

# U1520B

## SonicScope

### Quadrupole Shear Processing QC Plot

\*A Mark of Schlumberger

Using the following logs: SonicScope, NeoScope

COMPANY: IODP  
 WELL: U1520B  
 FIELD: HSM-05A  
 COUNTRY: New Zealand

Date Logged: 30-Dec-2017 Date Processed: 03-Jan-2018

Surface Location Longitude: 178° 7' 56.1" E Latitude: 38° 58' 9.84" S  
 Elevations: DF: 11 m GL: -3527.3 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 P. Bhuyan	Process Date: 03-Jan-2018
---------------	----------------------	-------------------	---------------------------

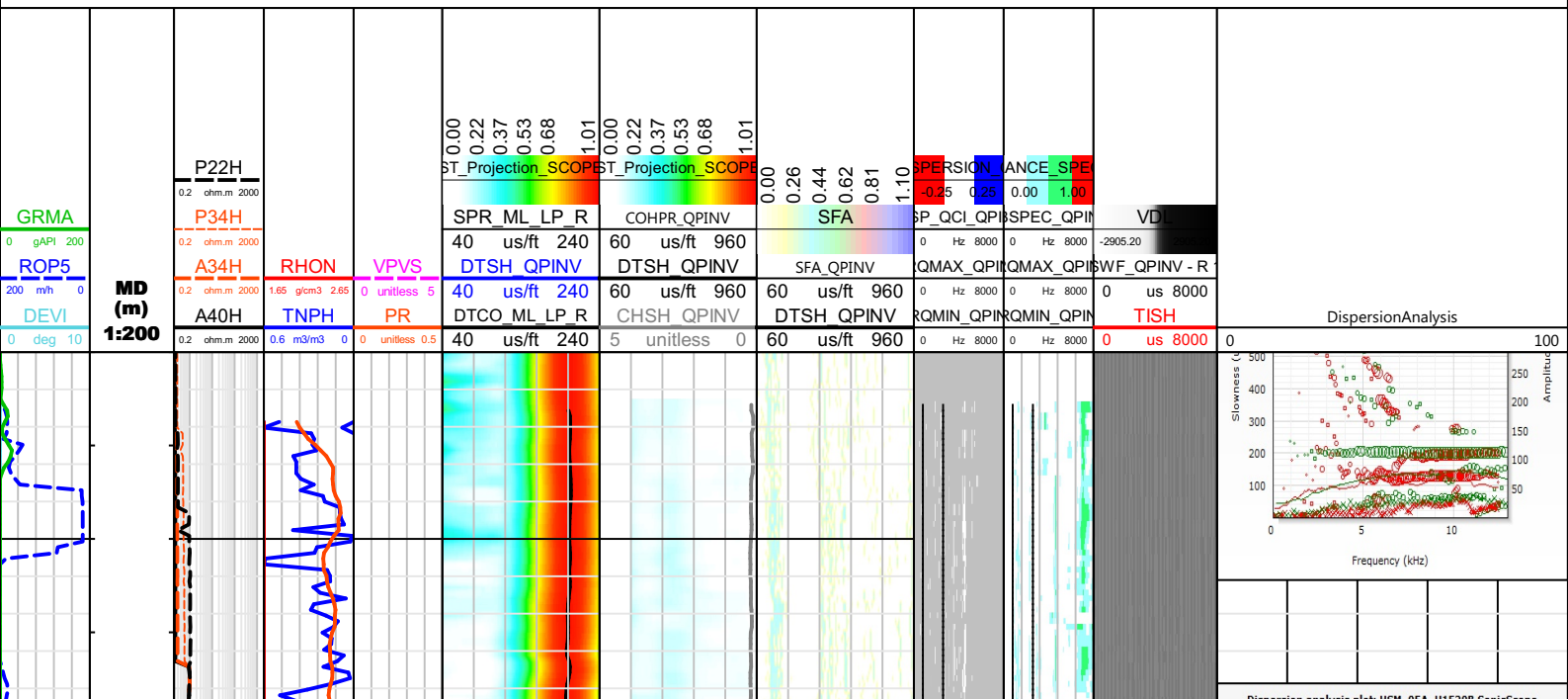
Mud and Borehole Measurements:		
Casing Size:	BHT : 7 degC	Bit Size: 8.5 in
Casing ID:	Type Fluid in Hole: Sea Water	
Casing Weight:	Mud density: 1.03 gm/cc	

