

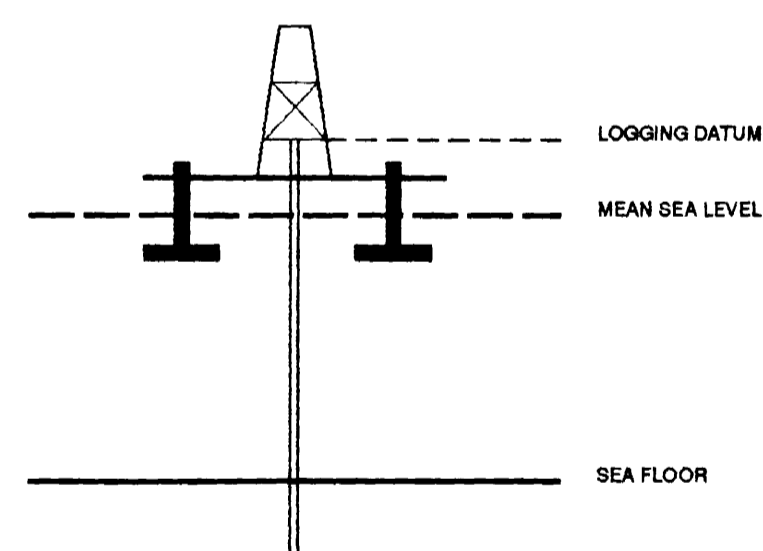
# VERTICAL SEISMIC PROFILE

ZERO OFFSET VSP PLOT 7  
REVERSE POLARITY  
VSP AND GEOGRAM COMPOSITE

Company: BHP PETROLEUM  
Well: MINERVA -2A  
Field: WILDCAT  
Country: AUSTRALIA  
Reference No: 560960 Interval: 2160.00 to 600.00  
Date Logged: 14-OCT-1993 Date Processed: 23/10/93  
Location: 142 57' 20.80" N 38 43' 04.54" E  
Elevations: KB: 25.30 DF: 25.00 GL: -85.00  
Permanent Datum: MSL Depth Units: METRES  
FIELD RECORDING: Engineer: M HELWIG Location: Program Version: 32.2  
COMPUTATION: Analyst: Z.KATELIS Centre: SYJ Baseline: 20.4

ELEVATION ABOVE MEAN SEA LEVEL

Logging Datum: 25.00  
Seismic Reference Datum: 0.00



Total Number of Levels: 57  
Depth Reference: SRD  
Time Reference: SRD

Run	Date	Tool Type	Bit Size/Depth	Casing Size/Depth	Top Depth	Bottom Depth
VSP Run	Date	Gun Offset	Hydro Offset	Gun Elevation	Hydro Elevation	Gun Azimuth
1	14-10-93	47 M	47 M	5 BELOW MSL	12 M BELOW MSL	80.0

REMARKS

The well name, location and borehole reference data were furnished by the customer. All interpretations are opinions based on information 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 willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

FOOD HERE

**WAVESHAPING**  
WAVESHAPING DECONVOLUTION  
ZERO PHASE ( 10-60 HZ )  
ENHANCED UPGOING WAVEFIELD  
VERTICAL SCALE : 10 CM/SEC  
POLARITY (S.E.G.) : REVERSE

