



# COMPENSATED SONIC

1:500 TVD

## Compact

COMPANY ESSO AUSTRALIA PTY LTD

WELL BREAM A9B

FIELD BREAM

PROVINCE/COUNTY BASS STRAIT

COUNTRY/STATE AUSTRALIA

LOCATION 38DEG 29' 58.800"S 147DEG 46' 20.685"E

5738460.920 N 567353.500 E **FIELD PRINT**

LSD	SEC	TWP	RGE	Other Services
				DUAL LATEROLOG
API Number				PHOTO DENSITY
Permit Number				COMPENSATED NEUTRON
Permanent Datum MSL				Elevation 0.0 metres
Log Measured From RT @ 32.82 M				above Permanent Datum
Drilling Measured From RT				
Date				05-MAR-2006
Run Number				ONE
Depth Driller				1994.35 metres
Depth Logger				1991.89 metres
First Reading				1986.10 metres
Last Reading				1567.70 metres
Casing Driller				567.70 metres
Casing Logger				1567.70 metres
Bit Size				8.50 inches
Hole Fluid Type				KCL/GYL/POLY
Density / Viscosity				10.00 lb/USg 75.00 CP
PH / Fluid Loss				8.90 2.80
Sample Source				FLOWLINE
Rm @ Measured Temp				0.095 @ 25.0 ohm-m
Rmf @ Measured Temp				0.072 @ 25.0 ohm-m
Rmc @ Measured Temp				0.099 @ 25.0 ohm-m
Source Rmf / Rmc				PRESS PRESS
Rm @ BHT				0.043 @ 82.4 ohm-m
Time Since Circulation				0.5 HRS
Max Recorded Temp				82.40 deg C
Equipment Name				5" CWS/CML
Equipment / Base				1 SALE
Recorded By				R. TENCH, B. MOSS
Witnessed By				TREVOR LOBO
CIRC STOPPED				22:00 4/03

## BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	1756.00	2283.00

## CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	13.375	0.00	797.00	54.50
K-55	9.625	797.00	1756.00	47.00

## REMARKS

RIG: NABORS 453

5" SHUTTLE/MEMORY COMPACT OPERATION.  
CREW: R TENCH , B MOSS , B GOODWIN, M KOLCZE.

FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG.

