



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-GR-CAL
300H5500126000	LAT 64 53' 28.5"N LONG 126 11' 20.3"W	HDIL-GR-CAL, CAL
LICENSE:	BH LOC, LSD:	XUAC-GR, FLEX-DSL
482	LAT 64 53' 28.5"N LONG 126 11' 20.3"W	DSL, EI-CBL-GR
		INDEX, DIRSUR
PERMANENT DATUM	G.L.	ELEVATION
LOG MEASURED FROM	K.B.	178.0 M
DRILL MEAS. FROM	KELLY BUSHING	ABOVE P.D.
		ELEVATIONS:
		KB 183.2 M
		DF
		GL 178.0 M

DATE	06-MAR-2012			
RUN	TRIP	1	1	
SERVICE ORDER	CA212311			
DEPTH DRILLER	1341.0 M			
DEPTH LOGGER	1340.2 M			
BOTTOM LOGGED INTERVAL	510.0 M			
TOP LOGGED INTERVAL	0.0 M			
CASING DRILLER	244.5 MM		510.0 M	0
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	NA	NA		
SOURCE OF SAMPLE	NO SAMPLE			
RM AT MEAS. TEMP.	NA	0 NA		0
RMF AT MEAS. TEMP.	NA	0 NA		0
RMC AT MEAS. TEMP.	NA	0 NA		0
SOURCE OF RMF	RMC	NO SAMPLE		
RM AT BHT	NA	0 NA		0
TIME SINCE CIRCULATION	8.0 HOURS			
MAX. RECORDED TEMP.	53.2 DEGC			
EQUIP. NO.	Z008672	OH CANADA		
RECORDED BY	J. COLLIER/D. DOUCETT			
WITNESSED BY	H. PARENHOYEN			

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	NA	0.0 M	510.0 M

REMARKS

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

CEMENT TOP FOUND AT 28.5 M

COULD NOT LOG CBL HIGHER UP DUE TO RADIOACTIVE SOURCES APPROACHING SURFACE

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	1	CBL	304400	FEET

		SWIVEL	3844XD	11908288	FREE
		DHPA	4430XB	12111382	FREE
		TIRM SUB	3881XB	11760038	FREE
		COMM	3514XC	12079085	FREE
		WTS DGR/SU	1328XB	11756674	FREE
		CN	2448XA	12088884	DECENTRALIZED
		ZDEN	2234XA	168004	PAD DEVICE
		WTS DBL KNJ	3838XA	10283200	FREE
		CRT	4401XB	Z166976	FREE
		ACOUSTIC EL	1877EA	12045829	CENTRALIZED
		XMAC RX KDR	1678MC	12002082	CENTRALIZED
		XMAC ISO	1878PB	12083102	FREE
		XMAC TX ELC	1678FA	12083108	CENTRALIZED
		XMAC TX ELC	1878FA	12111388	CENTRALIZED
		HDIL ELCNS	1515EA	12032417	STANDOFF
		HDIL MANDRL	1515MA	11997988	STANDOFF
		SWIVEL	3844XD	11848158	FREE
		DHPA	4430XB	12088588	FREE
		TIRM SUB	3881XA	Z173348	FREE
		COMM	3514XB	Z186132	FREE
		WTS DGR/SU	1328XB	Z178402	FREE
		CN	2448XA	12088881	DECENTRALIZED
		ZDEN	2234XA	Z172640	PAD DEVICE
		WTS DBL KNJ	3838XA	167194	FREE
		CRT	4401XB	12039483	FREE
		ACOUSTIC EL	1877EA	11981883	CENTRALIZED
		XMAC RX KDR	1678MC	12138263	CENTRALIZED
		XMAC ISO	1878PB	11970839	FREE
		XMAC TX ELC	1678FA	12103884	CENTRALIZED
		XMAC TX ELC	1878FA	12111385	CENTRALIZED
		HDIL ELCNS	1515EA	11988850	STANDOFF
		HDIL MANDRL	1515MA	12022811	STANDOFF
		CENTRALIZER	4341XA	Z173361	CENTRALIZED

INSTRUMENT CONFIGURATION

Source File: /data/husky_CA212311/run1-tdg

CABLEHEAD
 Diameter : 8.8 cm
 Length : 187.8 cm
 Weight : 10.8 kg
 Series : C48L338
 Manufacturer : CSM
 Measure Points: 83.8 cm: CABLEHEAD TOP

SWIVEL
 Diameter : 8.8 cm
 Length : 108.7 cm
 Weight : 30.8 kg
 Series : 384-8XD

DOWNHOLE POWER ADAPTER
 Diameter : 9.2 cm
 Length : 180.7 cm
 Weight : 38.1 kg
 Series : 4430XB
 Manufacturer : DHPA

TIRM SUB
 Diameter : 9.2 cm
 Length : 118.8 cm
 Weight : 38.2 kg
 Series : 3881XA
 Manufacturer : TIRM
 Measure Points: 42.2 cm: TIRM MP

WTS COMMON REMOTE
 Diameter : 9.2 cm
 Length : 184.0 cm
 Weight : 58.2 kg
 Series : 3514XD
 Manufacturer : WTS

DIGITAL SPECTRALOG
 Diameter : 9.2 cm
 Length : 228.8 cm
 Weight : 58.1 kg



40.70 m
 CABLEHEAD TOP 38.88 m

TIRM MP 38.83 m

Series : 132804
Invenio : DCL
Measure Points: 48.8 cm: OR MP

OR MP 31.00 m

COMPENSATED NEUTRON

Diameter : 9.2 cm
Length : 331.4 cm
Weight : 88.2 kg
Series : 344804
Invenio : CM
Measure Points: 80.3 cm: LSN MP
Measure Points: 89.2 cm: SSN MP

LSN MP 28.80 m
SSN MP 28.35 m

Z-DEBRILLOR

Diameter : 18.4 cm
Length : 341.8 cm
Weight : 163.8 kg
Series : 323404
Invenio : ZDL
Measure Points: 87.3 cm: DAL MP
Measure Points: 78.4 cm: LSD MP
Measure Points: 63.2 cm: SSD MP

DAL MP 28.28 m
LSD MP 28.04 m
SSD MP 28.81 m

KNUCKLE JOINT (DOUBLE)

Diameter : 8.8 cm
Length : 141.8 cm
Weight : 40.8 kg
Series : 383804
Invenio : KJMT

DIGITAL ORIENTATION

Diameter : 8.8 cm
Length : 328.4 cm
Weight : 80.0 kg
Series : 440100
Invenio : ORIT
Measure Points: 0.0 cm: ORIENT MP

ORIENT MP 20.87 m

ARRAY ACQUITLOR ELECTRONICS, 8 CHANNEL

Diameter : 8.8 cm
Length : 338.3 cm
Weight : 48.4 kg
Series : 1677EA
Invenio : KMAD

CROSS MULTIPOLE ARRAY ACQUITLOR

Diameter : 9.8 cm
Length : 332.4 cm
Weight : 101.8 kg
Series : 1878MD
Invenio : KM7
Measure Points: 167.8 cm: R8
Measure Points: 182.4 cm: R7
Measure Points: 137.2 cm: R6
Measure Points: 181.8 cm: R5
Measure Points: 108.7 cm: R4
Measure Points: 81.4 cm: R3
Measure Points: 78.2 cm: R2
Measure Points: 81.0 cm: R1

R8 18.04 m
R7 18.38 m
R6 18.53 m
R5 18.68 m
R4 18.83 m
R3 18.98 m
R2 19.13 m
R1 19.28 m

SHEAR BLADE ACQUITLOR

Diameter : 8.8 cm
Length : 102.4 cm
Weight : 81.4 kg
Series : 1678PB
Invenio : KMAC

MULTI-POLE ARRAY ACQUITLOR

Diameter : 9.8 cm
Length : 341.3 cm
Weight : 77.3 kg
Series : 1678BA
Invenio : KMBC
Measure Points: 188.8 cm: QUADRUPOLE T8
Measure Points: 188.8 cm: MONOPOLE T8
Measure Points: 142.2 cm: Y-DIPOLE T4
Measure Points: 142.2 cm: X-DIPOLE T3
Measure Points: 88.8 cm: MONOPOLE T1

MONOPOLE T8 12.88 m
QUADRUPOLE T8 12.88 m

X-DIPOLE T3 12.35 m
Y-DIPOLE T4 12.35 m

MONOPOLE T1 11.82 m

MULTI-POLE ARRAY ACQUITLOR

Diameter : 8.8 cm
Length : 131.8 cm

Weight : 29.4 kg
 Series : 1676PA
 Monomia : MAC

HIGH DEFINITION INJECTION TOOL

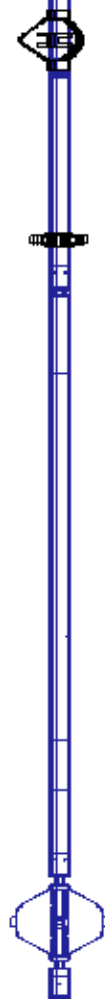
Diameter : 9.5 cm
 Length : 387.0 cm
 Weight : 186.6 kg
 Series : 151304
 Monomia : HDIL
 Measure Point: 423.9 cm: SP MP
 Measure Point: 286.8 cm: KQTR MP

