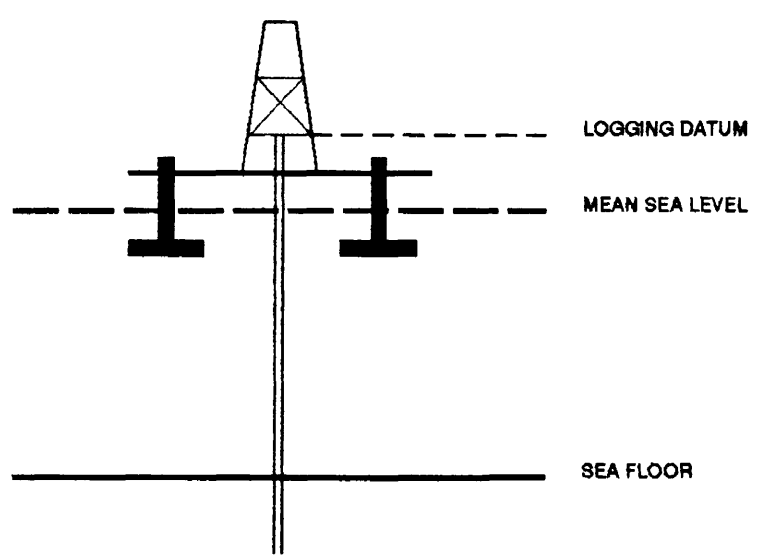


# VERTICAL SEISMIC PROFILE

ZERO OFFSET VSP PLOT 5  
WAVESHAPING AND CORRIDOR STACK

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: 38.2  
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	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	90.0

REMARKS  
FOLD HERE

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 interpretation. We are not responsible for any loss, cost, damage or expense incurred or sustained by anyone acting on any interpretation. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

**\* CORRIDOR STACK + AGC \***  
AGC WINDOW : 300 MS  
POLARITY (S.E.G.) : REVERSE

**\* CORRIDOR STACK \***  
CORRIDOR WINDOW : 100 MS  
POLARITY (S.E.G.) : REVERSE

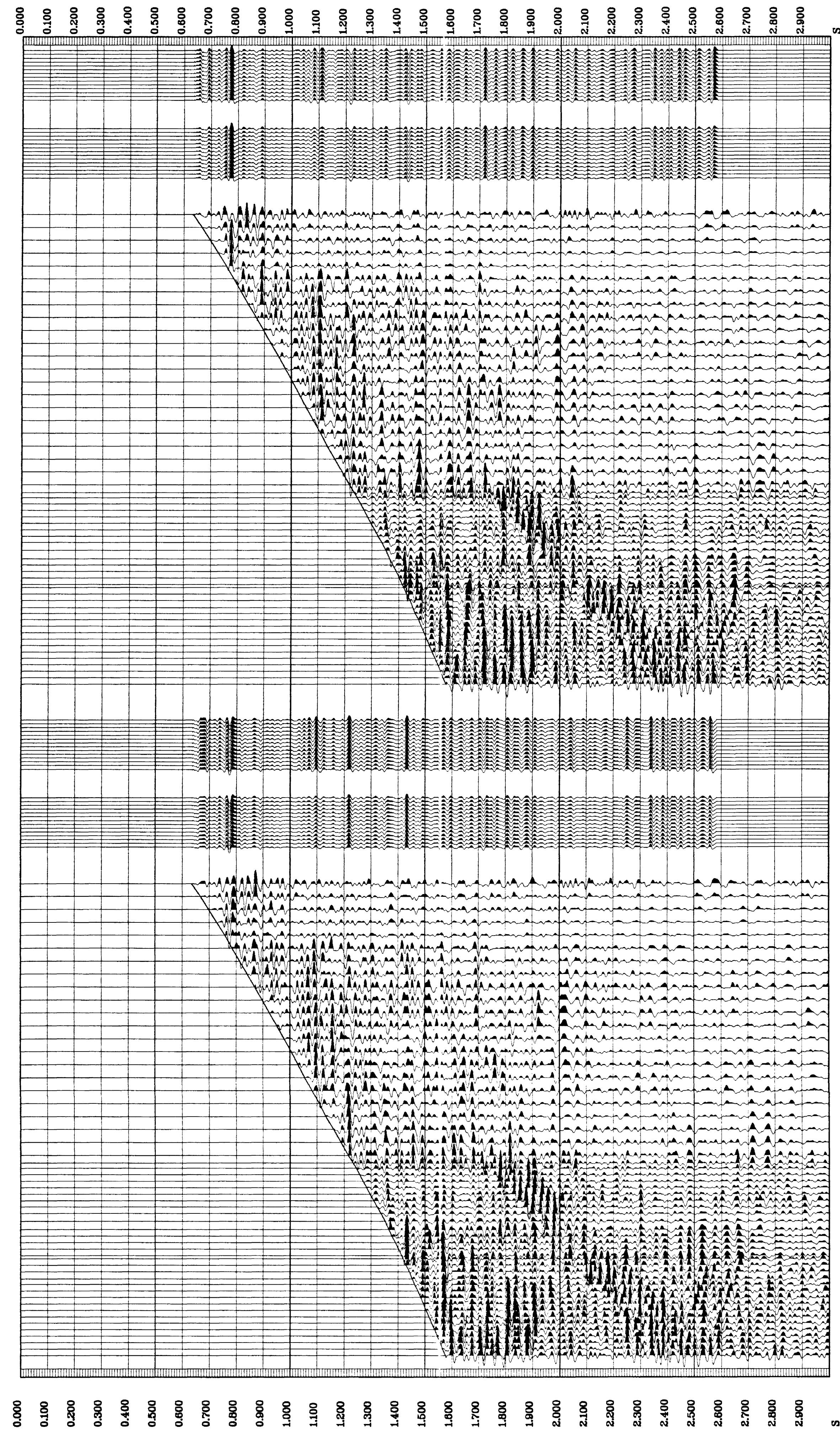
**\*\* WAVESHAPING \*\***  
WAVESHAPING DECONVOLUTION  
ZERO PHASE  
ENHANCED UPGOING WAVEFIELD  
PROCESSING SEQUENCE:  
MEDIAN STACK APPLIED  
STATIC CORRECTION TO MSL: 6.00 MS  
BAND PASS FILTER : 5-100 HZ  
NORMALISATION GATE : 100 MS  
TIME VARYING GAIN : T/TO\*\*1.00  
DOWNGOING WAVEFIELD SUBTRACTION  
WAVESHAPING DECONVOLUTION:  
5-70 HZ ZERO PHASE WAVELET  
OPERATOR LENGTH : 0.70 S  
PREWHITENING : 2 %  
5 LEVEL ENHANCED UPGOING WAVEFIELD  
VERTICAL SCALE : 10 CM/SEC  
POLARITY (S.E.G.) : REVERSE

