

# HSM-15A\_B

## proVISION Plus

### Processed Result

\* A Mark of Schlumberger

Using the following logs: proVISION, NeoScope

COMPANY: IODP

WELL: HSM-15A\_B

RIG: Joides Resolution

COUNTRY: New Zealand

Date Logged: 23-Dec-2017

Date Processed:

27-Dec-2017

Surface Location Longitude: 178° 53' 45.618" E Latitude: 38° 51' 32.202" S

Elevations: DF: 11 m

GL: -2637 m

FOLD HERE:

The well name, location and borehole reference data were furnished by the customer.

Any interpretation, research, analysis, data, results, estimates, or recommendation furnished with the services or otherwise communicated by Schlumberger to the customer at any time in connection with the services are opinions based on inferences from measurements, empirical relationships, and/or assumptions; which, inferences, empirical relationships and/or assumptions are not infallible and with respect to which professionals in the industry may differ. Accordingly, Schlumberger cannot and does not warrant the accuracy, correctness, or completeness of any such interpretation, research, analysis, data, results, estimates, or recommendation. The customer acknowledges that it is accepting the services "as is," that Schlumberger makes no representation or warranty, express or implied, of any kind or description in respect thereto, and that such services are delivered with the explicit understanding and agreement that any action taken based on the services received shall be at its own risk and responsibility, and no claim shall be made against Schlumberger as a consequence thereof.

Svc. Order #:	Techlog Vers: 2017.2	Analyst: Sachit	Process Date: 27-Dec-2017
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## Mud and Borehole Measurements:

Casing Size:	BHT : 5 degC	Bit Size: 8.5 in
Casing ID:	Type Fluid in Hole: Sea Water	
Casing Weight	Mud density: 1.03 g/cc	

## Remarks:

1. proVISION Plus processing result
2. T2 cutoff used is for clastics which is 33 ms.
3. Data might be affected due to borehole conditions.

## Acquisition & Calibration

Echo Amplitude MC:	358.819	Number Sub-Meas:	3
Frequency MC:	246.64 (kHz)	Number Echoes:	1500;64;32;0;0
Antenna Q MC:	128.809	Number Repeats:	1;32;64;0;0
Temperature MC:	26 (degC)	Echo Spacing:	1200;800;600;0;0 (us)
Loop MC:		Wait Time:	12.7751;0.048;0.016;0 (s)

## Processing Parameters

### Preprocessing

Stacking Levels:	9
Despike:	yes
Burst Baseline Corr:	no
Bend Ringing Corr:	no
Signal Phasing:	Manual

### Inversion


T2 Minimum:	1 (ms)
T2 Maximum:	5000 (ms)
Inversion Components:	30
Interpolation:	64
Sub Measurements:	1;2;3
Start Echo:	2;2;2
EPM Processing:	Auto
T1/T2 Input:	1.5
Polarization Correction:	no
Regularization:	Manual
Regularization Factor:	0.1

