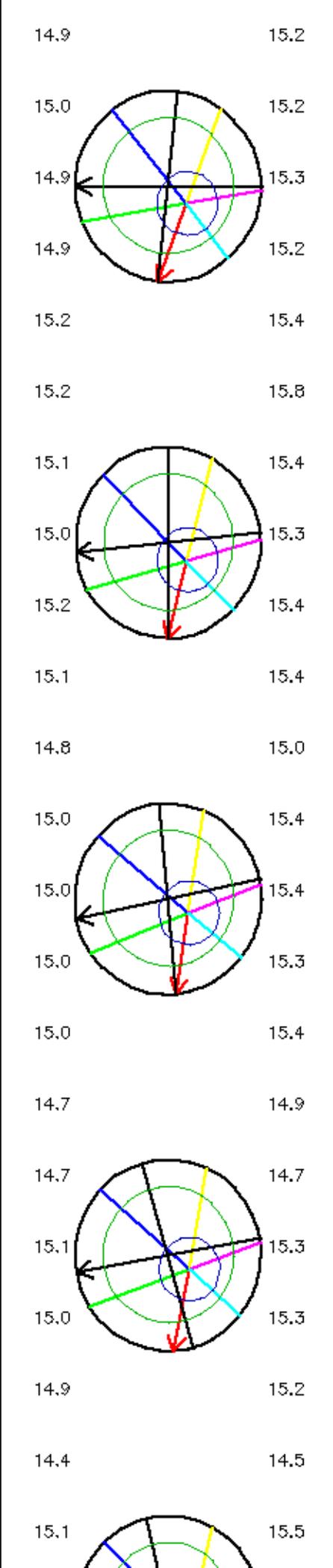
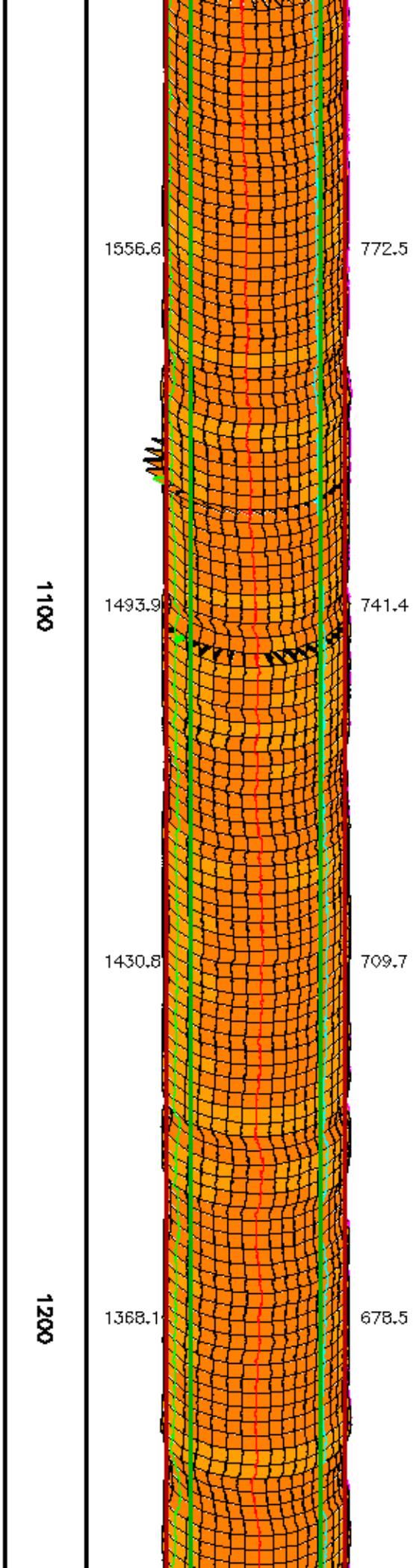
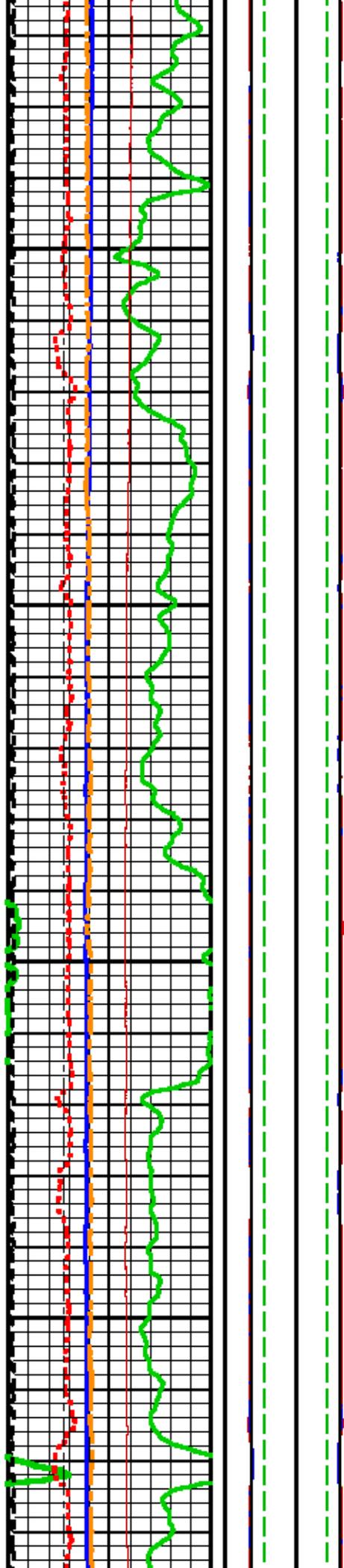
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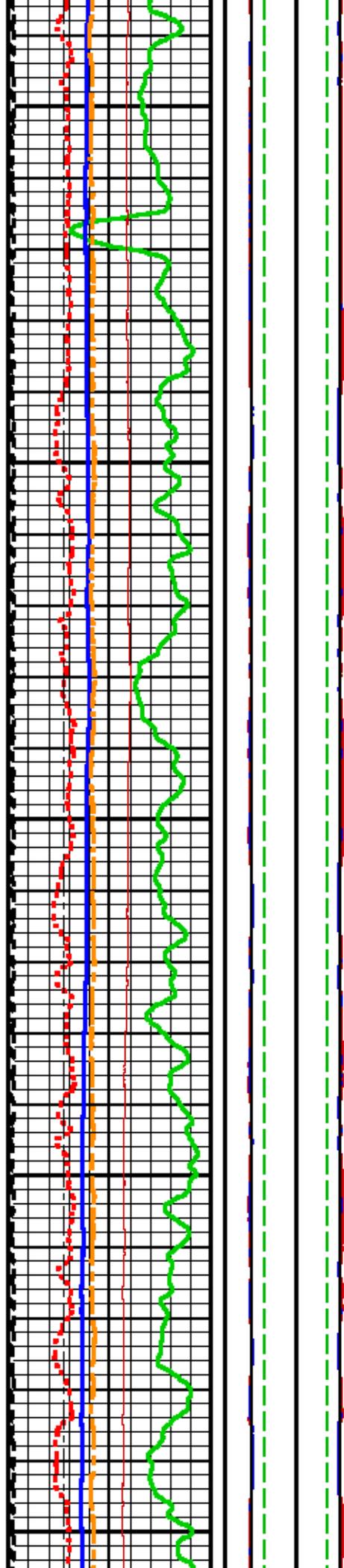
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1100

