



FILE NO:	COMPANY	HUSKY OIL OPERATIONS LIMITED
API NO:	WELL	LITTLE BEAR H-64
	FIELD	SLATER RIVER
	PROVINCE	NORTHWEST TERRITORIES
Ver. 3.87	LOCATION:	OTHER SERVICES
UID:	SURF LOC:	ZOL-CH-GR-CAL
300H4500126000	LAT 64 53' 28.5"N LONG 126 11' 20.3"W	HDIL-GR-CAL, CAL
LICENSE:	BH LOC, LSD:	XUAC-GR, FLEX-TSL
482	LAT 64 53' 28.5"N LONG 126 11' 20.3"W	DSL, WREX, DIRSUR
		CSL
PERMANENT DATUM	G.L.	ELEVATION
LOG MEASURED FROM	K.B.	178.0 M
DRILL MEAS. FROM	5.2 M	ABOVE P.D.
	KELLY BUSHING	
		ELEVATIONS:
		KB 183.2 M
		DF
		GL 178.0 M

DATE	TRIP		
06-MAR-2012	1	2	
SERVICE ORDER	CA212311		
DEPTH DRILLER	1341.0 M		
DEPTH LOGGER	1340.2 M		
BOTTOM LOGGED INTERVAL	1337.5 M		
TOP LOGGED INTERVAL	800.0 M		
CASING DRILLER	244.5 MM	510.0 M	
CASING LOGGER	510.0 M		
BIT SIZE	222.0 MM		
TYPE OF FLUID IN HOLE	INVERT		
DENSITY	1240.0 G/L	47.0 S	
PH	MA	MA	
SOURCE OF SAMPLE	NO SAMPLE		
RM AT MEAS. TEMP.	MA	MA	
RM AT MEAS. TEMP.	MA	MA	
RM AT MEAS. TEMP.	MA	MA	
SOURCE OF RMF	NO SAMPLE	NO SAMPLE	
RM AT BHT	MA	MA	
TIME SINCE CIRCULATION	15.5 HOURS		
MAX. RECORDED TEMP.	57.8 DEGC		
EQUIP. NO.	Z008672	OH CANADA	
RECORDED BY	J. COLLIER/D. DOUCETT		
WITNESSED BY	H. ARENBURG		

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.

BOREHOLE RECORD		
BIT SIZE	FROM	TO
311.0 MM	0.0 M	510.0 M
222.0 MM	510.0 M	1341.0 M

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
244.5 MM	53.6 KG/M	MA	0.0 M	510.0 M

REMARKS

RUN 1 TRIP 2: TIME STOPPED CIRCULATION: 06-MAR-2012 02:30 PM

DID NOT BRING CALIPERS INTO CASING ON THIS PASS TO PREVENT DAMAGE TO EI PADS

RIG: NABORS 23

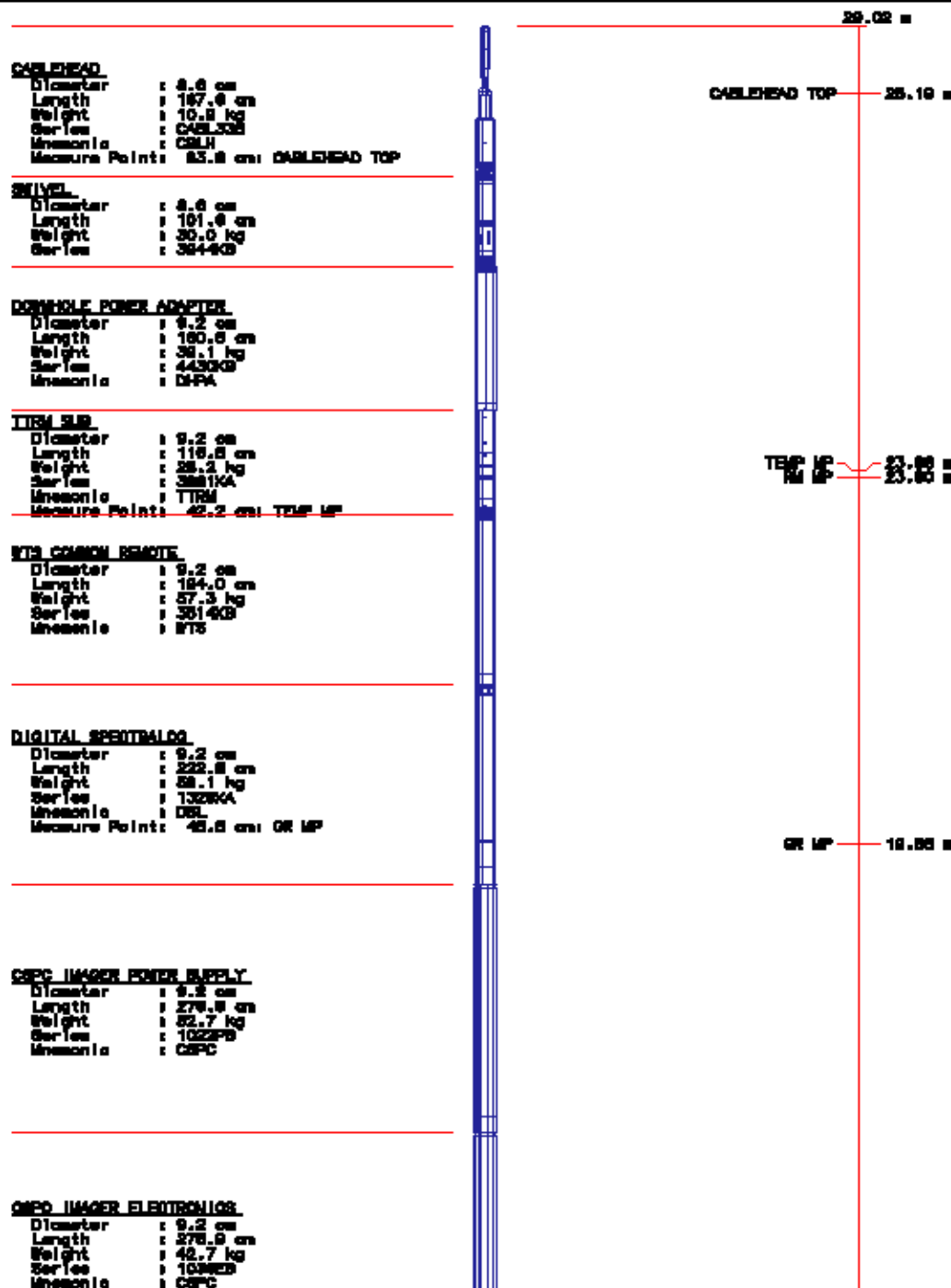
CREW: J. COLLIER, D. DOUCETT, D. KIRMAN, D. SCHNEIDER, N. MCDERMID, P. ARENBURG

EQUIPMENT DATA				
RUN	TRIP	TOOL	SERIES NO.	POSITION
1	2	SWIVEL	3844XD	FREE
1	2	DHCP	44300B	FREE
1	2	TRIP CLIP	10843	FREE

1	2	TTRM SUB	3881XA	12073548	FREE
1	2	COMM	3514XC	12079083	FREE
1	2	WTS DGR/SL	1328XB	11756674	FREE
1	2	STAR II PS	1022PB	12083301	FREE
1	2	F/ GOM	1036EB	12073777	FREE
1	2	STAR MANDRE	4238XA	10209809	6-PAD DEVICE
1	2	WTS ISO SUB	3982XA	12074457	FREE
1	2	ORT	4401XB	Z1668978	FREE
1	2	WTS DBL KINJ	3930XA	12081507	FREE
1	2	CSIL ELEC	1873EB	Z1664558	CENTRALIZED
1	2	CSIL MANDRE	1873XA	10171647	CENTRALIZED

INSTRUMENT CONFIGURATION

Source File: /data/husky_CA212311/run2-tdg



CBPC IMAGER MANDREL

Diameter : 13.3 cm
Length : 381.0 cm
Weight : 128.4 kg
Series : 4238MB
Mnemonic : CBPC
Measure Point: 100.8 cm: PAD MP

PAD MP 11.05 m

ISOLATION RETURN SUB

Diameter : 9.3 cm
Length : 83.6 cm

DIGITAL ORIENTATION

Diameter : 8.6 cm
Length : 328.4 cm
Weight : 30.0 kg
Series : 4401KB
Mnemonic : ORIT
Measure Point: 0.0 cm: ORIENT MP

ORIENT MP 8.12 m

KNUCKLE JOINT (DOUBLE)

Diameter : 8.6 cm
Length : 141.8 cm
Weight : 40.8 kg
Series : 3838KA
Mnemonic : KJNT

E-CRIL ACOUSTIC IMAGER ELECTRONICS

Diameter : 8.6 cm
Length : 223.0 cm
Weight : 54.6 kg
Series : 1873EA
Mnemonic : CRIL

E-CRIL ACOUSTIC IMAGER MANDREL

Diameter : 8.6 cm
Length : 238.1 cm
Weight : 86.2 kg
Series : 1873MA
Mnemonic : CRIL
Measure Point: 88.7 cm: MID MP
Measure Point: 40.3 cm: IMAGE MP

MID MP 1.05 m

IMAGE MP 0.48 m

BALL PLUG 3 3/8

TOTAL LENGTH: 28.02 m
TOTAL WEIGHT: 680.0 kg
MAX DIAMETER: 16.5 cm

0.00 m

BOREHOLE PROFILE LOG

ECLIPS 6.11 Aug 06, 2010
Updates: 1 Patches: 1

Wed Mar 7 10:49:07 2012

Perpllt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.51

PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/husky_CA212311/repeat00.prm
LOGGING MODE: NEDTH DIRECTION: UP

