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OS1: none

OS2:

OS3:

OS4:

OS5:

REMARKS: RUN NUMBER 1

Tool run as per sketch.

Casing becomes more narrow at 500' and 200' no mentions were made about a different casing id's.	
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Crew: Troy Ocanas

Rig: Work over

RUN 1

SERVICE ORDER #:  
PROGRAM VERSION:  
FLUID LEVEL:

BE0K-00134  
18C0-147

LOGGED INTERVAL

START

**STOP**

RUN 2

SERVICE ORDER #:  
PROGRAM VERSION:  
FLUID LEVEL:

LOGGED INTERVAL

START

**STOP**

RUN 1

**SURFACE EQUIPMENT  
WITM (DTS)-A**

GSR-U/Y  
NCT-B  
CNB-AB  
NCS-VB

## DOWNHOLE EQUIPMENT

LEH-QT  
LEH-QT

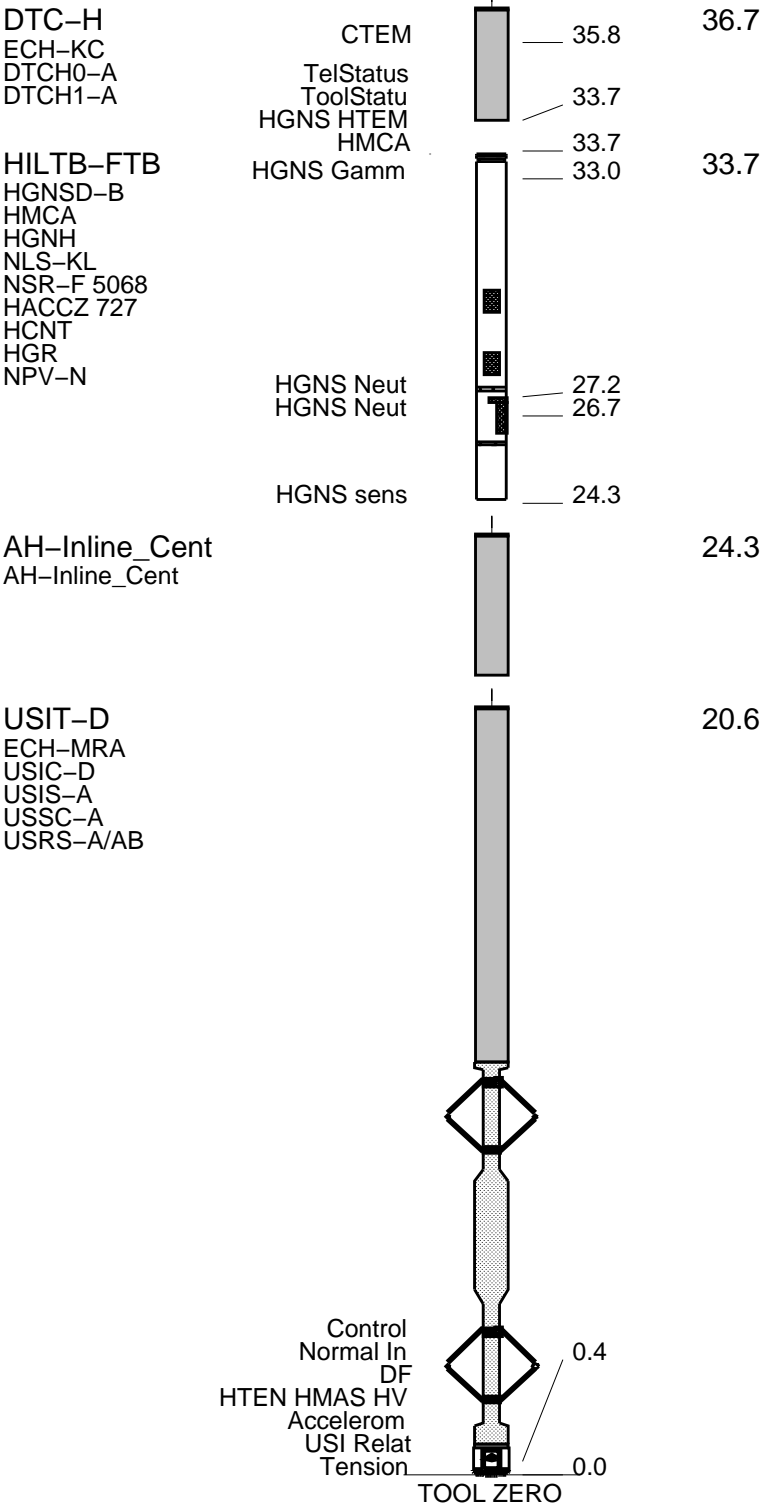
43.4



AH-Inline\_Cent  
AH-Inline\_Cent

40.5





MAXIMUM STRING DIAMETER 3.56 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN FEET