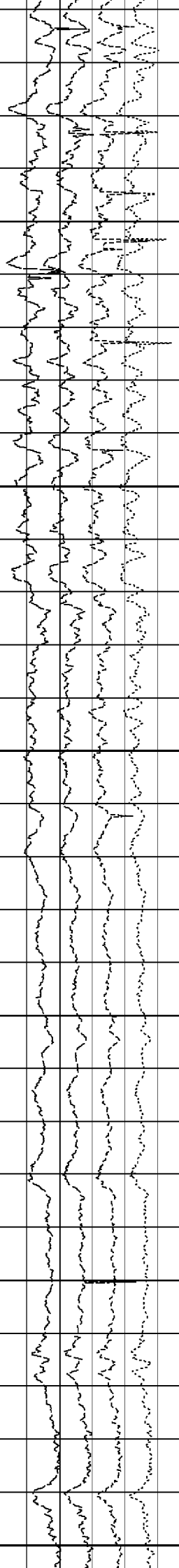
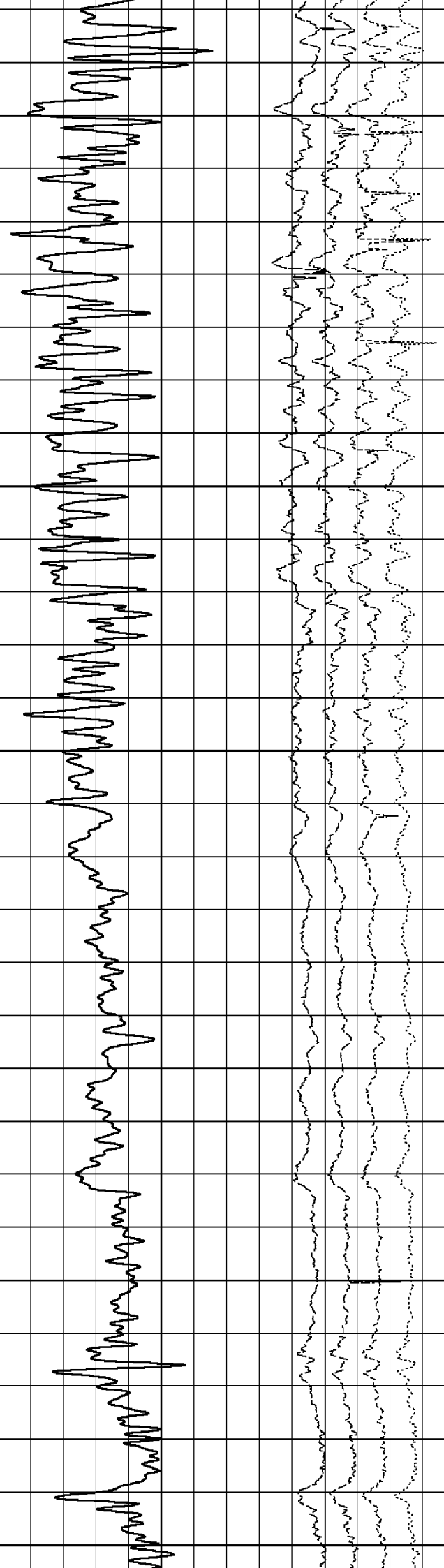
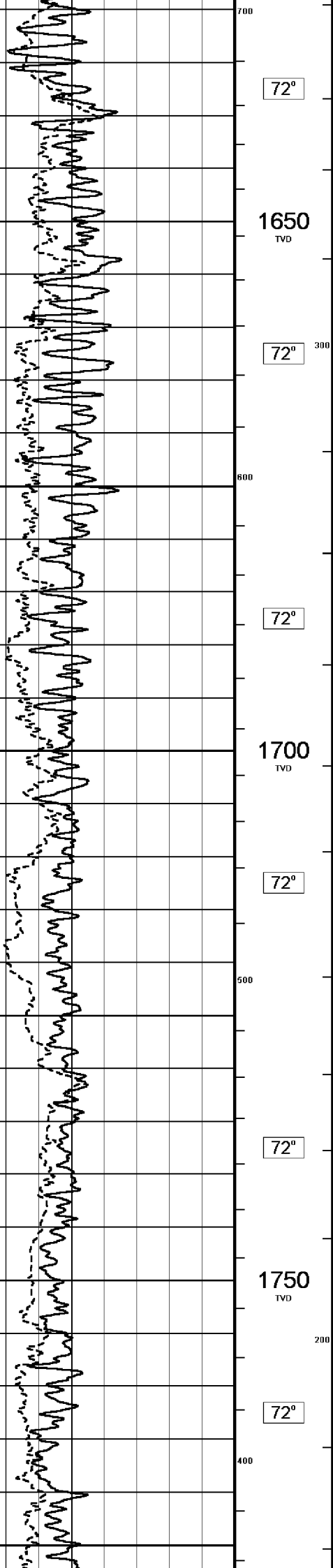
MAX. TEMPERATURE: 82.4 DEG C AT 2226.5 m MD  
MAX. INCLINATION: 47.9 DEG AT 1750 m MD  
MAX. DOGLEG SERVERITY: 6.15 DEG/30m AT 1802.19 m MD  
DEPLOYMENT ANGLE: 33.7 DEG

