

DEPT. NAT. RES & ENV
PE601579

WELL : MUDSKIPPER-1
 LOCATION : 038° 54' 31.500" S
 148° 07' 55.800" E
 COMPANY : PETROFINA EXPLORATION
 AUSTRALIA SA

VERTICAL SEISMIC PROFILE
 DISPLAY VG1
 INTERPRETERS COMPOSITE
 ZERO PHASE OPTIMUM FREQUENCY FILTER
 POLARITY SEG NORMAL

POLARITY DESCRIPTION : INCREASE IN ACOUSTIC IMPEDANCE
 REPRESENTED BY A WHITE TROUGH
 TIME SCALE : 10 CM/S
 DEPTH SCALE : 1:10000
 DATE PROCESSED : JULY 1990

FIELD ACQUISITION

SURVEY DATE : JUNE 1990
 SOURCE : AIRGUN
 SOURCE DEPTH : 5.0 M BELOW MSL
 SOURCE OFFSET : 60.8 M
 SOURCE DIRECTION : 170 DEG N
 SOURCE MONITOR : NEAR FIELD HYDROPHONE
 MONITOR DEPTH : 10.0 M BELOW MSL
 WELL GEOPHONE : SAT
 RECORDING EQUIPMENT : SCHLUMBERGER CSU
 SAMPLE RATE : 1 MS
 WATER DEPTH : 101.0 M
 VSP DATUM : MSL
 REFERENCE LEVEL : KB AT 27.0 M ABOVE MSL

VSP PROCESSING SEQUENCE

EDIT
 AUTOMATED TRACE ALIGNMENT
 STACK OF CONSTANT DEPTH TRACES
 SOURCE SIGNATURE DECONVOLUTION (330 MS WINDOW)
 AMPLITUDE RECOVERY PROPORTIONAL TO T
 PRELIMINARY BANDPASS FILTER 3.5 - 100, 130 HZ
 DOWNGOING WAVE SUBTRACTION
 FIRST ARRIVALS SHIFTED TO TWO-WAY TIME SUB DATUM
 SPECIAL VSP DECONVOLUTION (700 MS DERIVATION WINDOW)
 OPTIMUM BANDPASS FILTER 4.6 - 60, 90 HZ
 DIP FILTER (5 SAMPLE MEDIAN OPERATOR, 0 MS/TRACE DIP)
 POST MEDIAN FILTER 3.5 - 70, 100 HZ
 TRACE EQUALISATION (50 MS WINDOW, 25 MS OVERLAP)
 CORRIDOR STACK

