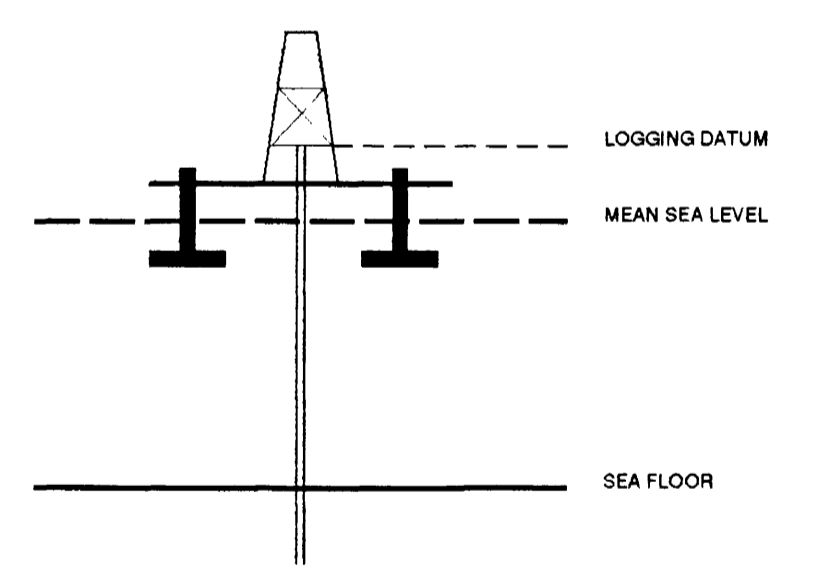


VERTICAL SEISMIC PROFILE

ZERO OFFSET VSP PLOT 2
AMPLITUDE RECOVERY

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: SYD 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	50 0

REMARKS

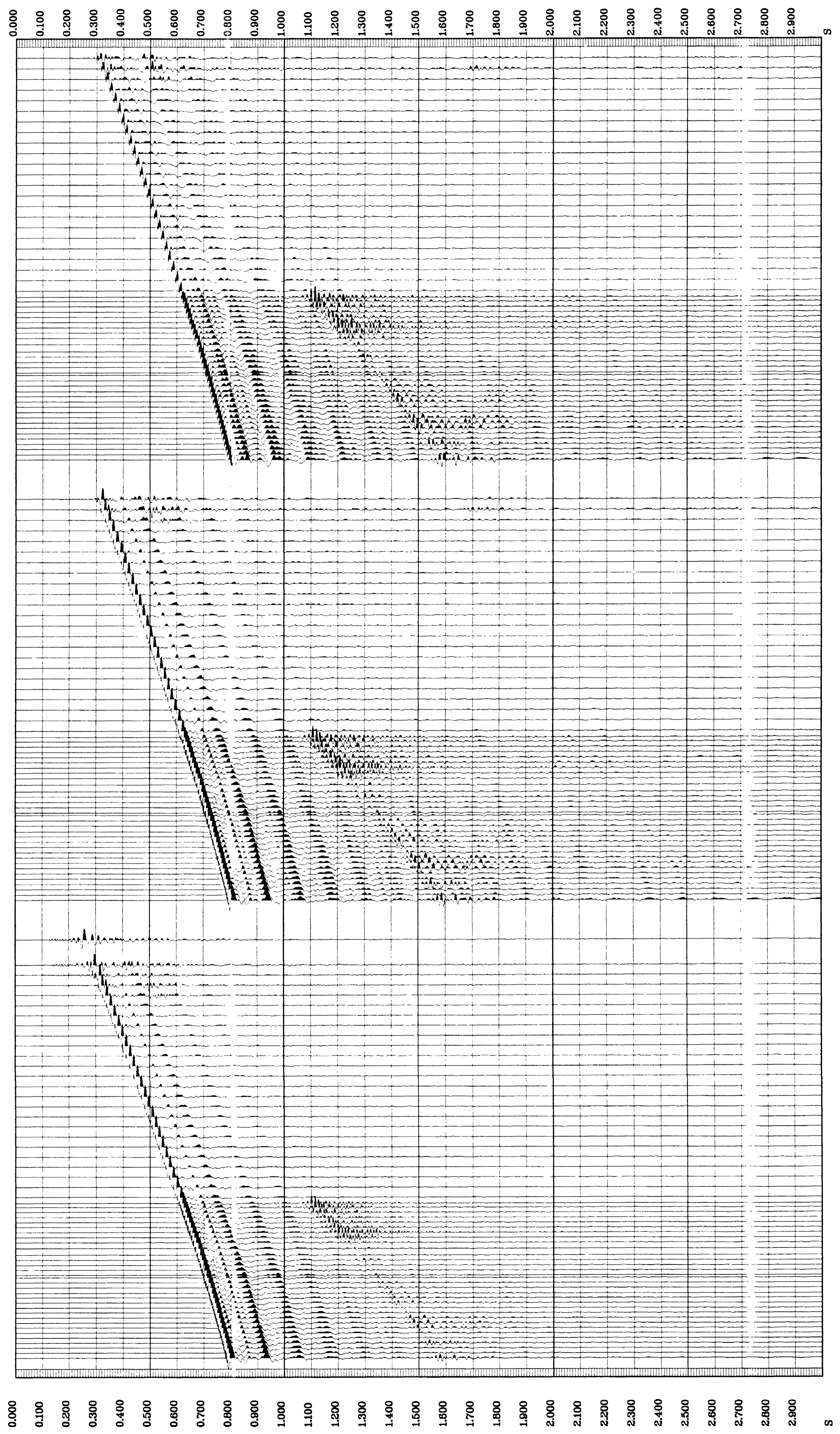
The well name, location and borehole reference data were furnished by the customer. All interpretations are opinions based on information from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to change without notice from Schlumberger Services International Corporation.

