Schlumberger

Company: Lamont Doherty

Well: IODP EXP 305 Site U1309D
Field: Atlantis Massif
Rig: Joides Resolution Ocean: Atlantic Ocean

Well Seismic tool

Rig: Joides Resolution
Field: Atlantis Massif
Location: Mid-Atlantic Ridge
Well: IODP EXP 305 Site U1309D
Company: Lamont Doherty

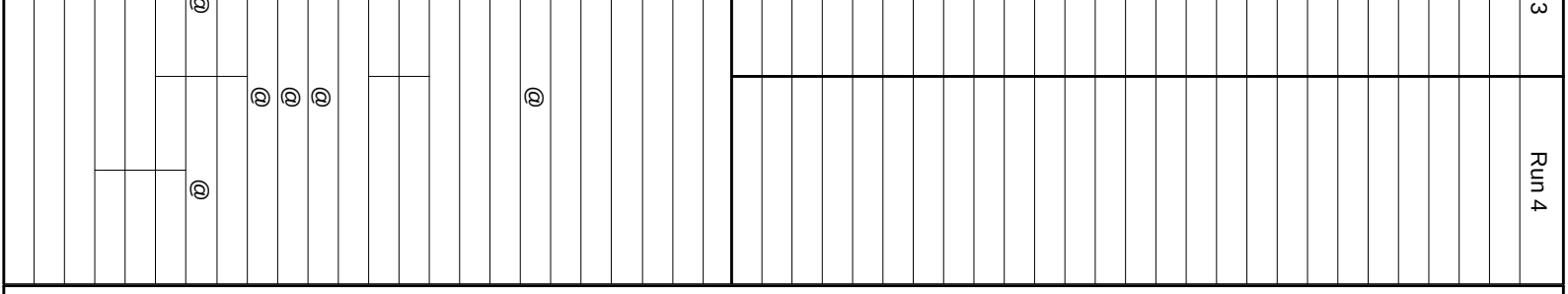
LOCATION

Mid-Atlantic Ridge		Elev.: K.B.	11.3 m
		G.L.	-1656 m
		D.F.	11 m
Permanent Datum:	Mean Sea Level	Elev.:	0 m
Log Measured From:	Rig Floor	11.3 m	above Perm. Datum
Drilling Measured From:	Rig Floor		

API Serial No.	Max. Hole Devi.	Longitude	Latitude
		42.11865 W	30.16847 N

	Run 1	Run 2	Run
Logging Date	1-Feb-2005		
Run Number	Two		
Depth Driller	2493.4 m		
Schlumberger Depth	2493.4 m		
Bottom Log Interval	2493 m		
Top Log Interval	1990 m		
Casing Driller Size @ Depth	0.000 in @ 1826 m	@	@
Casing Schlumberger	1826 m		
Bit Size	9.875 in		
Type Fluid In Hole	Fresh Water		
MUD Density / Viscosity	1.2 g/cm3		
MUD Fluid Loss / PH	0 cm3		
MUD Source Of Sample			
RM @ Measured Temperature	0.322 ohm.m @ 50 degC	@	@
RMF @ Measured Temperature	@	@	@
RMC @ Measured Temperature	@	@	@
Source RMF / RMC			
RM @ MRT / RMF @ MRT	0.322 @ 50	@ 50	@ @
Maximum Recorded Temperatures	50 degC		
Circulation Stopped / Time	30-Jan-2005	23:00	
Logger On Bottom / Time	1-Feb-2005	8:30	
Unit Number / Location	2082	Houston	
Recorded By	Javier Espinosa		
Witnessed By	Heike Delius, Margarete Linek		

	Run 1	Run 2	Run
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth	@		
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
MUD Density / Viscosity			
MUD Fluid Loss / PH			
MUD Source Of Sample			
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF / RMC			
RM @ MRT / RMF @ MRT	@	@	@
Maximum Recorded Temperatures			
Circulation Stopped / Time			
Logger On Bottom / Time			
Unit Number / Location			
Recorded By			
Witnessed By			



OTHER SERVICES1	OTHER SERVICES2
OS1: DLT, HNGS, APS, HLDS	OS1:
OS2: MEST, DSST	OS2:
OS3: UBI	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Hole Cored with RCB	
All depths in Meters Below Rig Floor (MBRF).	
Hole flushed with fresh water	
Tool ran as per tool sketch below	

RUN 1

SERVICE ORDER #:
PROGRAM VERSION: 12C0-301
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #:
PROGRAM VERSION:
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