Input DLIS Files

USI\_TLD\_MCFL\_CNL\_011PUP

FN:10

30-Mar-2011 22:02

7335.0 FT

80.5 FT

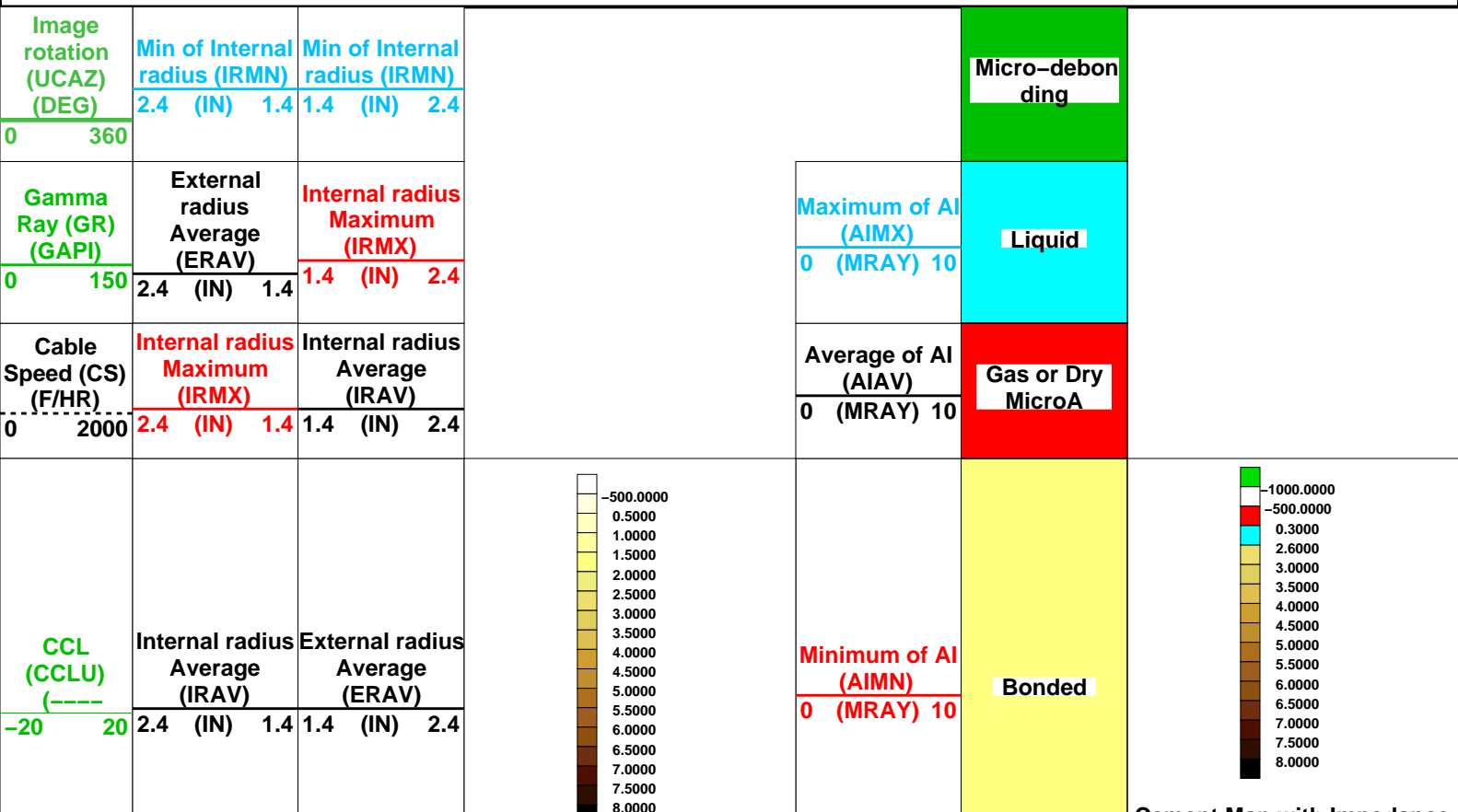
OP System Version: 18C0-147

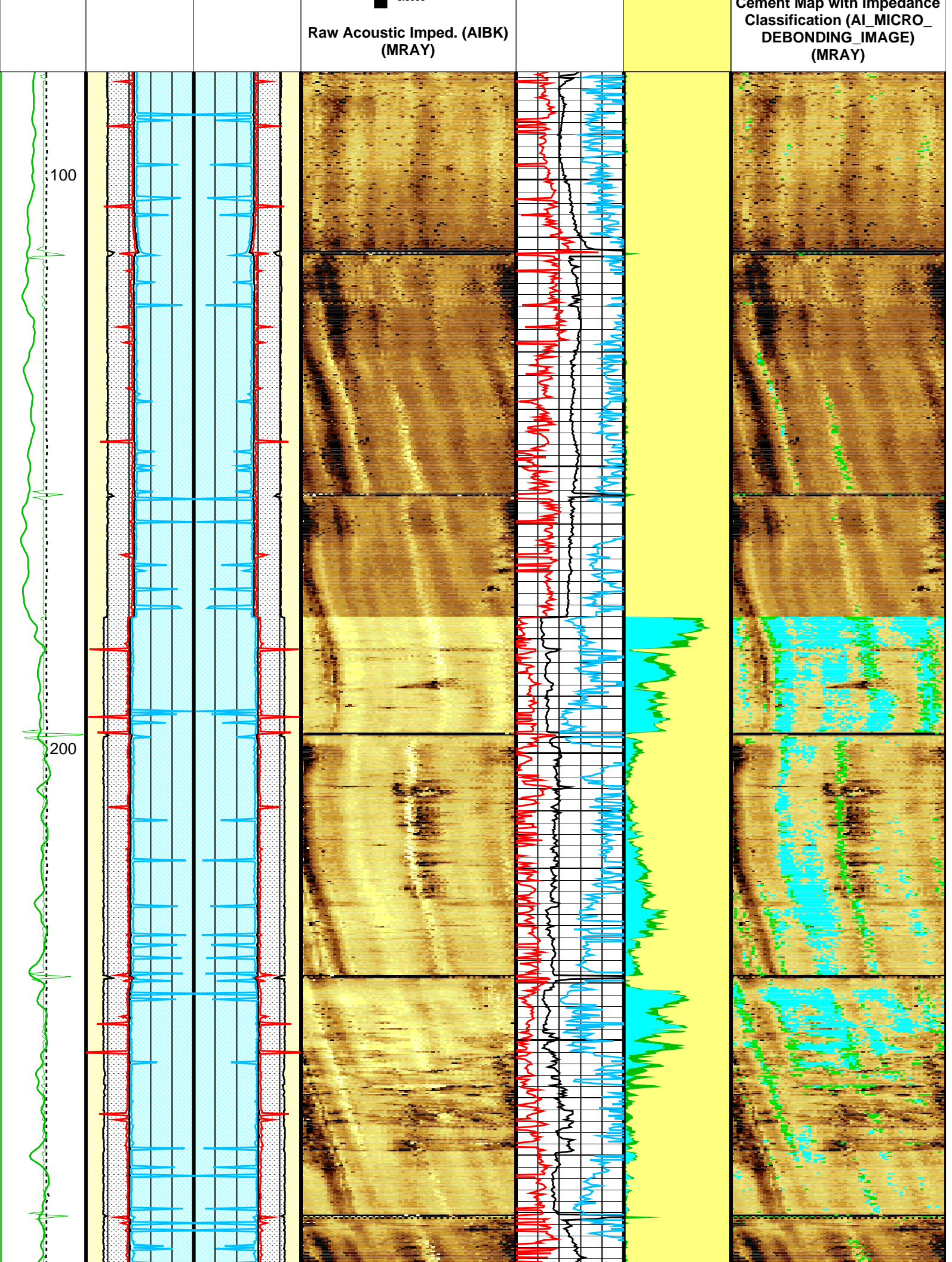
USITD  
DTCH

SRPC-4072-Q4\_2010\_OP18\_b  
18C0-147

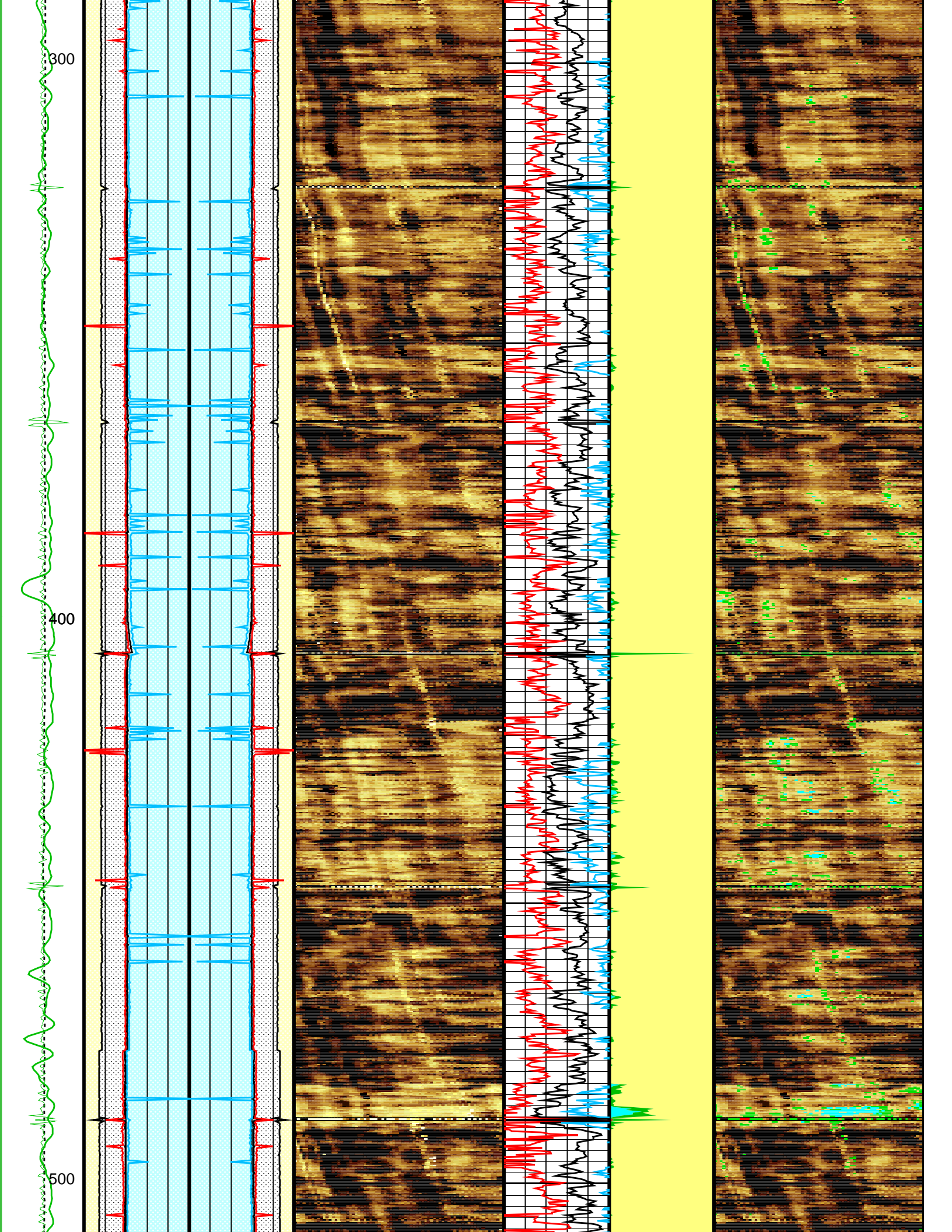
HILTD

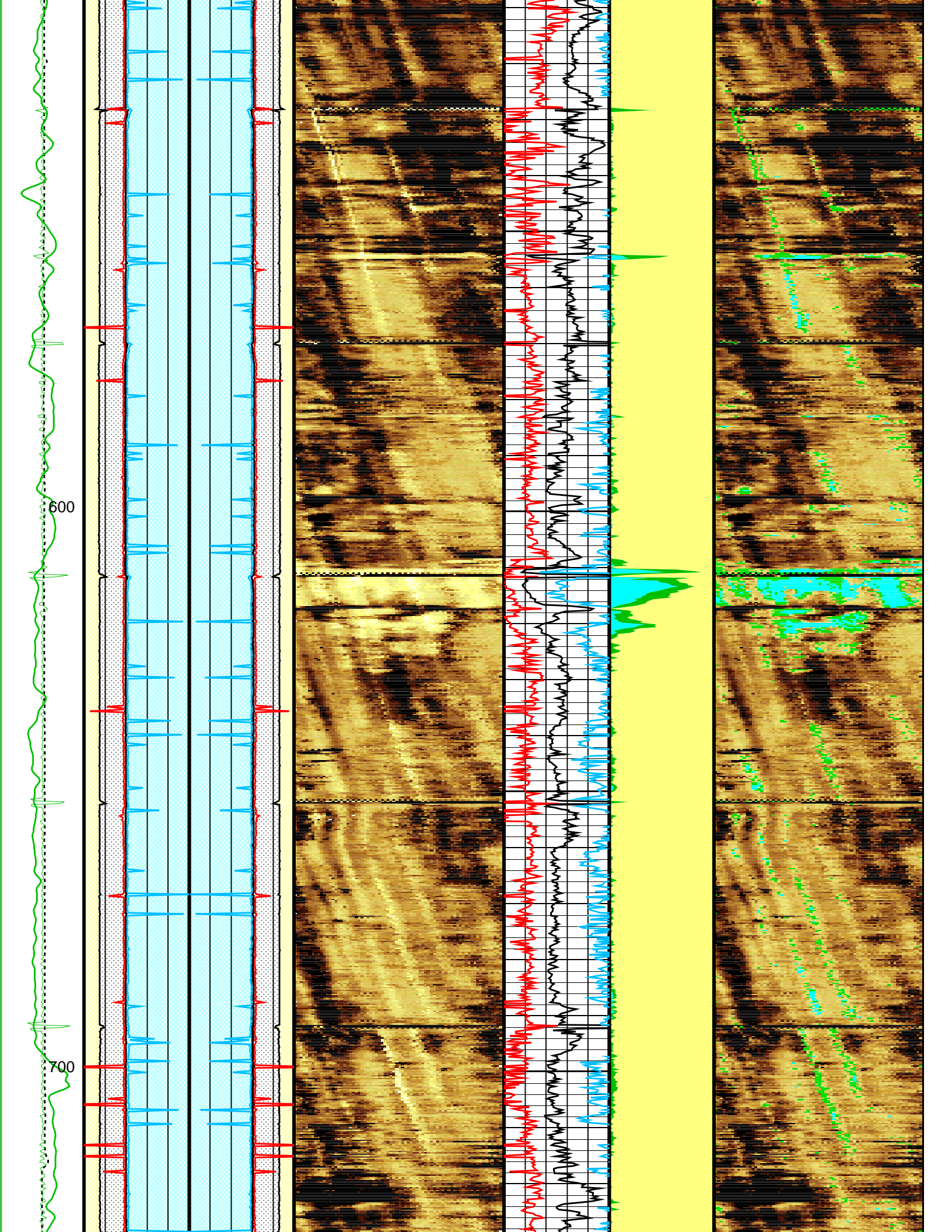
18C0-147