1200



1300

1400

1305.9

1243.6

1180.3

1118.3

1056.5

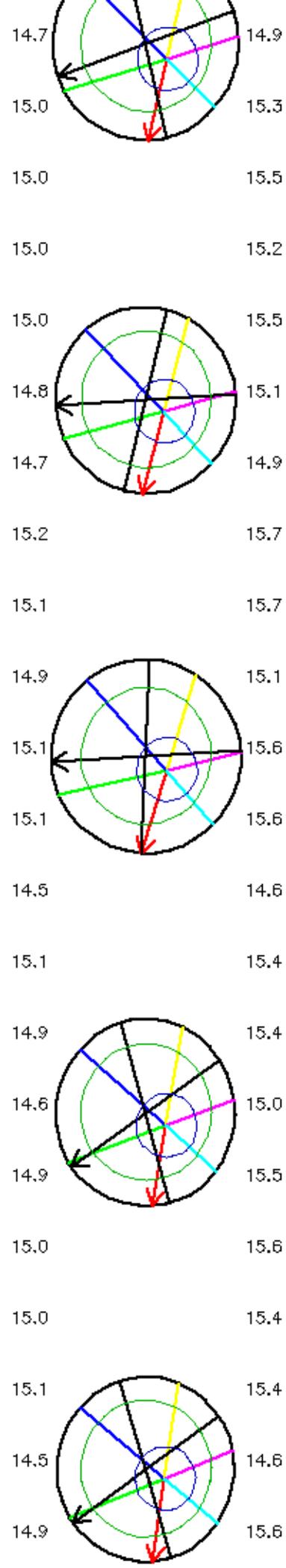
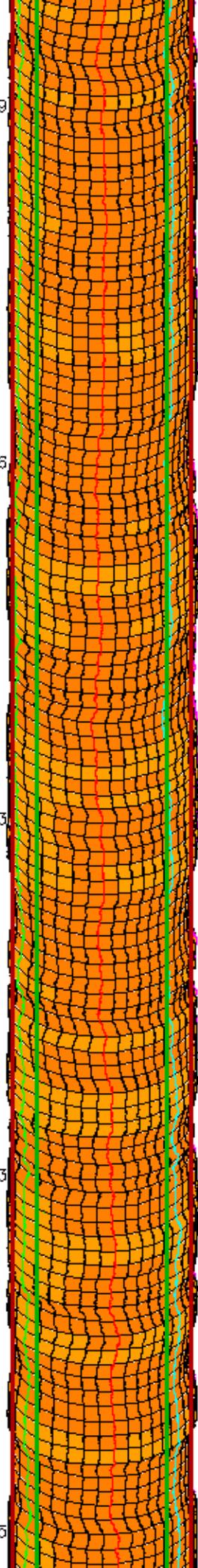
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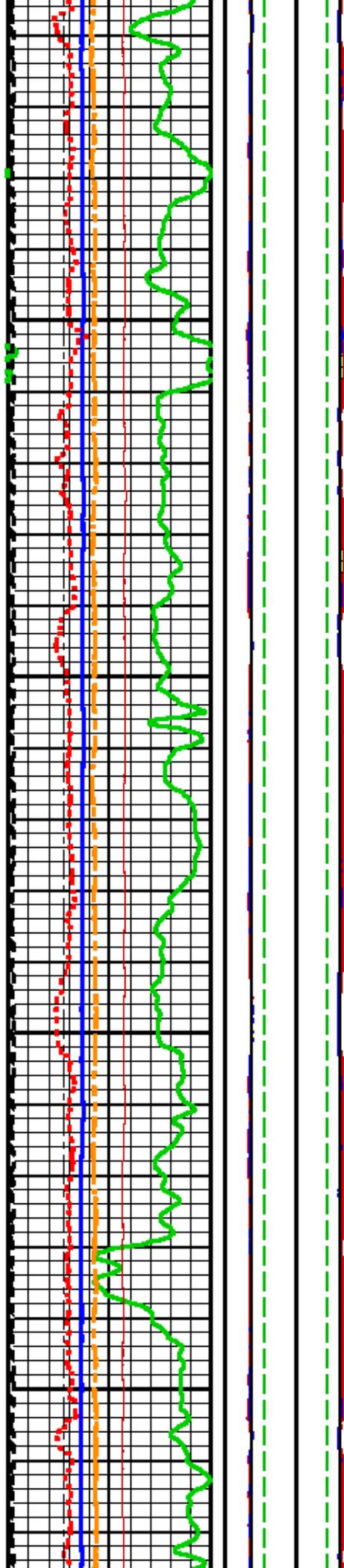
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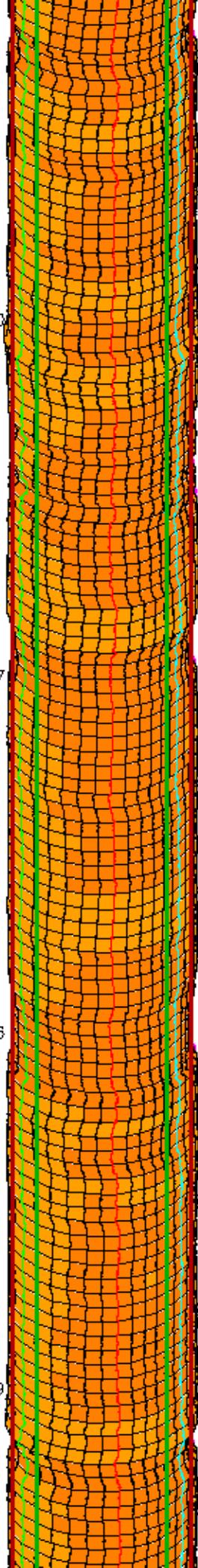
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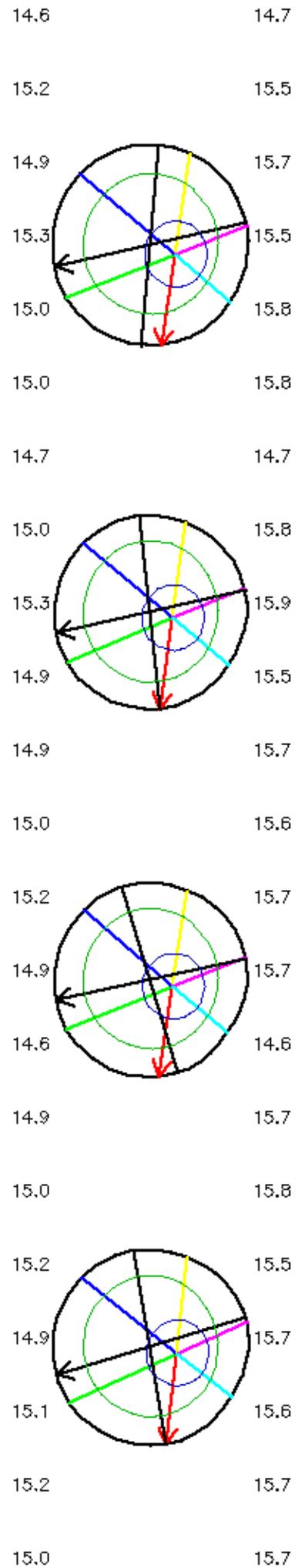


