

Reeves

COMPENSATED SONIC 1:200 TVD

COMPANY				ESSO AUSTRALIA PTY. LTD.			
WELL				TUNA A-05A			
FIELD				GIPPSLAND BASIN			
PROVINCE/COUNTY				BASS STRAIT			
COUNTRY/STATE				AUSTRALIA			
LOCATION				X: 624233.40 m E, Y: 5774225.83 m N 38°10'16.282" S, 148°25'05.756" E			
LSD	SEC	TWP	RGE	Other Services DUAL LATEROLOG PHOTO DENSITY		COMPENSATED NEUTRON	
API Number							
Permit Number							
Permanent Datum MSL				, Elevation 0		metres	
Log Measured From DF@ 31.32 metres above Permanent Datum							
Drilling Measured From DF							
Date	26-Dec-2002						
Run Number	1						
Depth Driller	1450.68			metres			
Depth Logger	1450.68			metres			
First Reading	1448.70			metres			
Last Reading	1319.80			metres			
Casing Driller	652.00			metres			
Casing Logger							
Bit Size	8.50			Inches			
Hole Fluid Type	KCL/PPH/AGLY						
Density / Viscosity	10.30 lb/USg			64.00 secs/ct			
PH / Fluid Loss	9.00			3.20 ml/30Min			
Sample Source	FLOWLINE						
Rm @ Measured Temp	0.118 @ 25.0			ohm-m			
Rmf @ Measured Temp	0.085 @ 25.0			ohm-m			
Rmc @ Measured Temp	0.193 @ 25.0			ohm-m			
Source Rmf / Rmc	PRESS			FILTER			
Rm @ BHT	0.059 @ 73.0			ohm-m			
Time Since Circulation	36:15 hrs						
Max Recorded Temp	73.00			deg C			
Equipment Name	SHUTTLE						
Equipment / Base	1			CML			
Recorded By	M. BARNES, B. ARNOLD					D. WACHIN, G. MCWANUS	
Witnessed By	G. SMITH						
Circ. Stopped	09:00 25-Dec						

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
12.250	218.00	841.00
8.500	841.00	3257.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
	9.625	0.00	836.41	47.00

REMARKS

DRILLING RIG: NABORS (ISDL) RIG 453.

COMPACT WIRELINE TOOLS DEPLOYED BY COMPACT WELL SHUTTLE TECHNIQUE.

MESSENGER DEPLOYED WITH RIG MUD PUMPS.

RING SHEARED AT 21:10 26-DEC-02.

SHEARING PRESSURE WAS 1200 PSI.

HTHP FILTER LOSS = 10.8 ml/30min.

CASING DETAILS:

20" 133.0 lb/ft from surface to 164.60 m.

13 3/8" 54.5 lb/ft from surface to 609.65 m (window milled from 210.39 m to 218.39 m).

9 5/8" 47.0 lb/ft from surface to 836.41 m.

CALIPER READING 8.68" ON TIME LOG IN 9 5/8" 47 LB/FT CASING.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