Remarks:

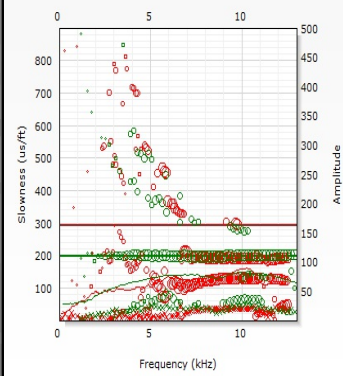
Quadrupole waveform is processed to get formation shear arrival.  
 Data might be affected due to borehole condition.

### Processing parameters summary

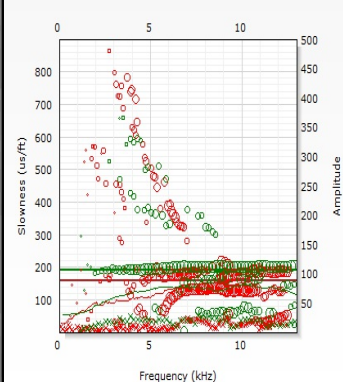
Quadrupole inversion		
<b>Binning option:</b> Yes	<b>Bin width:</b> 1000 Hz	<b>Caliper:</b> 8.5 in
<b>Compressional slowness:</b> DTSH_MH_LP_Merged us/ft	<b>Window move out (Shear DT):</b> DTSH_QPND_M57_R_2_RUN1 us/ft	<b>Leaky-Q filtering:</b> Yes
<b>Filter band high for inversion:</b> 2600 Hz	<b>Filter band high for filtered waveform:</b> 5000 Hz	<b>Filter band low for inversion:</b> 800 Hz
<b>Filter band low for filtered waveform:</b> 0 Hz	<b>Filter type:</b> Static filter	<b>Formation type:</b> Very slow
<b>Inversion type:</b> 2-Parameters	<b>Monopole high ST Projection:</b> SPR_MH_M57_R_1_RUN3 unitless	<b>Mud slowness:</b> 200 us/ft
<b>Mud density:</b> 8.599999 lbm/gal	<b>Mud type:</b> WBM	<b>Multishot NRSA:</b> 7
<b>Max frequency for SFA:</b> 4000 Hz	<b>Min frequency for SFA:</b> 0 Hz	<b>Slowness lower limit:</b> 60 us/ft
<b>Slowness upper limit:</b> 960 us/ft	<b>Waveform length:</b> 512	<b>Max frequency for TKO:</b> 12000 Hz
<b>Min frequency for TKO:</b> 0 Hz	<b>Model order:</b> 3	<b>Matching tolerance:</b> 50
<b>Waveform:</b> WFA_QPT	<b>Reference receiver:</b> 6	<b>Receiver selection:</b> R1;R2;R3;R4;R5;R6;R7;R8;R9;R10;R11;R12
<b>Processing window start:</b> 0 us	<b>Processing window width:</b> 10000 us	



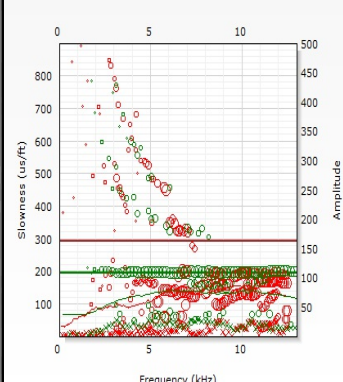
Current depth = 3544.98 m



Dispersion analysis plot: HSM\_05A\_U1520B.SonicScope  
Current depth = 3559.96 m



Dispersion analysis plot: HSM\_05A\_U1520B.SonicScope  
Current depth = 3574.95 m



Dispersion analysis plot: HSM\_05A\_U1520B.SonicScope  
Current depth = 3589.93 m