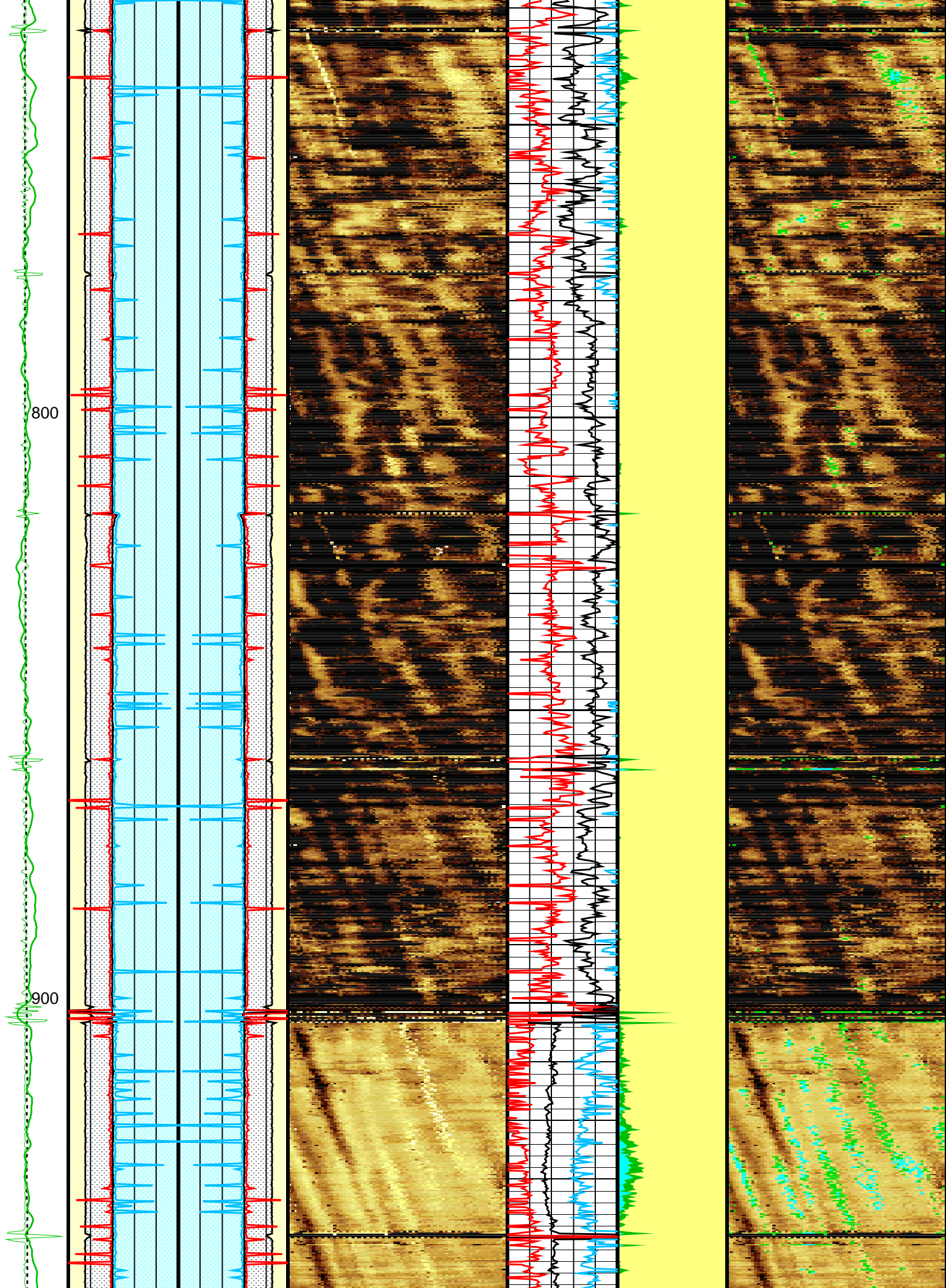




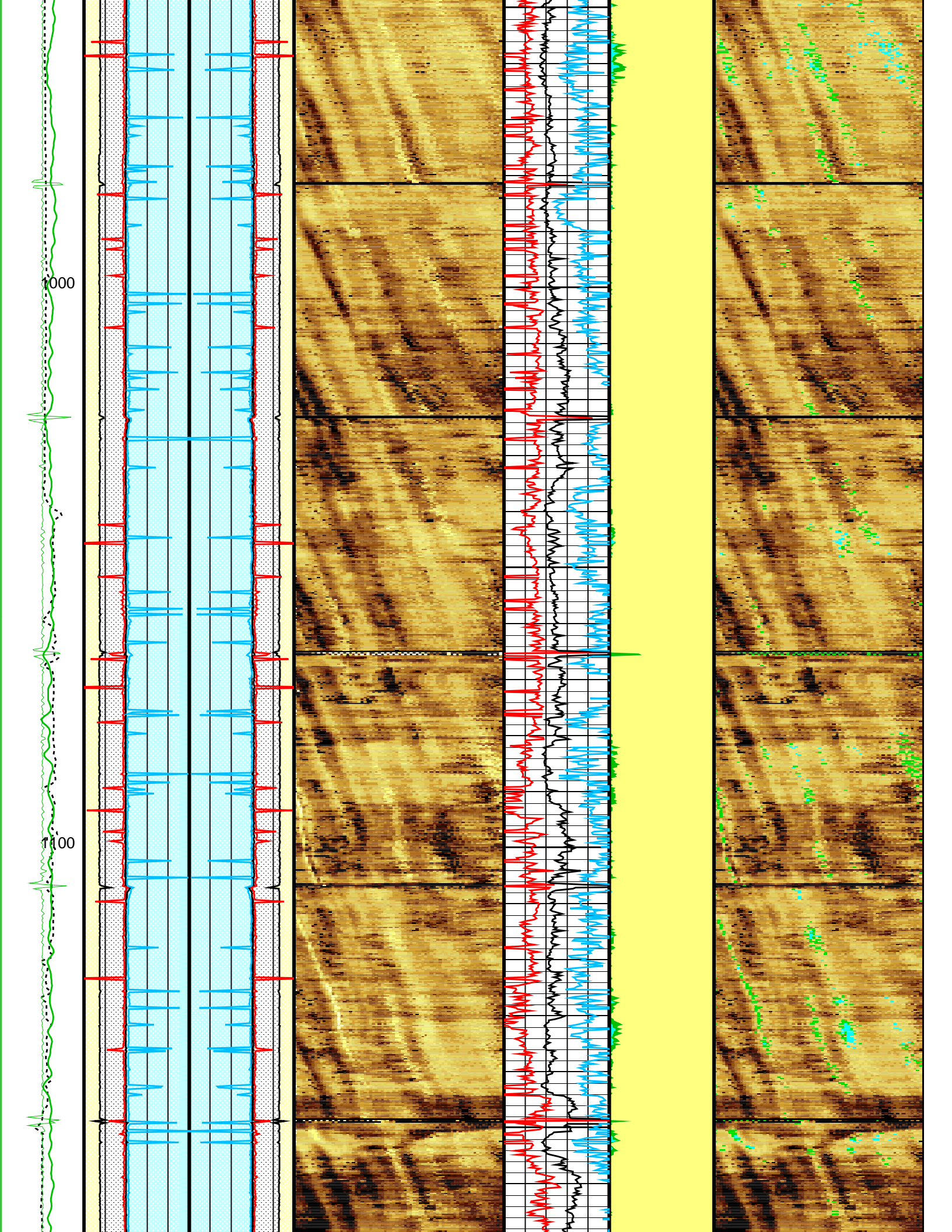


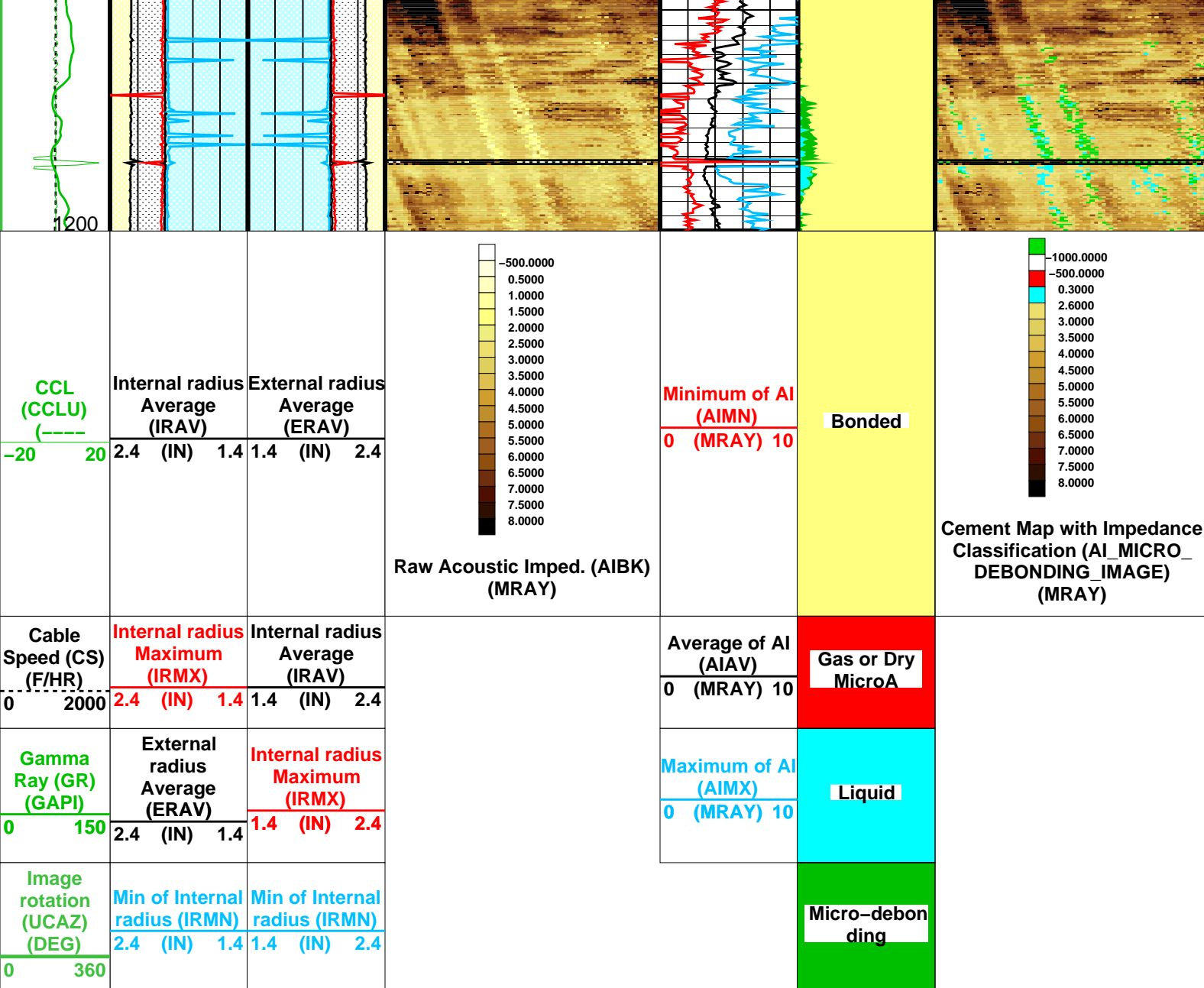












Format: USI\_Cement Vertical Scale: 5" per 100' Graphics File Created: 30-Mar-2011 22:17

## OP System Version: 18C0-147

USITD SRPC-4072-Q4\_2010\_OP18\_b HILTD 18C0-147  
DTCH 18C0-147

### Parameters

DLIS Name	Description	Value	
USIT-D: Ultrasonic Imaging – D			
AGMN	Minimum Gain of Cartridge	–4	dB
AGMX	Maximum Gain of Cartridge	20	dB
BERJ	Bad Echo Rejection	ON	
CDIA	Casing Outer Diameter	4.500	in
CSDE	Casing Density	486.9	lbm/ft3
CSID	Casing Inner Diameter	4.000	in
DFVL	Default Fluid Velocity	195.0	us/ft
DOT	Diameter of Transducer Sensor	1.756	in
EMXV	EMEX Voltage	20	V
FDII	FPM Data Interpolation Interval	0.000	ft
MW	Mud Weight	8.400	lbm/gal
RCOD	Reference Calibrator Outer Diameter	4.500	in
RCSO	Reference Calibrator Standoff	0.842	in
RCTH	Reference Calibrator Thickness	0.216	in
TCUB	T^3 Processing Level	VXLP	
THDH	Maximum Search Thickness (percentage of nominal)	130.0	
THDL	Minimum Search Thickness (percentage of nominal)	70.000	
THDR	Thickness Detection Radius	FUNDAMENTAL	