PLUS

AS ABOVE EXCEPT DATA DISPLAYED BEFORE TRANSPOSITION

SYNTHETIC SEISMOGRAM PARAMETERS

DATA PARAMETERS
 PRINCIPAL DATA : CALIBRATED SONIC LOG
 SUPPLEMENTARY DATA : DENSITY LOG
 SEISMIC SECTION : GF88C-19
 LOG DATA DIGITISING : CONTINUOUSLY IN DEPTH
 SOURCE TYPE : VSX SLEEVE GUNS
 SOURCE DEPTH : 6 M
 DETECTOR DEPTH : 8 M
 SYNTHETIC TIME-LAYER INTERVAL : 2MS TWO-WAY
 DEPTH SCALE : NON-LINEAR IN METRES
 TWO-WAY TIME SCALE : 10 CM/SEC
 DATUM : MSL
 WATER DEPTH : 101 M
 SURFACE REFLECTION COEFFICIENT : 0.18
 POLARITY : INCREASE IN ACOUSTIC IMPEDANCE
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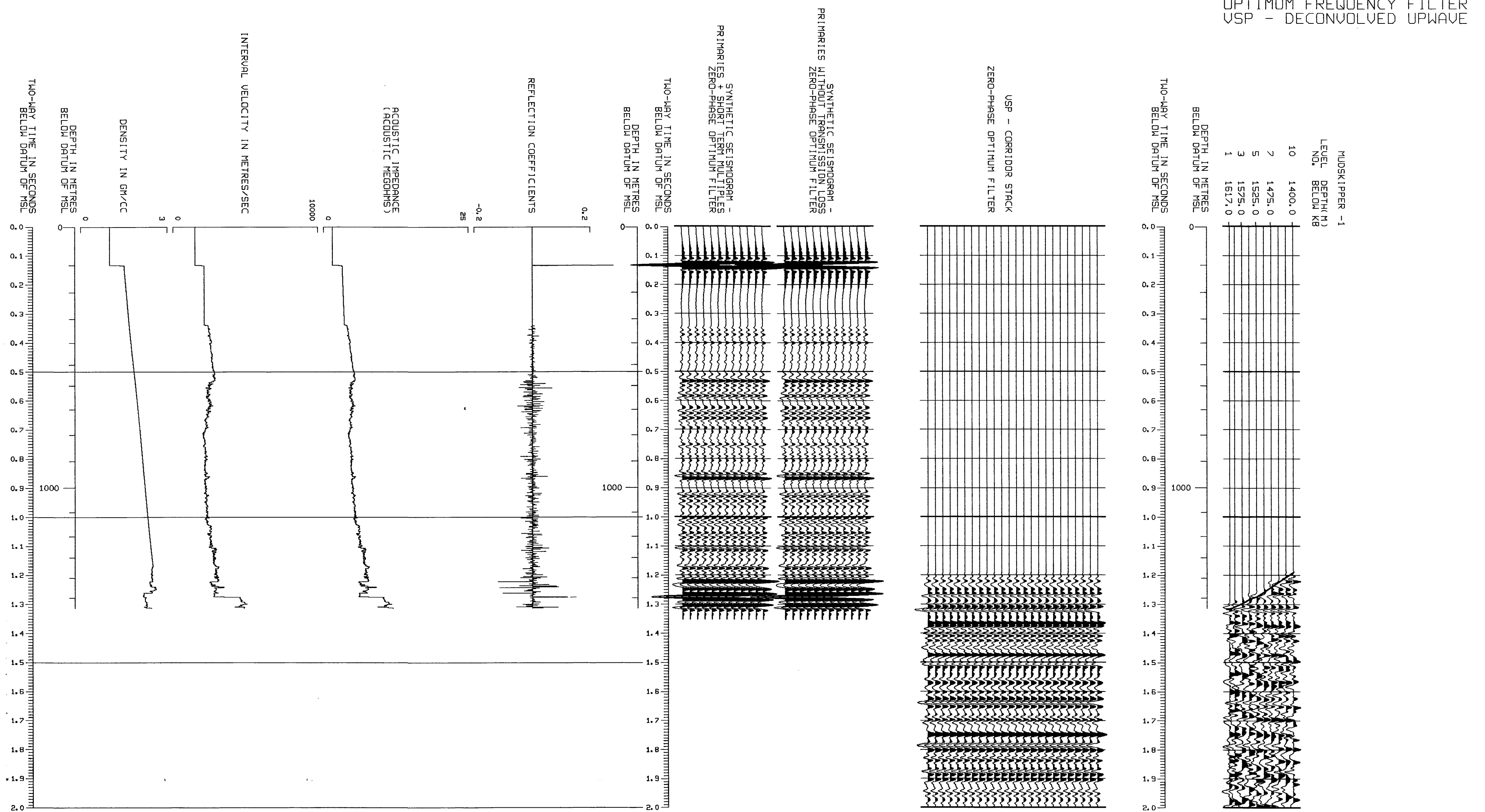
TRACES DISPLAYED : PRIMARIES + SHORT TERM MULTIPLES
 (12 MS WINDOW)
 PRIMARIES WITHOUT TRANSMISSION LOSS

CONVOLUTION WAVELET : ZERO PHASE OPTIMUM FILTER
 4.6 - 60, 90 HZ

POLARITY : INCREASE IN ACOUSTIC IMPEDANCE
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POLARITY - SEG NORMAL

SEISMOGRAPH SERVICE - BOREHOLE GEOPHYSICS DIVISION



OPTIMUM FREQUENCY FILTER
 VSP - DECONVOLVED UPWAVE