CURVE NO: 1001 TOP DEPTH: 525.435 m BOTTOM DEPTH: 1338.163 m

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
GR	FILTER { FILTER { FILTER {	medium { medium { medium {		TOP " "	BOTTOM " "

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	177.800	mm	TOP "	BOTTOM "
BIT SIZE	BIT SIZE	222.000	mm		

CURVE DESCRIPTION REPORT

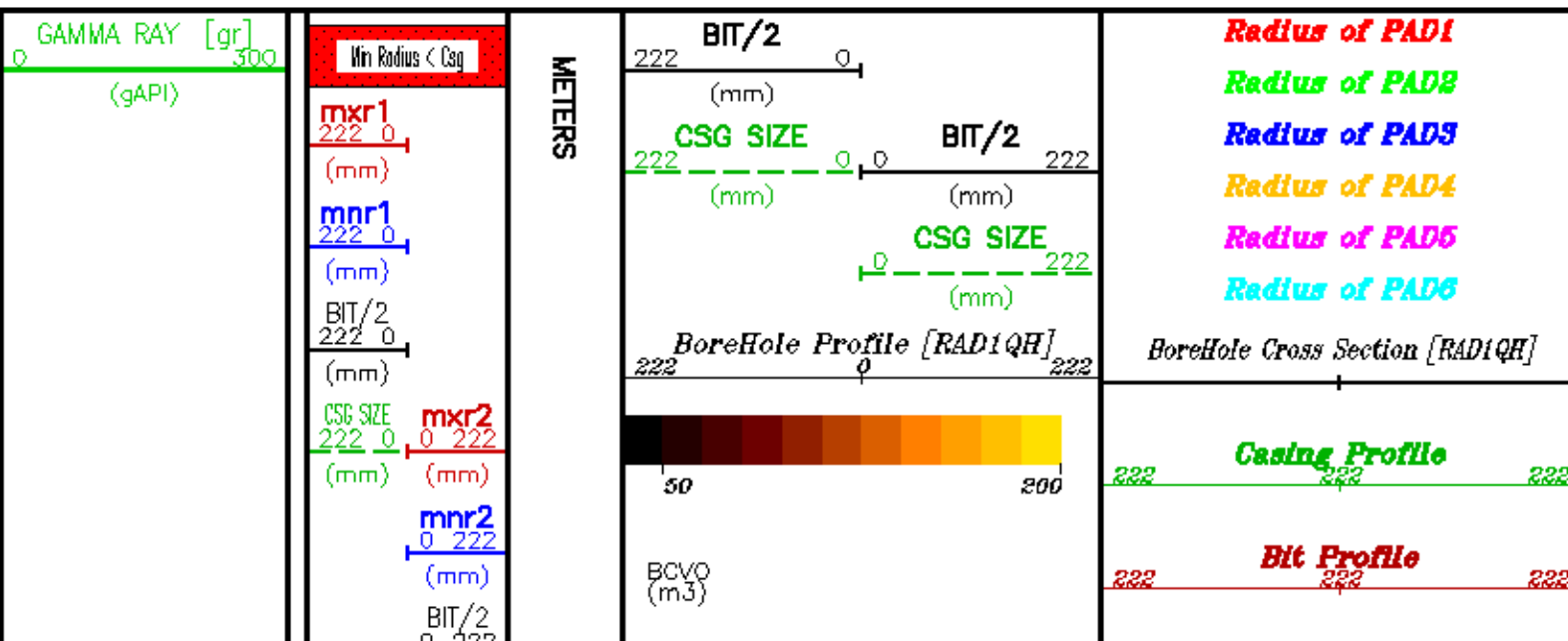
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BCVO	Mar 7 10:10:28 2012	BOREHOLE CUMULATIVE VOLUME
F1:BRAD	Mar 7 10:10:28 2012	BIT RADIUS
F1:CCVO	Mar 7 10:10:28 2012	CEMENT CUMULATIVE VOLUME
F1:CRAD	Mar 7 10:10:28 2012	CASING RADIUS
F1:DFL0	Mar 7 10:10:28 2012	DEAD CROSS-SECTIONAL AREA FLAG
F1:GR	Mar 7 10:10:28 2012	GAMMA RAY
F1:MAXD	Mar 7 10:10:28 2012	MAXIMUM CALIPER DIAMETER
F1:MIND	Mar 7 10:10:28 2012	MINIMUM CALIPER DIAMETER
F1:MNR1	Mar 7 10:10:28 2012	MINIMUM RADIUS 1
F1:MNR2	Mar 7 10:10:28 2012	MINIMUM RADIUS 2
F1:MXR1	Mar 7 10:10:28 2012	MAXIMUM RADIUS 1
F1:MXR2	Mar 7 10:10:28 2012	MAXIMUM RADIUS 2
F1:OFFS	Mar 7 10:10:28 2012	TOOL-TO-CENTROID RADIUS

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
BRAD	10.97	GR	19.81	MXR1	10.97		
CRAD	10.97	MNR1	10.97	MXR2	10.97		
DFL0	10.97	MNR2	10.97	OFFS	10.97		

Presentation : opus:/data/husky_CA212311/bhp_slater_101.pdf [1:240 Scale]
Plot Interval : 500.044 - 1338.15 Meters

Data File 1 : F1 : opus:/data/husky_CA212311/obll_al_main.off
Created On : Mar 7 10:10:28 2012
Company : HUSKY OIL OPERATIONS LIMITED
Well : LITTLE BEAR H-04
Field : SLATER RIVER
File Interval : 501.625 - 1338.15 Meters
Out : m857g_KC



0 222
(mm)
CSG SIZE
0 222
(mm)
Cent. Offset (offs)
0 15.24
(mm)



525

550

32.7

32.5

32.3

32.1

31.9

31.7

31.5

31.3

31.1

30.8

CCVO
(m3)

12.38

12.30

12.23

12.14

12.05

11.97

11.89

11.81

11.73

11.65

MIND
(mm)

MAXD
(mm)

224

226

225

228

221

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232

222

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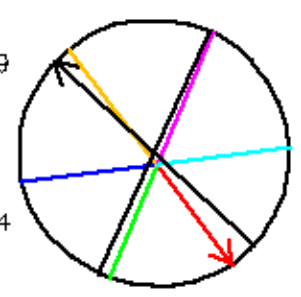
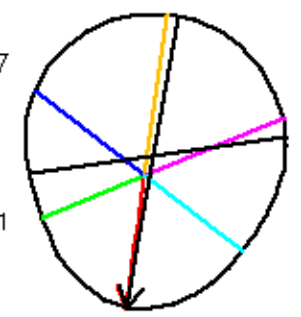
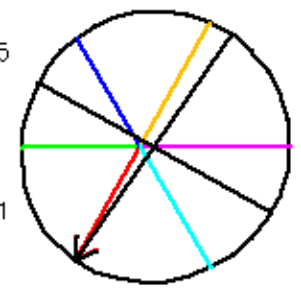
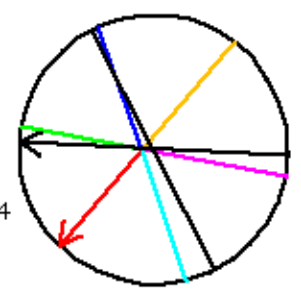
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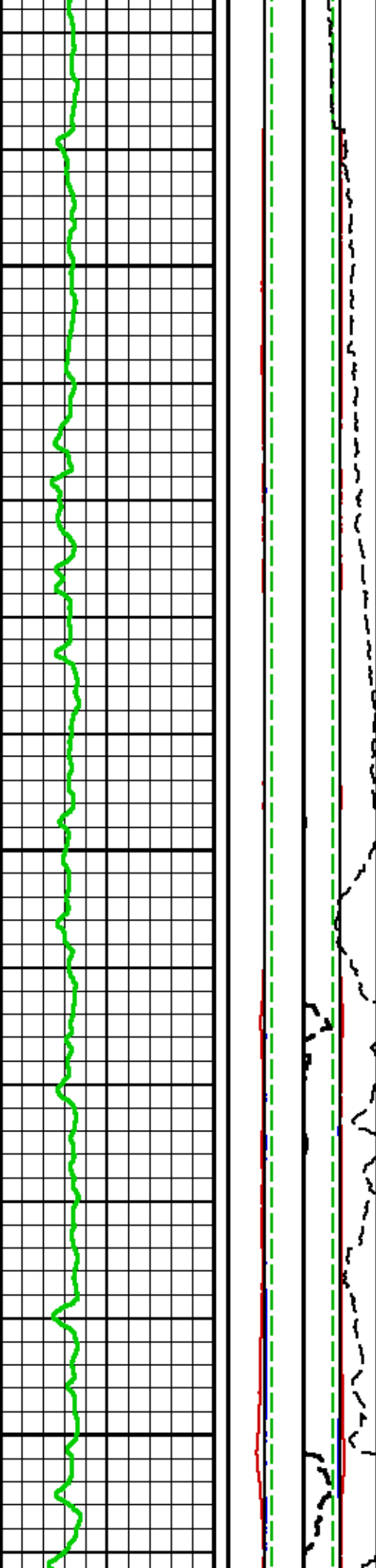
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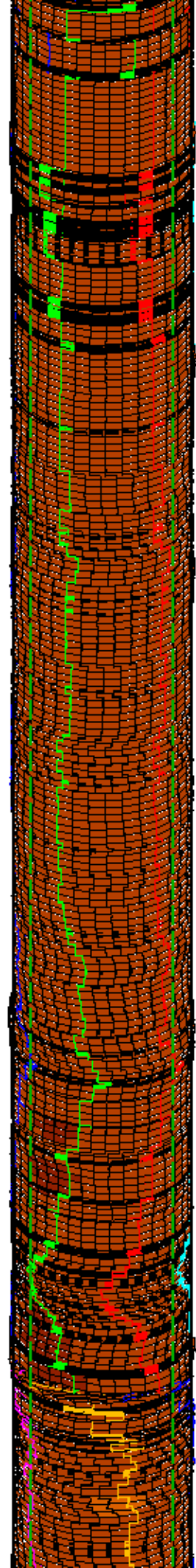


