

HSM-15A_A

proVISION Plus

Processed Result

* A Mark of Schlumberger

Using the following logs: proVISION, NeoScope

COMPANY: IODP

WELL: HSM_15A_A

RIG: Joides Resolution

COUNTRY: New Zealand

Date Logged: 20-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 Manas	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: 8.6 lbm/gal	

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


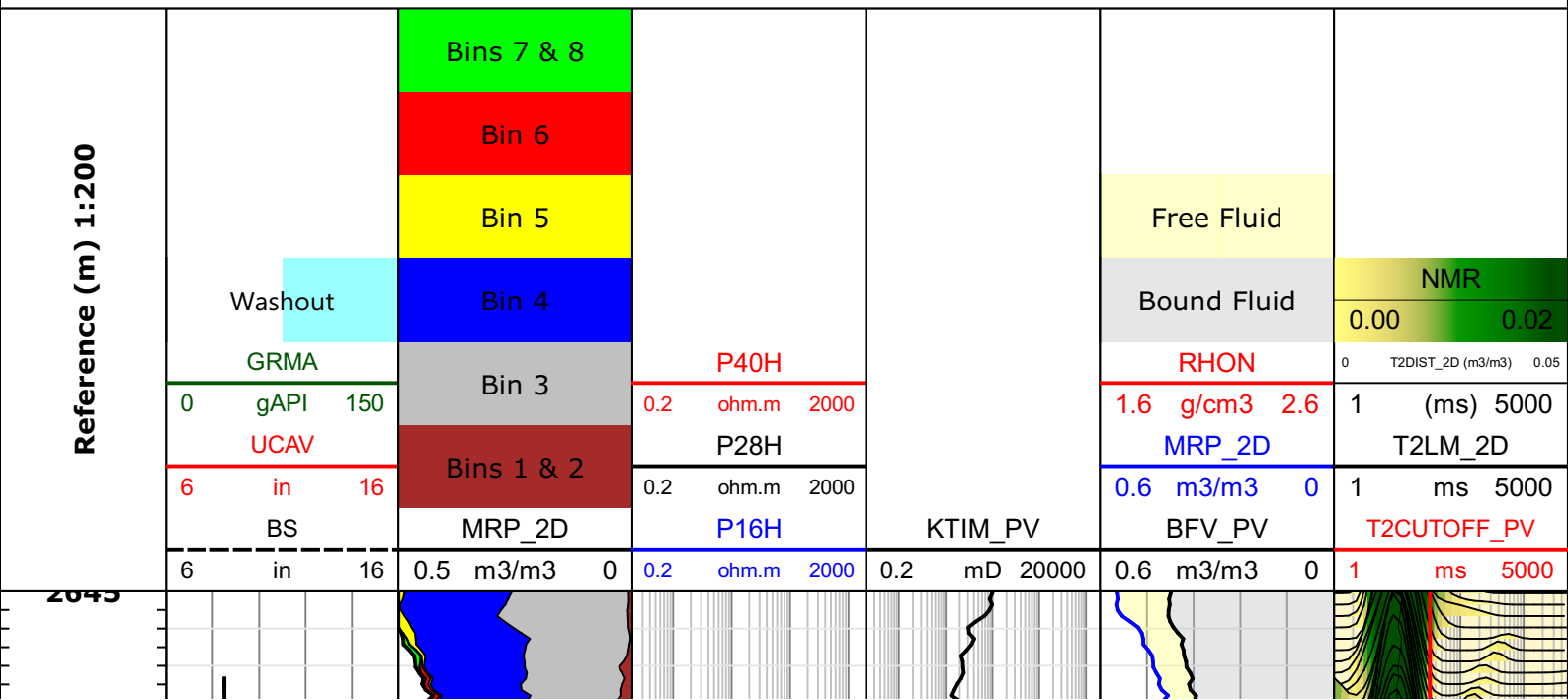
T2 Minimum:	1 (ms)
T2 Maximum:	5000 (ms)
Inversion Components:	30
Interpolation:	64
Sub Measurements:	1;2;3
Start Echo:	2;2;2
EPM Processing:	Auto
T1/T2 Input:	1.5
Polarization Correction:	no
Regularization:	Manual
Regularization Factor:	0.2