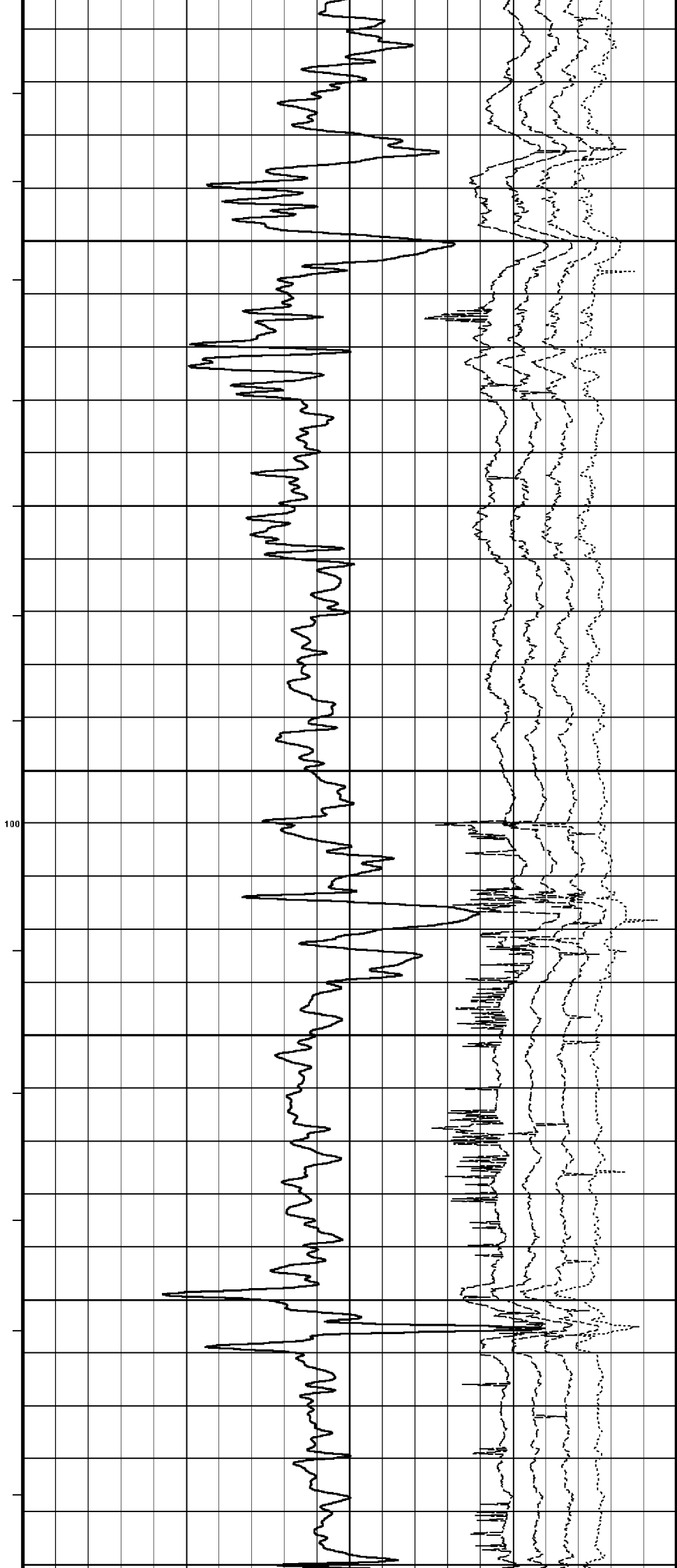
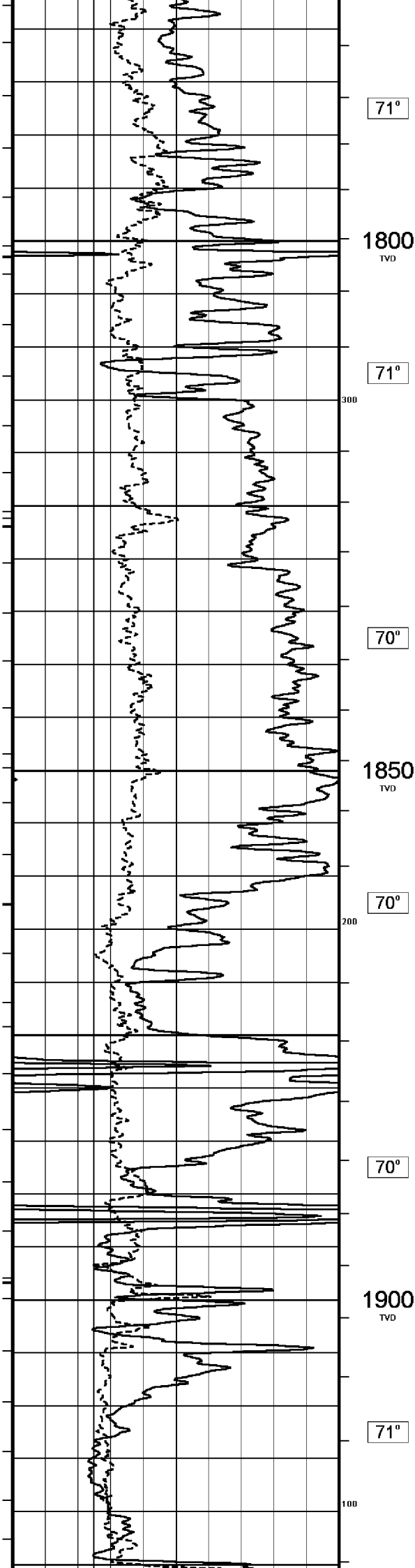
HVOL: 850 FT^3  
AVOL: 415 FT^3

