

<div>EcoScope Resistivity</div> <div>1:240 Measured Depth</div> <div>Recorded Mode Data</div>										<div>Schlumberger</div>																													
Company: IODP					Well: U1520A					Field: HSM-05A					Rig Name: Joides Resolution					Expedition: 372					Country: New Zealand														
Well: U1520A					Field: HSM-05A					Rig Name: Joides Resolution					Expedition: 372					Country: New Zealand																			
Latitude: 38° 58' 9.84" S					Longitude: 178° 7' 56.1" E					Block: EXP372					FL1: FL2:					UWID: RIG Name: RIG Type: Joides Resolution Drill Ship																			
<div>Log Measured From: - Drill Floor: 11.00 m</div> <div>Permanent Datum: - Mean Sea Level</div> <div>Ground Level: 3527.30 m</div>																																							
Acquisition Dates: 26-Dec-2017 ~ 27-Dec-2017					Log Interval: 3530.00(m) ~ 3636.00(m)					Index Types: Measured Depth					Index Scales: 1:240					Depth Source: Driller's Depth					Depth Sensor: DES					Print Type: Final					Spud Date: 26-Dec-2017				
Other Services: SonicScope										proVISION Plus										geoVISION Images										Stehtoscope									

Disclaimer

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Run 1

FINAL ECO LOG 3

Software Version

Acquisition System		Version	
Maxwell 2017 SP3		7.3.92069.3100	
Computation	Description	Version	
ECO6GammaRay	Natural Gamma Ray Processing, ECO 6.75	7.3.92069.3100	
ARCResistivity	ARC Resistivity Computation Package for ARC Tool Family	7.3.92069.3100	
ECO6ResistivityComputation	Resistivity QC Processing, ECO 6.75	7.3.92069.3100	
SoftwareVersion_Tool	SoftwareVersion_System Version	SoftwareVersion_Loaded Version	
HSPM	20.3c.062	7.3.92069.3100	
Tool Elements	Description	Software Version	Firmware Version
DRILLING_SURFACE	DRILLING_SURFACE	7.3.92069.3100	
DVME	NeoScope 6.75 - Electronics Chassis	7.3.92069.3100	V5.300

DVME

NeoScope 0.75 - Electronics Chassis

7.5:92009.3100

V3.500

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 1	Drilling	Down	3505.48 m	3636.67 m	26-Dec-2017 10:05:45 AM	27-Dec-2017 2:47:40 AM	Yes

All depths are referenced to toolstring zero

Log

Company:IODP

Well:U1520A

Run 1: Drilling:S008

Description: ARC + sonicVISION    Format: Log ( FINAL ECO LOG 3 )    Index Scale: 1:240    Index Unit: m    Index Type: Measured Depth    Creation Date: 31-Dec-2017 19:18:23