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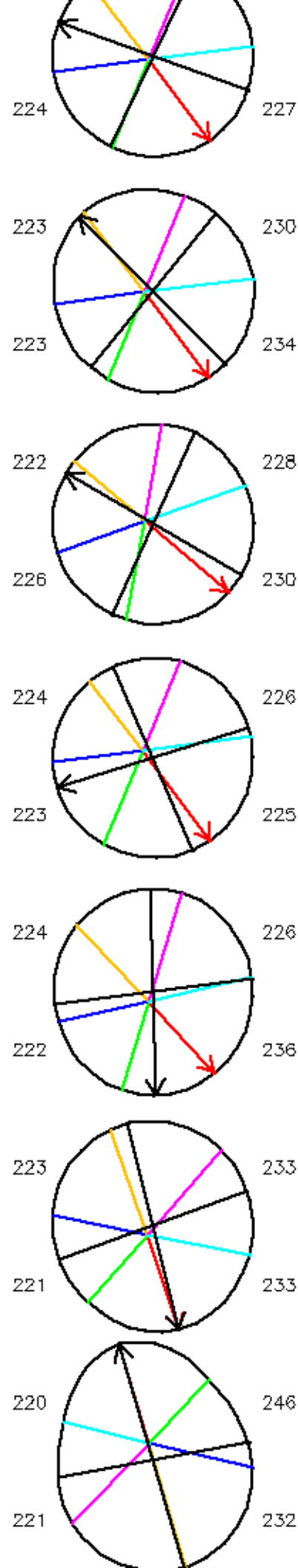
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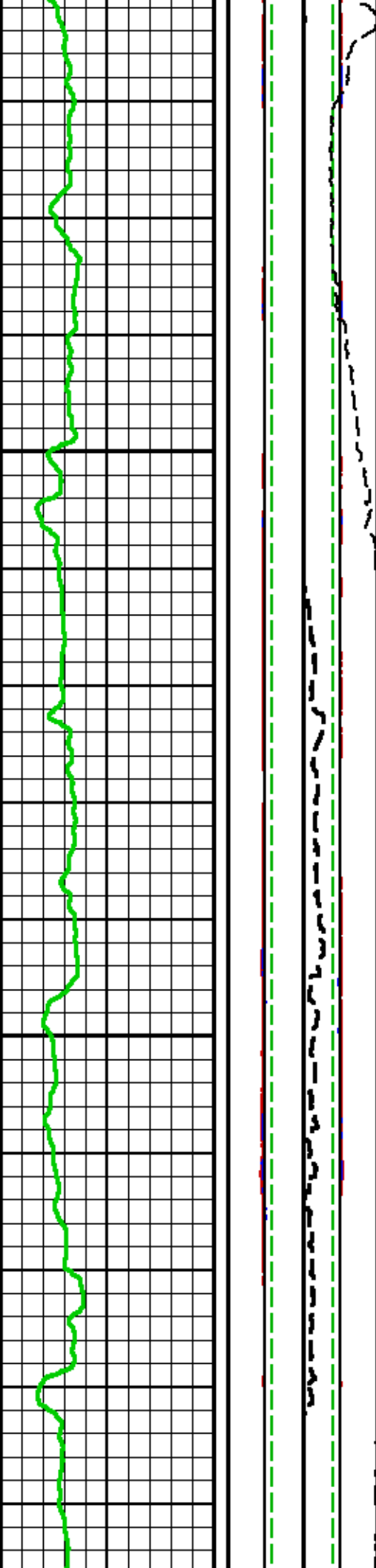
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28.4
28.2



11.58
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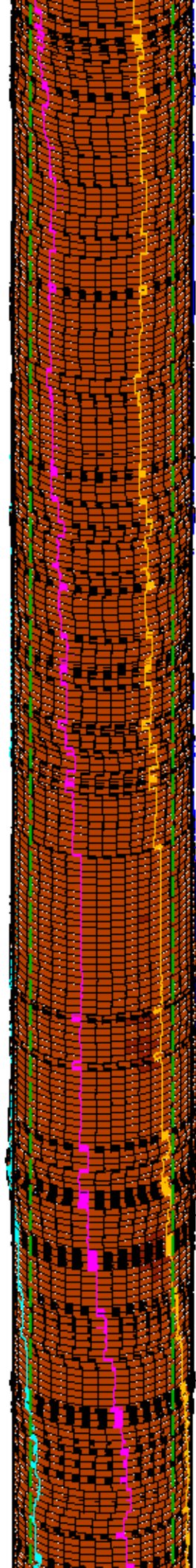




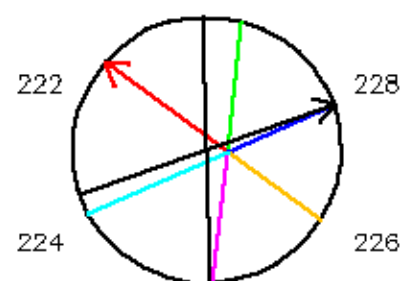
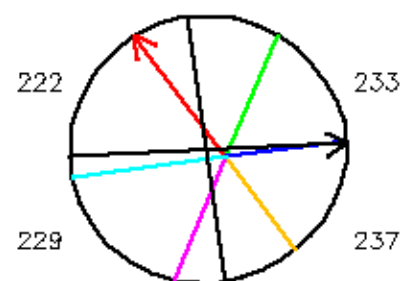
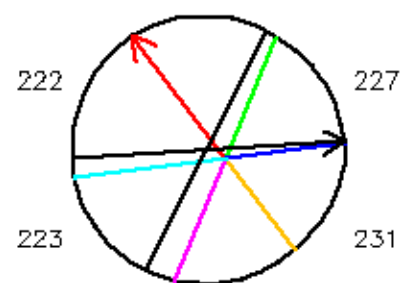
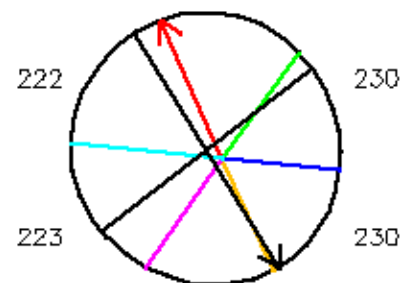
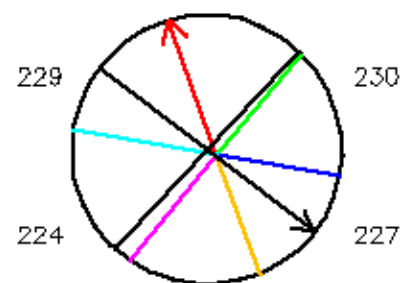
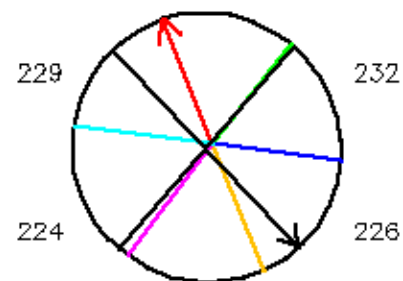
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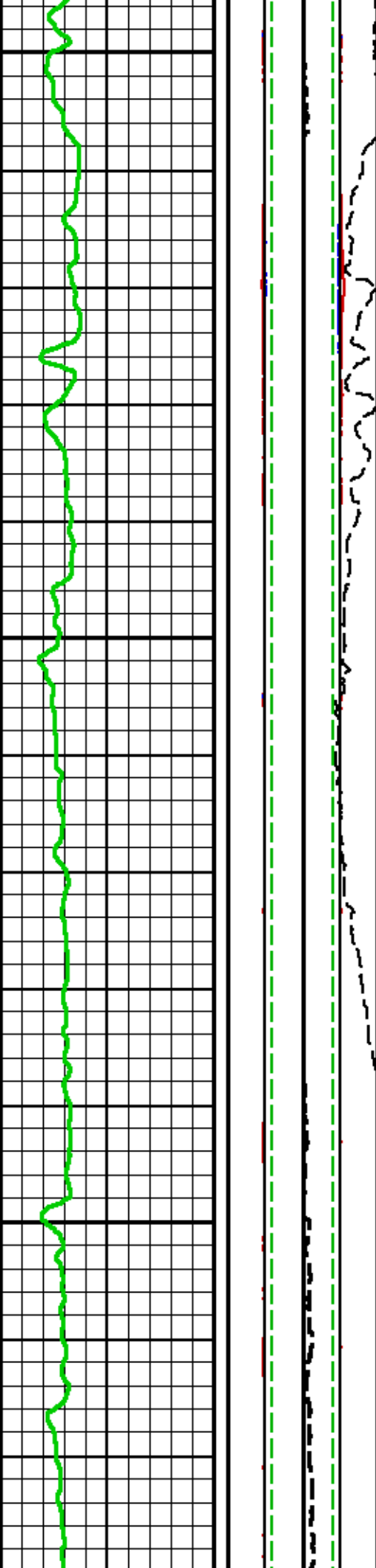
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25.8
25.6