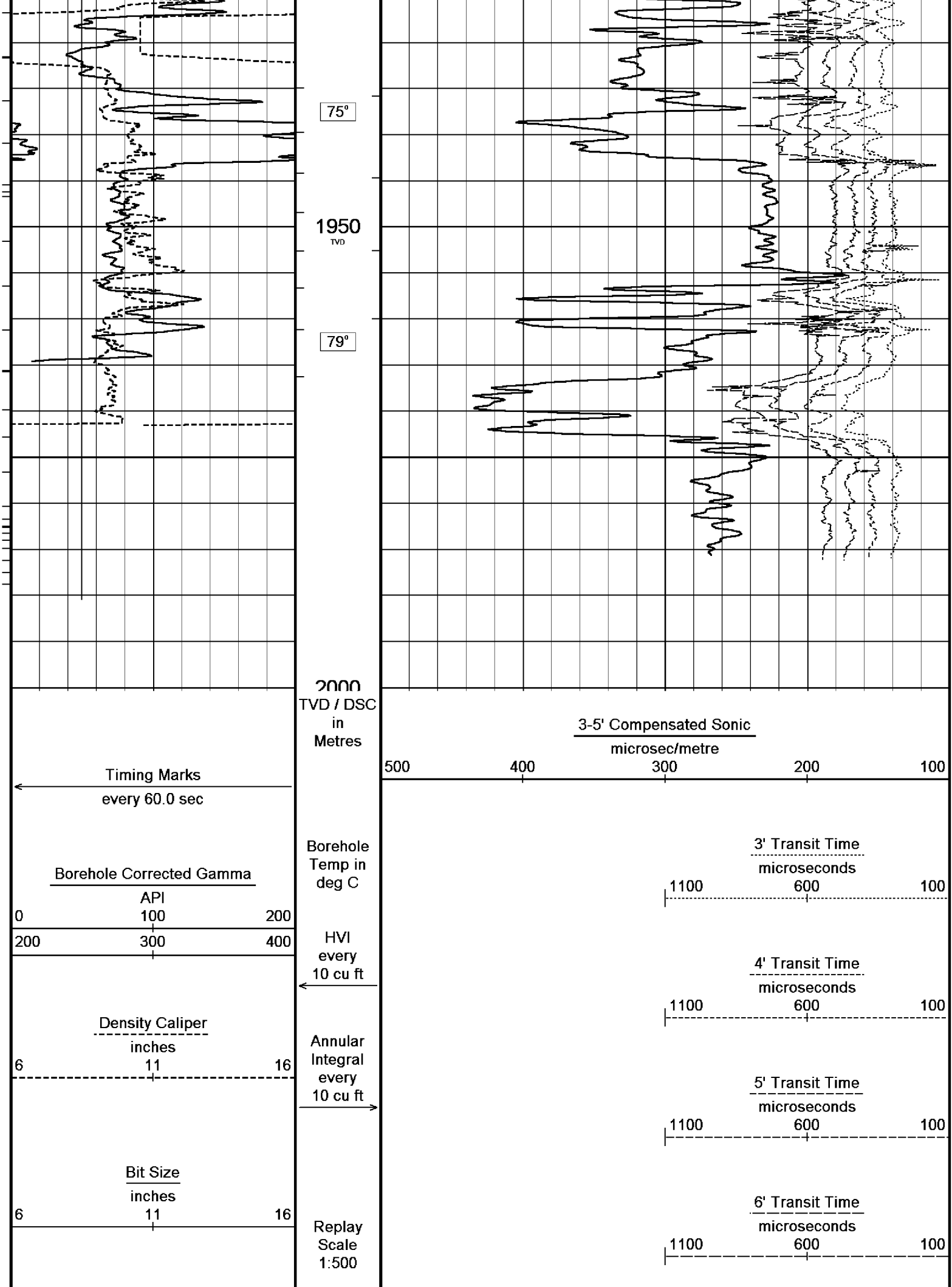
LOGGING SPEED 6M/MIN FROM TD TO 1937.52  
LOGGING SPEED 12M/MIN FROM 1937.52 TO 1735.6