4 ARM BOW SPRING CENTRALIZER

Diameter : 8.6 cm
 Length : 126.6 cm
 Weight : 38.7 kg
 Series : 4341KA
 Monomia : CENT

BALL PLUG 3 3/8

TOTAL LENGTH: 40.70 m
 TOTAL WEIGHT: 1100.6 kg
 MAX DIAMETER: 12.4 cm



ACOUSTIC CEMENT BOND LONG

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

Wed Mar 7 05:34:07 2012

PerpIt /main/62

Cplot

Pdf_Cpp /main/16

Fileview 5.51

PARAMETER AND FILTER SUMMARY REPORT

File: /data/husky_CA212311/m77evh_xc04.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 29.527 m BOTTOM DEPTH: 552.468 m

SYMMETRIC FILTER

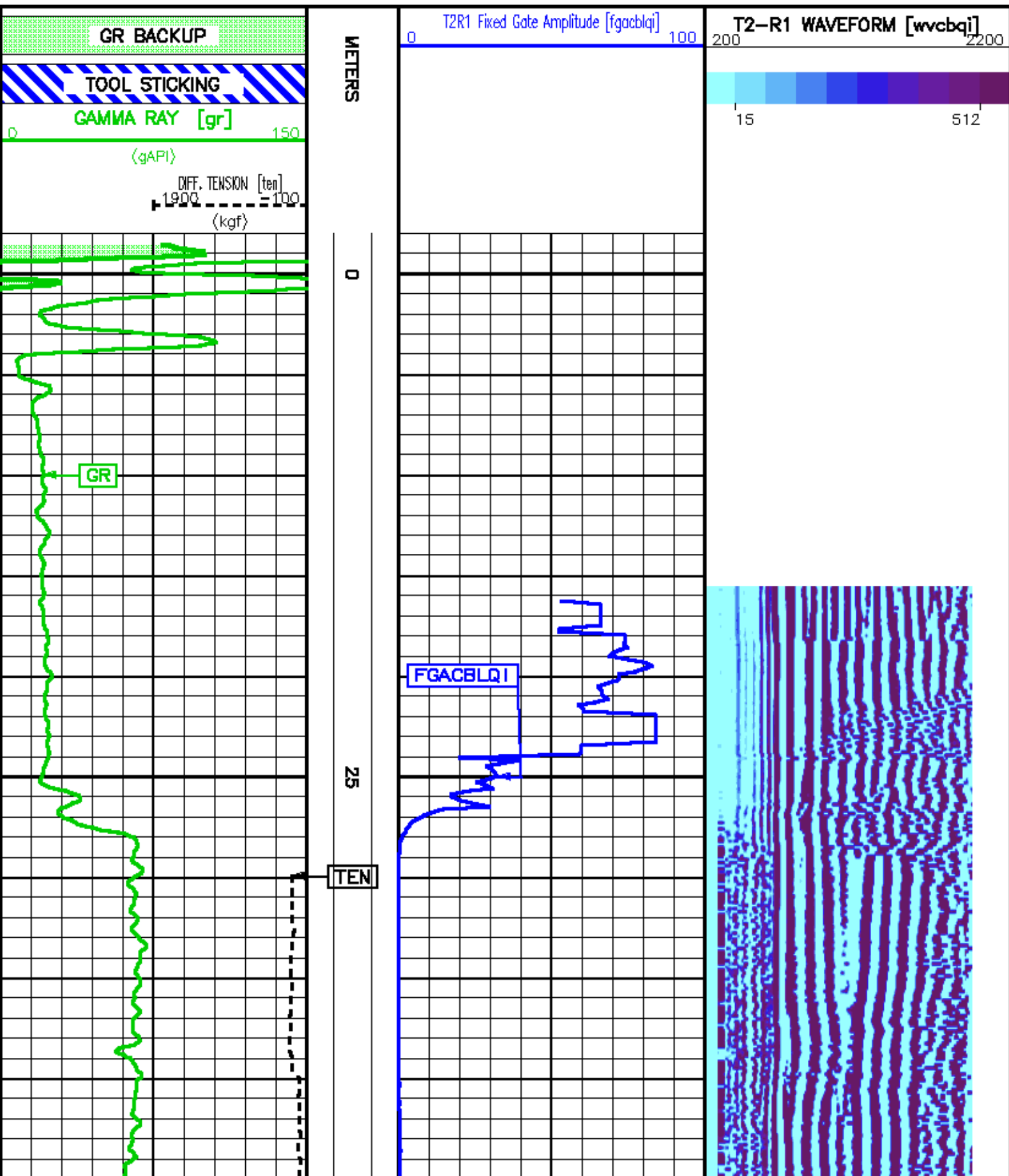
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
TENSION	FILTER ()	medium (1)		TOP	BOTTOM
GR	FILTER ()	medium (1)		"	"
ACOU AMP	FILTER ()	no filter (0)		"	"

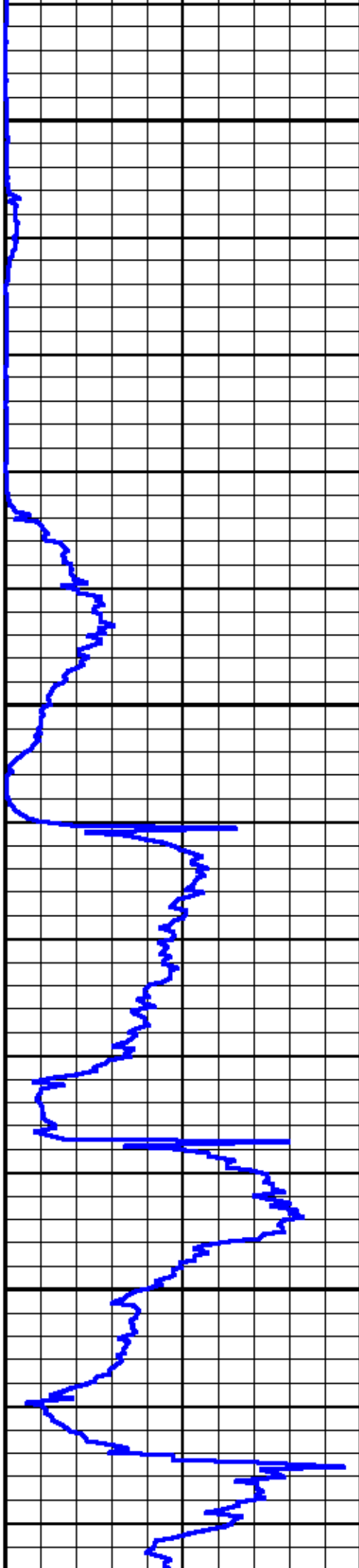
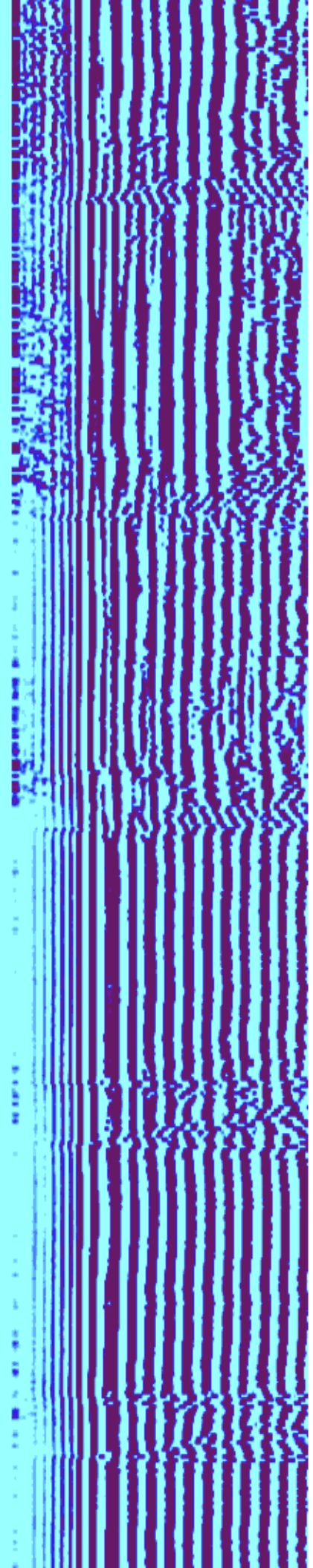
ACOUSTIC PICK CONTROL, CBL