### LQC Threshold Parameters

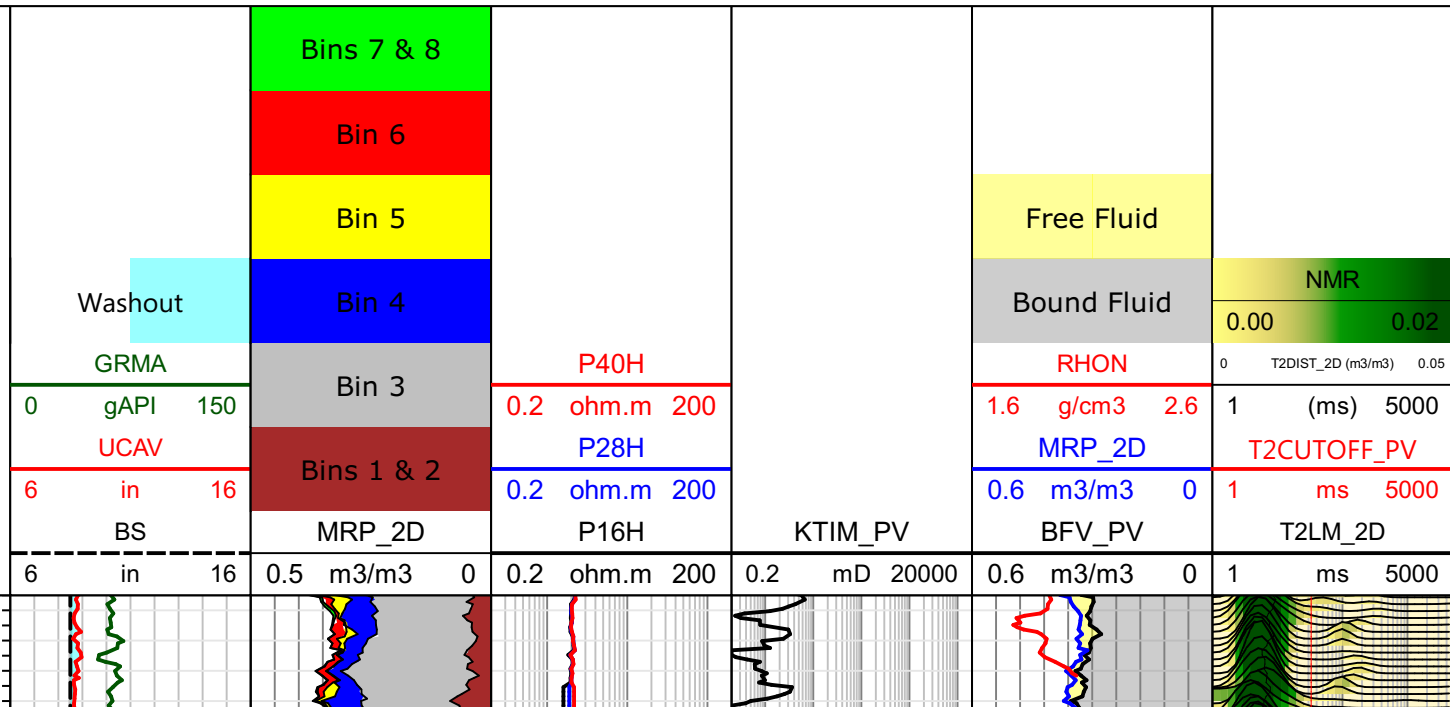
Polarization Corr Threshold:	0.015 (m3/m3)
Bad Hole Porosity:	0.4 (m3/m3)
Bad Hole T2:	10 (ms)