**\* CORRIDOR STACK + AGC \***  
AGC WINDOW : 300 MS  
POLARITY (S.E.G.) : NORMAL

**\* CORRIDOR STACK \***  
CORRIDOR WINDOW : 100 MS  
POLARITY (S.E.G.) : NORMAL

**\*\* WAVESHAPING \*\***  
WAVESHAPING DECONVOLUTION  
ZERO PHASE  
ENHANCED UPGOING WAVEFIELD  
PROCESSING SEQUENCE:  
MEDIAN STACK APPLIED  
STATIC CORRECTION TO MSL: 6.00 MS  
BAND PASS FILTER : 5-100 HZ  
NORMALISATION GATE : 100 MS  
TIME VARYING GAIN : T/TO\*\*1.00  
DOWNGOING WAVEFIELD SUBTRACTION  
WAVESHAPING DECONVOLUTION:  
10-60 HZ ZERO PHASE WAVELET  
OPERATOR LENGTH : 0.70 S  
PREWHITENING : 2 %  
5 LEVEL ENHANCED UPGOING WAVEFIELD  
VERTICAL SCALE : 10 CM/SEC  
POLARITY (S.E.G.) : NORMAL

RAW DEPTH M	TRUE VERTICAL DEPTH MSL M	TRANSIT TIME S	LEVEL NO
0.0	0.0	0.000	0
0.0	0.0	0.000	0
0.0	0.0	0.000	0
0.0	0.0	0.000	0
0.0	0.0	0.000	0
0.0	0.0	0.000	0
1620.0	1628.8	0.642	28
680.0	654.0	0.318	54
720.0	693.9	0.334	55
760.0	733.9	0.349	56
800.0	773.8	0.365	57
840.0	813.7	0.380	58
880.0	853.7	0.395	59
920.0	893.6	0.407	60
960.0	933.6	0.421	61
1000.0	973.5	0.435	62
1040.0	1013.4	0.449	63
1080.0	1053.4	0.462	64
1120.0	1093.3	0.476	65
1160.0	1133.3	0.490	66
1200.0	1173.2	0.503	67
1240.0	1213.2	0.516	68
1280.0	1253.1	0.529	69
1320.0	1293.0	0.542	70
1360.0	1333.0	0.556	71
1400.0	1372.9	0.567	72
1440.0	1412.9	0.581	73
1480.0	1452.8	0.595	74
1520.0	1492.7	0.609	75
1544.0	1516.7	0.618	76
1560.0	1540.7	0.630	77
1580.0	1564.7	0.642	78
1600.0	1588.7	0.654	79
1620.0	1612.7	0.666	80
1640.0	1636.7	0.677	81
1660.0	1660.7	0.689	82
1680.0	1684.7	0.700	83
1700.0	1708.7	0.711	84
1720.0	1732.7	0.722	85
1740.0	1756.7	0.733	86
1760.0	1780.7	0.744	87
1780.0	1804.7	0.755	88
1800.0	1828.7	0.766	89
1820.0	1852.7	0.777	90
1840.0	1876.7	0.788	91
1860.0	1900.7	0.799	92
1880.0	1924.7	0.810	93
1900.0	1948.7	0.821	94
1920.0	1972.7	0.832	95
1940.0	1996.7	0.843	96
1960.0	2020.7	0.854	97
1980.0	2044.7	0.865	98
2000.0	2068.7	0.876	99
2020.0	2092.7	0.887	100
2040.0	2116.7	0.898	101
2060.0	2140.7	0.909	102
2080.0	2164.7	0.920	103
2100.0	2188.7	0.931	104
2120.0	2212.7	0.942	105
2140.0	2236.7	0.953	106



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

**Schlumberger**