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
FIXED WINDOW PICK (T2R1)	FIXED WINDOW START	710	us	TOP	BOTTOM
	FIXED WINDOW LENGTH	100	us	"	"

FIRST ARRIVAL PICK (T2R1 - CBL)	MAX OBSERVED AMP	-1500		''	''
	TARGET AMPLITUDE	100		''	''
	SEARCH WINDOW START	645	us	''	''
	SEARCH WINDOW LENGTH	703	us	''	''
	THRESHOLD FACTOR	0.30		''	''
	THRESHOLD MINIMUM	1.8	pot	''	''
	MAX OBSERVED AMP	-1500		''	''
	TARGET AMPLITUDE	100		''	''
ACOUSTIC WAVEFORM FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
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/husky_CA212311/m77evh_xc04.prm LOGGING MODE: DEPTH DIRECTION: UP TOP DEPTH: 29.527 m BOTTOM DEPTH: 552.488 m					
SYMMETRIC FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
TENSION	FILTER ()	medium (1)		TOP	BOTTOM
GR	FILTER ()	medium (1)		''	''
ACCU AMP	FILTER ()	no filter (0)		''	''
ACOUSTIC PICK CONTROL, CBL					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
FIXED WINDOW PICK (T2R1)	FIXED WINDOW START	710	us	TOP	BOTTOM
	FIXED WINDOW LENGTH	100	us	''	''
	MAX OBSERVED AMP	-1500		''	''
	TARGET AMPLITUDE	100		''	''
FIRST ARRIVAL PICK (T2R1 - CBL)	SEARCH WINDOW START	645	us	''	''
	SEARCH WINDOW LENGTH	703	us	''	''
	THRESHOLD FACTOR	0.30		''	''
	THRESHOLD MINIMUM	1.8	pot	''	''
	MAX OBSERVED AMP	-1500		''	''
	TARGET AMPLITUDE	100		''	''
ACOUSTIC WAVEFORM FILTER					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
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	CREATION DATE	CURVE DESCRIPTION			
F2:FGACBLQ1	Mar 7 01:08:43 2012	FIXED GATE AMPLITUDE IN CBL			
F1:GR	Mar 7 01:08:43 2012	GAMMA RAY			
F1:TEN	Mar 7 01:08:43 2012	DIFFERENTIAL TENSION			
F1:WVGBQ1	Mar 7 01:08:43 2012	CBL WAVEFORM			
CURVE MEASURE POINT OFFSET					
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
FGACBLQ1	13.41	GR	31.38	TEN	0.00
Presentation : epuzz/data/husky_CA212311/acou_cbl_rdl.pdf [1:240 Scale] Plot Interval : -1.4478 - 552.068 Meters Data File 1 : F1 : epuzz/data/husky_CA212311/m77evh_xc04.nff Created On : Mar 7 01:08:43 2012 Company : HUSKY OIL OPERATIONS LIMITED Well : LITTLE BEAR H-64 Field : SLATER RIVER File Interval : -5.8436 - 552.488 Meters					

Out : m77wh_x
Data File 2 : F2 : epuzz/dot1a/husky_CA212311/gr_en_eblatf
Created On : Mar 7 01:08:43 2012
Company : HUSKY OIL OPERATIONS LIMITED
Well : LITTLE BEAR H-64
Field : SLATER RIVER
File Interval : -5.6388 - 552.488 Meters
Out : m77wh_x