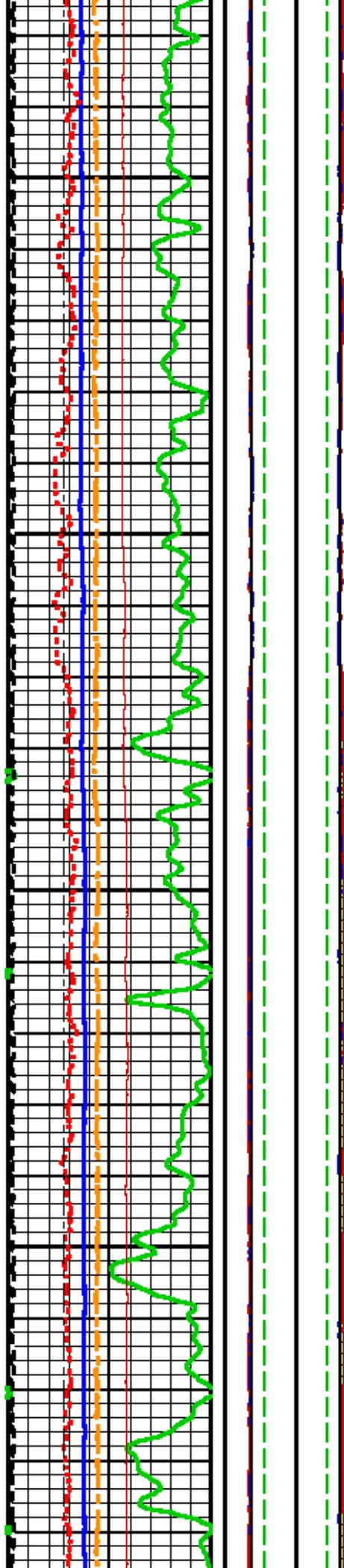
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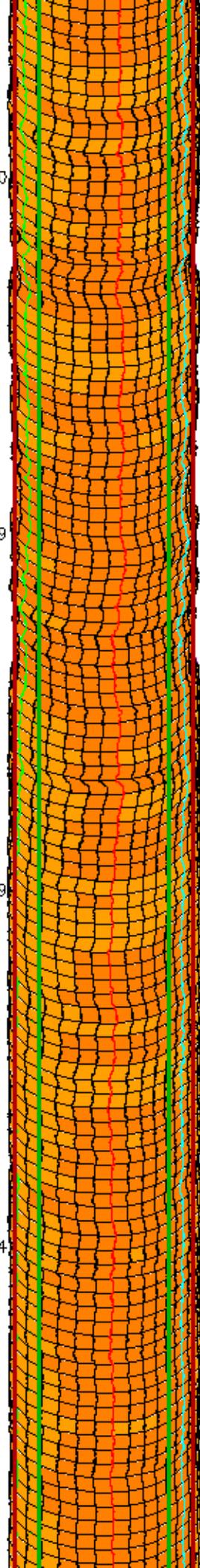
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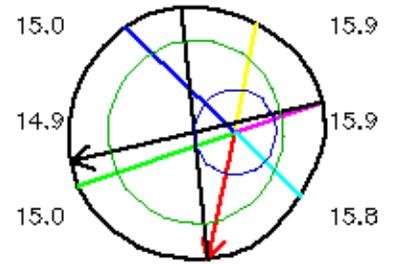
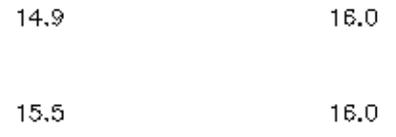
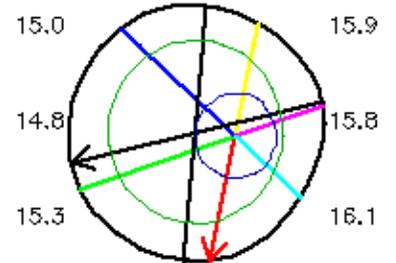
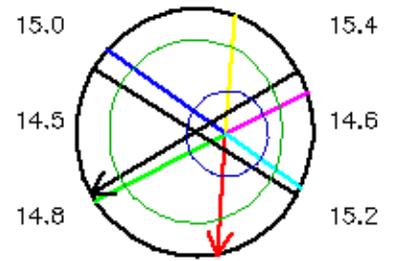
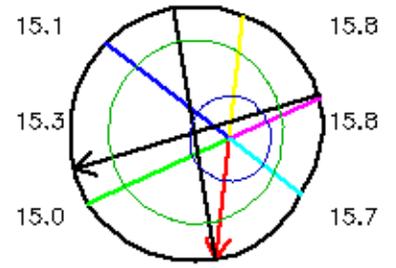