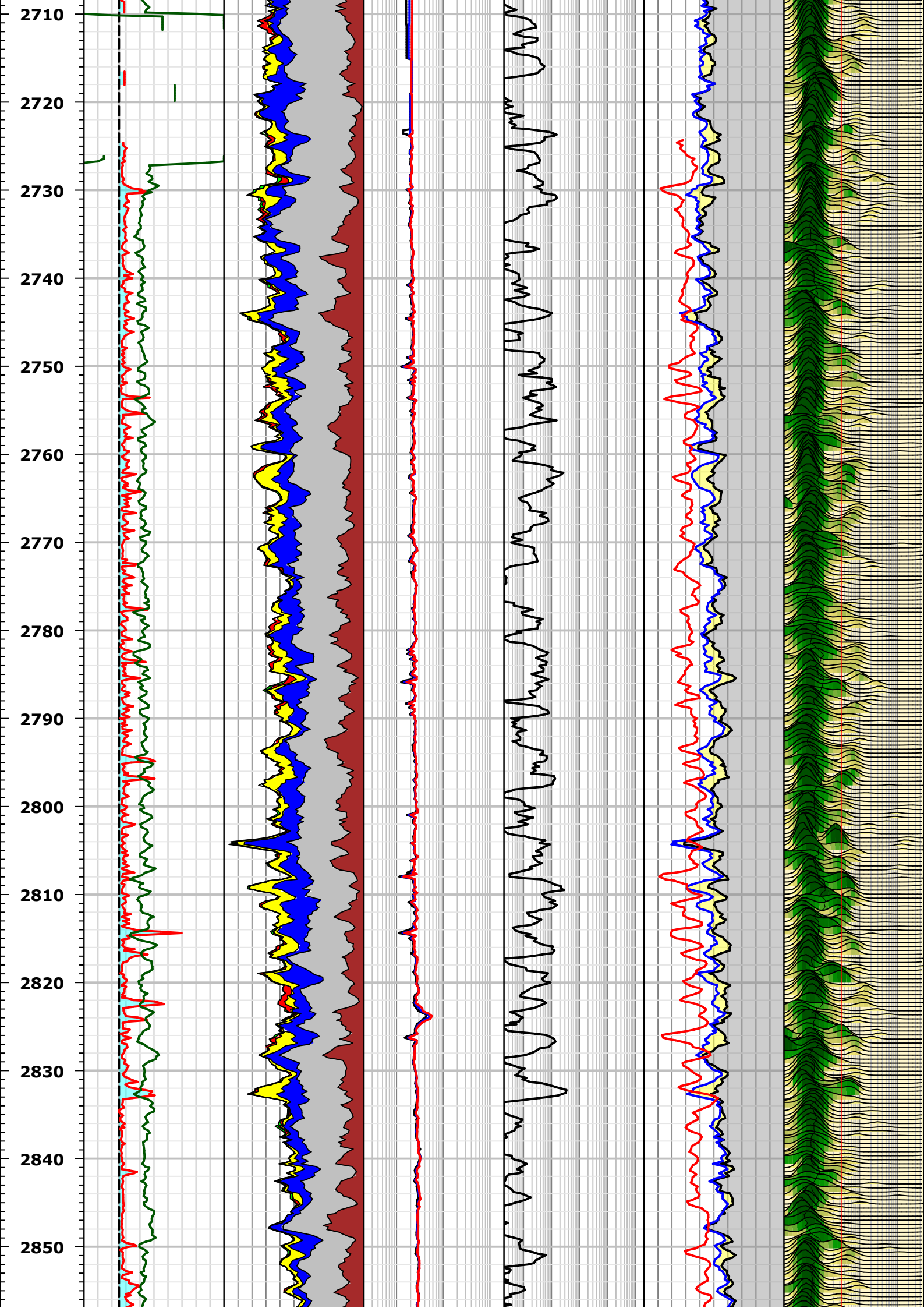
## Bound Fluid Permeability and Bin Porosity