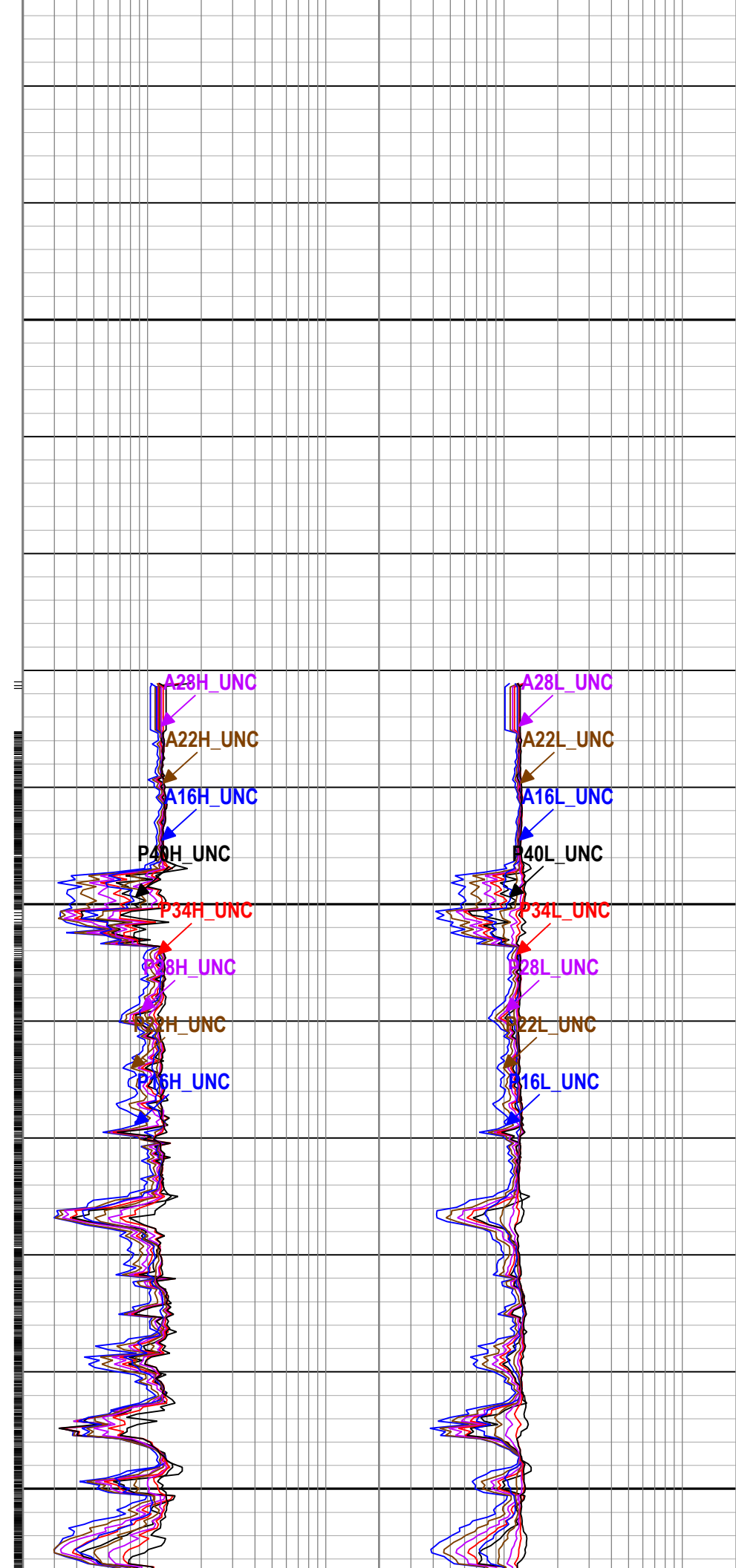
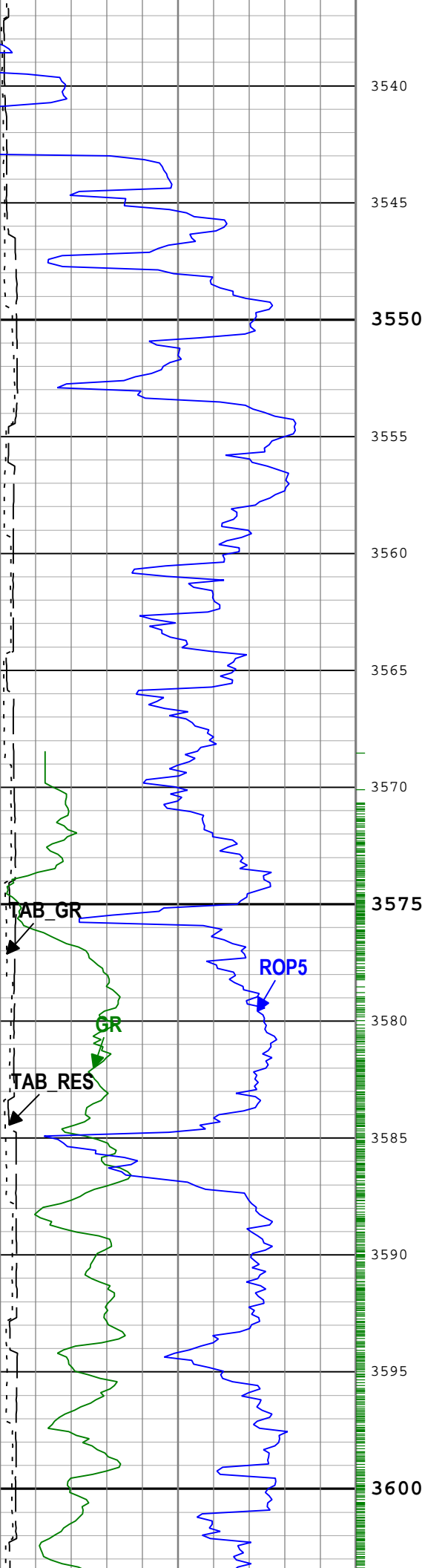
TICK\_GR - Gamma Ray Samples DV6MTN RM