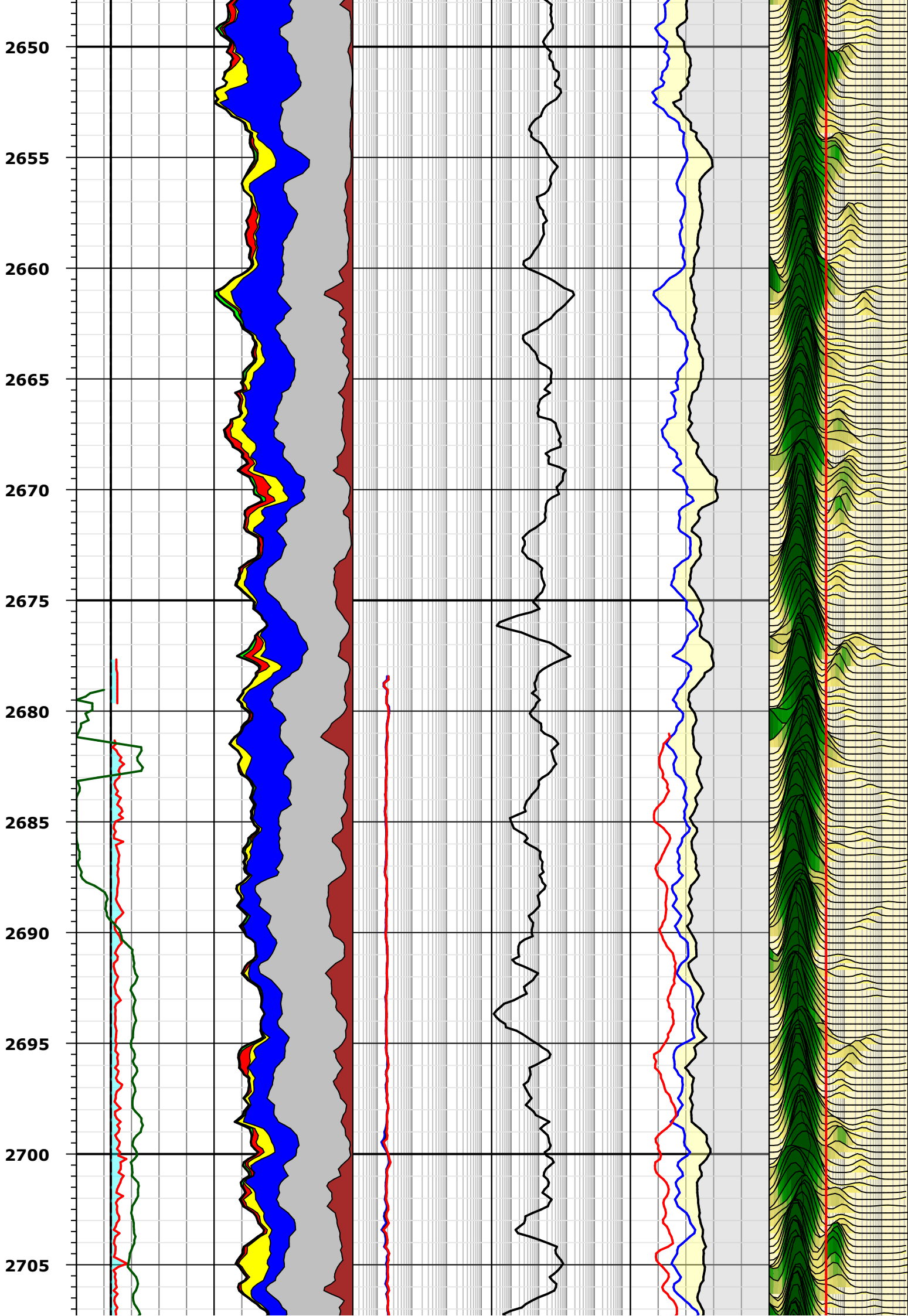
LQC Threshold Parameters

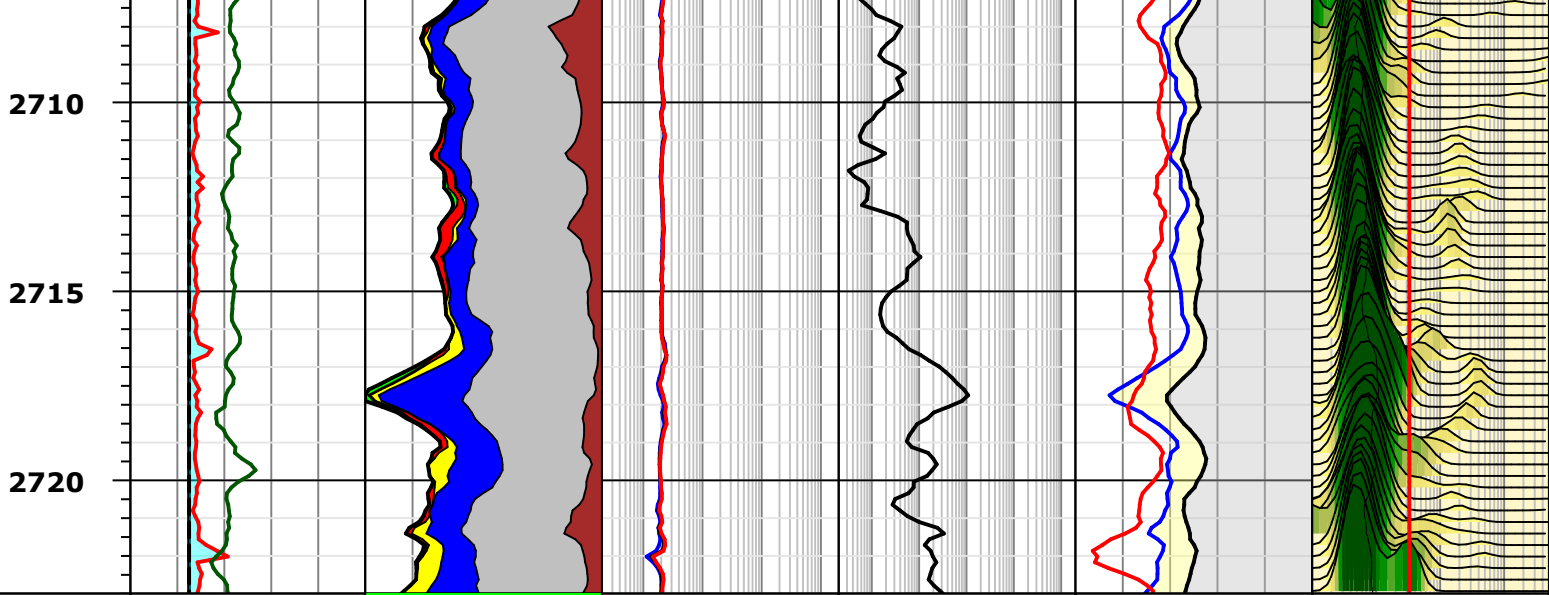
Polarization Corr Threshold:	0.015 (m3/m3)
Bad Hole Porosity:	0.4 (m3/m3)
Bad Hole T2:	10 (ms)

Bound Fluid Permeability and Bin Porosity

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





Reference (m) 1:200

Reference (m) 1:200	Washout		Bins 7 & 8							
			Bin 6							
			Bin 5				Free Fluid			
			Bin 4				Bound Fluid		NMR	
	GRMA		Bin 3	P40H			RHON		0.00 0.02	
	0	gAPI	150	0.2 ohm.m 2000			1.6 g/cm3 2.6		1 (ms) 5000	
	UCAV		Bins 1 & 2	P28H			MRP_2D		T2LM_2D	
	6	in	16	0.2 ohm.m 2000			0.6 m3/m3 0		1 ms 5000	
BS		MRP_2D	P16H			KTIM_PV		BFV_PV		
6	in	16	0.5 m3/m3 0	0.2 ohm.m 2000	0.2 mD 20000	0.6 m3/m3 0	1 ms 5000		T2CUTOFF_PV	