

HSM-15A_A

SonicScope

Monopole High Compressional QC Plot

* A Mark of Schlumberger

Using the following logs: SonicScope, Neoscope

COMPANY: IODP

WELL: HSM-15A_A

RIG NAME: 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: Onishant	Process Date: 27-Dec-2017
---------------	----------------------	-------------------	---------------------------

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. Data might be affected due to borehole condition and mud contamination.
2. Monopole High waveform is processed in the interval 2700-2735m to get formation compressional arrival.

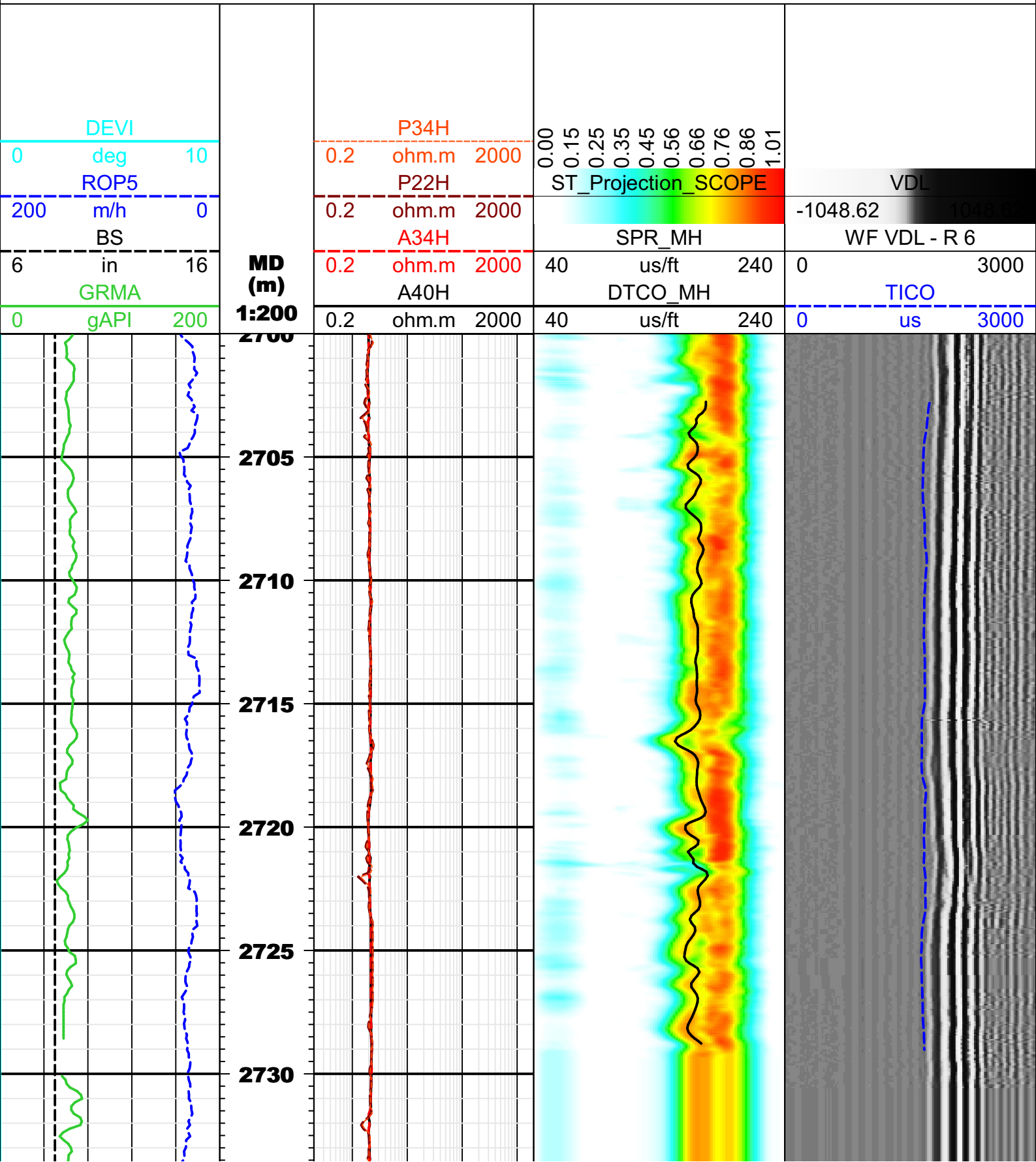
Processing parameters summary

Monopole High STC

Borehole status: Open hole
Energy threshold: 1 Pa
Filter band high: 13000 Hz
Formation type: Intermediate
Dispersion file mode: None
Mud density: 8.599999 lbm/gal
Search band offset: 294.583 us
Slowness lower limit: 40 us/ft
STC stacking: Yes
Compute SFA: Yes
Model order: 2
Compressional lower limit: 56.7 us/ft
Shear upper limit: 540 us/ft
Time width: 1600 us
Reference receiver: 6

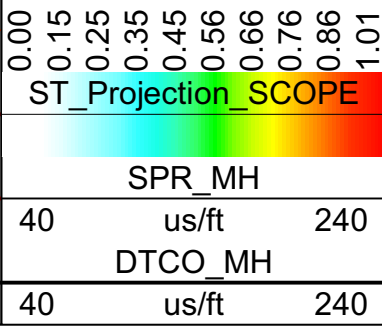
Bit size: 8.5 in
Energy threshold option: Collar only
Filter band low: 9000 Hz
Average hole size: 8.5 in
Receiver/transmitter/DDBHC mode: Receiver mode
Mud type: WBM
Search band width: 2135.83 us
Shear only processing: No
Slowness upper limit: 240 us/ft
Max frequency: 12000 Hz
Matching tolerance: 50
Compressional upper limit: 127.5 us/ft
Time step: 100 us
Integration time window: 300 us
Receiver selection: R1;R2;R3;R4;R5;R6;R7;R8;R9;R10;R11;R12

Caliper: BS in
Filter length: 41
Filter type: Static filter
Leaky-P: No
Mud slowness: 200 us/ft
Multishot NRSA: 7
Semblance threshold: 0.35
Slowness step: 2 us/ft
Slowness width: 20 us/ft
Min frequency: 0 Hz
Time lower limit: 400 us
Shear lower limit: 80 us/ft
Time upper limit: 3700 us
Waveform: WFA_MHT



0	DEVI deg	10	0.2	P34H ohm.m	2000	0.00	
200	ROP5 m/h	0	0.2	P22H ohm.m	2000	0.15	VDL
6	BS in	16	0.2	A34H ohm.m	2000	0.25	-1048.62
0	GRMA gAPI	200	0.2	A40H ohm.m	2000	0.35	WF VDL - R 6
						0.45	
						0.56	
						0.66	
						0.76	
						0.86	
						1.01	

**MD
(m)
1:200**



Company: IODP
 Well: HSM-15A_A
 Rig Name: Joides Resolution
 Country: New Zealand



Date Logged: 20-Dec-2017 Date Processed: 27-Dec-2017
 Surface Location: 178° 53' 45.618" E 38° 51' 32.202" S

Elevations: DF: 11 m GL: -2637 m