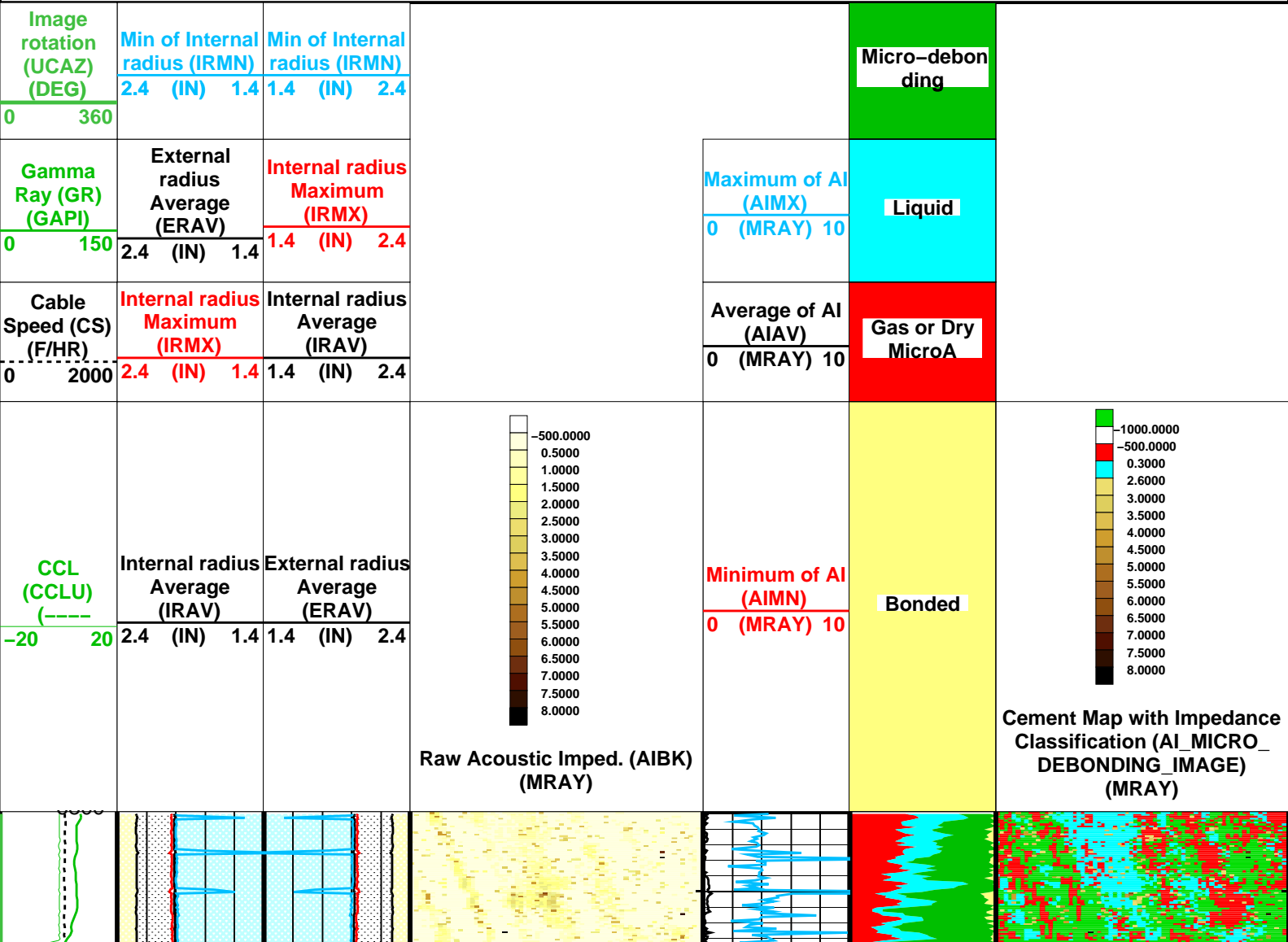
THDP	Thickness Detection Policy	FUNDAMENTAL	0.250	in
THNO	Nominal Thickness of Casing		-2.000	us
USTO	Ultrasonic Time Offset		5INC	
USUB	Ultrasonic Subassembly Identifier		D603005H	
UWKM	Ultrasonic Working Mode		51.400	us/ft
VCAS	Ultrasonic Transversal Velocity in Casing		14.992	us
WLEN	T^3 Processing Length		46.250	Mrayl
ZCAS	Acoustic Impedance of Casing		-1.000	Mrayl
ZINI	Initial Estimate of Cement Impedance		1.300	Mrayl
ZMUD	Acoustic Impedance of Mud		2.600	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement		0.300	Mrayl
ZTGS	Acoustic Impedance Threshold for Gas			
DIR: Directional Survey Computation				
SPVD	TVD of Starting Point		0.000	ft
TIMD	Along-hole depth of Tie-in Point		0.000	ft
TIVD	TVD of Tie-in Point		0.000	ft
System and Miscellaneous				
CWEI	Casing Weight		11.600	lbm/ft

Input DLIS Files					
USI_TLD_MCFL_CNL_011PUP	FN:10	30-Mar-2011 22:02	7335.0 FT	80.5 FT	