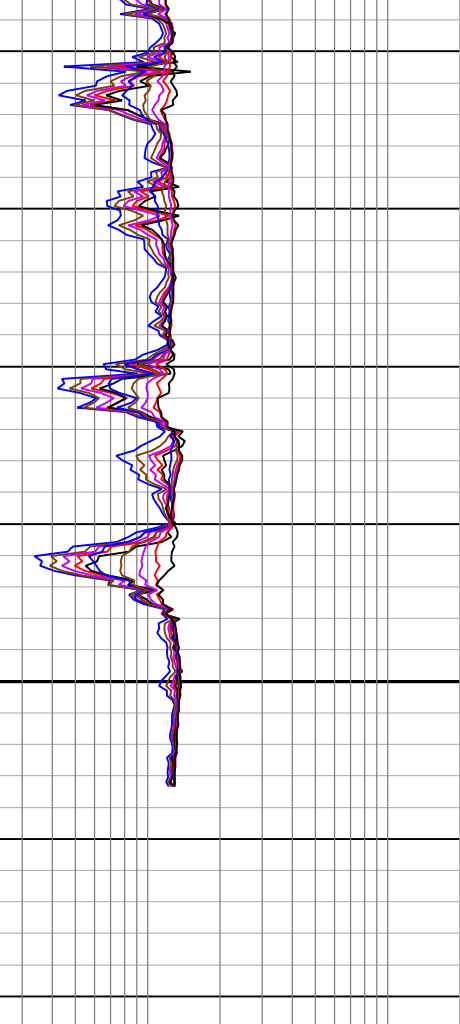
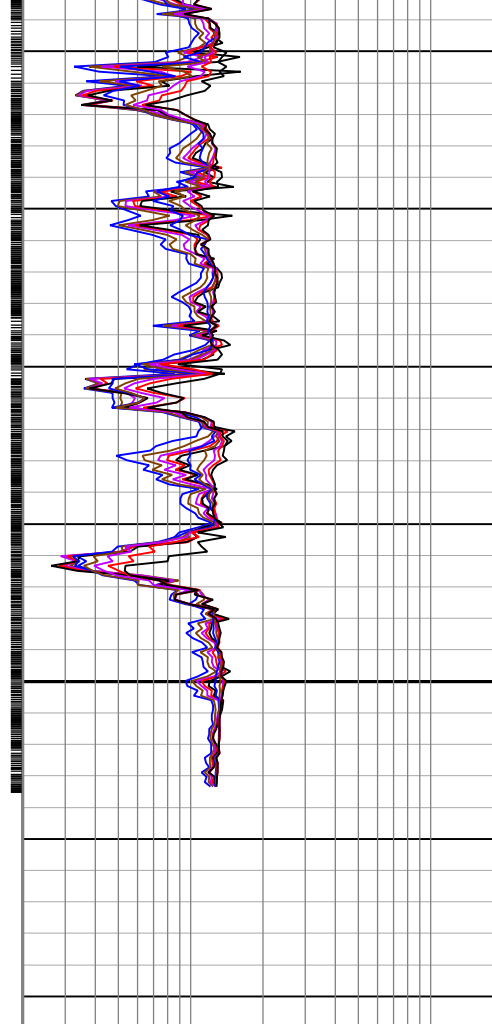
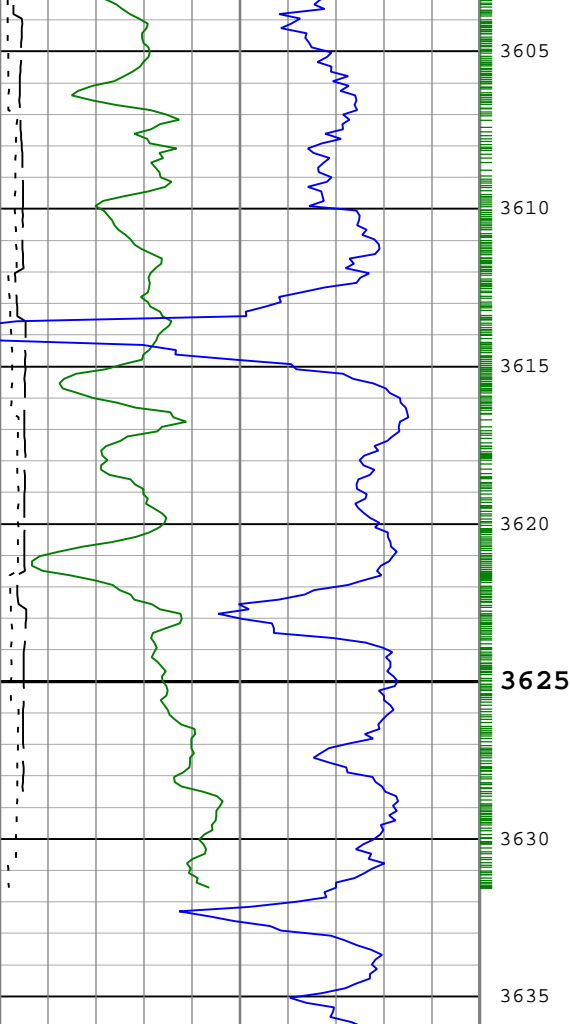
TICK\_ARC\_RES - ARC Resistivity Samples DV6MTN RM

