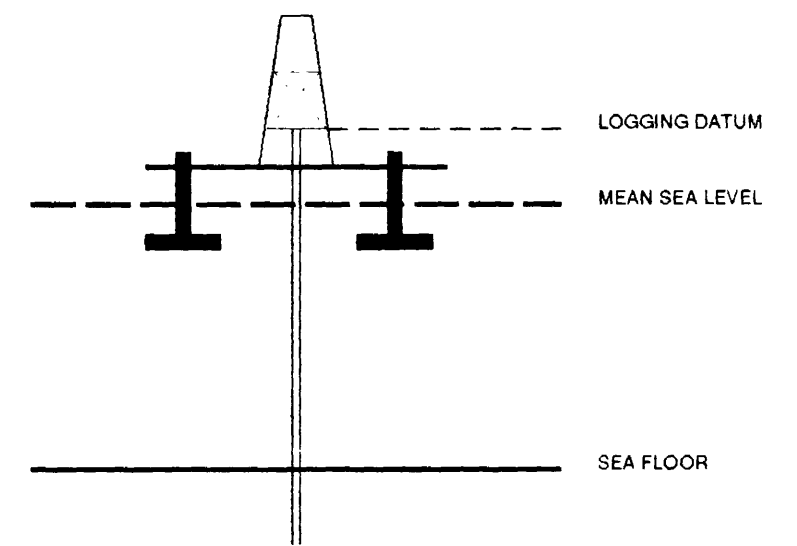


VERTICAL SEISMIC PROFILE

ZERO OFFSET VSP PLOT 6
NORMAL POLARITY
VSP AND GEOGRAM COMPOSITE

Company: BHP PETROLEUM
Well: MINERVA 1
Field: EXPLORATION
Country: AUSTRALIA
Reference No: 560896 Interval: 2405.00 to 551.00
Date Logged: 05-04-93 Date Processed: 20-04-94
Location: 38 42' 12.23" S 142 57' 12.34" E
Elevations: KB: 25.30 DF: 25.00 GL: -57.00
Permanent Datum: MSL Depth Units: METRES
FIELD RECORDING Engineer: M HELWIG Location: VEA Program Version: 32.4
COMPUTATION Analyst: A. WIBISONO Centre: SYJ Baseline: 5.5

ELEVATION ABOVE MEAN SEA LEVEL
Logging Datum: 25.00
Seismic Reference Datum: 0.00



Total Number of Levels: 100
Depth Reference: SRD
Time Reference: SRD

Run	Date	Tool Type	Bit Size	Casing Size	Top Depth	Bottom Depth
1	14-03-93	AS			1183 M	551 M
2	21-03-93	AS			1793 M	1195 M
3	25-03-93	AS		2084 M	1793 M	1793 M
4	05-04-93	AS			2112 M	2084 M

VSP Run	Date	Gun Offset	Hydro Offset	Gun Elevation	Hydro Elevation	Gun Azimuth	Hydro Azimuth
1	14-03-93	47 M	47 M	7 M BELOW MSL	14 M BELOW MSL	50	50
2	22-03-93	47 M	47 M	7 M BELOW MSL	14 M BELOW MSL	50	50

REMARKS

The well name, location and location reference data were furnished by the customer. All interpretations are strictly based on information furnished and do not guarantee the accuracy or completeness of any interpretations, and we shall not be held liable for any misinterpretations, errors or omissions, or any consequences incurred or sustained by anyone resulting from any misinterpretations made by any of our clients, 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.

**** N M O ****
NORMAL MOVEOUT CORRECTION
STATIC CORRECTION TO MSL: 9.18 MS
BAND PASS FILTER : 5-75 HZ
NORMALISATION GATE : 100 MS
TIME VARYING GAIN : T/TO**1.00
WAVESHAPING DECONVOLUTION:
5-65 HZ ZERO PHASE WAVELET
5 LEVEL ENHANCED UPGOING WAVEFIELD
NORMAL MOVEOUT CORRECTION
VERTICAL SCALE : 10 CM/SEC
POLARITY (S.E.G.) : NORMAL