10.55
10.47
10.40
10.32
10.24
10.17
10.09
10.01
9.93
9.85
9.77
9.70
9.62





700

725

750

25.4

25.2

25.0

24.8

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24.2

24.0

23.8

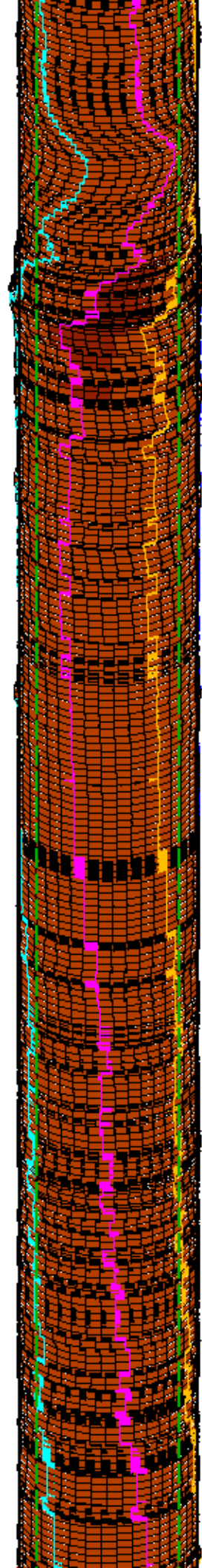
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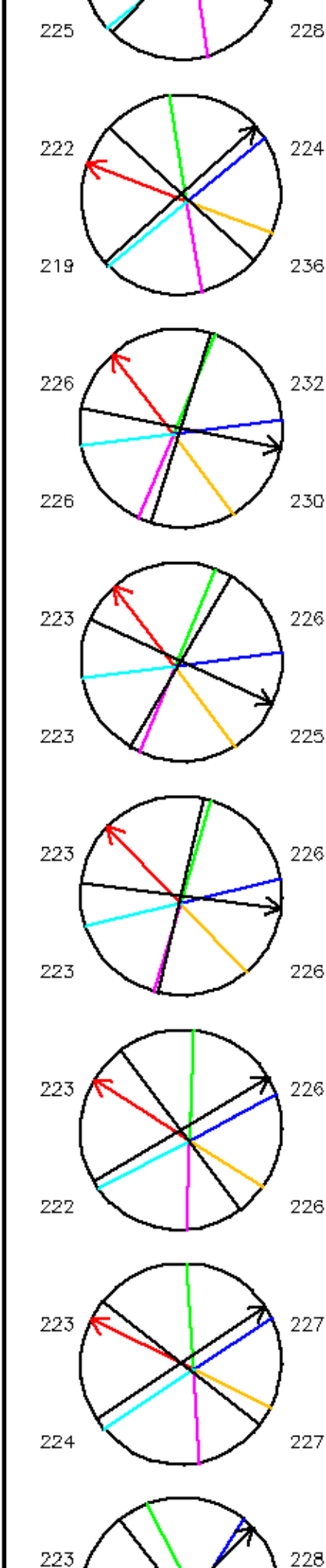
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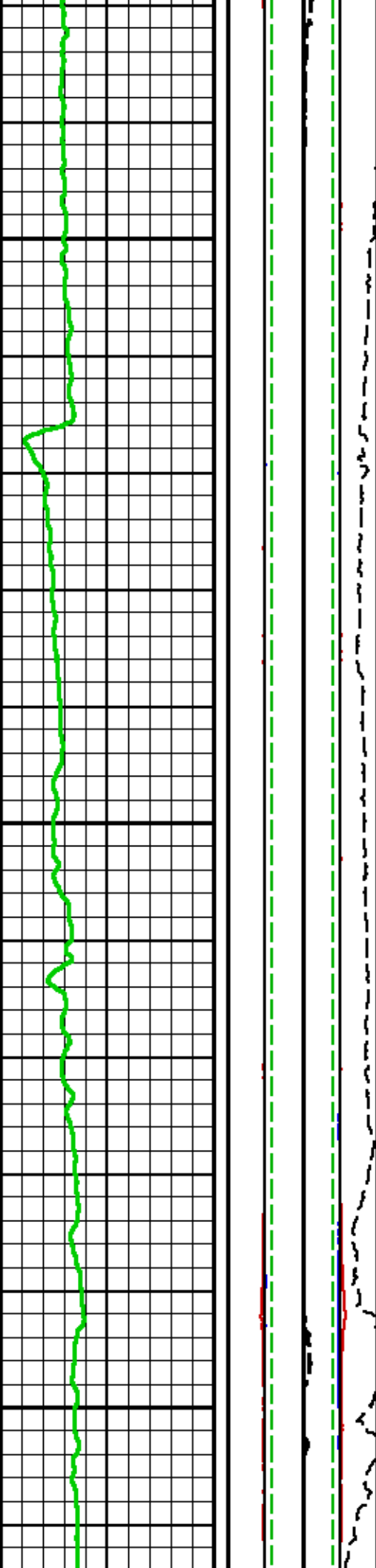
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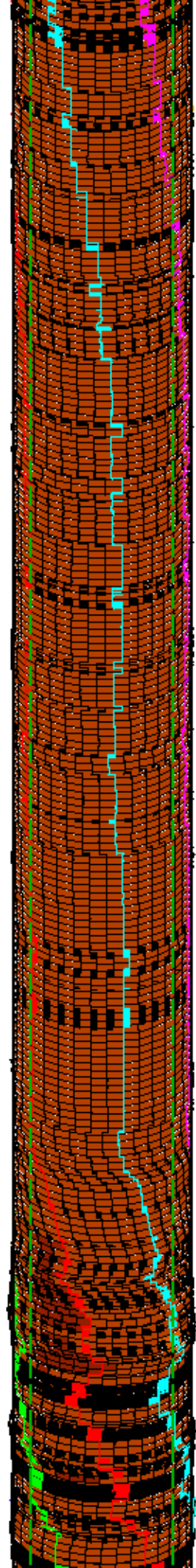


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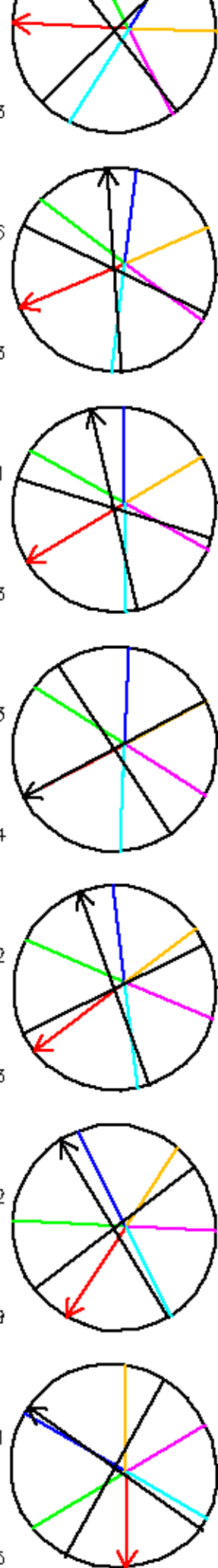
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20.2