MAIN LOG 1:200

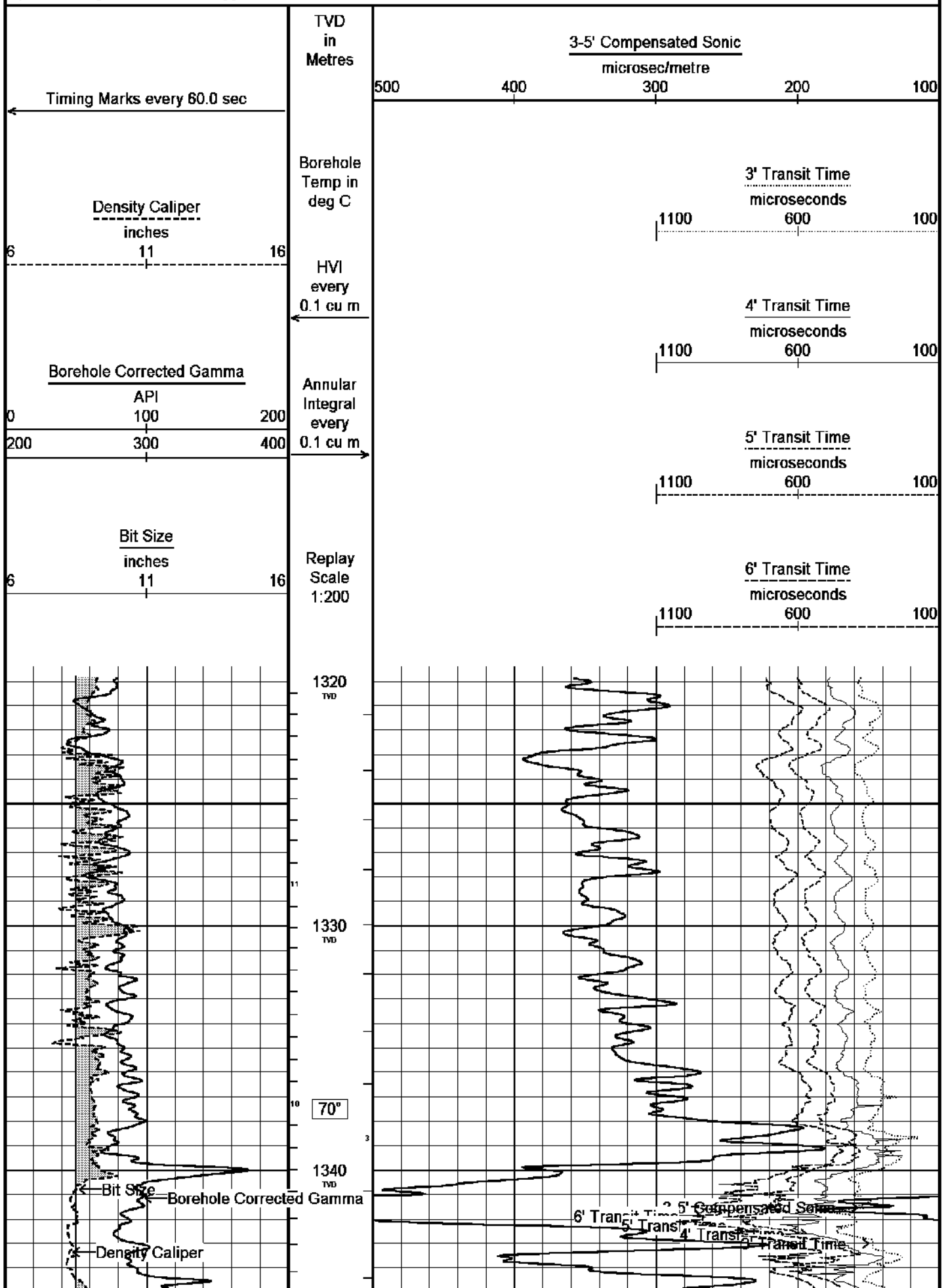
Depth Based Data - Maximum Sampling Increment 10.0cm