CORRIDOR STACK

CORRIDOR STACK + AGC
300 MS AGC WINDOW

GEOGRAM 35 HZ.
ZERO PHASE - NORMAL POLARITY

GEOGRAM 25 HZ.
ZERO PHASE - NORMAL POLARITY

GEOGRAM 45 HZ.
ZERO PHASE - NORMAL POLARITY

INVERTED IMPEDANCE

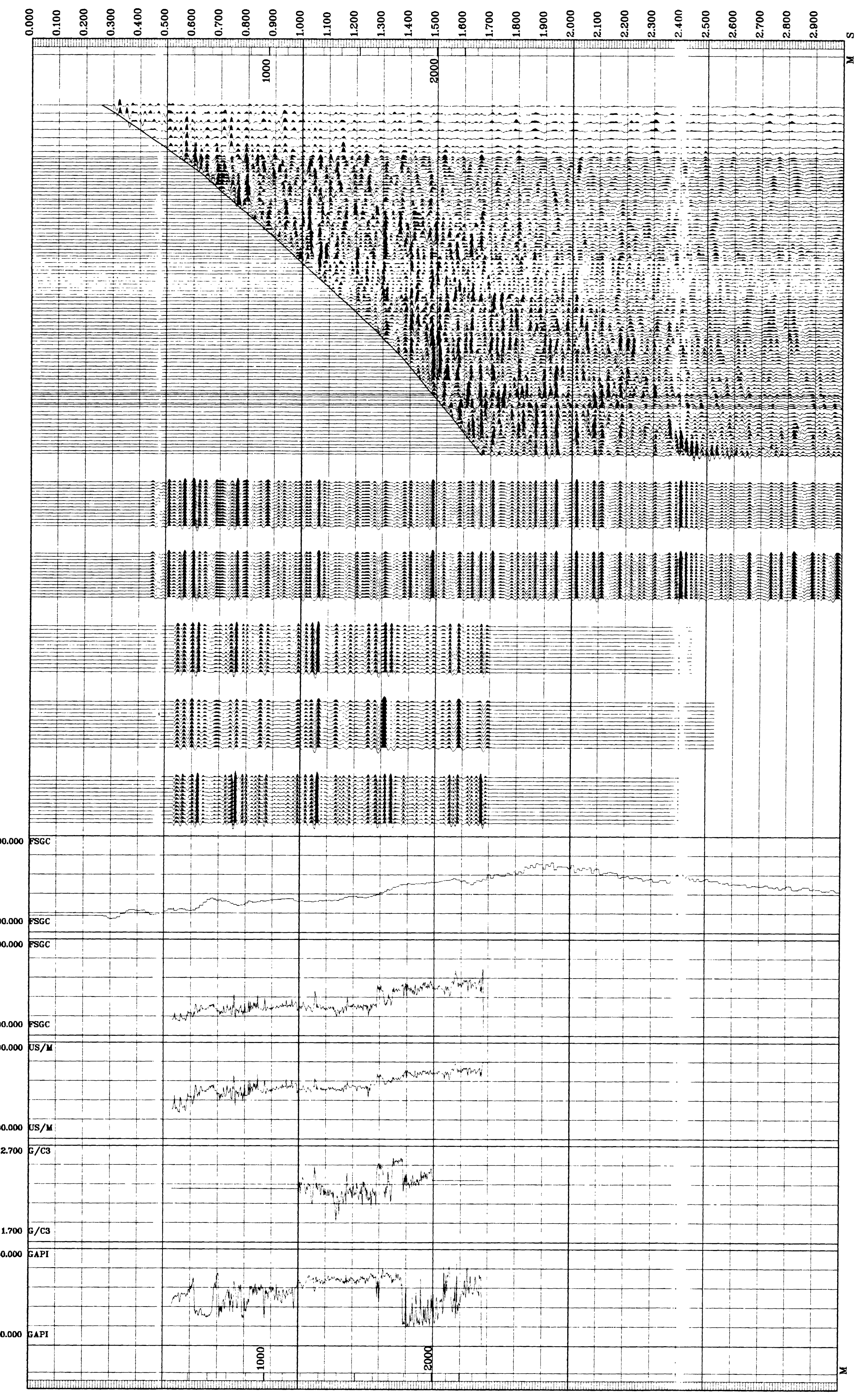
LOGGED IMPEDANCE

SONIC

DENSITY

GAMMA RAY

RAW DEPTH	TRUE VERTICAL DEPTH MSL	GEOPHONE OFFSET	TRANSIT TIME	TRANSIT TIME NMO	LEVEL NO
M	M	M	S	S	
250.0	225.0	1.0	0.122	0.250	99
300.0	275.0	1.2	0.117	0.310	98
350.0	325.0	1.4	0.110	0.350	97
400.0	375.0	1.6	0.101	0.390	96
450.0	425.0	1.8	0.093	0.440	95
500.0	475.0	2.0	0.085	0.480	94
550.0	525.0	2.2	0.078	0.520	93
600.0	575.0	2.4	0.071	0.560	92
650.0	625.0	2.6	0.065	0.600	91
700.0	675.0	2.8	0.059	0.640	90
750.0	725.0	3.0	0.054	0.680	89
800.0	775.0	3.2	0.049	0.720	88
850.0	825.0	3.4	0.044	0.760	87
900.0	875.0	3.6	0.040	0.800	86
950.0	925.0	3.8	0.036	0.840	85
1000.0	975.0	4.0	0.032	0.880	84
1050.0	1025.0	4.2	0.029	0.920	83
1100.0	1075.0	4.4	0.026	0.960	82
1150.0	1125.0	4.6	0.023	1.000	81
1200.0	1175.0	4.8	0.021	1.040	80
1250.0	1225.0	5.0	0.018	1.080	79
1300.0	1275.0	5.2	0.017	1.120	78
1350.0	1325.0	5.4	0.015	1.160	77
1400.0	1375.0	5.6	0.014	1.200	76
1450.0	1425.0	5.8	0.013	1.240	75
1500.0	1475.0	6.0	0.012	1.280	74
1550.0	1525.0	6.2	0.011	1.320	73
1600.0	1575.0	6.4	0.010	1.360	72
1650.0	1625.0	6.6	0.009	1.400	71
1700.0	1675.0	6.8	0.008	1.440	70
1750.0	1725.0	7.0	0.008	1.480	69
1800.0	1775.0	7.2	0.007	1.520	68
1850.0	1825.0	7.4	0.007	1.560	67
1900.0	1875.0	7.6	0.006	1.600	66
1950.0	1925.0	7.8	0.006	1.640	65
2000.0	1975.0	8.0	0.005	1.680	64
2050.0	2025.0	8.2	0.005	1.720	63
2100.0	2075.0	8.4	0.005	1.760	62
2150.0	2125.0	8.6	0.004	1.800	61
2200.0	2175.0	8.8	0.004	1.840	60
2250.0	2225.0	9.0	0.004	1.880	59
2300.0	2275.0	9.2	0.003	1.920	58
2350.0	2325.0	9.4	0.003	1.960	57
2400.0	2375.0	9.6	0.003	2.000	56
2450.0	2425.0	9.8	0.003	2.040	55
2500.0	2475.0	10.0	0.002	2.080	54