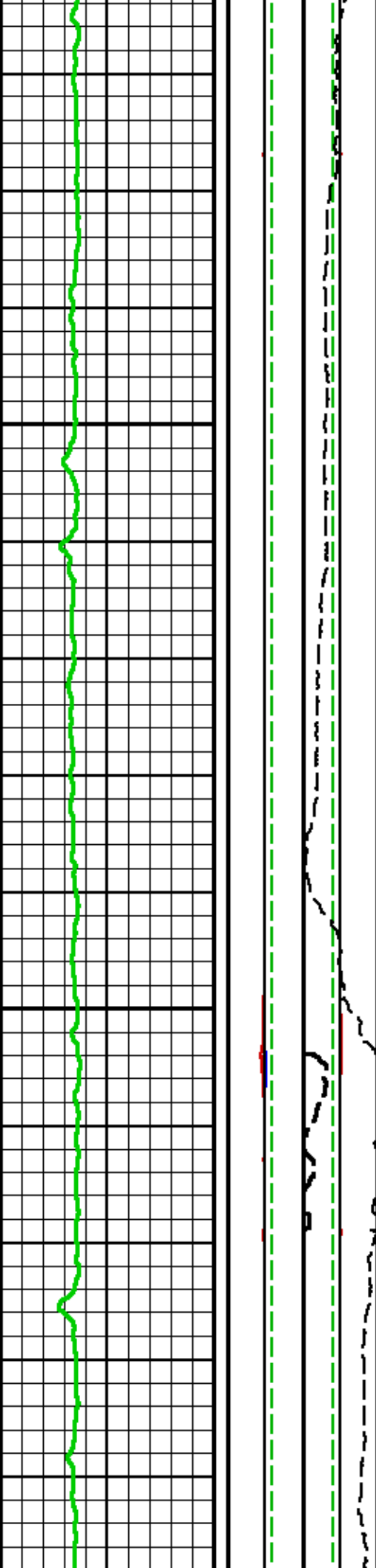


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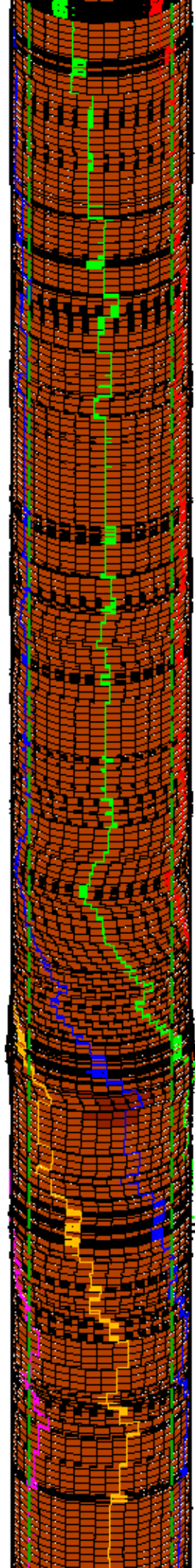
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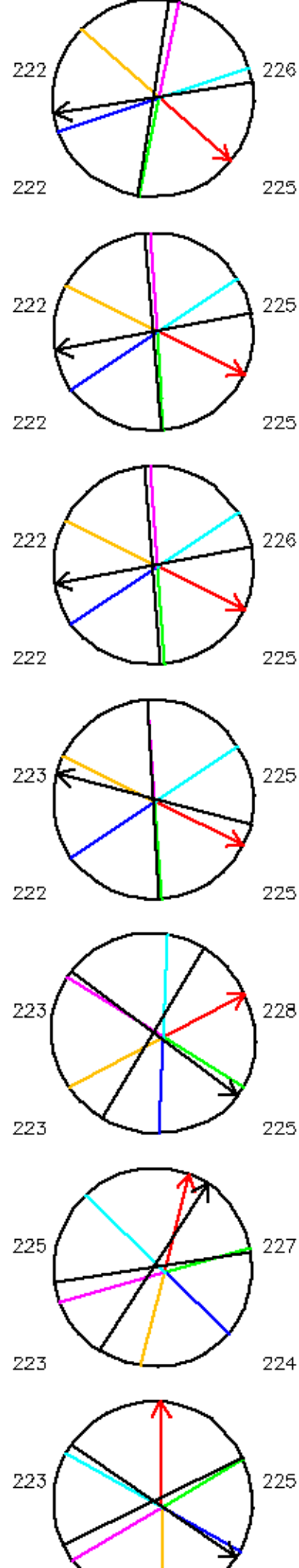
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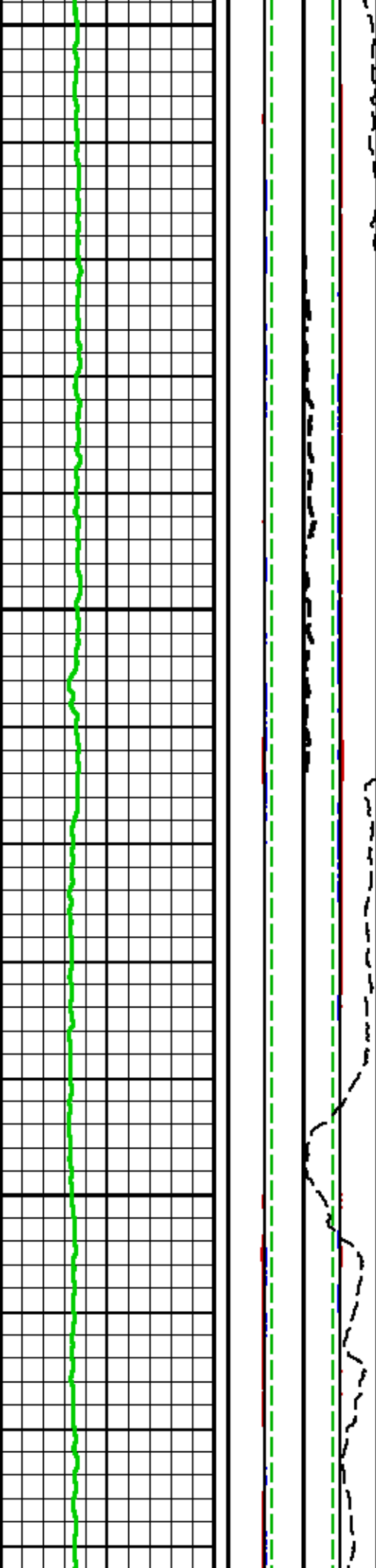
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17.8
17.6



7.52
7.44
7.37
7.30
7.23
7.15
7.08
7.01
6.93
6.86
6.78
6.71
6.64





900

925

950

17.4

17.2

17.0

16.8

16.6

16.4

16.2

16.0

15.8

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15.4

15.2

15.0

14.8

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6.41

6.34

6.26

6.19

6.11

6.03

5.96

5.89

5.81

5.74

5.67

5.59

224

222

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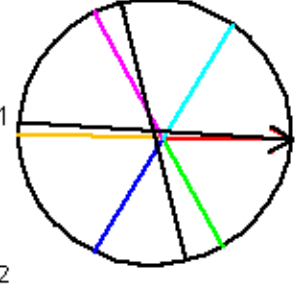
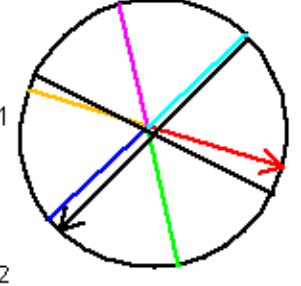
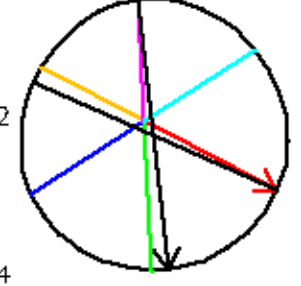
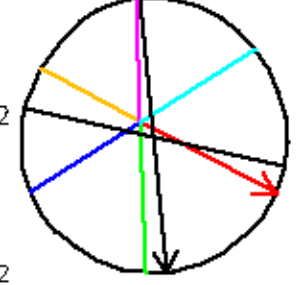
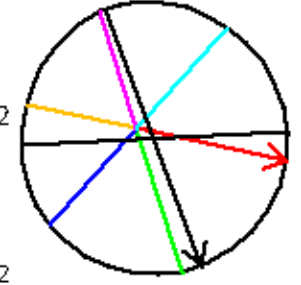
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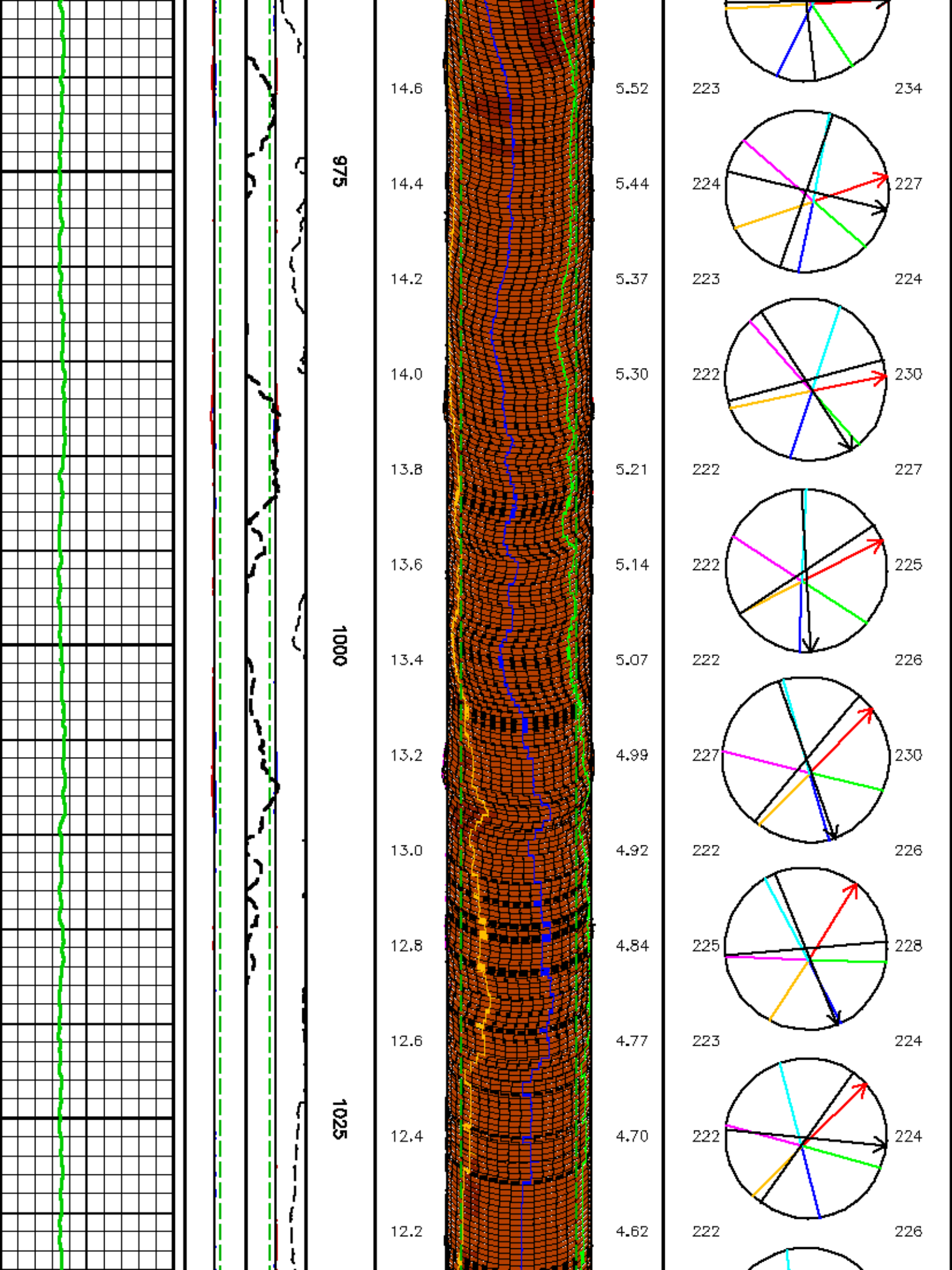
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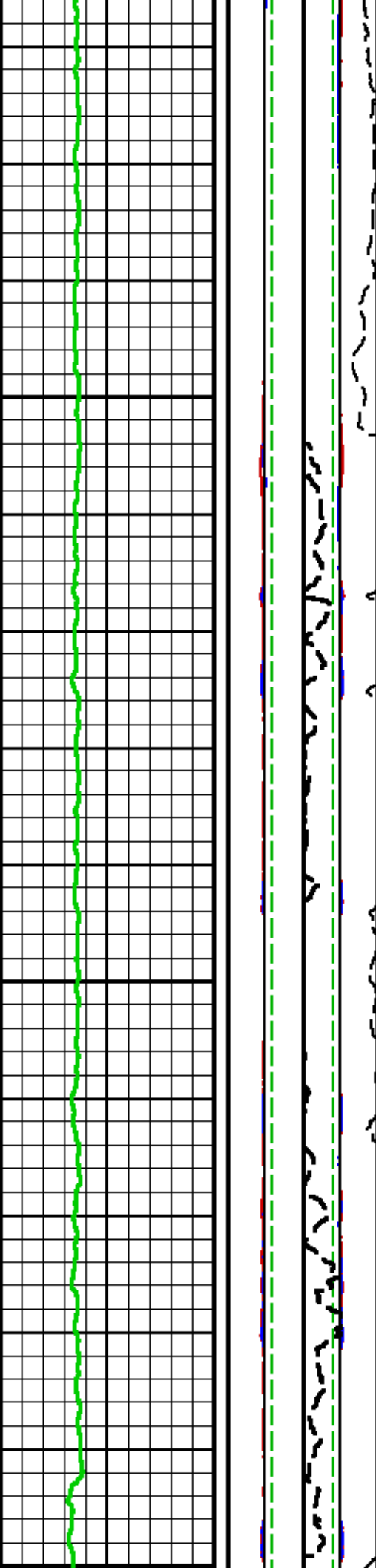
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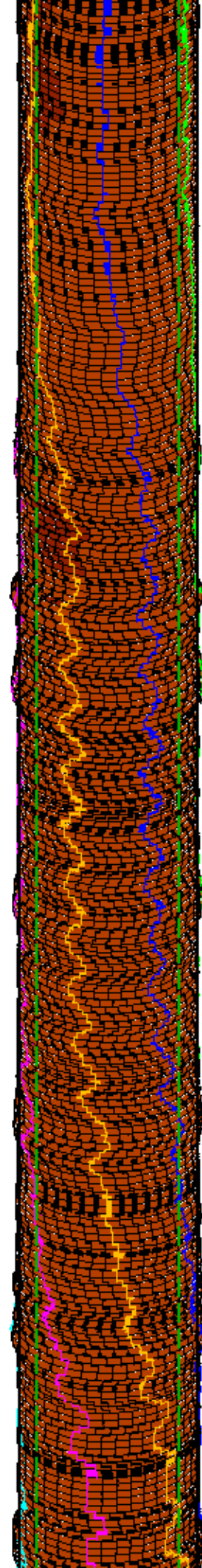