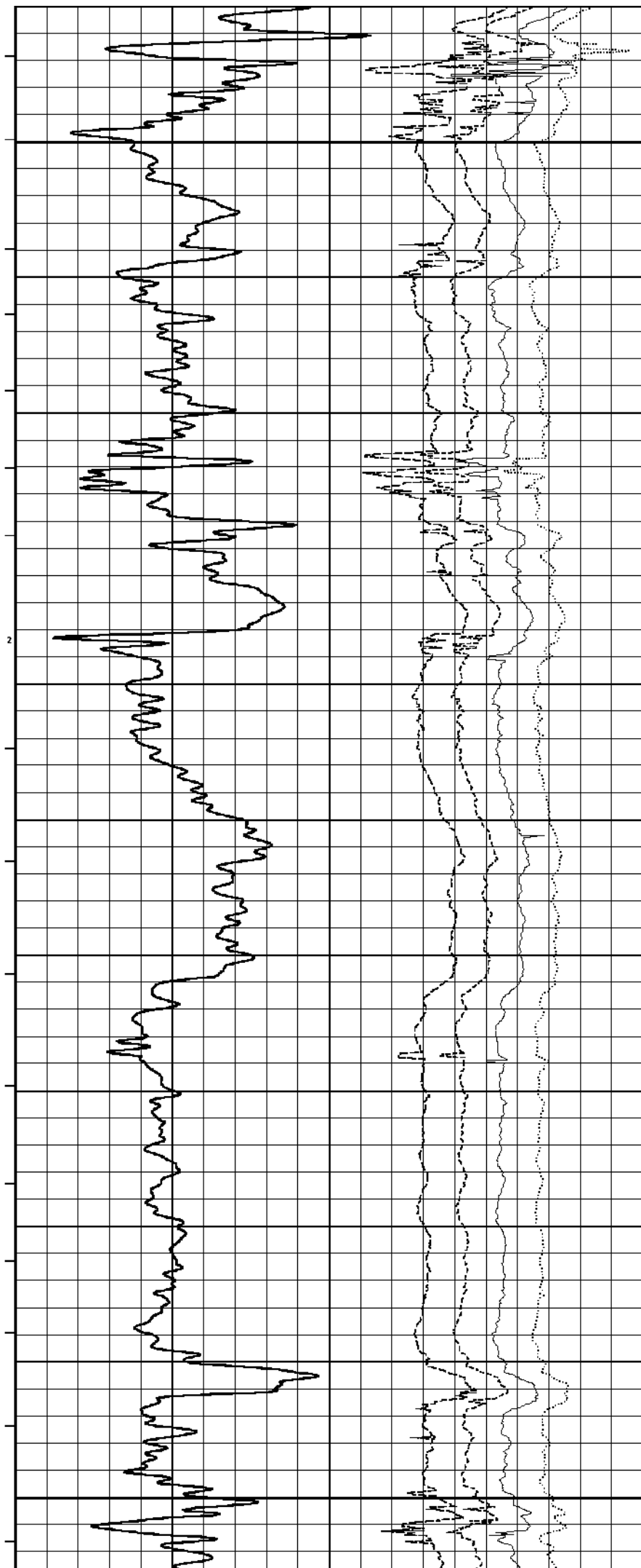
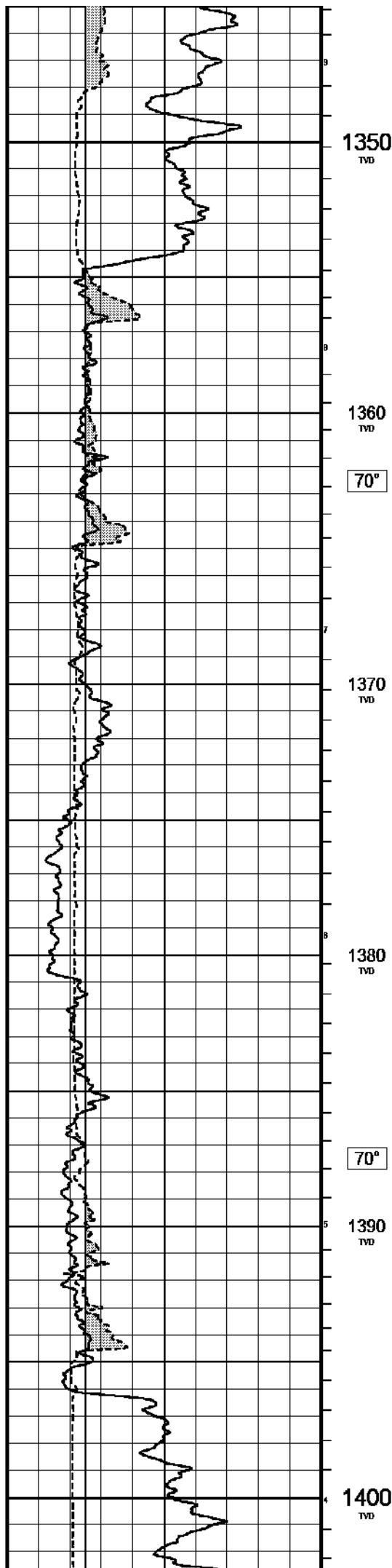
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