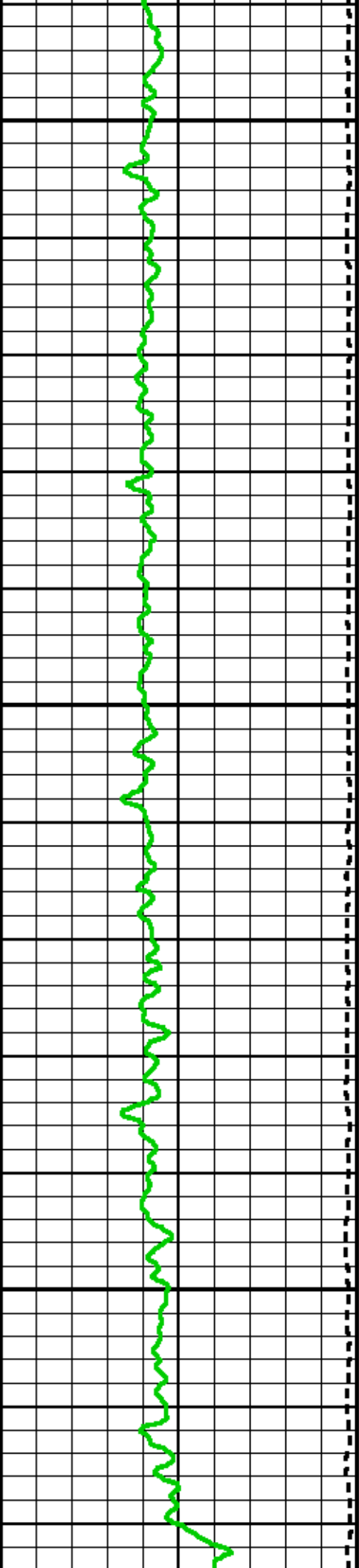


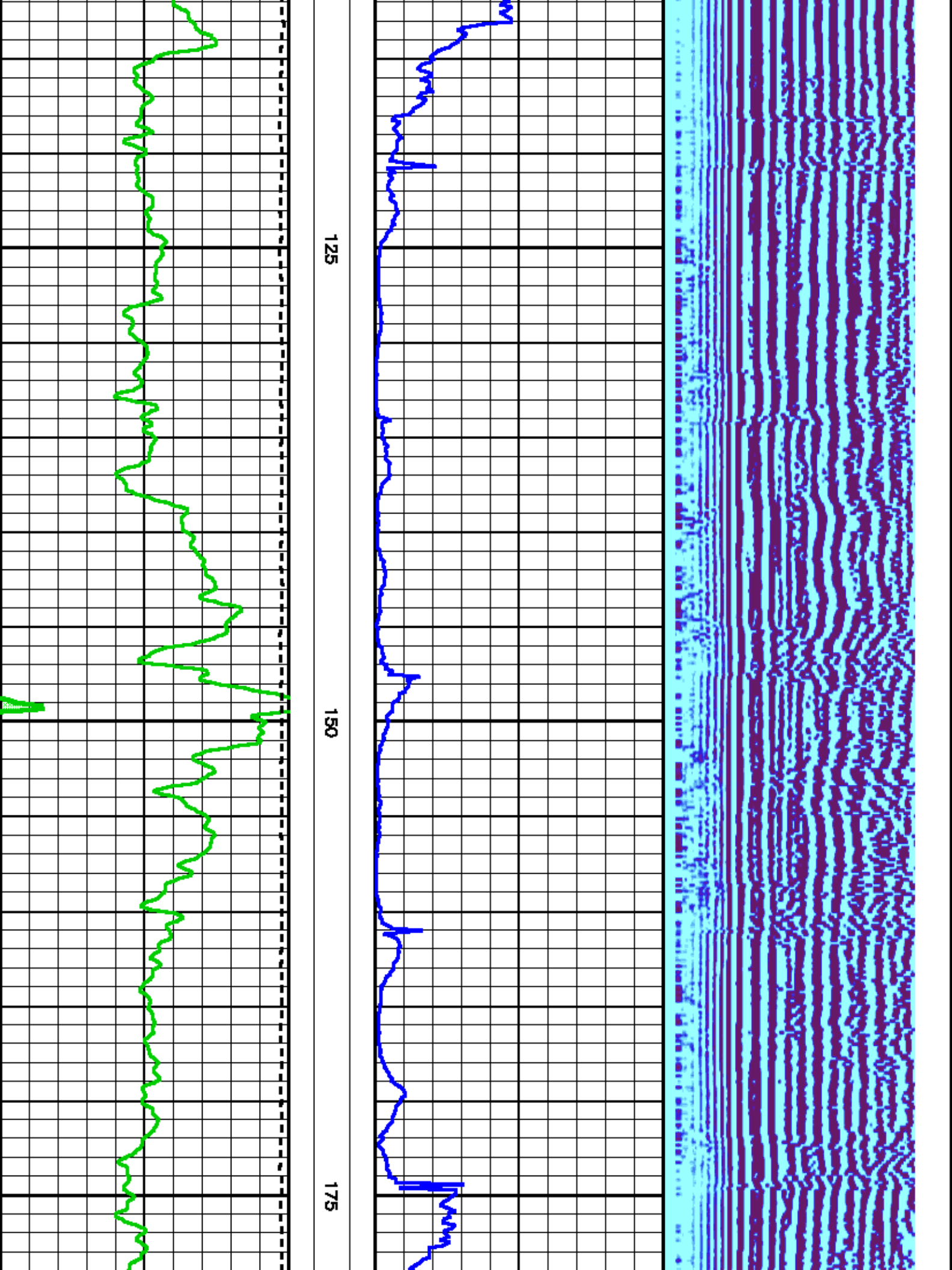


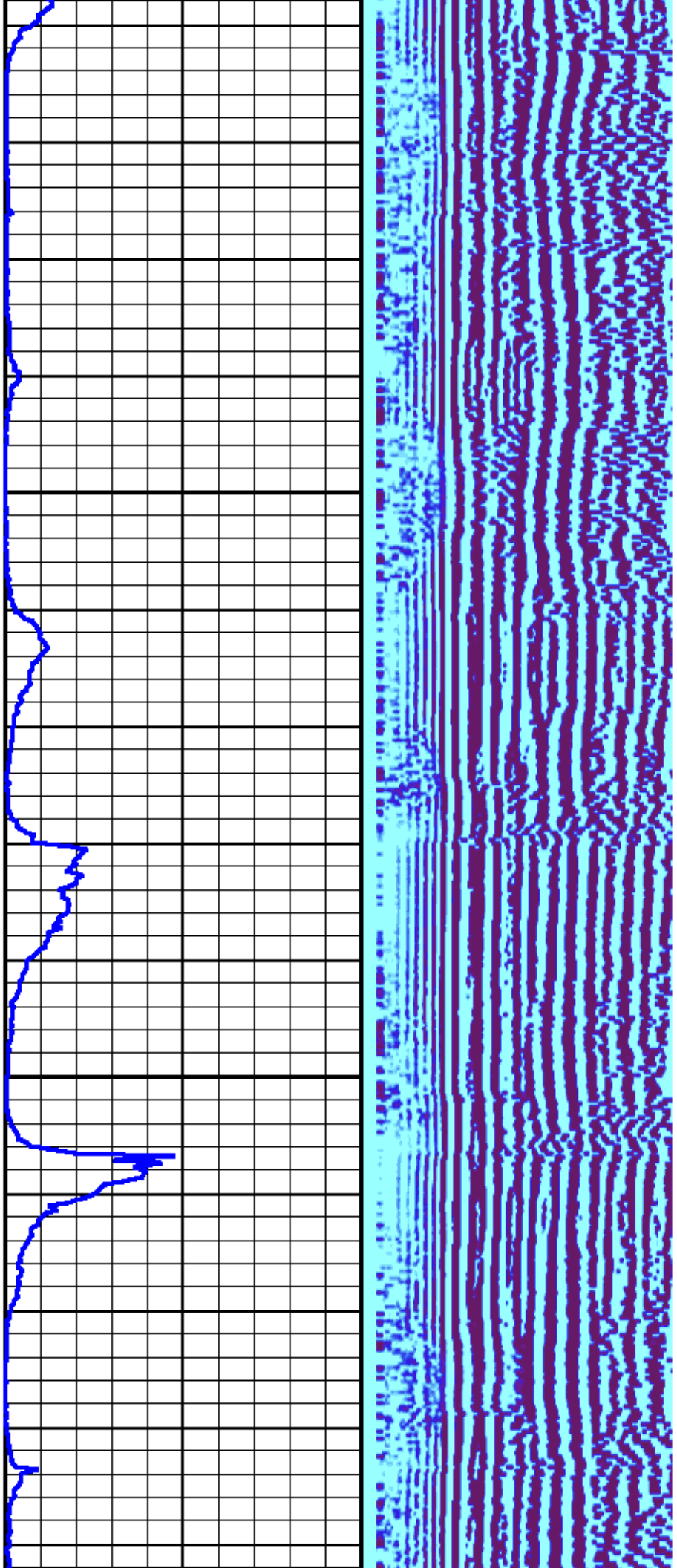
50

75

100

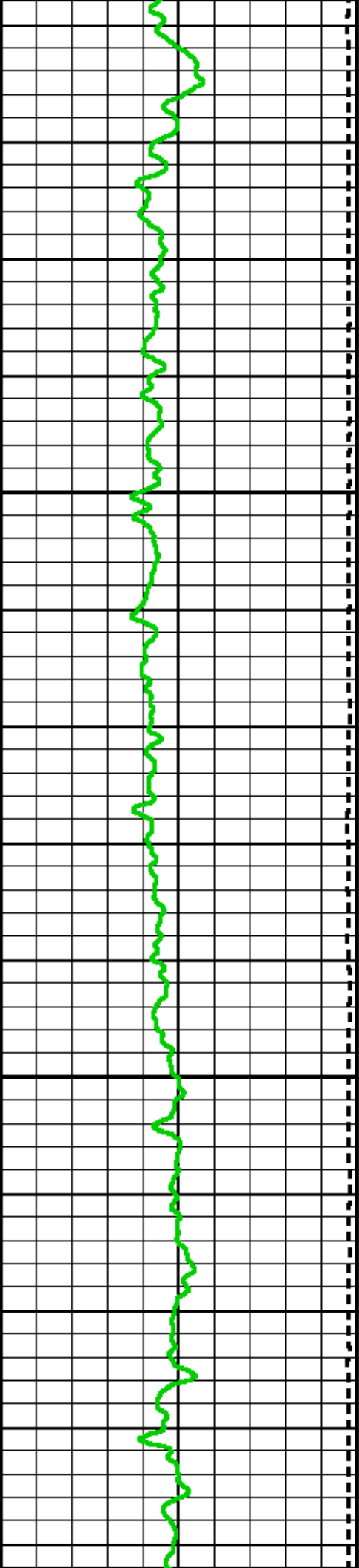


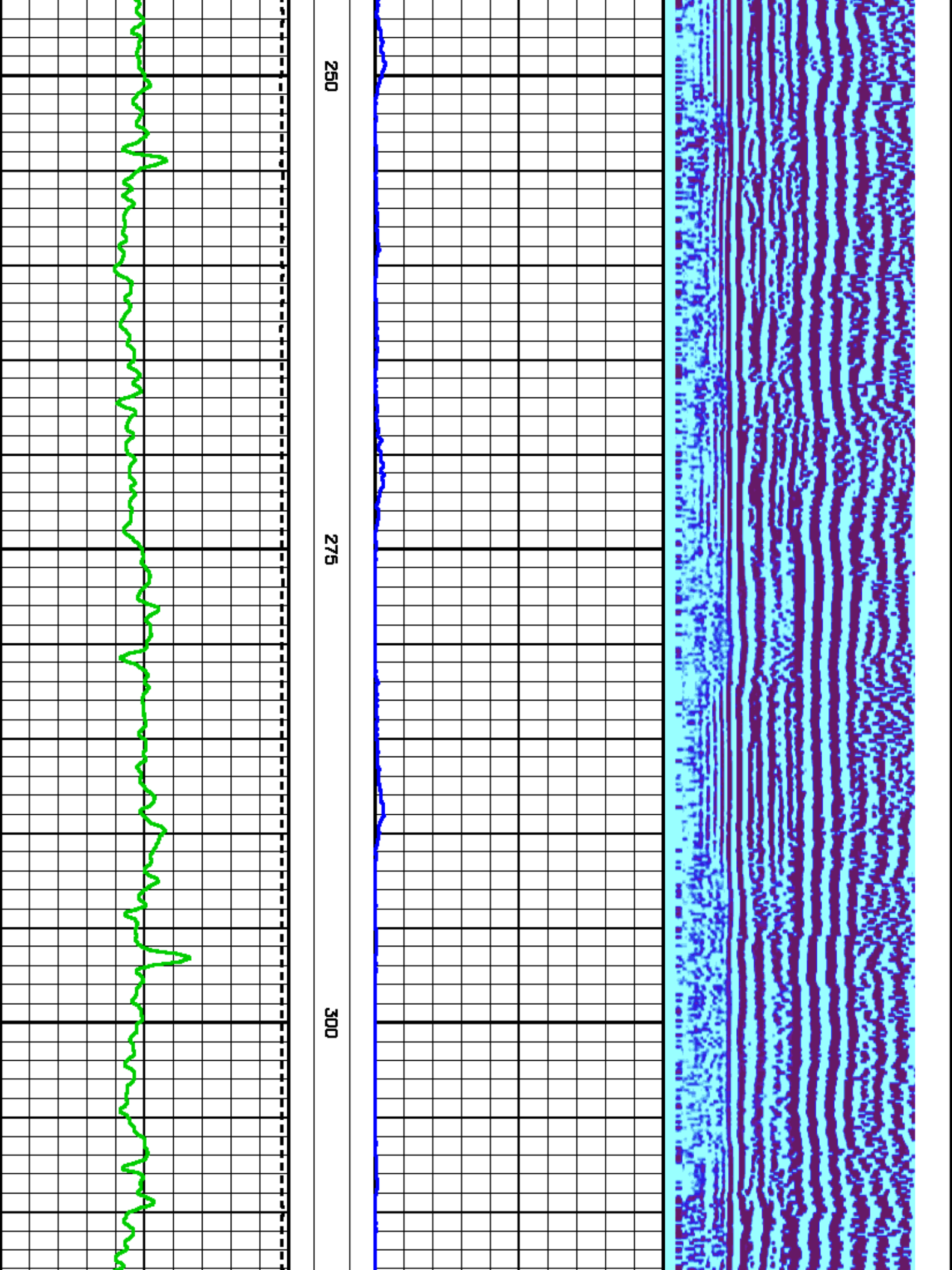


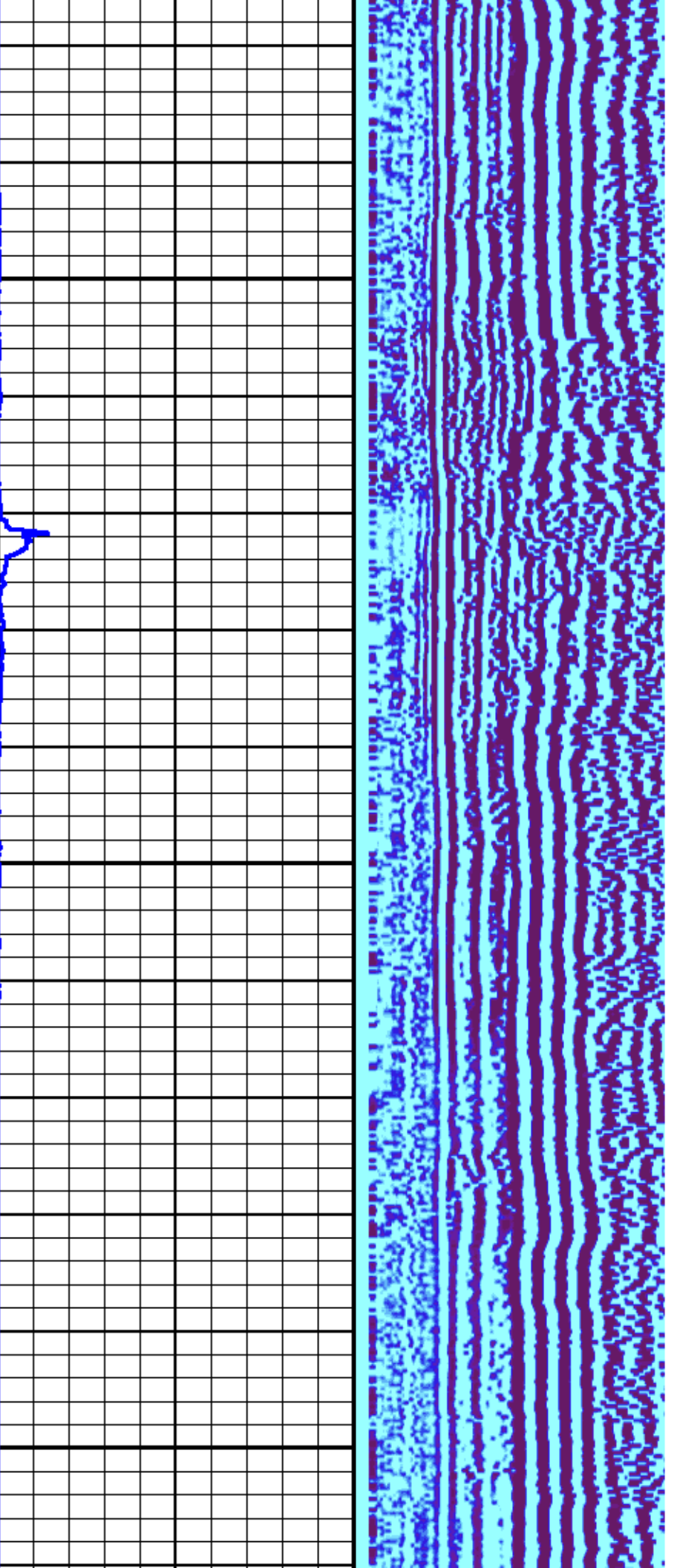


200

225



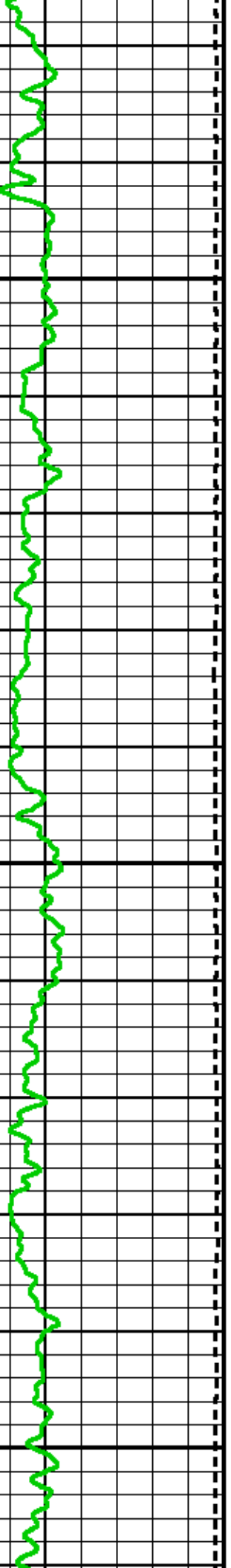


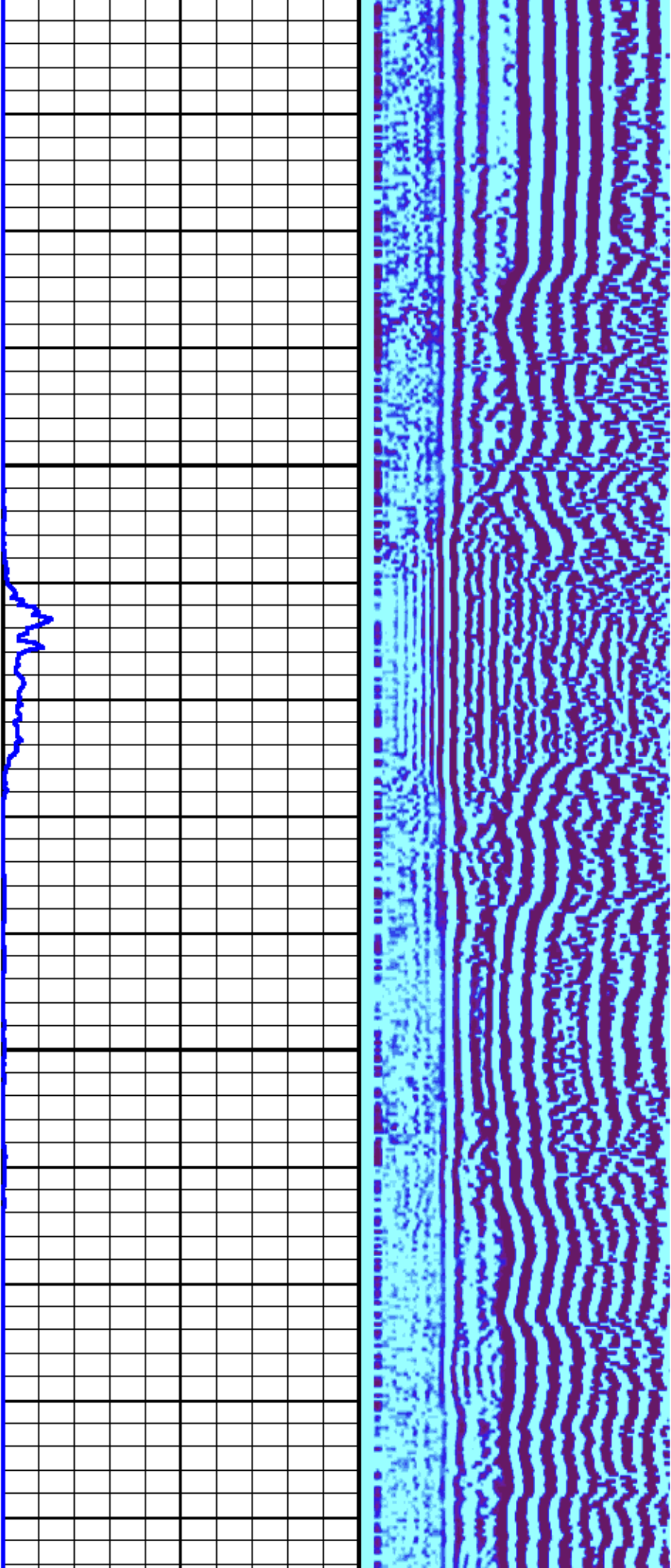


325

350

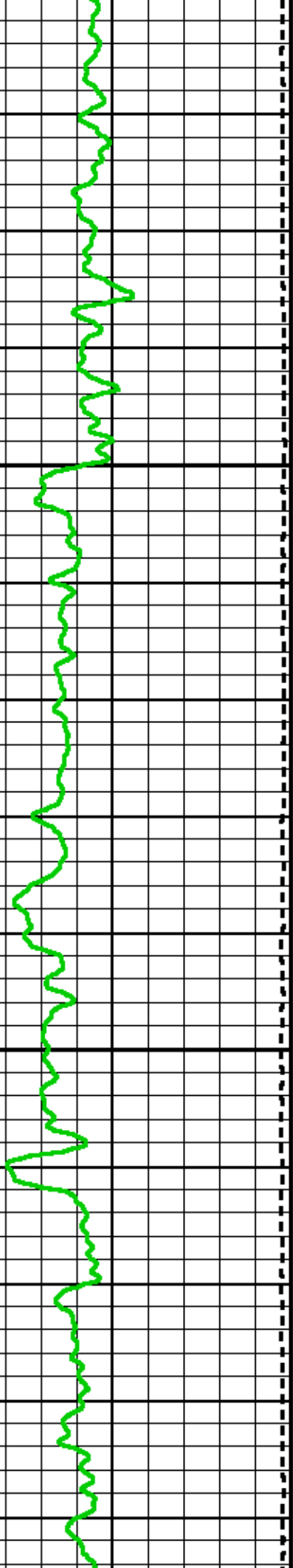
375

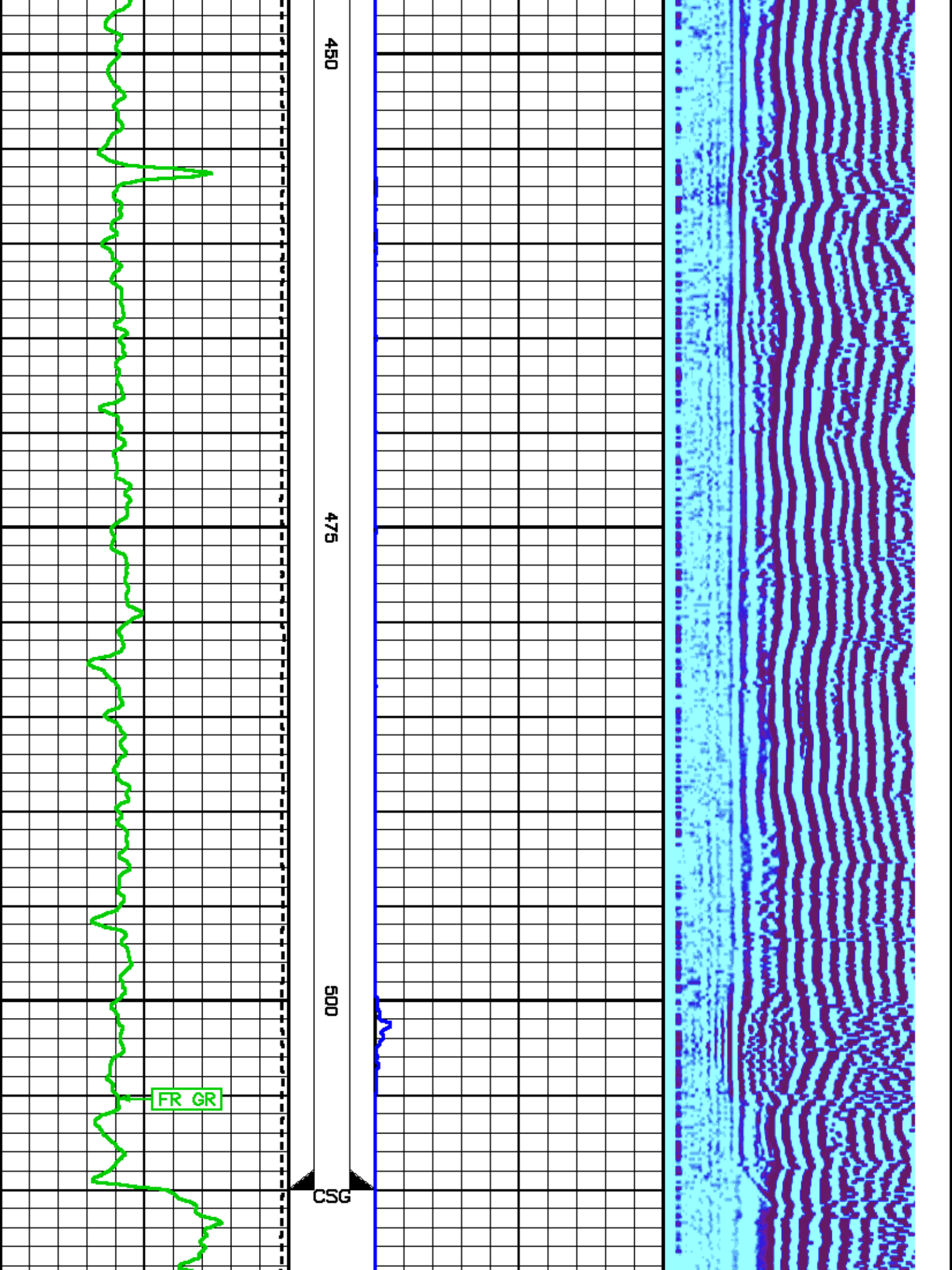