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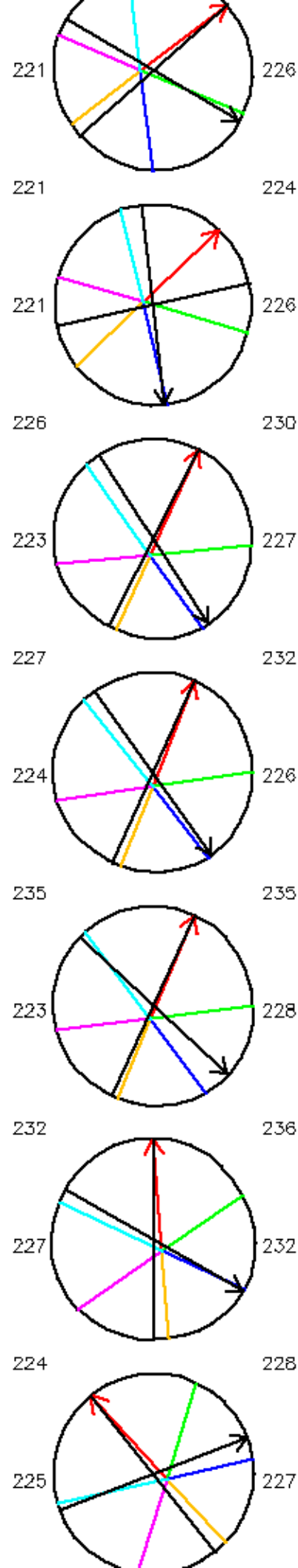
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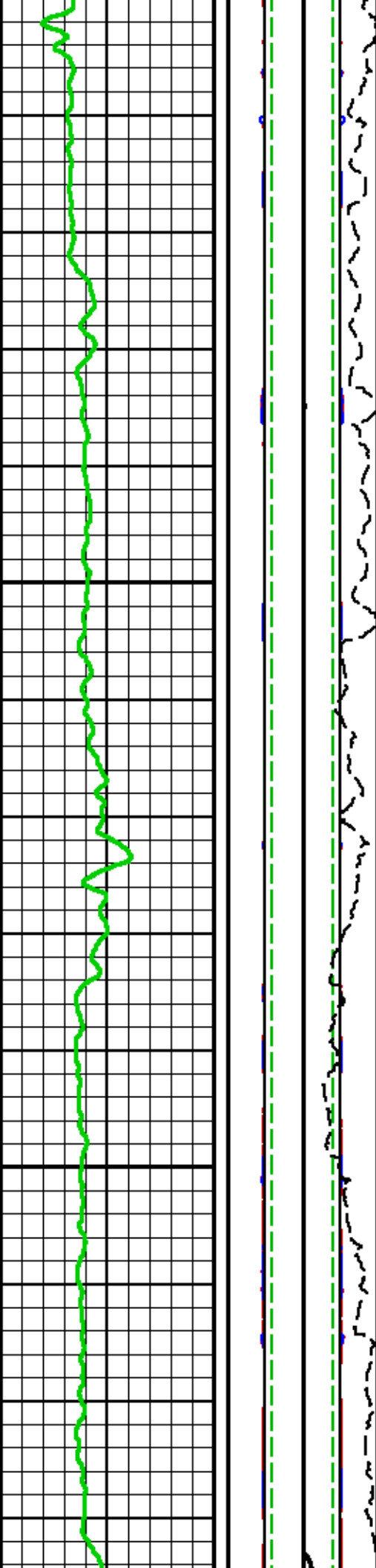
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9.61



4.55
4.48
4.41
4.33
4.25
4.17
4.09
4.01
3.93
3.85
3.77
3.68
3.61





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7.79

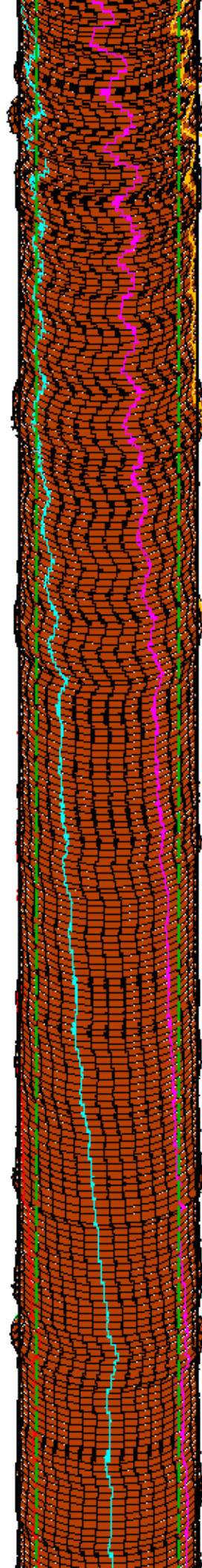
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6.76