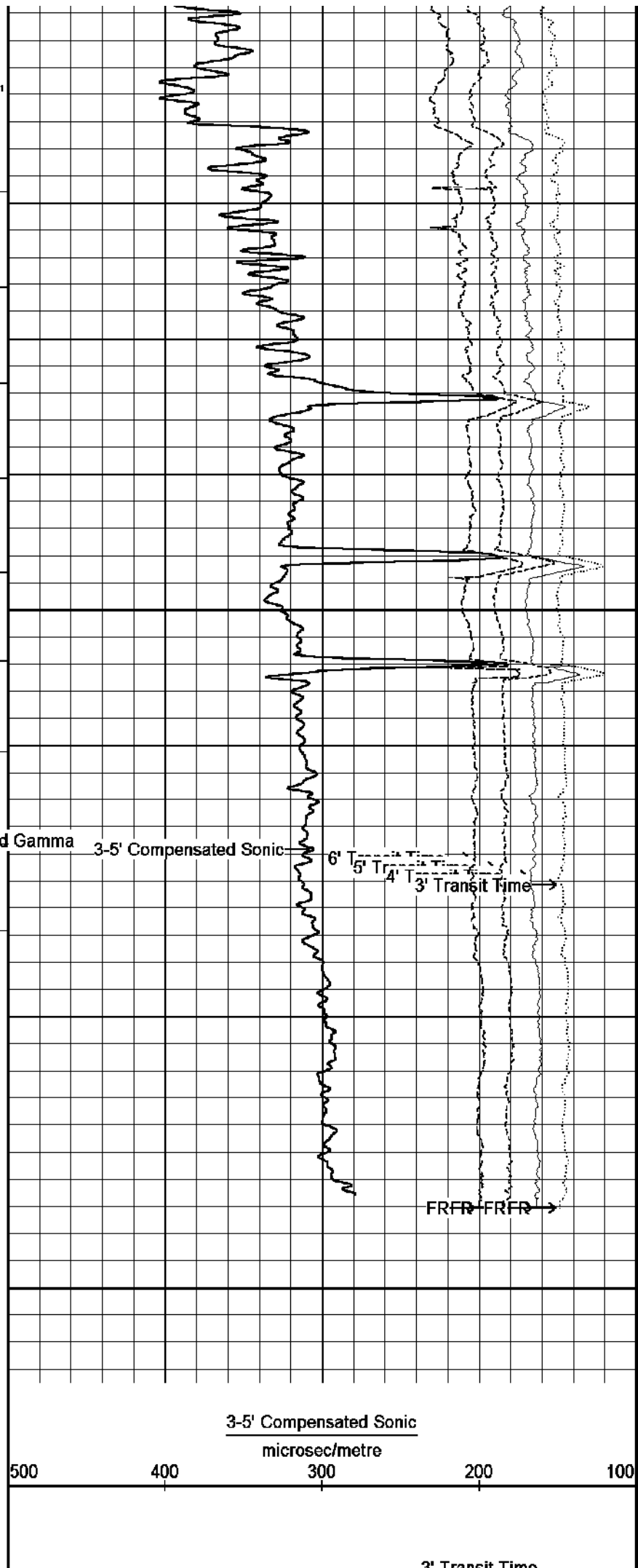
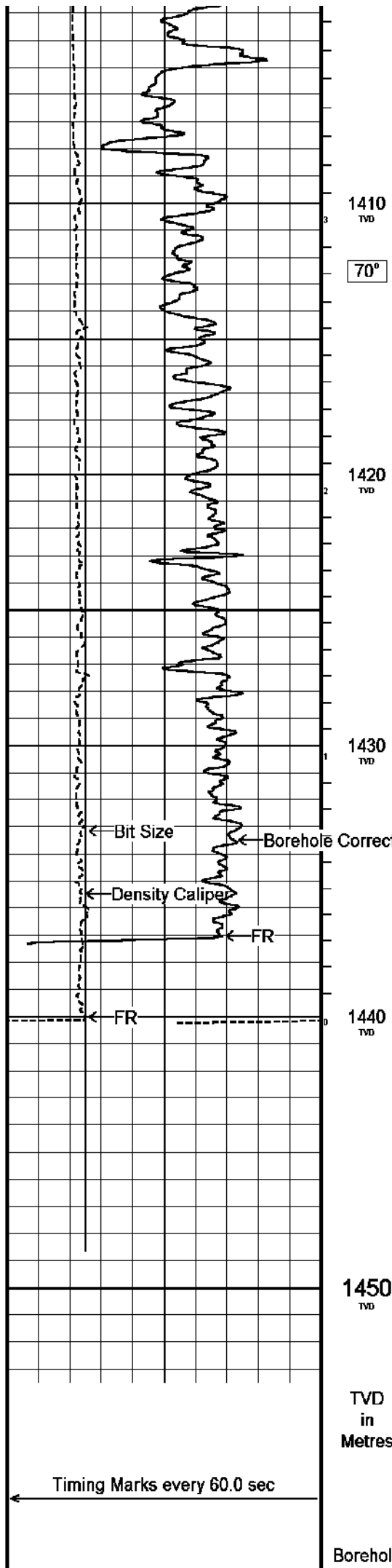