Uncorrected Phase Shift Resistivity for 16 inch Spacing at 2 MHz (P16H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 16 inch at 400 KHz (P16L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity for 22 inch Spacing at 2 MHz (P22H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 22 inch at 400 KHz (P22L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity for 28 inch Spacing at 2 MHz (P28H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 28 inch at 400 KHz (P28L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity for 34 inch Spacing at 2 MHz (P34H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 34 inch at 400 KHz (P34L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Phase Shift Resistivity 40 inch at 2 MHz (P40H_UNC) DV6MTN RM	Uncorrected Phase Shift Resistivity 40 inch at 400 KHz (P40L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 16 inch Spacing at 2 MHz (A16H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 16 inch at 400 KHz (A16L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 22 inch Spacing at 2 MHz (A22H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 22 inch at 400 KHz (A22L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 28 inch Spacing at 2 MHz (A28H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 28 inch at 400 KHz (A28L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity for 34 inch Spacing at 2 MHz (A34H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 34 inch at 400 KHz (A34L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20
Uncorrected Attenuation Resistivity 40 inch at 2 MHz (A40H_UNC) DV6MTN RM	Uncorrected Attenuation Resistivity 40 inch at 400 KHz (A40L_UNC) DV6MTN RM
0.2 ohm.m 20	0.2 ohm.m 20

Resistivity Time After Bit (TAB_RES) DV6MTN	
0	10
h	
Gamma Ray (GR) DV6MTN RM	
0	150
gAPI	
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT	
100	0
m/h	
Gamma Ray Time after Bit (TAB_GR) DV6MTN	
0	10
h	

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Resistivity Time After Bit (TAB_RES) DV6MTN		
0	h	10
Gamma Ray (GR) DV6MTN RM		
0	gAPI	150
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT		
100	m/h	0
Gamma Ray Time after Bit (TAB_GR) DV6MTN		
0	h	10

Uncorrected Phase Shift Resistivity for 16 inch Spacing at 2 MHz (P16H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity for 22 inch Spacing at 2 MHz (P22H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity for 28 inch Spacing at 2 MHz (P28H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity for 34 inch Spacing at 2 MHz (P34H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity 40 inch at 2 MHz (P40H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Attenuation Resistivity for 16 inch Spacing at 2 MHz (A16H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Attenuation Resistivity for 22 inch Spacing at 2 MHz (A22H\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Attenuation Resistivity for 28 inch Spacing at 2 MHz (A28H\_UNC) DV6MTN RM

Uncorrected Phase Shift Resistivity 16 inch at 400 KHz (P16L\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity 22 inch at 400 KHz (P22L\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity 28 inch at 400 KHz (P28L\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Phase Shift Resistivity 34 inch at 400 KHz (P34L\_UNC) DV6MTN RM

0.2	ohm.m	20
-----	-------	----

Uncorrected Phase Shift Resistivity 40 inch at 400 KHz (P40L\_UNC) DV6MTN RM

0.2	ohm.m	20
-----	-------	----

Uncorrected Attenuation Resistivity 16 inch at 400 KHz (A16L\_UNC) DV6MTN RM

0.2	ohm.m	20
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Uncorrected Attenuation Resistivity 22 inch at 400 KHz (A22L\_UNC) DV6MTN RM