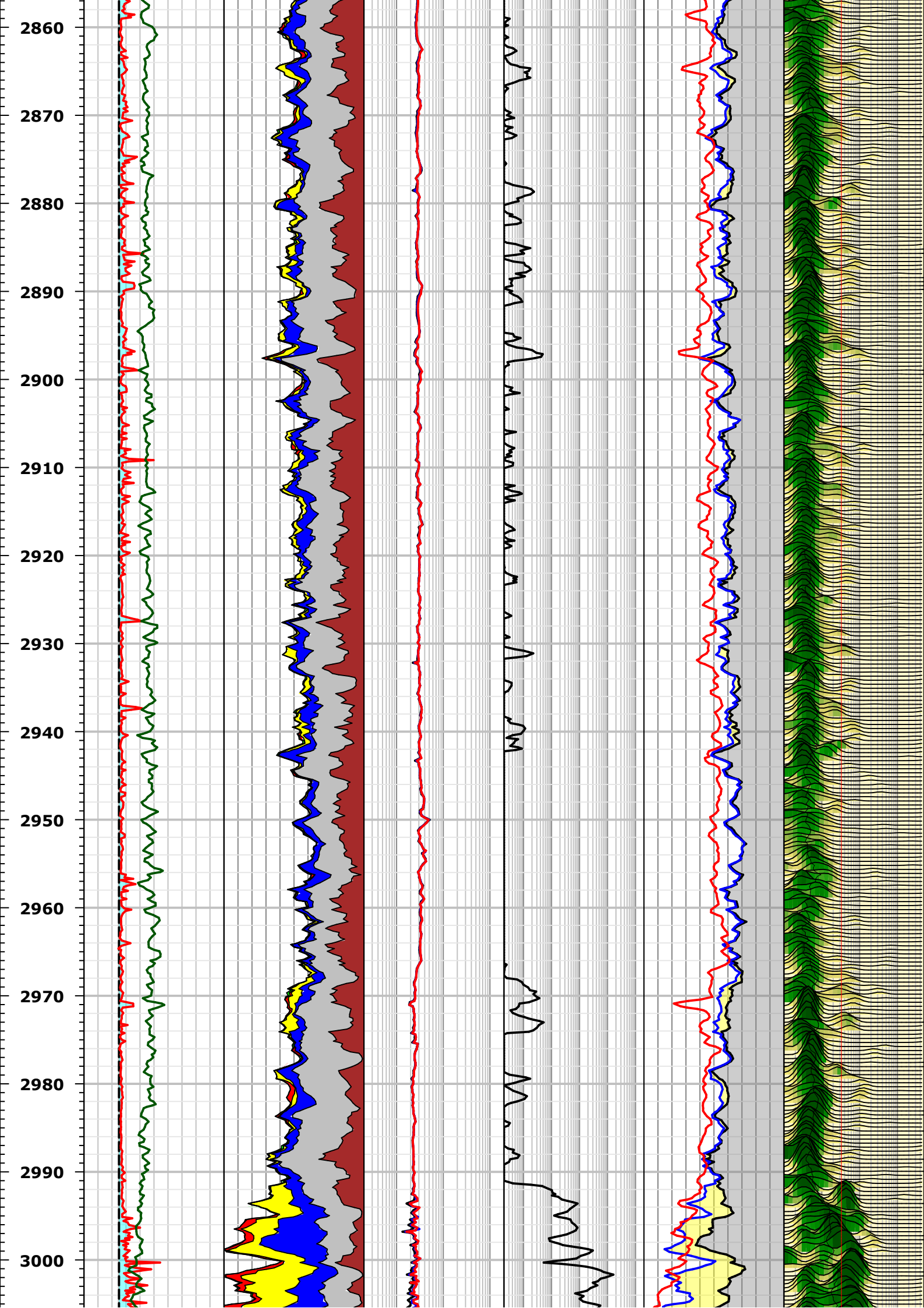
<u>Parameters</u>	<u>Permeability</u>	<u>Timur</u>	<u>SDR</u>
T2 Cutoff: 33 (ms)	Computed:	yes	no
	Multiplier:	1	4
	Porosity Exponent:	4	4
	Ratio/T2LM Exp:	2	2
<u>Bin Porosities (ms)</u>	Bound Fluid Min:	0.01 (m3/m3)	
1      1      3      10      33      100      300      1000      5000			