**CORRIDOR STACK**

**CORRIDOR STACK + AGC**  
300 MS AGC WINDOW

**GEOGRAM 35 HZ.**  
ZERO PHASE - REVERSE POLARITY

**GEOGRAM 25 HZ.**  
ZERO PHASE - REVERSE POLARITY

**GEOGRAM 45 HZ.**  
ZERO PHASE - REVERSE POLARITY

**INVERTED IMPEDANCE**

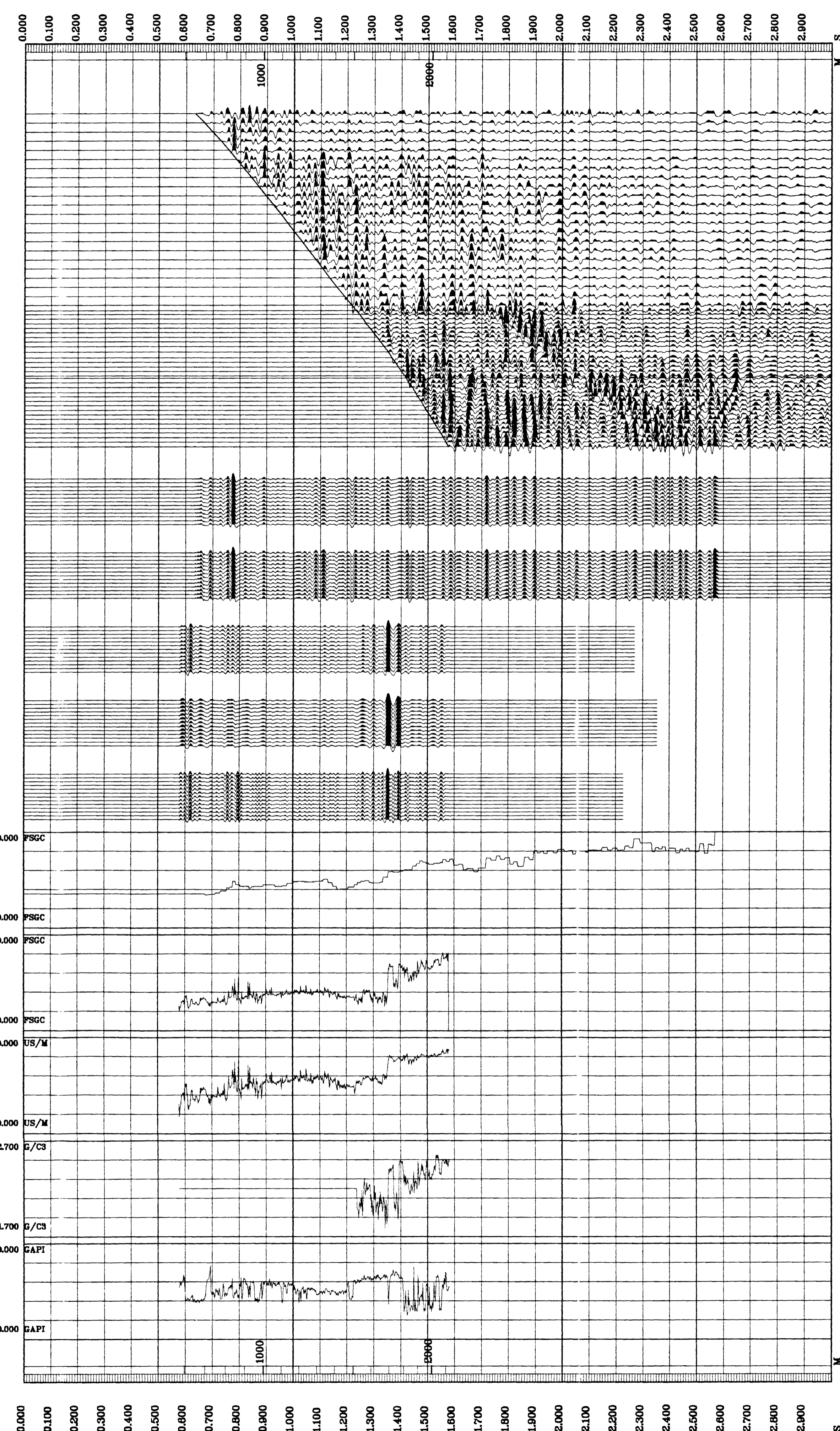
**LOGGED IMPEDANCE**

**SONIC**

**DENSITY**

**GAMMA RAY**

RAW DEPTH M	TRANSIT TIME S	LEVEL NO
880.0	0.518	54
790.0	0.394	55
780.0	0.549	56
800.0	0.385	51
840.0	0.280	50
850.0	0.288	49
920.0	0.407	48
960.0	0.431	47
1000.0	0.436	46
1040.0	0.449	45
1080.0	0.442	44
1120.0	0.476	43
1160.0	0.490	42
1200.0	0.503	41
1240.0	0.516	40
1280.0	0.529	39
1320.0	0.642	38
1360.0	0.555	37
1400.0	0.557	36
1440.0	0.561	35
1480.0	0.585	34
1520.0	0.610	33
1560.0	0.630	32
1600.0	0.642	31
1680.0	0.665	30
1720.0	0.659	29
1760.0	0.671	28
1780.0	0.685	27
1800.0	0.685	26
1830.0	0.707	18
1860.0	0.718	16
1900.0	0.727	14
1940.0	0.737	12
1980.0	0.747	10
2020.0	0.758	8
2060.0	0.768	6
2100.0	0.779	4
2140.0	0.789	2
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
1520.0	0.642	28
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
0.0	0.000	0
1520.0	0.642	28



COMPANY BHP PETROLEUM  
FIELD WILDCAT  
WELL MINERVA -2A  
COUNTRY AUSTRALIA