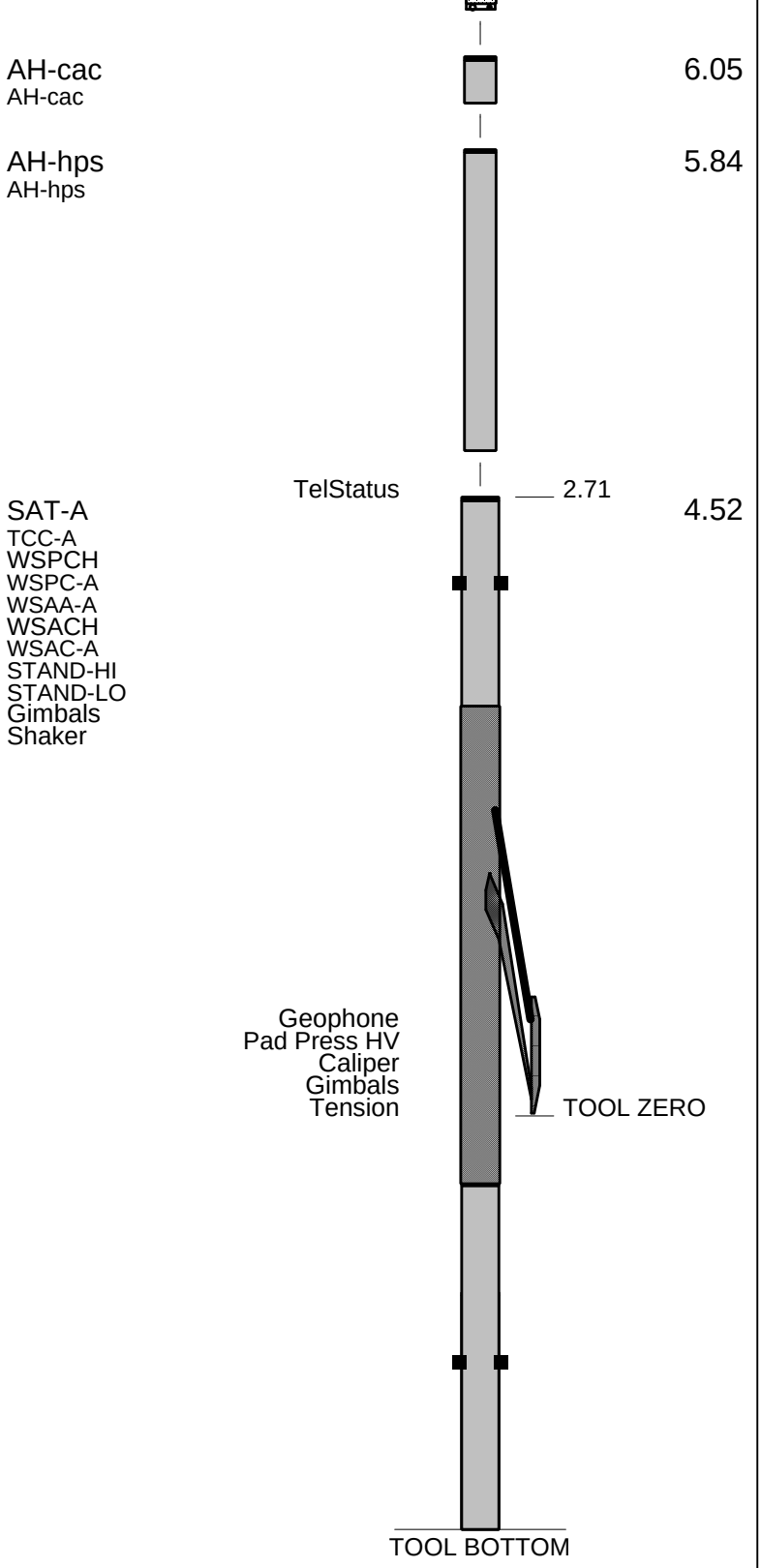
SURFACE EQUIPMENT

WSAM
WITM (CTS)-A

DOWNHOLE EQUIPMENT

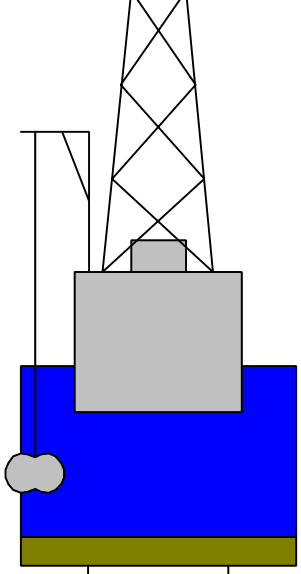
LEH-QT 6.93
LEH-QT

RUN 2



MAXIMUM STRING DIAMETER 4.50 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Production String	(in) OD	(in) ID	(m) MD	Well Schematic	(m) MD	(in) OD	(in) ID	Casing String