0.2	ohm.m	20
-----	-------	----

Uncorrected Attenuation Resistivity 28 inch at 400 KHz (A28L\_UNC) DV6MTN RM

	0.2	ohm.m	20	0.2	ohm.m	20
	Uncorrected Attenuation Resistivity for 34 inch Spacing at 2 MHz (A34H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 34 inch at 400 KHz (A34L_UNC) DV6MTN RM		
	0.2	ohm.m	20	0.2	ohm.m	20
	Uncorrected Attenuation Resistivity 40 inch at 2 MHz (A40H_UNC) DV6MTN RM			Uncorrected Attenuation Resistivity 40 inch at 400 KHz (A40L_UNC) DV6MTN RM		
	0.2	ohm.m	20	0.2	ohm.m	20
-TICK_ARC_RES - ARC Resistivity Samples DV6MTN RM						
-TICK_GR - Gamma Ray Samples DV6MTN RM						

Description: ARC + sonicVISION    Format: Log ( FINAL ECO LOG 3 )    Index Scale: 1:240    Index Unit: m    Index Type: Measured Depth    Creation Date: 31-Dec-2017 19:18:23

Channel Processing Parameters				
Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
ABNT	Abnormal Transmitter Indicator	DV6MTN	NO_TX_FAILED	
BH_OPT	Borehole Effect Computation Option	DV6MTN	No	
BHK	Drilling Fluid Potassium Concentration	Borehole	0	%
BHT	Bottom Hole Temperature	Borehole	2	degC
BS	Bit Size	DNMSESSION	8.5	in
CALI_SEL_GR	Hole-Size Correction Source for Gamma-Ray Processing	DV6MTN	GCSE	
DEPTH_SEL	Depth Selection Parameter	DNMSESSION	Driller's Depth	
DFD	Drilling Fluid Density	Borehole	8.6	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
ERRCT	Percentage Error Cutoff	DV6MTN	4.5	%
GCSE_RM	Generalized Caliper Selection for DnM recorded mode	Borehole	BS	
GR_O2COR_OPT	Enable Gamma Ray Oxygen Activation Correction	DV6MTN	Yes	
GRSE_RM	Generalized Mud Resistivity Selection for Recorded Mode	Borehole	REMS(RM)	
GRSH	Gamma Ray Shale	DV6MTN	1000	gAPI
GTSE_RM	Generalized Temperature Selection for Recorded Mode	Borehole	DHAT(RM)	
HIGH_BLEND	High Resistivity Threshold for Blending	DV6MTN	2	ohm.m
INVAS_OPT	Invasion Computation Option	DV6MTN	No	
LOW_BLEND	Low Resistivity Threshold for Blending	DV6MTN	1	ohm.m
MST	Mud Sample Temperature	Borehole	23.89	degC
MSWS	ARCWizard Model Switch Window Size	DV6MTN	152.4	cm
MULTIEFF_OPT	Multi-effect Computation Option	DV6MTN	No	
OACF	O2 Activation Correction Factor (RM)	DV6MTN	8	
PRTD	ARCWizard Preferred Resistivty Log for Rt Display while Multi-Effects	DV6MTN	P34B	
RMS	Resistivity of Mud Sample	Borehole	0.2	ohm.m
STOH	Top of Hole Sector	DV6MTN	SECTOR_0	
T1WM	ARCWizard Weight Multiplier to Measurements for Transmitter 1	DV6MTN	1	
T2WM	ARCWizard Weight Multiplier to Measurements for Transmitter 2	DV6MTN	1	
T3WM	ARCWizard Weight Multiplier to Measurements for Transmitter 3	DV6MTN	1	
T4WM	ARCWizard Weight Multiplier to Measurements for Transmitter 4	DV6MTN	1	
T5WM	ARCWizard Weight Multiplier to Measurements for Transmitter 5	DV6MTN	1	
TEMP_SEL_ARC	ARC Temperature Selection	DV6MTN	Annular	
UNIFORM_OPT	Uniform Rock Computation Option	DV6MTN	No	

Run 1: Parameters

Parameter	Description	Tool	Value	Unit
OFFBTM_TH	Threshold for deciding whether the bit is off bottom	DNMSESSION	0.3	m

Company:	IODP
Well:	U1520A
Field:	HSM-05A
Rig Name:	Joides Resolution
Expedition:	372
Country:	New Zealand



Schlumberger

EcoScope Resistivity  
1:240 Measured Depth  
Recorded Mode Data