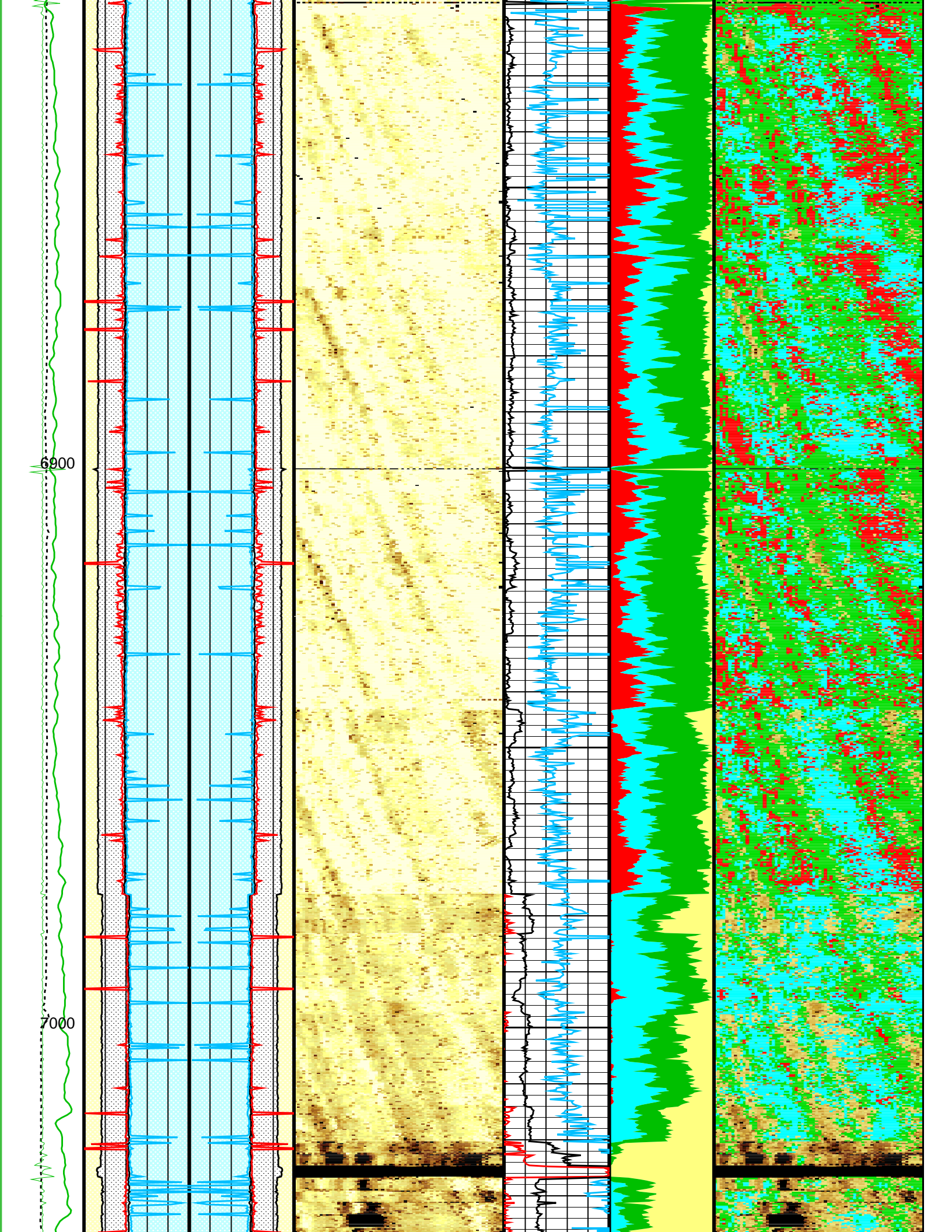
Company: Encana Oil & Gas Inc (USA)	Well: Ranchero 1
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Input DLIS Files					
USI_TLD_MCFL_CNL_011PUP	FN:10	30-Mar-2011 22:02	7335.5 FT	80.5 FT	

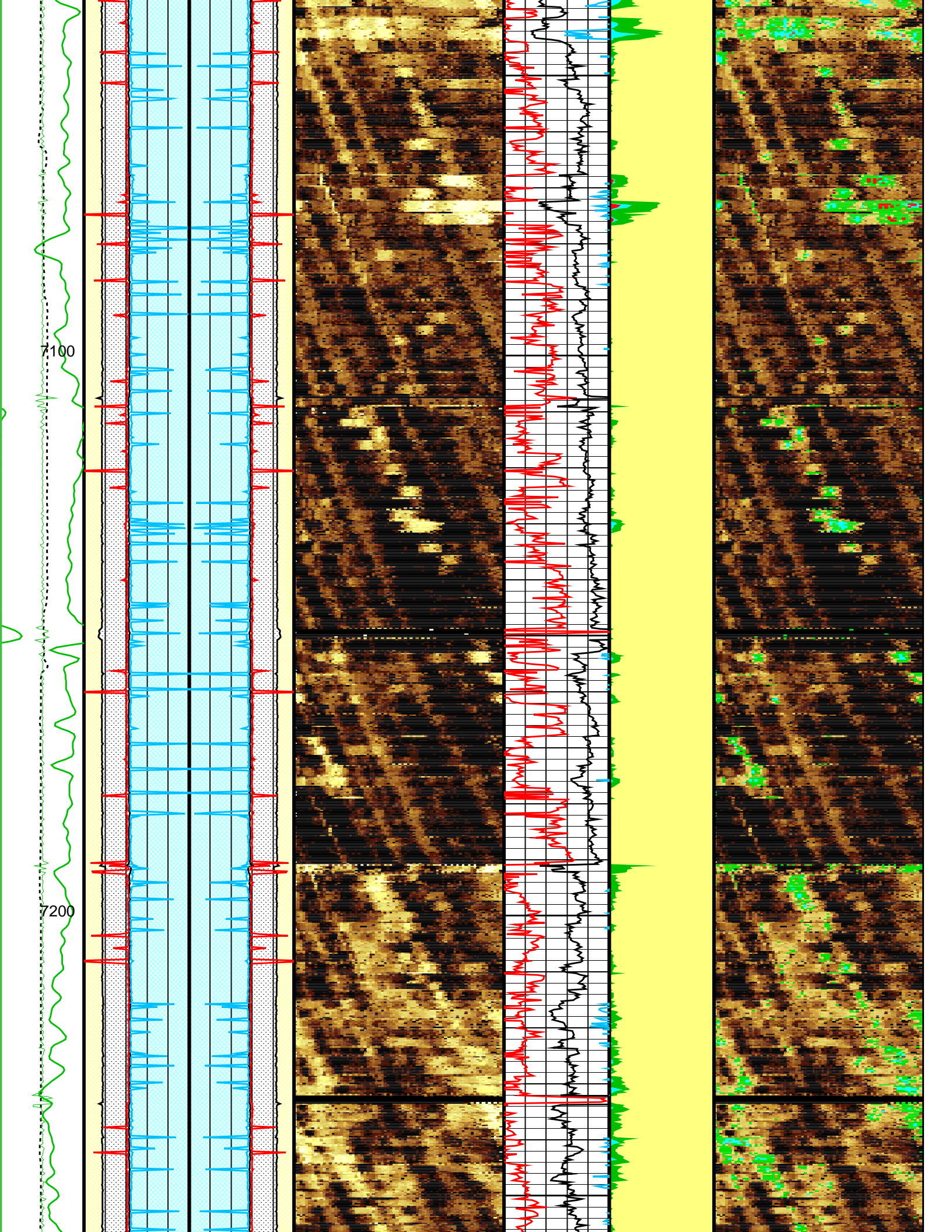
OP System Version: 18C0-147					
USITD	SRPC-4072-Q4_2010_OP18_b	HILTD	18C0-147		
DTCH	18C0-147				