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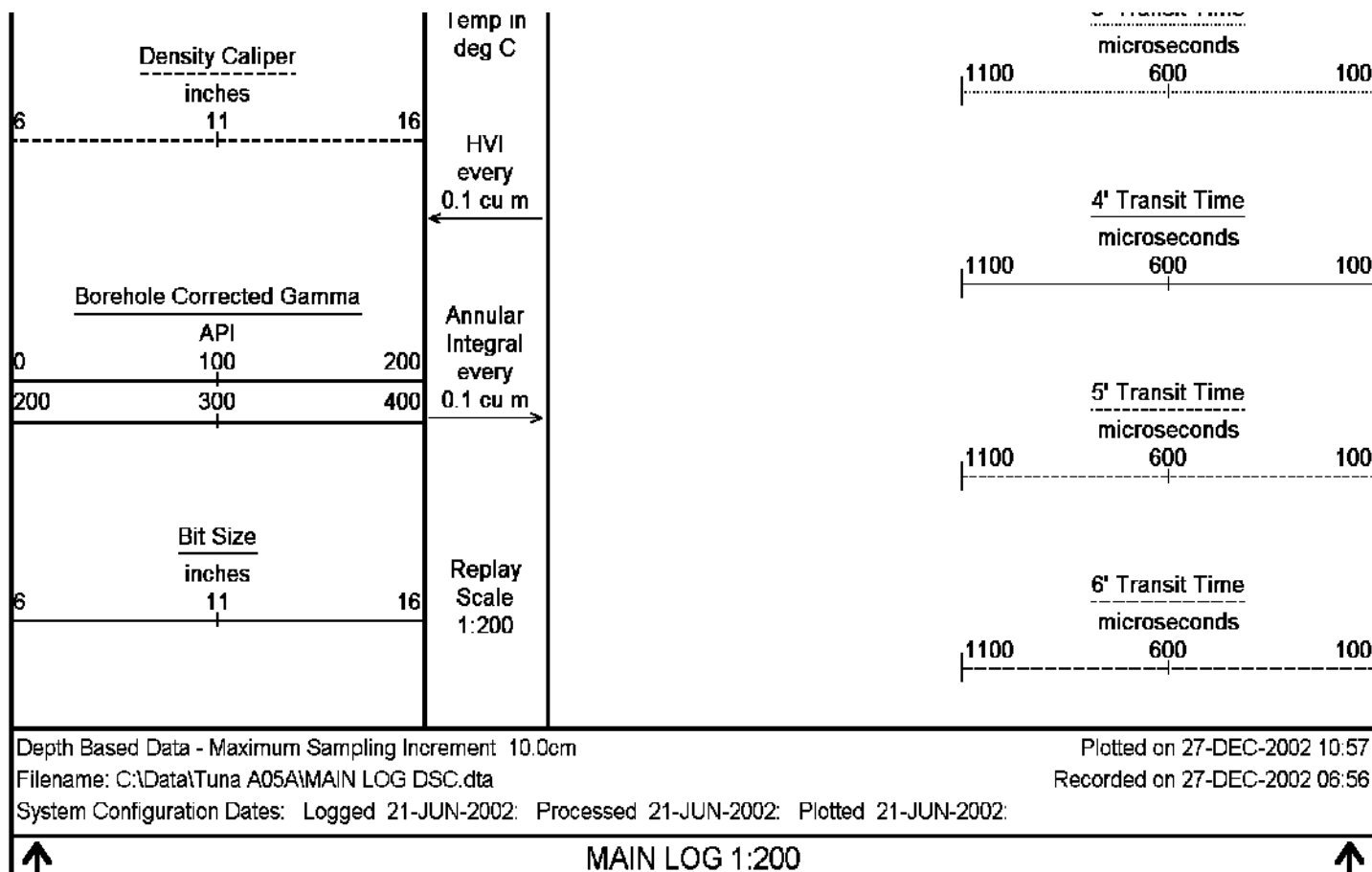
Recorded on 27-DEC-2002 06:56