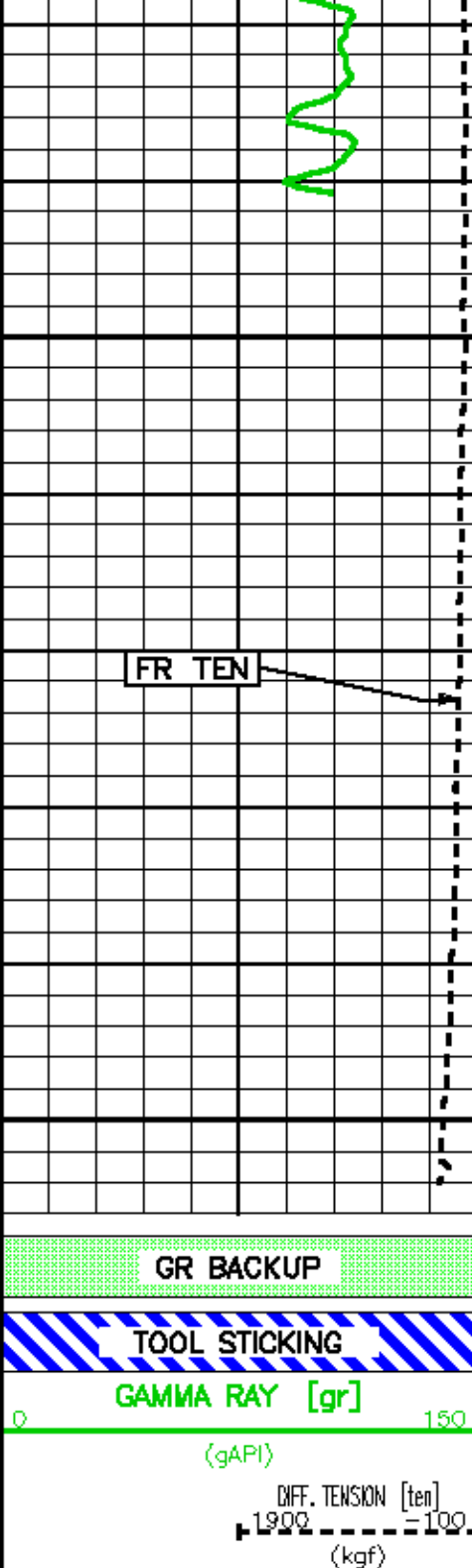


400

425



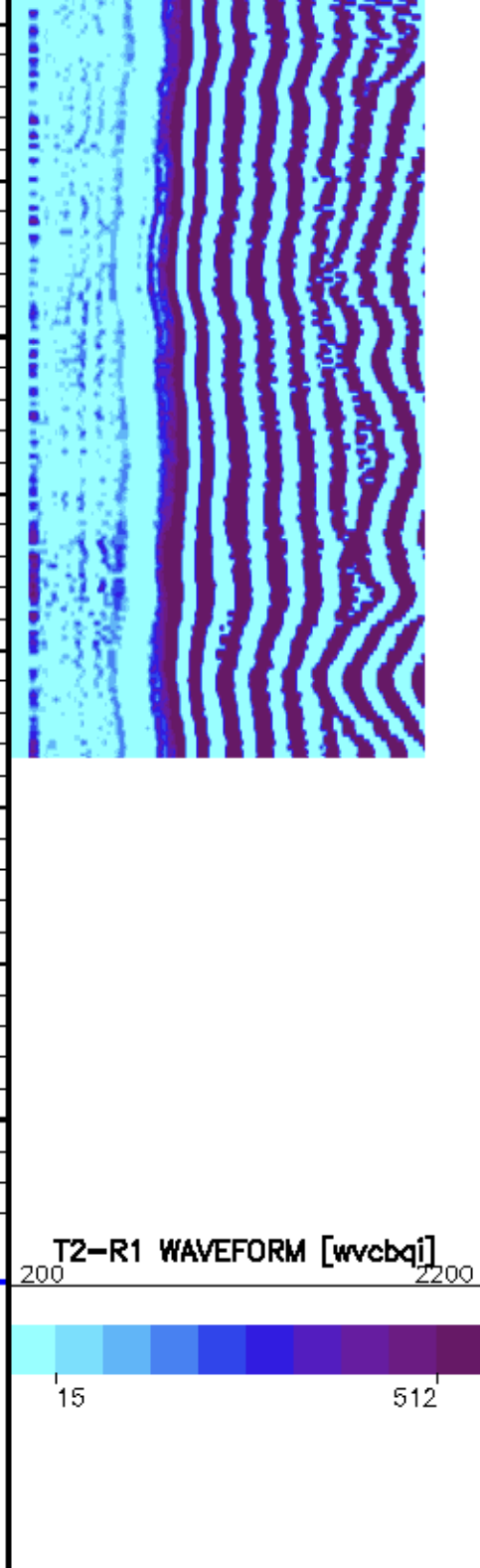
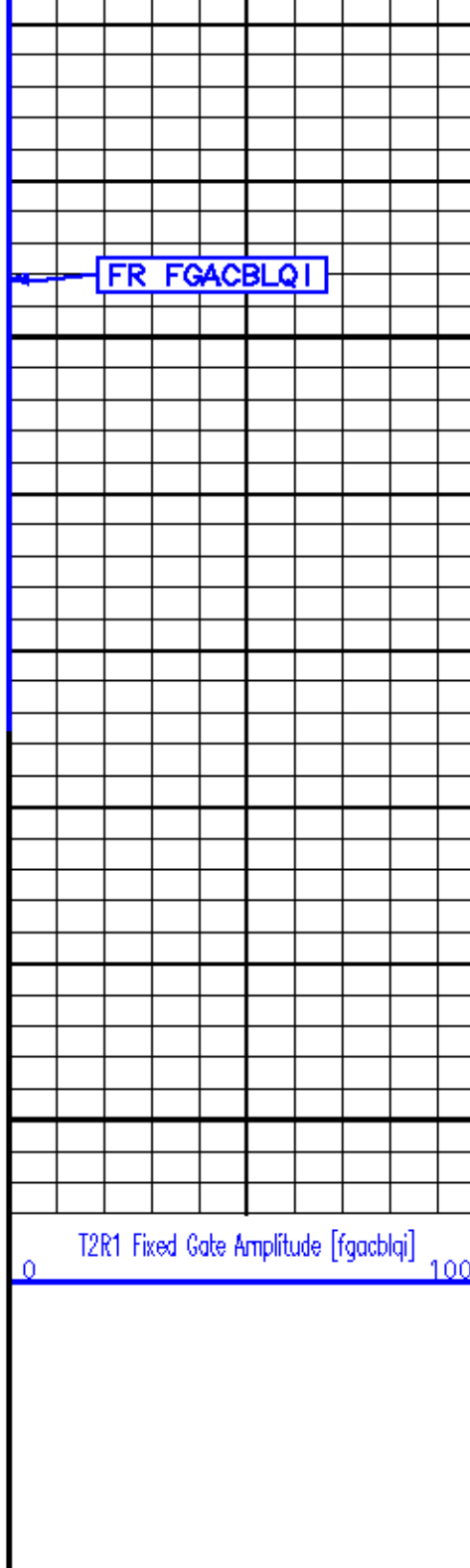




525

550

METERS



ACOUSTIC CEMENT BOND LONG - REPEAT PASS

File: /data/husky_CA212311/m77wvh_xc03.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 487.566 m BOTTOM DEPTH: 1340.929 m

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
TENSION	FILTER ()	medium (1)		TOP	BOTTOM