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

Timing Marks every 60.0 sec			TVD / DSC in Metres	3-5' Compensated Sonic microsec/metre		
Borehole Corrected Gamma API 0 100 200 200 300 400			Borehole Temp in deg C	3' Transit Time microseconds 1100 600 100		
Density Caliper inches 6 11 16			HVI every 10 cu ft	4' Transit Time microseconds 1100 600 100		
Bit Size inches 6 11 16			Annular Integral every 10 cu ft	5' Transit Time microseconds 1100 600 100		
Replay Scale 1:500				6' Transit Time microseconds 1100 600 100		
<div>72°</div> <div>1563</div> <div>Casing Shoe</div>						
<div>72°</div> <div>1600</div> <div>TVD</div>						
<div>72°</div>						









## BEFORE SURVEY CALIBRATION

C:\logs\BMA\_A9B\Field\_Data\DSC3.dta

## General Constants All 000

General Parameters		
Mud Resistivity	0.108	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	

## Hole/Annular Volume and Differential Caliper Parameters

HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	Density Caliper	
Annular Volume Diameter	7.000	inches
Caliper for Differential Caliper	None	

## Rwa Parameters

Porosity used	Limestone Sonic Porosity
Resistivity used	Deep Induction
RWA Constant A	0.610
RWA Constant M	2.150

## High Resolution Temperature Calibration MCG 142

Field Calibration on 3-MAR-2006,18:44

	Measured	Calibrated(Deg C)
Lower	0.00	0.00
Upper	100.00	100.00

## High Resolution Temperature Constants MCG 142

Pre-filter Length	11
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## Gamma Calibration MCG 142

Field Calibration on 3-MAR-2006 18:49

	Measured	Calibrated (API)
Background	9	6
Calibrator (Gross)	1351	915
Calibrator (Net)	1342	909

## Gamma Constants MCG 142

Gamma Calibrator Number	060	
Mud Density	1.20	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

## Caliper Calibration MPD 083

Base Calibration on 26-FEB-2006 16:04

Field Calibration on 3-MAR-2006 19:00

## Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14260	4.01
2	22438	5.99
3	30914	7.98
4	39296	9.94
5	48592	12.01
6	N/A	N/A

## Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.98	7.98

## Sonic Constants MSS 066

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft

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	N/A

#### Down Hole Fixed Gate Parameters

Gate Start	N/A	micro-sec
Gate Width	N/A	micro-sec
Initial Discriminator Level	0.0000	mVolts