2550.0	2525.0	10.2	0.002	2.120	53
2600.0	2575.0	10.4	0.002	2.160	52
2650.0	2625.0	10.6	0.002	2.200	51
2700.0	2675.0	10.8	0.002	2.240	50
2750.0	2725.0	11.0	0.001	2.280	49
2800.0	2775.0	11.2	0.001	2.320	48
2850.0	2825.0	11.4	0.001	2.360	47
2900.0	2875.0	11.6	0.001	2.400	46
2950.0	2925.0	11.8	0.001	2.440	45
3000.0	2975.0	12.0	0.001	2.480	44
3050.0	3025.0	12.2	0.001	2.520	43
3100.0	3075.0	12.4	0.001	2.560	42
3150.0	3125.0	12.6	0.001	2.600	41
3200.0	3175.0	12.8	0.001	2.640	40
3250.0	3225.0	13.0	0.001	2.680	39
3300.0	3275.0	13.2	0.001	2.720	38
3350.0	3325.0	13.4	0.001	2.760	37
3400.0	3375.0	13.6	0.001	2.800	36
3450.0	3425.0	13.8	0.001	2.840	35
3500.0	3475.0	14.0	0.001	2.880	34
3550.0	3525.0	14.2	0.001	2.920	33
3600.0	3575.0	14.4	0.001	2.960	32
3650.0	3625.0	14.6	0.001	3.000	31
3700.0	3675.0	14.8	0.001	3.040	30
3750.0	3725.0	15.0	0.001	3.080	29
3800.0	3775.0	15.2	0.001	3.120	28
3850.0	3825.0	15.4	0.001	3.160	27
3900.0	3875.0	15.6	0.001	3.200	26
3950.0	3925.0	15.8	0.001	3.240	25
4000.0	3975.0	16.0	0.001	3.280	24
4050.0	4025.0	16.2	0.001	3.320	23
4100.0	4075.0	16.4	0.001	3.360	22
4150.0	4125.0	16.6	0.001	3.400	21
4200.0	4175.0	16.8	0.001	3.440	20
4250.0	4225.0	17.0	0.001	3.480	19
4300.0	4275.0	17.2	0.001	3.520	18
4350.0	4325.0	17.4	0.001	3.560	17
4400.0	4375.0	17.6	0.001	3.600	16
4450.0	4425.0	17.8	0.001	3.640	15
4500.0	4475.0	18.0	0.001	3.680	14
4550.0	4525.0	18.2	0.001	3.720	13
4600.0	4575.0	18.4	0.001	3.760	12
4650.0	4625.0	18.6	0.001	3.800	11
4700.0	4675.0	18.8	0.001	3.840	10
4750.0	4725.0	19.0	0.001	3.880	9
4800.0	4775.0	19.2	0.001	3.920	8
4850.0	4825.0	19.4	0.001	3.960	7
4900.0	4875.0	19.6	0.001	4.000	6
4950.0	4925.0	19.8	0.001	4.040	5
5000.0	4975.0	20.0	0.001	4.080	4
5050.0	5025.0	20.2	0.001	4.120	3
5100.0	5075.0	20.4	0.001	4.160	2
5150.0	5125.0	20.6	0.001	4.200	1



COMPANY: BHP PETROLEUM
FIELD: EXPLORATION
WELL: MINERVA 1
COUNTRY: AUSTRALIA

Schlumberger