GR	FILTER ()	medium (1)		"	"
ACCU AMP	FILTER ()	no filter (0)		"	"

ACOUSTIC PICK CONTROL, CBL

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
FIXED WINDOW PICK (T2R1)	FIXED WINDOW START	710	us	TOP	BOTTOM
	FIXED WINDOW LENGTH	100	us	"	"
	MAX OBSERVED AMP	-1500		"	"
	TARGET AMPLITUDE	100		"	"
FIRST ARRIVAL PICK (T2R1 - CBL)	SEARCH WINDOW START	645	us	"	"
	SEARCH WINDOW LENGTH	703	us	"	"
	THRESHOLD FACTOR	0.30		"	"
	THRESHOLD MINIMUM	1.8	pet	"	"
	MAX OBSERVED AMP	-1500		"	"
	TARGET AMPLITUDE	100		"	"

ACOUSTIC WAVEFORM FILTER

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

CURVE DESCRIPTION REPORT

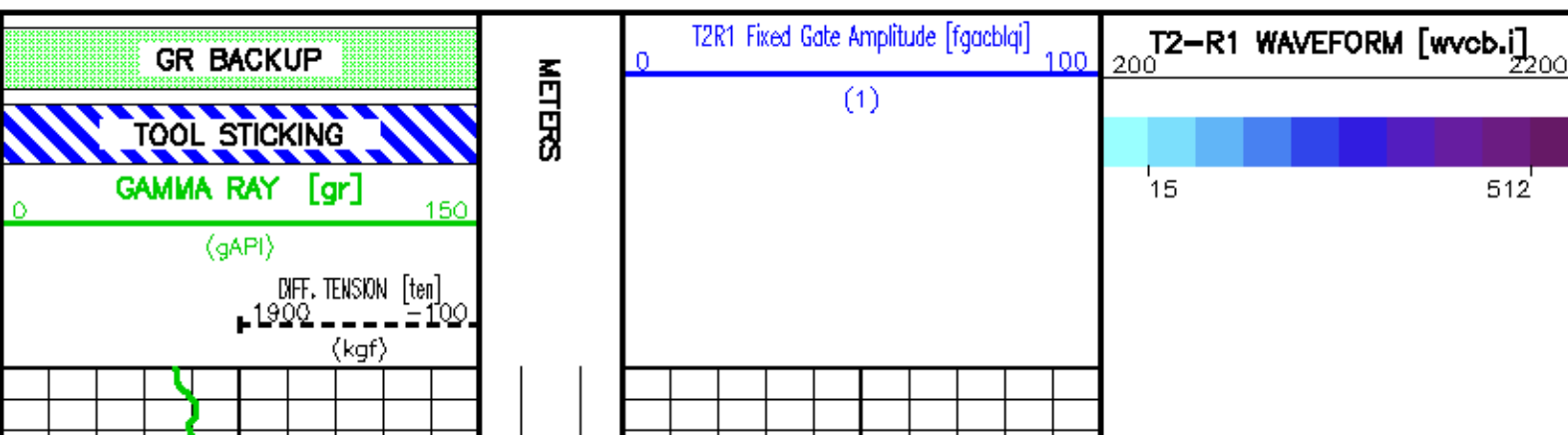
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:FGACBLQI	Mar 6 22:18:03 2012	FIXED GATE AMPLITUDE IN CBL
F1:GR	Mar 6 22:18:03 2012	GAMMA RAY
F1:TEN	Mar 6 22:18:03 2012	DIFFERENTIAL TENSION
F1:WVCBQI	Mar 6 22:18:03 2012	CBL WAVEFORM