Kelly Bushing Elevation		11.8				
Derrick Floor Elevation		11.8				
Mean Sea Level		0.0				
Seismic Gun depth below MSL		-304.6				
				0.0	5.000	Casing String
				1656.0	9.875	Borehole Segment
				1826.0	5.000	Casing Shoe

Company: Lamont Doherty | Well: IODP EXP 305 Site 1309D

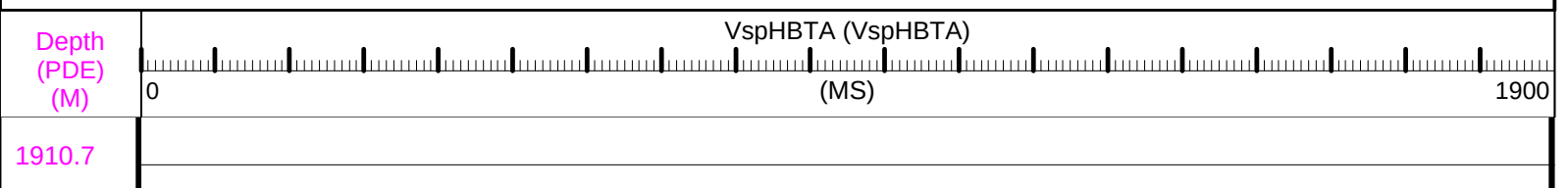
OP System Version: 12C0-301

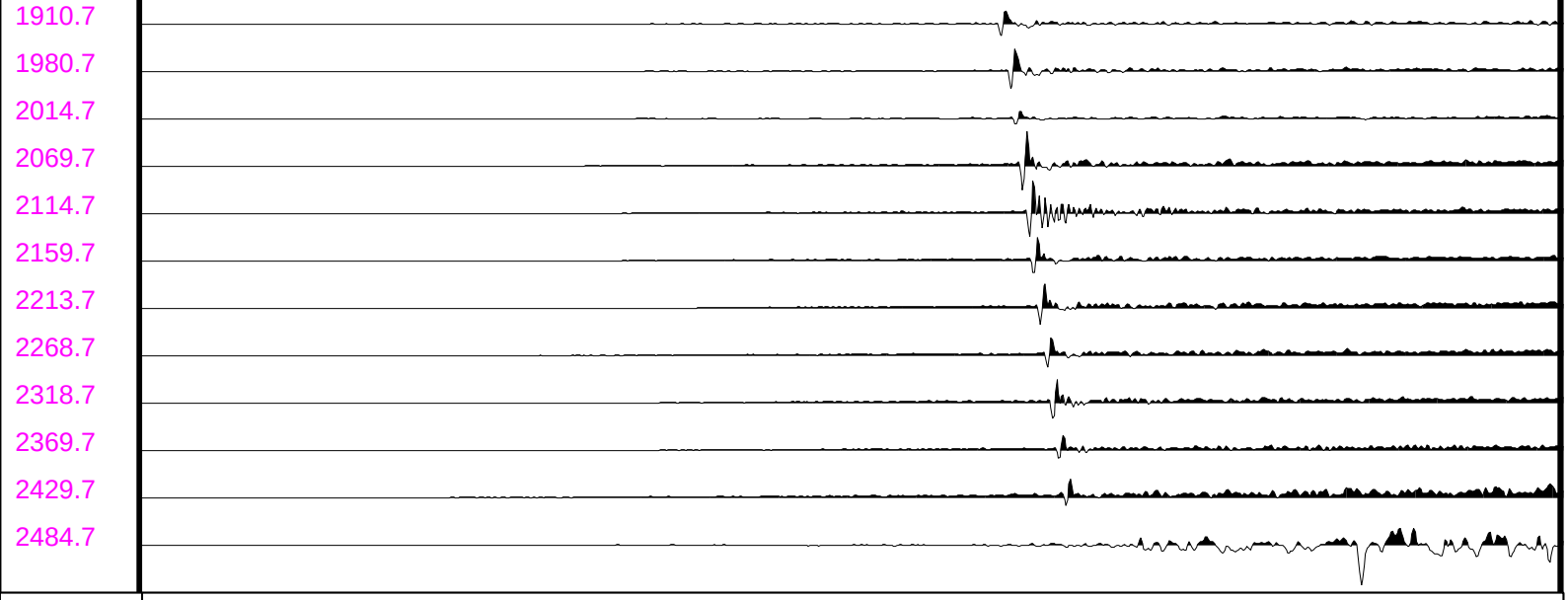
MCM

SAT-A 12C0-301

VSP PROCESSING

Data Corrected to SRD and TVD
Input data filtered from 5 to 120 Hz
One Way Time Scale Plot
SEG Reverse Polarity
TAR = DATA(I)*I**1.700
Z-AXIS Processed