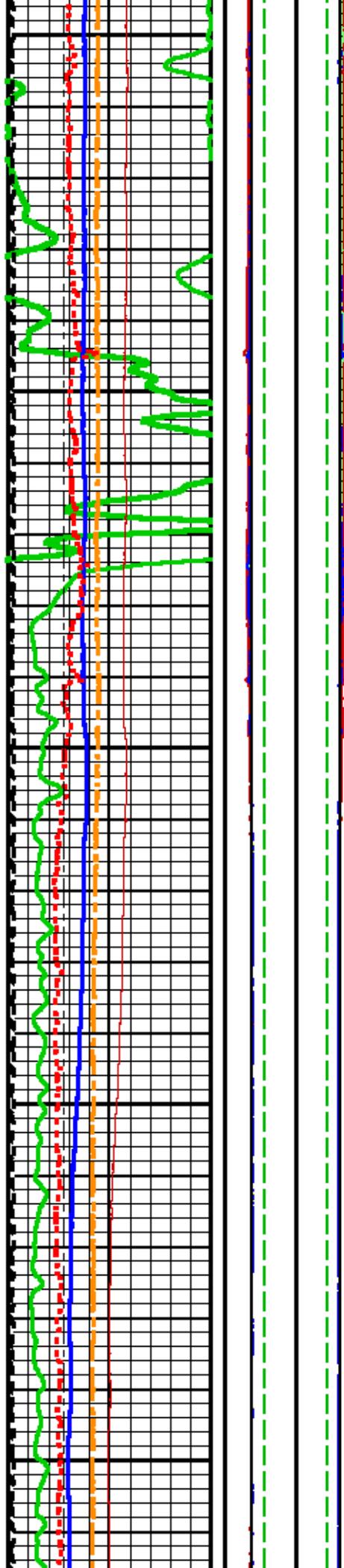
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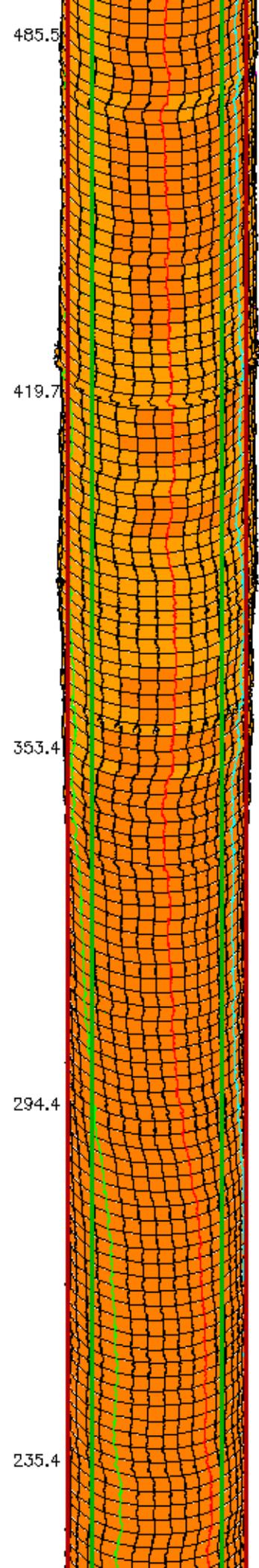