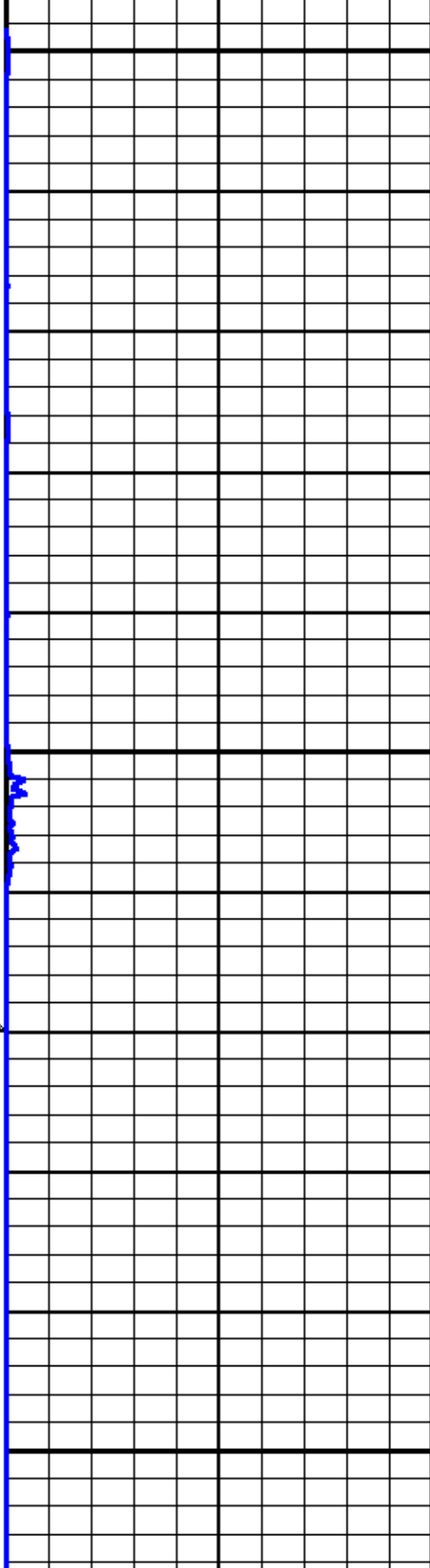
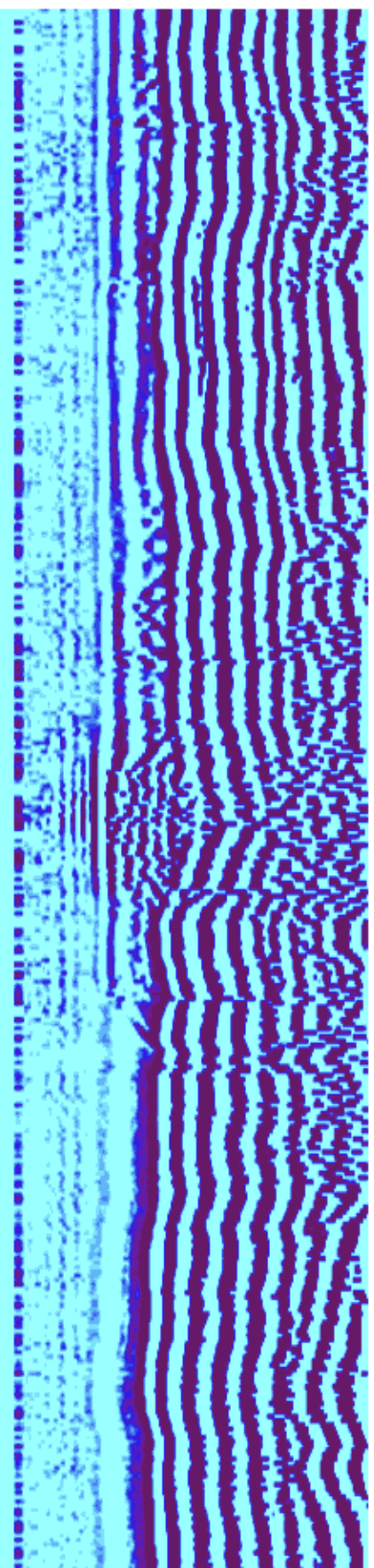
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
FGACBLQI	13.41	GR	31.59	TEN	0.00		

Presentation : opuz:/data/husky_CA212311/accu_cbl_vdl_RPT.pdf [1:240 Scale]
 Plot Interval : 480 - 535 Meters

Data File 1 : F1 : opuz:/data/husky_CA212311/m77wvh_xc03.att
 Created On : Mar 6 22:18:03 2012
 Company : HUSKY OIL OPERATIONS LIMITED
 Well : LITTLE BEAR H-64
 Field : SLATER RIVER
 File Interval : 432.018 - 1340.95 Meters
 Out : m77wvh_x



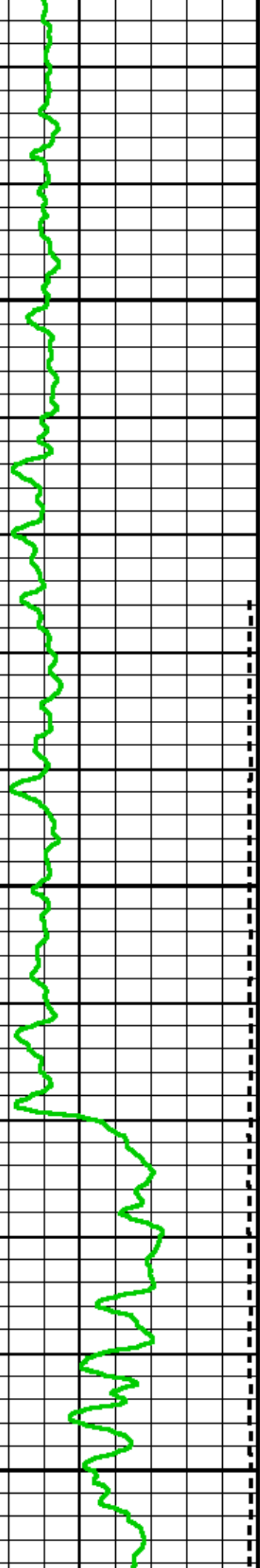


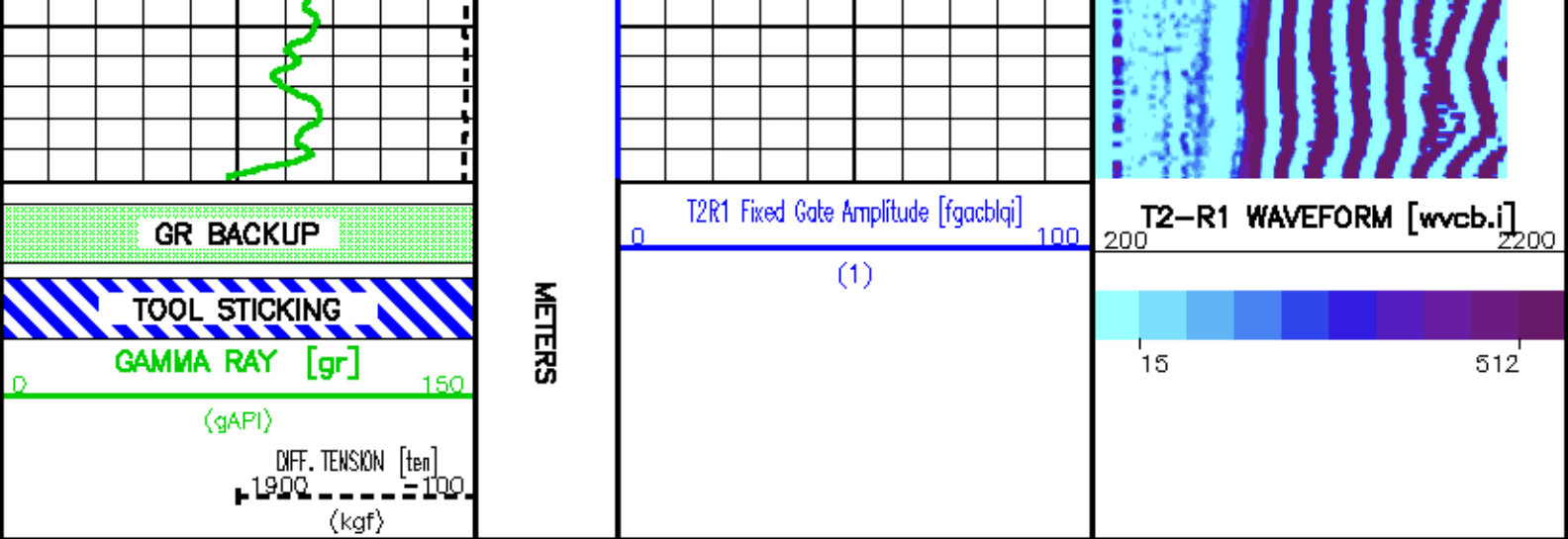
475

500

CSG

525





	COMPANY	HUSKY OIL OPERATIONS LIMITED	FILE NO:	
	WELL	LITTLE BEAR H-64		
	FIELD	SLATER RIVER	API NO:	
	PROVINCE	NORTHWEST TERRITORIES		
LOCATION:		ELEVATIONS:	UID:	



SURF LOC:
LAT 64 53' 28.5"N LONG 126 11' 20.3"W
BH LOC. LSD:
LAT 64 53' 28.5"N LONG 126 11' 20.3"W

KB 183.2 M
DF
GL 178.0 M

300H64500126000
LICENSE:
482

DATE 06-MAR-2012