#### Full Waveform Parameters

Use 3' Waveform to derive TR	No	
Use 4' Waveform to derive TR	No	
Use 5' Waveform to derive TR	No	
Use 6' Waveform to derive TR	No	
3' Waveform Discriminator Level	0.45	mV
4' Waveform Discriminator Level	0.45	mV
5' Waveform Discriminator Level	0.35	mV
6' Waveform Discriminator Level	0.35	mV
3' Waveform Filter	None	
4' Waveform Filter	None	
5' Waveform Filter	None	
6' Waveform Filter	None	
Semblance Level	0.50	
Semblance Window Width	120.00	micro-sec
Sonic 1 Despiker	100.00	micro-sec/ft
Sonic 2 Despiker	100.00	micro-sec/ft

## DOWNHOLE EQUIPMENT

C:\logs\BMA\_A9B\Field\_Data\DSC3.dta

Compact Swivel Head Adaptor F  
SHA 71 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint  
SKJ 100 Length: 0.66 m Weight: 24.3 lb

Compact Battery Sub.  
MBS 99 Length: 4.41 m Weight: 44.1 lb

Compact Inline Standoff B  
MIS 73 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.  
MBE 18 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B  
MIS 138 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.



Compact Stiff Bridle Electrode Sub.

MBE 19 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B

MIS 136 Length: 0.65 m Weight: 15.4 lb

MBE21 - THIRD BRIDLE

MLK 111 Length: 3.76 m Weight: 30.9 lb

Compact Inline Standoff B

MIS 133 Length: 0.65 m Weight: 15.4 lb

Compact Gamma

MCG 142 Length: 2.65 m Weight: 63.9 lb

Compact Memory Sub A.C

MMS 38 Length: 0.95 m Weight: 30.9 lb

Compact Knuckle Joint

SKJ 45 Length: 0.66 m Weight: 24.3 lb

Compact Swivel Head Adaptor F

SHA 64 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A

MIS 94 Length: 1.74 m Weight: 33.1 lb

Compact Neutron

MDN 85 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper

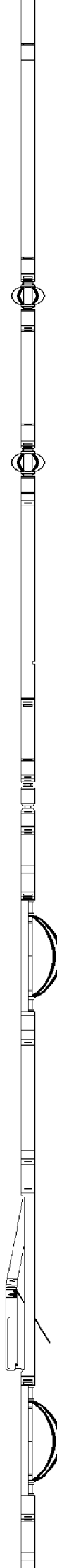
MPD 83 Length: 2.92 m Weight: 90.4 lb

Compact Inline Bowspring A

MIS 24 Length: 1.74 m Weight: 33.1 lb

Compact Swivel Head Adaptor

SHA 28 Length: 0.83 m Weight: 26.5 lb





Compact Knuckle Joint  
SKJ 110    Length: 0.66 m    Weight: 24.3 lb

Compact Inline Standoff B  
MIS 72      Length: 0.65 m      Weight: 15.4 lb

Compact Upper Guard Sub.  
MUG 30    Length: 2.74 m    Weight: 68.3 lb

Compact Inline Standoff B  
MIS 141    Length: 0.65 m    Weight: 15.4 lb

Compact Laterolog Electrode Sub.  
MLE 31      Length: 3.76 m      Weight: 92.6 lb

Compact Inline Standoff B  
MIS 127    Length: 0.65 m    Weight: 15.4 lb

Compact Lower Guard Sub.  
MLG 7      Length: 2.44 m      Weight: 55.1 lb

Compact Inline Standoff B  
MIS 129    Length: 0.65 m    Weight: 15.4 lb

Compact Sonic  
MSS 66    Length: 3.82 m    Weight: 72.8 lb

Compact Inline Standoff B  
MIS 126    Length: 0.65 m    Weight: 15.4 lb

Compact Induction  
MAI 39      Length: 3.29 m      Weight: 48.5 lb

Pressure Bung + Hole Finder  
HFS 4      Length: 0.40 m      Weight: 6.6 lb

Total Length: 54.01 m      Weight: 1201.5 lb



Tool Zero (0.44m from bottom)

All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A9B
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	1986.10	metres
Elevation Drill Floor	32.82	metres	Depth Driller	1994.35	metres
Elevation Ground Level	50.40	metres	Depth Logger	1991.89	metres



COMPENSATED SONIC  
1:500 TVD

## Connect.