Format: vspHBTA Vertical Scale: 0.25" per 1SAMPLES Graphics File Created: 07-Feb-2005 09:51

OP System Version: 12C0-301

MCM

SAT-A 12C0-301

VSP STACK SUMMARY LISTING

Gun and Hydrophone Coordinates:

Gun Azimuth	190.0 DEG	
Gun Offset	55.0 M	
Gun Depth	From Schlumberger Zero	13.3 M
Hydrophone Depth	From Schlumberger Zero	13.3 M
SRD Depth	From Schlumberger Zero	11.3 M

Other VSP constants:

True Vertical Time Correction	YES
Surface Velocity	1524.00 M/S

Stack number	Measured Depth (1) (M)	Measured Trans Time (MS)	True Vert. Depth from SRD (2) (M)	Corrected Trans Time (3) (MS)	Interval Velocity (4) (M/S)
12	1922.0	1145.85	1910.7	1146.69	5338.48
11	1992.0	1158.94	1980.7	1159.80	5885.27
10	2026.0	1164.70	2014.7	1165.58	6140.04
9	2081.0	1173.64	2069.7	1174.54	5246.49
8	2126.0	1182.20	2114.7	1183.11	6317.92
7	2171.0	1189.31	2159.7	1190.24	6124.05
6	2225.0	1198.11	2213.7	1199.05	7950.24
5	2280.0	1205.01	2268.7	1205.97	5049.12

4	2330.0	1214.90	2318.7	1215.87	5948.21
3	2381.0	1223.47	2369.7	1224.45	-75.11
2	2441.0	424.39	2429.7	425.59	-129.63
1	2496.0	0.00	2484.7	1.31	0.00

(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero.
(2)TVD is referenced to SRD (5)
(3)Transit time with respect to SRD(5) corrected for Deviation.
(4)Interval Velocity corrected for Deviation.
(5)SRD is Seismic Reference Depth.

VSP STACK SUMMARY LISTING (TWO WAY CORRECTED TIMES)

Gun and Hydrophone Coordinates:

Gun Azimuth 190.0 DEG
Gun Offset 55.0 M
Gun Depth From Schlumberger Zero 13.3 M
Hydrophone Depth From Schlumberger Zero 13.3 M
SRD Depth From Schlumberger Zero 11.3 M

Other VSP constants:

True Vertical Time Correction YES
Surface Velocity 1524.00 M/S

Stack number	Measured Depth (1) (M)	Measured Trans Time (MS)	True Vert. Depth from SRD (2) (M)	Corrected Trans Time (3) (MS)	Interval Velocity (4) (M/S)
12	1922.0	1145.85	1910.7	2293.38	5338.48
11	1992.0	1158.94	1980.7	2319.60	5885.27
10	2026.0	1164.70	2014.7	2331.16	6140.04
9	2081.0	1173.64	2069.7	2349.07	5246.49
8	2126.0	1182.20	2114.7	2366.23	6317.92
7	2171.0	1189.31	2159.7	2380.47	6124.05
6	2225.0	1198.11	2213.7	2398.11	7950.24
5	2280.0	1205.01	2268.7	2411.94	5049.12
4	2330.0	1214.90	2318.7	2431.75	5948.21
3	2381.0	1223.47	2369.7	2448.90	-75.11
2	2441.0	424.39	2429.7	851.19	-129.63
1	2496.0	0.00	2484.7	2.62	0.00

(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero.
(2)TVD is referenced to SRD (5)
(3)TW Transit time with respect to SRD(5) corrected for Deviation
(4)Interval Velocity corrected for Deviation.
(5)SRD is Seismic Reference Depth.

Company:	Lamont Doherty
Well:	IODP EXP 305 Site U1309D
Field:	Atlantis Massif
Rig:	Joides Resolution
Ocean:	Atlantic Ocean

Schlumberger

Well Seismic tool