System Configuration Dates: Logged 21-JUN-2002: Processed 21-JUN-2002: Plotted 21-JUN-2002









BEFORE SURVEY CALIBRATION

C:\Data\Tuna A05A\MAIN LOG DSC.dta

General Constants All 000

General Parameters

Mud Resistivity	0.06	ohm-metres
Mud Resistivity Temperature	73.00	degrees C
Water Level	0.00	metres
Density/Neutron Processing	Wet Hole	

Hole/Annular Volume Parameters

HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	Density Caliper	
Annular Volume Diameter	7.00	inches

Rwa Parameters

Porosity used	Base Density Porosity	
Resistivity used	Deep Induction	
RWA Constant A	0.61	
RWA Constant M	2.15	

Gamma Calibration MCG 044

Field Calibration on 24-DEC-2002 10:04

	Measured	Calibrated (API)
Background	11	7
Calibrator (Gross)	1439	916
Calibrator (Net)	1428	909

Gamma Constants MCG 044

Gamma Calibrator Number	060	
Mud Density	1.24	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Calibration MCG 044

Field Calibration on 4-SEP-2002,14:58

	Measured	Calibrated(Deg C)
Lower	1.00	1.00
Upper	150.00	150.00

High Resolution Temperature Constants MCG 044		
Pre-filter Length	11	
Caliper Calibration MPD 066		Base Calibration on 27-DEC-2002,09:09 Field Calibration on
Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	11999	4.31
2	20143	6.29
3	28915	8.28
4	37314	10.24
5	46672	12.31
6	N/A	N/A
Field Calibration		
	0	0
	0.00	0.00

Sonic Constants MSS 045				
Maximum Boundary Contrast	328.08	micro-sec/m		
Fluid Transit Time	620.08	micro-sec/m		
Limestone Transit Time	155.84	micro-sec/m		
Sandstone Transit Time	182.09	micro-sec/m		
Dolomite Transit Time	142.72	micro-sec/m		
Sonic used for Porosities	3-5' Compensated Sonic			
Correction for Sonde Skew	Applied			
Cycle Stretch Algorithm	Applied			
MN3FT	N/A	micro-sec		
MX3FT	N/A	micro-sec		
Fixed Gate Parameters				
Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A	
N/A	N/A	N/A		
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	
Down Hole Fixed Gate Parameters				
Gate Start	N/A	micro-sec		
Gate Width	N/A	micro-sec		
Full Waveform Parameters				
Use derived TR for 3' Waveform	N/A			
Use derived TR for 4' Waveform	N/A			
Use derived TR for 5' Waveform	N/A			
Use derived TR for 6' Waveform	N/A			
3' Waveform Discriminator Level	N/A	mV		
4' Waveform Discriminator Level	N/A	mV		
5' Waveform Discriminator Level	N/A	mV		
6' Waveform Discriminator Level	N/A	mV		
3' Waveform Filter	N/A			
4' Waveform Filter	N/A			
5' Waveform Filter	N/A			
6' Waveform Filter	N/A			

DOWNHOLE EQUIPMENT
All measurements relative to tool zero.

Compact Battery Sub.
MBS 99 Length: 4.34 m Weight: 44.09 lb



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Compact Inline Standoff B
MIS 31 Length: 0.65 m Weight: 15.43 lb

Compact Knuckle Joint
SKJ 44 Length: 0.66 m Weight: 24.25 lb

Compact Gamma
MCG 44 Length: 2.65 m Weight: 63.93 lb

33.53 m GRGC - Gamma Ray

32.64 m CGXT - MCG External Temperature

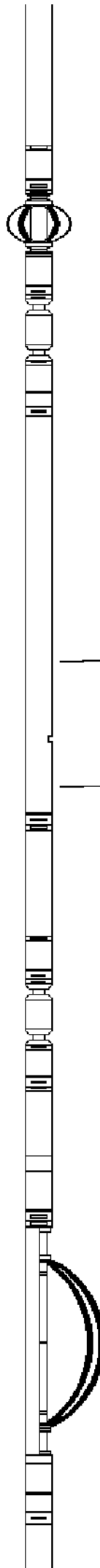
Compact Memory Sub.
MMS 24 Length: 0.95 m Weight: 22.05 lb