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3.37

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3.21

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3.06

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2.50

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224

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222

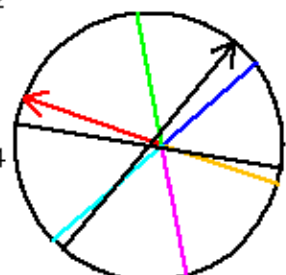
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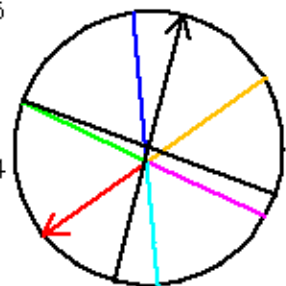
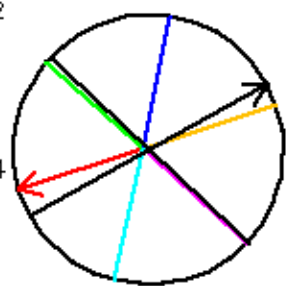
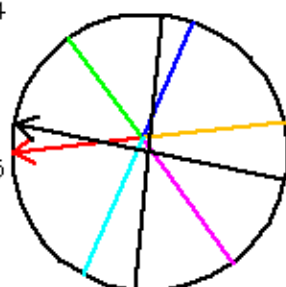
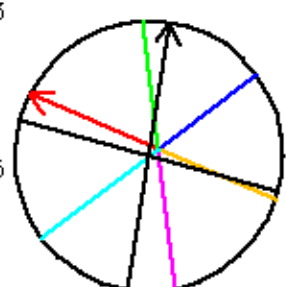
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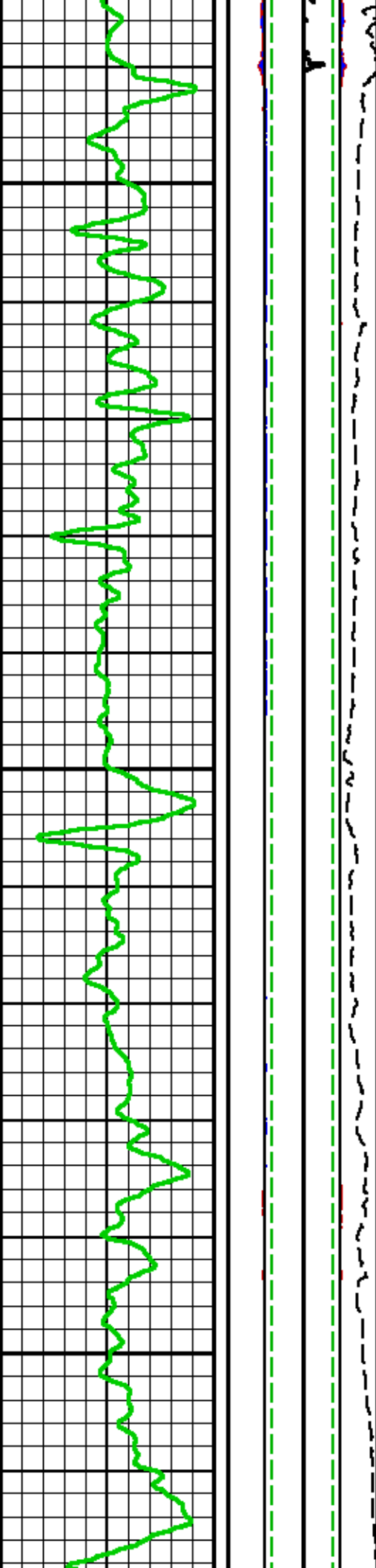
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233





1175

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6.35

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5.17

4.97

4.78

4.58

4.38

4.18

2.42

2.35

2.27

2.20

2.13

2.06

1.99

1.91

1.84

1.77

1.70

1.62

1.55

221

220

221

220

221

221

222

222

221

223

224

222

223

228

225

226

225

225

225

224

225

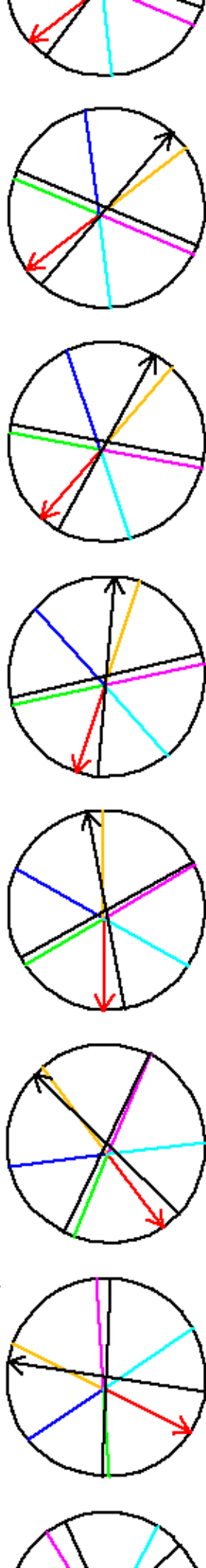
225

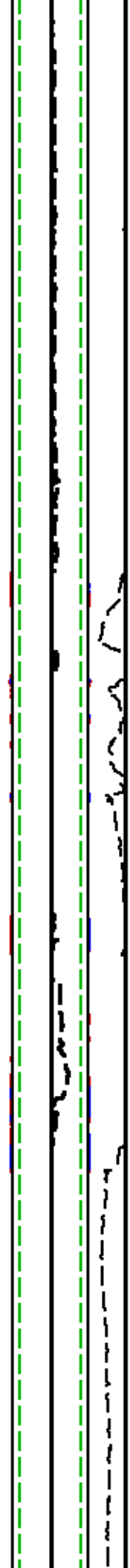
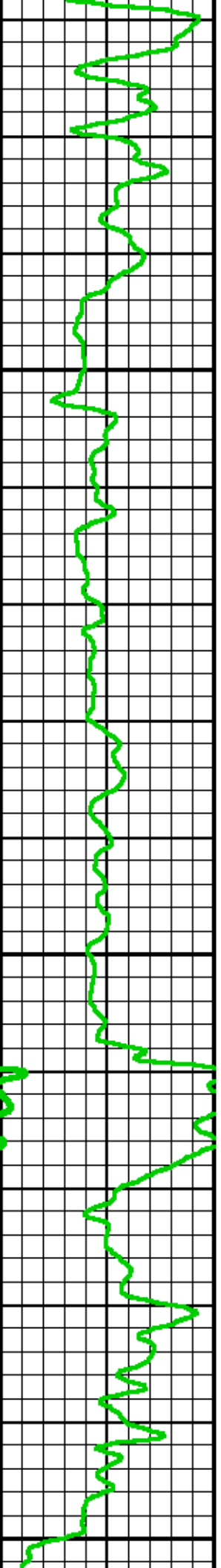
226

226

224

224



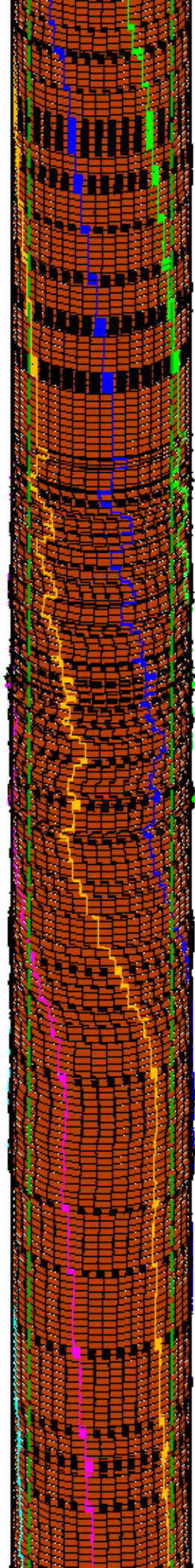


1250

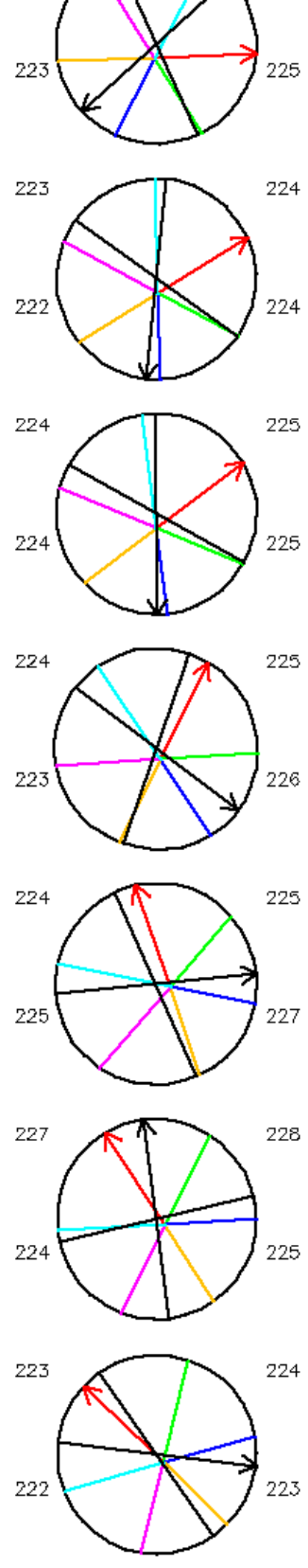
1275

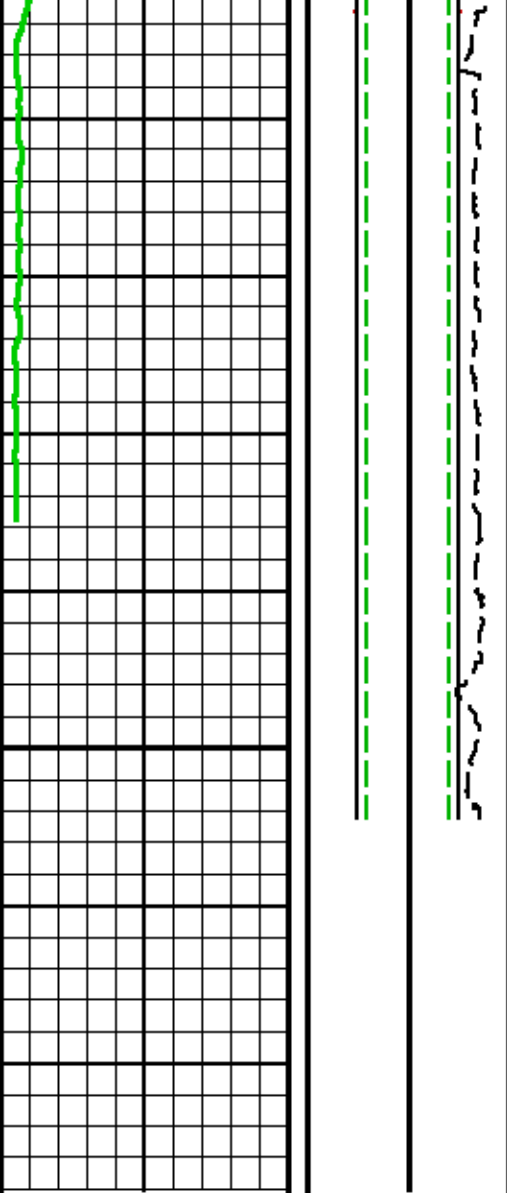
1300

3.98
3.79
3.59
3.39
3.19
2.99
2.79
2.59
2.39
2.18
1.98
1.78
1.59



1.48
1.40
1.33
1.26
1.19
1.11
1.03
0.96
0.88
0.80
0.72
0.65
0.58





GAMMA RAY [gr]
(gAPI)