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2000

2100



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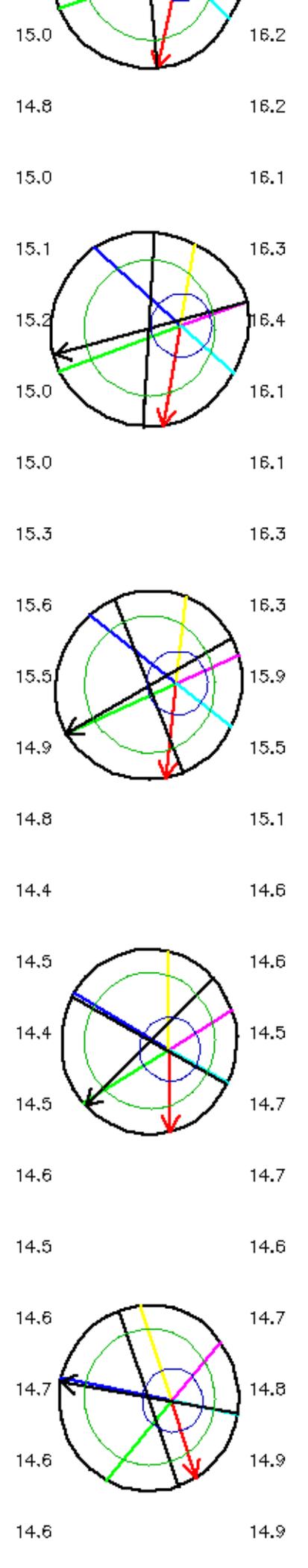
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14.8