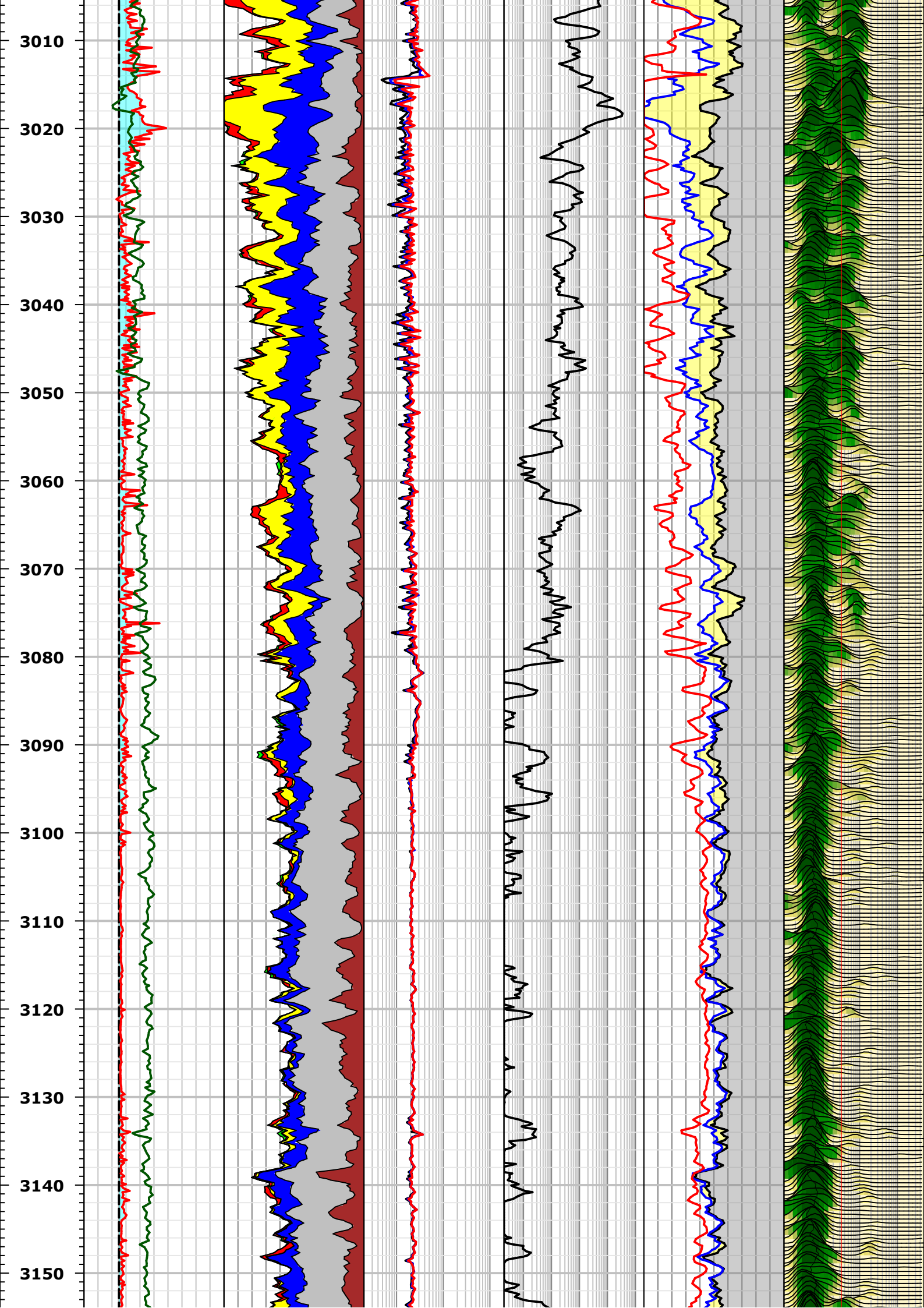


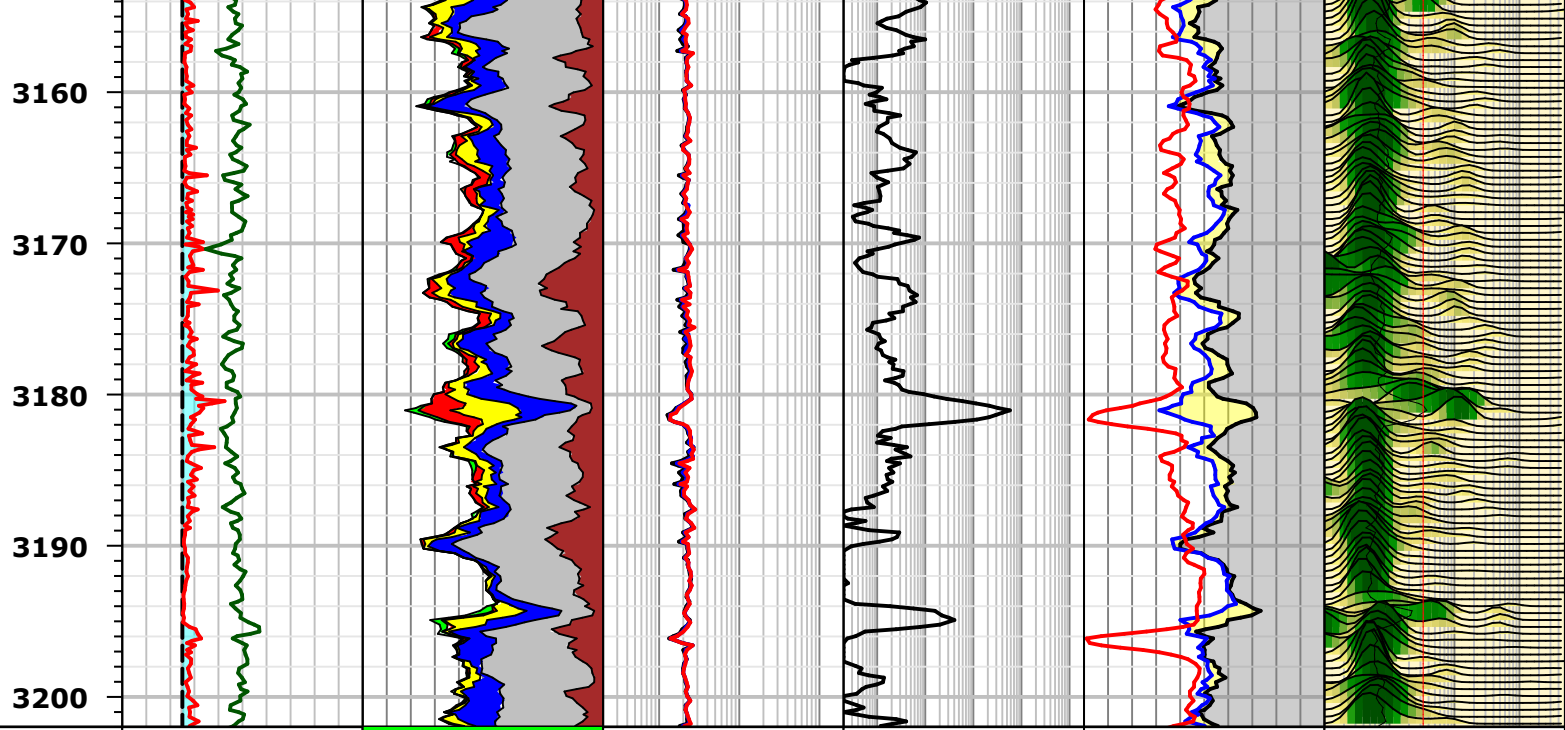
Reference (m) 1:500











<b>Reference (m) 1:500</b>			Bins 7 & 8								
			Bin 6								
			Bin 5								
			Bin 4								
	Washout		Bin 3								
	GRMA		Bins 1 & 2								
	0	gAPI	150								
				P40H							
				0.2 ohm.m 200							
				P28H							
				0.2 ohm.m 200							
				P16H							
				KTIM_PV							
				0.2 mD 20000							
								Free Fluid			
								Bound Fluid			
								RHON			
								1.6 g/cm3 2.6			
								MRP_2D			
								0.6 m3/m3 0			
								BFV_PV			
								0.6 m3/m3 0			
										NMR	
										0.00 0.02	
										0 T2DIST_2D (m3/m3) 0.05	
										1 (ms) 5000	
										T2CUTOFF_PV	
										1 ms 5000	
										T2LM_2D	
										1 ms 5000	