Win Radius < Csq

mxr1
222 0
(mm)

mnr1
222 0
(mm)

BIT/2
222 0
(mm)

CSG SIZE
222 0
(mm)

mxr2
222 0 222
(mm)

mnr2
0 222
(mm)

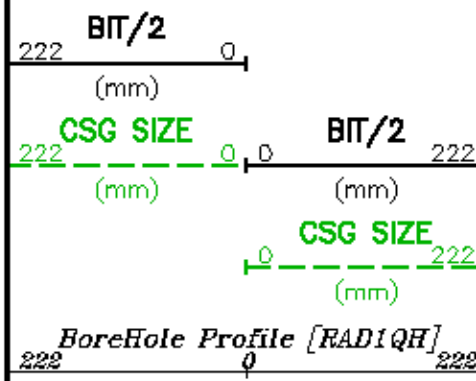
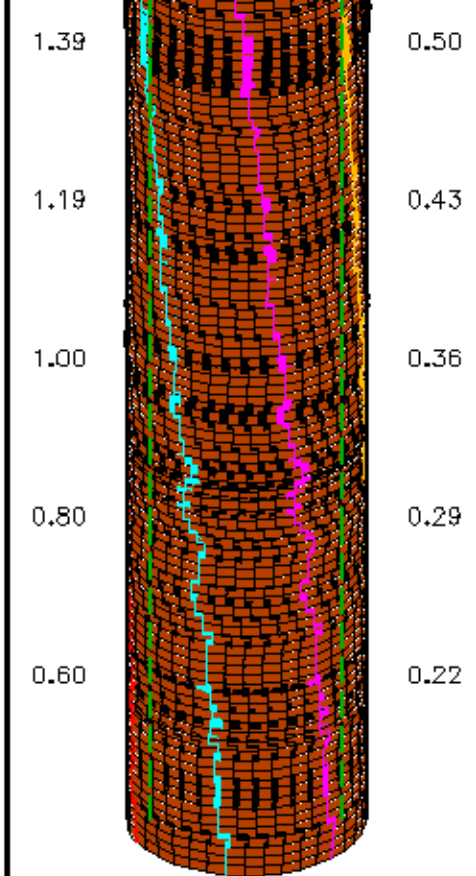
BIT/2
0 222
(mm)

CSG SIZE
0 222
(mm)

Cent. Offset [offs]
 ρ 15.24
(mm)

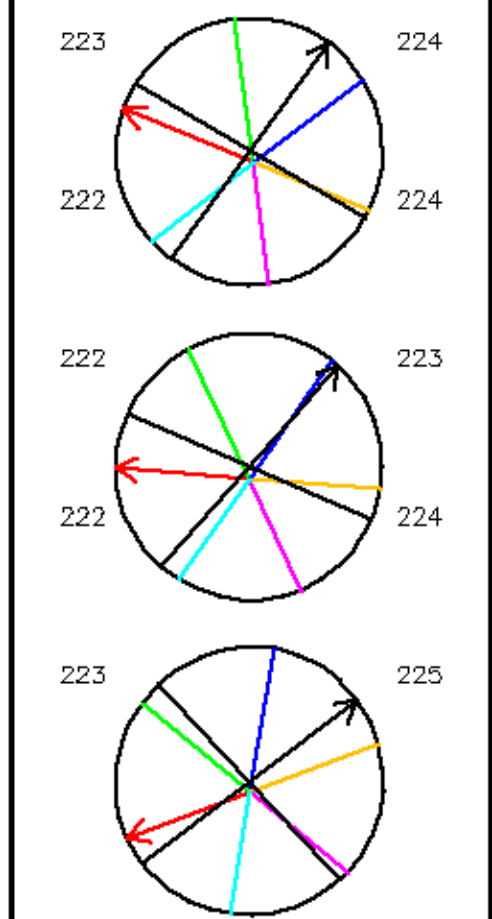
1325

METERS



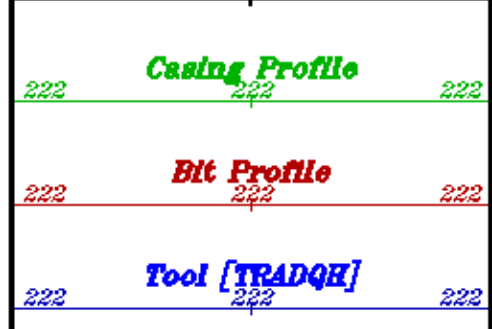
BCVO
(m3)

CCVO
(m3)



Radius of PAD1
Radius of PAD2
Radius of PAD3
Radius of PAD4
Radius of PAD5
Radius of PAD6

BoreHole Cross Section [RAD1QH]



Casing Profile

Bit Profile

Tool [TRADQH]

MIND
(mm)

MAXD
(mm)

CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/husky_CA212511/m837g_XC.tpl

EARTCAL PRIMARY CALIBRATION SUMMARY

TOOL #: 4236WB 10209809

DATE/TIME PERFORMED: Mon Feb 27 20:44:42 2012

UNIT #: 5753XB 10108816

	SMALL RING (row)	LARGE RING (row)	MULT (mm/row)	ADD (mm)	SMALL RING (mm)	LARGE RING (mm)
RADIUS 1	1042.5	2529.3	0.0513	48.1724	101.600	177.800
RADIUS 2	1095.7	2543.9	0.0526	43.9490	101.600	177.800
RADIUS 3	1164.5	2582.3	0.0537	39.0076	101.600	177.800
RADIUS 4	1178.9	2575.9	0.0545	37.2921	101.600	177.800
RADIUS 5	1137.7	2561.0	0.0535	40.6923	101.600	177.800
RADIUS 6	1059.6	2529.3	0.0518	46.6651	101.600	177.800
CALIPER 1					203.200	355.600
CALIPER 2					203.200	355.600
CALIPER 3					203.200	355.600

SMALL RING LARGE RING

PAD FORCE % 1.024 2.002

DC MOTOR V 1.1 1.0

EARTCAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 4236WB 10209809 DATE/TIME PERFORMED: Wed Mar 7 04:34:01 2012 DAYS SINCE CAL: 8

UNIT #: 38545A 008672

I.D. (row)	MULT	ADD	I.D. (mm pct V)	CASING SIZE (mm)
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RADIUS	1608.9	0.05125	48.17239	130.629
RADIUS 2	1323.2	0.05262	43.94902	113.572
RADIUS 3	1071.8	0.05375	39.00760	96.614
RADIUS 4	1030.3	0.05455	37.29209	93.490
RADIUS 5	1252.4	0.05354	40.69228	107.743
RADIUS 6	1584.5	0.05185	46.66510	128.814
CALIPER 1			224.119	226.600
CALIPER 2			221.315	
CALIPER 3			225.428	
PAD FORCE			-31.020	
DC MOTOR V			0.3	

EARTCAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 4236MB 10209809 DATE/TIME PERFORMED: Wed Mar 7 09:57:16 2012 DAYS SINCE CAL: 8

UNIT #: 38545A 008672

	I.D. (raw)	MULT	ADD	I.D. (mm pct V)	CASING SIZE (mm)
RADIUS 1	1203.6	0.05125	48.17239	109.858	
RADIUS 2	1484.4	0.05262	43.94902	122.050	
RADIUS 3	1613.8	0.05375	39.00760	125.745	
RADIUS 4	1403.8	0.05455	37.29209	113.865	
RADIUS 5	1152.3	0.05354	40.69228	102.384	
RADIUS 6	1022.9	0.05185	46.66510	99.701	
CALIPER 1				223.723	226.600
				211.419 236.819	
CALIPER 2				224.434	
				208.615 234.015	
CALIPER 3				225.446	
				212.728 238.128	
PAD FORCE				-0.888	
DC MOTOR V				1.0	

	COMPANY <u>HUSKY OIL OPERATIONS LIMITED</u> WELL <u>LITTLE BEAR H-64</u> FIELD <u>SLATER RIVER</u> PROVINCE <u>NORTHWEST TERRITORIES</u>		FILE NO: _____ API NO: _____
	LOCATION: SURF LOC: LAT 64 53' 28.5"N LONG 128 11' 20.3"W BH LOC. LSD: LAT 64 53' 28.5"N LONG 128 11' 20.3"W	ELEVATIONS: KB 183.2 M DF GL 178.0 M DATE 08-MAR-2012	UID: 300H64500126000 LICENSE: 462