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15.5

14.9

14.8

14.4

14.5

14.4

14.5

14.6

14.5

14.6

14.7

14.6

14.6

16.2

16.2

16.1

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16.4

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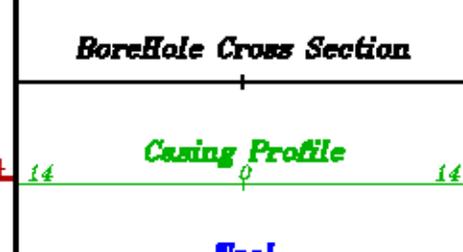
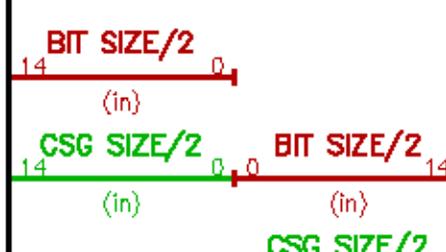
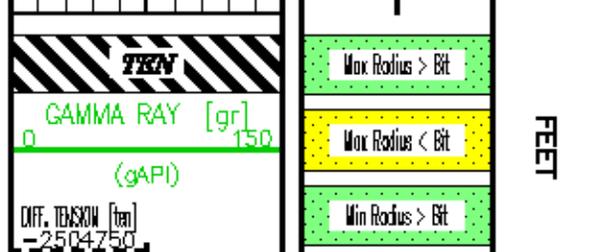
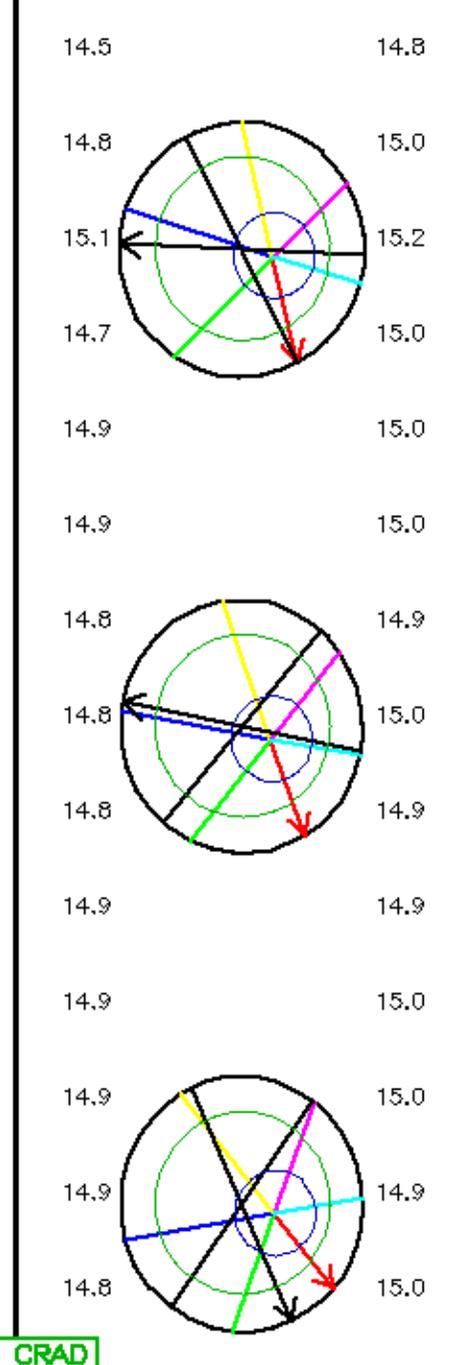
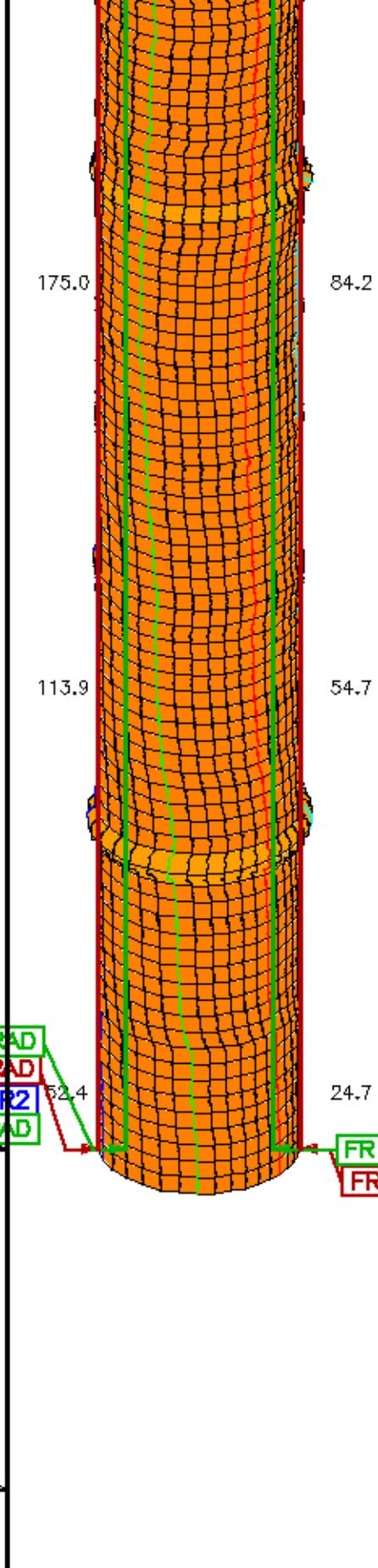
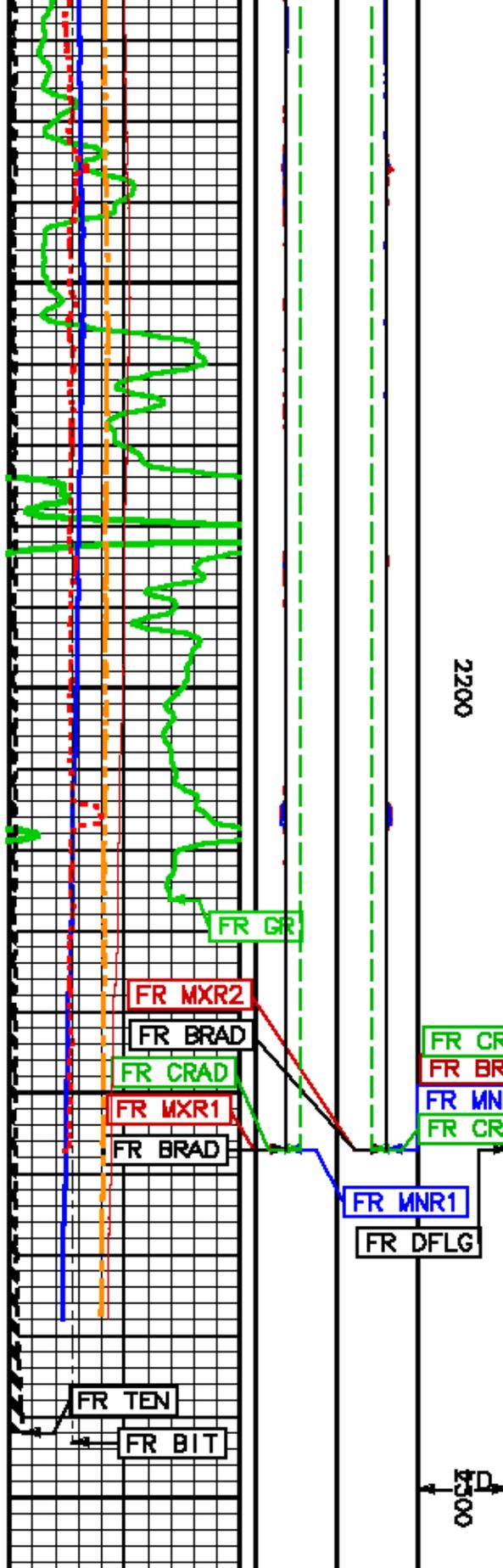
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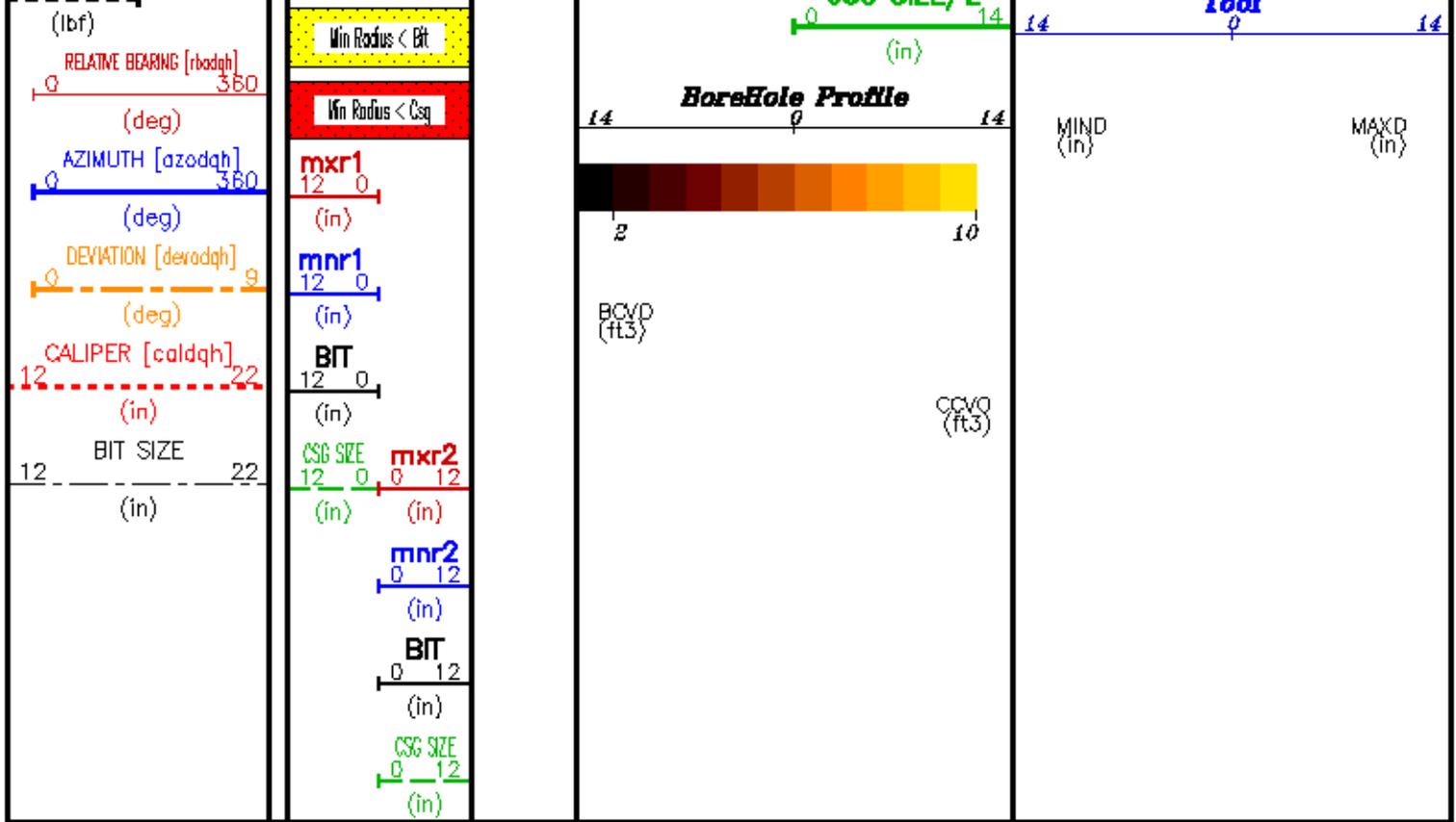
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14.8

14.9

14.9





 Baker Atlas 	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>
	LOCATION: <u>2235.18' FSL & 938.11' FHL</u> <u>SW/C</u> SEC <u>29</u> TWP <u>1N</u> RGE <u>38.5E</u>	ELEVATIONS: KB <u>4919.57 FT</u> DF GL <u>4903.57 FT</u> DATE <u>15-NOV-2009</u>