**** AMPLITUDE RECOVERY ****
VERTICAL COMPONENT
PROCESSING SEQUENCE:
MEDIAN COHERENCY STACK APPLIED
STATIC CORR-N TO MSL
BAND PASS FILTER : 5-100 HZ
NORMALISATION GATE : 100 MS
SCALE : 10 CM/SEC
POLARITY (S.E.G.) : NORMAL

**** AMPLITUDE RECOVERY ****
VERTICAL COMPONENT
PROCESSING SEQUENCE:
MEDIAN COHERENCY STACK APPLIED
STATIC CORR-N TO MSL
BAND PASS FILTER : 5-100 HZ
NORMALISATION GATE : 100 MS
SCALE : 10 CM/SEC
POLARITY (S.E.G.) : REVERSE

**** STACKED DATA ****
VERTICAL COMPONENT
PROCESSING SEQUENCE:
MEDIAN COHERENCY STACK APPLIED
SCALE : 10 CM/SEC
POLARITY (S.E.G.) : REVERSE

RAW DEPTH M	TRUE VERTICAL DEPTH MSL M	TRANSIT TIME S	LEVEL NO	MAX AMPLITUDE	MIN AMPLITUDE
640.0	614.0	0.305	53	136.83	-65.78
660.0	634.0	0.318	54	119.86	-87.05
700.0	663.9	0.334	55	130.94	-80.77
760.0	733.9	0.349	52	128.75	-85.03
800.0	773.8	0.365	51	123.36	-86.57
840.0	813.7	0.380	50	119.73	-83.94
880.0	853.7	0.393	49	128.42	-82.99
900.0	863.6	0.407	48	127.94	-82.89
960.0	903.6	0.421	47	125.87	-82.20
1000.0	973.5	0.435	46	128.03	-85.78
1040.0	1013.4	0.449	45	123.15	-84.38
1080.0	1053.4	0.462	44	122.55	-85.17
1120.0	1093.3	0.476	43	121.00	-84.16
1160.0	1133.3	0.490	42	122.48	-84.86
1200.0	1173.2	0.503	41	119.83	-80.99
1240.0	1213.2	0.516	40	123.35	-79.45
1280.0	1253.1	0.529	39	122.03	-80.20
1320.0	1293.0	0.542	38	123.30	-86.72
1360.0	1332.9	0.555	37	122.39	-84.86
1400.0	1372.9	0.567	36	115.50	-88.89
1440.0	1412.9	0.581	35	115.42	-88.86
1480.0	1452.9	0.595	34	112.90	-82.02
1520.0	1492.7	0.609	33	110.79	-82.81
1560.0	1532.7	0.623	31	111.88	-85.43
1600.0	1572.6	0.636	32	107.75	-82.96
1640.0	1612.6	0.649	33	111.76	-82.97
1680.0	1652.5	0.662	32	107.76	-82.97
1720.0	1692.5	0.675	31	107.76	-82.97
1760.0	1732.4	0.688	30	107.76	-82.97
1800.0	1772.4	0.701	29	107.76	-82.97
1840.0	1812.3	0.714	28	107.76	-82.97
1880.0	1852.3	0.727	27	107.76	-82.97
1920.0	1892.2	0.740	26	107.76	-82.97
1960.0	1932.2	0.753	25	107.76	-82.97
2000.0	1972.1	0.766	24	107.76	-82.97
2040.0	2012.1	0.779	23	107.76	-82.97
2080.0	2052.0	0.792	22	107.76	-82.97
2120.0	2092.0	0.805	21	107.76	-82.97
2160.0	2131.9	0.818	20	107.76	-82.97



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