Compact Knuckle Joint
SKJ 48 Length: 0.66 m Weight: 24.25 lb

Compact Swivel Head Adaptor
SHA 27 Length: 0.83 m Weight: 26.46 lb

Compact Inline Bowspring A
MIS 24 Length: 1.74 m Weight: 33.07 lb

Compact Neutron
MDN 68 Length: 1.53 m Weight: 50.71 lb



Compact Density/Caliper
MPD 66 Length: 2.92 m Weight: 90.39 lb

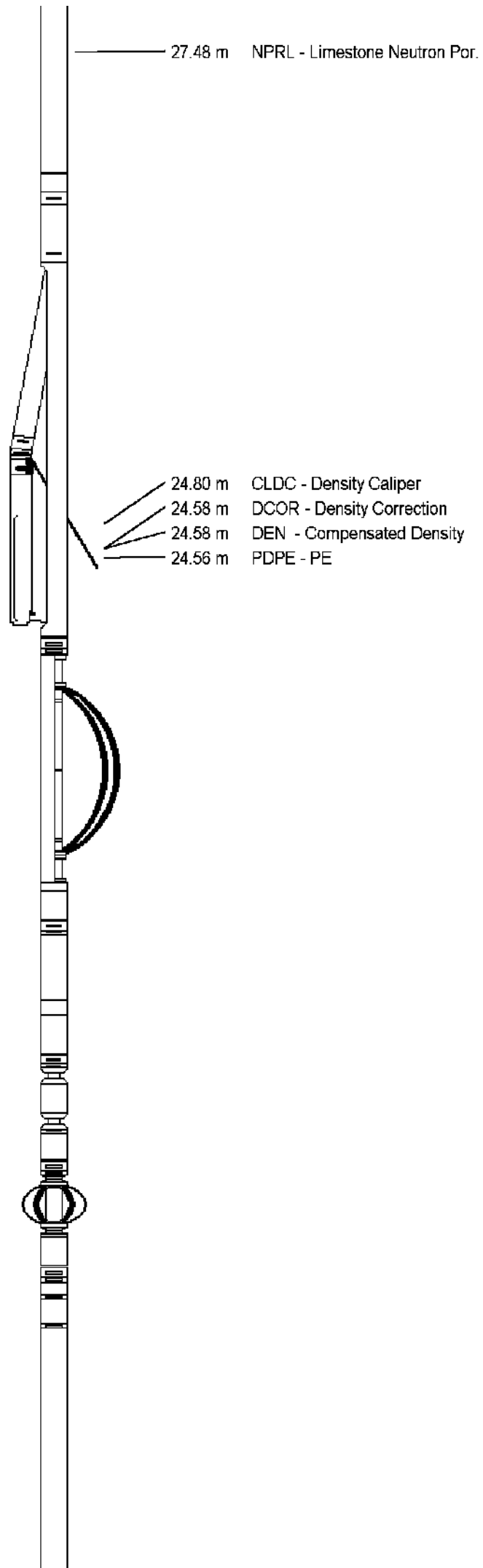
Compact Inline Bowspring A
MIS 25 Length: 1.74 m Weight: 33.07 lb

Compact Swivel Head Adaptor
SHA 28 Length: 0.83 m Weight: 26.46 lb

Compact Knuckle Joint
SKJ 45 Length: 0.66 m Weight: 24.25 lb

Compact Inline Standoff B
MIS 53 Length: 0.65 m Weight: 15.43 lb

Compact Upper Guard Sub.
MUG 17 Length: 2.74 m Weight: 68.34 lb



Compact Inline Standoff B
MIS 49 Length: 0.65 m Weight: 15.43 lb

Compact Laterolog Electrode Sub.
MLE 15 Length: 3.76 m Weight: 92.59 lb

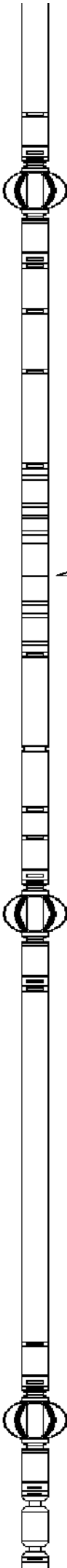
14.66 m DSLL - Shallow Laterolog
14.66 m DGLL - Groningen Laterolog

