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OIL and GAS DIVISION

25 FEB 1983

# SEISMOGRAPH SERVICE LIMITED

COMPANY : PHILIPS AUSTRALIAN OIL CO.  
 WELL : SELENE NO. 1  
 LOCATION : 38° 37' 24.97"S  
 : 148° 26' 11.51"E



DISPLAY : VSP COMPOSITE TRACE DISPLAY  
 POLARITY 1

TIME SCALE : 1S = 10CMS  
 DEPTH SCALE : 10 TRACES/INCH  
 DATE PROCESSED : FEBRUARY 1983

### FIELD ACQUISITION

DATE SHOT : 6.2.83  
 SOURCE : SINGLE BOLT AIRGUN (120CU. IN)  
 SOURCE DEPTH : 4.5M BELOW MSL  
 GUN PRESSURE : 2000PSI  
 SOURCE MONITOR : NEAR FIELD HYDROPHONE  
 MONITOR DEPTH : 7.5M BELOW MSL  
 WELL GEOPHONE : GCH 100HT  
 RECORDING EQUIPMENT : DWS  
 SAMPLE RATE : 1MS  
 SURFACE ELEVATION : /  
 WATER DEPTH : 253M  
 VSP DATUM : MSL  
 DEPTH REFERENCE LEVEL : KB, 23M AMSL

### PROCESSING SEQUENCE

V1. EDIT  
 AUTOMATED TRACE ALIGNMENT  
 VERTICAL STACK OF CONSTANT DEPTH TRACES  
 SOURCE SIGNATURE DECONVOLUTION (310MS DERIVATION)  
 AMPLITUDE RECOVERY T<sub>xx</sub>1.0  
 FIRST ARRIVALS SHIFTED TO TWO-WAY TIME SUB DATUM  
 DOWNGOING WAVE SUBTRACTION  
 SPECIAL VSP DECONVOLUTION (1050MS DERIVATION WINDOW)  
 BANDPASS FILTER (1-5, 70-88HZ)  
 TRACKING FILTER (9:1 MEDIAN, 0-4MS/TR LEFT DIP ENHANCEMENT)  
 FRONT CORRIDOR COMPOSITE TRACE PRODUCTION  
 (VARIABLE WINDOW STARTING 50MS AFTER FIRST ARRIVAL)  
 24 TRACE REPEAT  
 BANDPASS FILTER (1-5, 70-88HZ)

V2. AS FOR V1 EXCEPT  
 BANDPASS FILTER BEFORE AND AFTER  
 FRONT CORRIDOR COMPOSITE REPLACED BY  
 TIME VARIANT FILTER FROM SEISMIC SECTION (LINE GP81-91)  
 (11-15, 55-69HZ 0.00-1.53S  
 8-10, 50-62HZ AT 1.83S  
 1-5, 45-56HZ AT 2.13S  
 1-5, 40-50HZ 2.23S TO END OF DATA)

POLARITY 1 :  
 AN UPGOING COMPRESSION WAVE IS REPRESENTED BY A WHITE TROUGH  
 THE DOWNGOING FIRST ARRIVAL COMPRESSION WAVE IS A BLACK PEAK