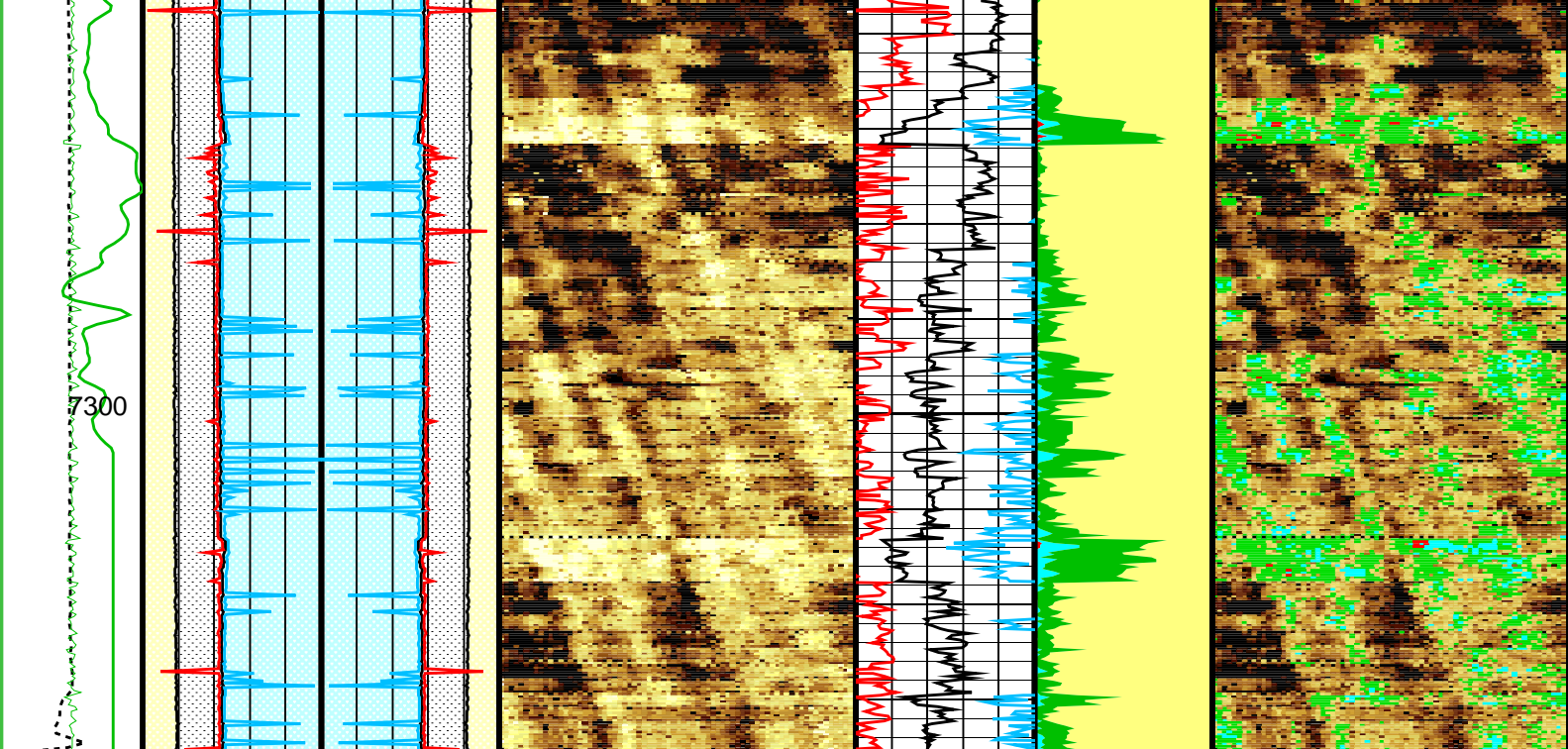












<b>CCL (CCLU)</b> (----) -20 20	<b>Internal radius Average (IRAV)</b> 2.4 (IN) 1.4	<b>External radius Average (ERAV)</b> 1.4 (IN) 2.4	-500.0000 0.5000 1.0000 1.5000 2.0000 2.5000 3.0000 3.5000 4.0000 4.5000 5.0000 5.5000 6.0000 6.5000 7.0000 7.5000 8.0000 <b>Raw Acoustic Imped. (AIBK) (MRAY)</b>	<b>Minimum of AI (AIMN)</b> 0 (MRAY) 10	<b>Bonded</b>	1000.0000 -500.0000 0.3000 2.6000 3.0000 3.5000 4.0000 4.5000 5.0000 5.5000 6.0000 6.5000 7.0000 7.5000 8.0000 <b>Cement Map with Impedance Classification (AI_MICRO_DEBONDING_IMAGE) (MRAY)</b>
<b>Cable Speed (CS) (F/HR)</b> 0 2000	<b>Internal radius Maximum (IRMX)</b> 2.4 (IN) 1.4	<b>Internal radius Average (IRAV)</b> 1.4 (IN) 2.4		<b>Average of AI (AIAV)</b> 0 (MRAY) 10	<b>Gas or Dry MicroA</b>	
<b>Gamma Ray (GR) (GAPI)</b> 0 150	<b>External radius Average (ERAV)</b> 2.4 (IN) 1.4	<b>Internal radius Maximum (IRMX)</b> 1.4 (IN) 2.4		<b>Maximum of AI (AIMX)</b> 0 (MRAY) 10	<b>Liquid</b>	
<b>Image rotation (UCAZ) (DEG)</b> 0 360	<b>Min of Internal radius (IRMN)</b> 2.4 (IN) 1.4	<b>Min of Internal radius (IRMN)</b> 1.4 (IN) 2.4			<b>Micro-debonding</b>	

Format: USI\_Cement Vertical Scale: 5" per 100' Graphics File Created: 30-Mar-2011 22:15

## OP System Version: 18C0-147

USITD SRPC-4072-Q4\_2010\_OP18\_b HILTD 18C0-147  
DTCH 18C0-147

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THDL	Minimum Search Thickness (percentage of nominal)	70.000	
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THNO	Nominal Thickness of Casing	0.250	in
USTO	Ultrasonic Time Offset	-2.000	us
USUB	Ultrasonic Subassembly Identifier	5INC	
UWKM	Ultrasonic Working Mode	D603005H	
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TIMD	Along-hole depth of Tie-in Point	0.000	ft
TIVD	TVD of Tie-in Point	0.000	ft
System and Miscellaneous			
CWEI	Casing Weight	11.600	lbm/ft

### Input DLIS Files

USI\_TLD\_MCFL\_CNL\_011PUP

FN:10

30-Mar-2011 22:02

7335.5 FT

80.5 FT

Company: **Encana Oil & Gas Inc (USA)**

**Schlumberger**

Well: **Ranchero 1**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

Ultra Sonic Imager

Cement