Compact Inline Standoff B
MIS 76 Length: 0.65 m Weight: 15.43 lb

Compact Lower Guard Sub.
MLG 7 Length: 2.44 m Weight: 55.12 lb

Compact Inline Standoff B
MIS 73 Length: 0.65 m Weight: 15.43 lb

Compact Knuckle Joint
SKJ 48 Length: 0.66 m Weight: 24.25 lb



Compact Inline Standoff B
MIS 75 Length: 0.65 m Weight: 15.43 lb

Compact Sonic
MSS 45 Length: 3.82 m Weight: 72.75 lb

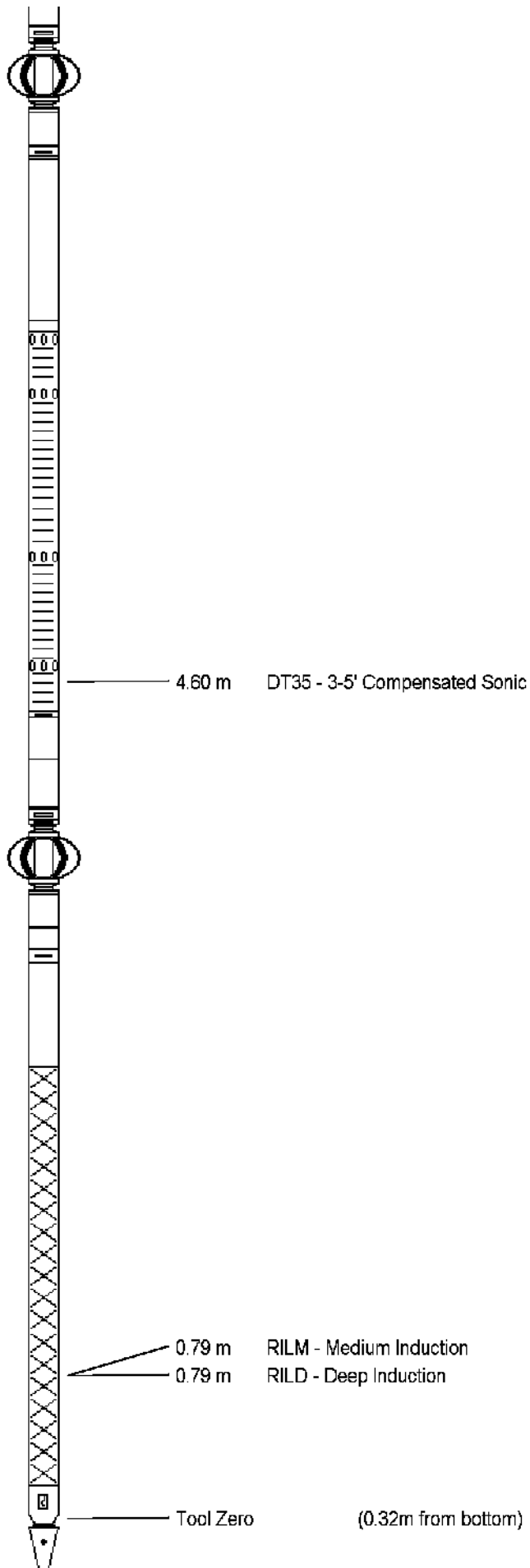
Compact Inline Standoff B
MIS 30 Length: 0.65 m Weight: 15.43 lb

Compact Induction
MAI 69 Length: 3.29 m Weight: 48.50 lb

Pressure Bung + Hole Finder
HFS 99 Length: 0.28 m Weight: 6.61 lb

Total Length: 50.55 m

Total Weight: 1183.88 lb



COMPANY
WELL

ESSO AUSTRALIA PTY. LTD.
TUNA A-05A

FIELD		GIPPSLAND BASIN	
PROVINCE/COUNTY		BASS STRAIT	
COUNTRY/STATE		AUSTRALIA	
Elevation Kelly Bushing		metres	
Elevation Drill Floor	31.32	metres	
Elevation Ground Level	-59.40	metres	
First Reading	1448.70	metres	
Depth Driller	1450.68	metres	
Depth Logger	1450.68	metres	
<div><div><div>Reeves</div></div><div>COMPENSATED SONIC 1:200 TVD</div></div>			