

# GEOGRAM\*

(Synthetic Seismogram)

Company: ESSO AUSTRALIA LTD.  
 Well: BLACKBACK 1 (ST-1/ST-2)  
 Field: WILDCAT  
 Country: AUSTRALIA  
 Reference No: 56480 Interval: 3905.00 to 575.00  
 Date Logged: 18/6/89 Date Processed: 20/7/89  
 Location: 38 33'33" S 147 23'42.88" E  
 Elevations: KB: 2100 DF: 20.70 GL: -418.00  
 Permanent Datum: MSL Depth Units: METRES

**LOG INFORMATION**  
 FIELD RECORDING Engineer: G. SMITH Location: Program Version: 322  
 COMPUTATION Analyst: ZKATEUS Centre: STJ Baseline: 18.000X3  
 ELEVATION ABOVE MEAN SEA LEVEL  
 Logging Datum: 21.00  
 Seismic Reference Datum: 0.00  
 Sonic Calibration By Check Shot: YES Sonic Edited By Analyst: YES  
 Two-Way Time Sample Interval: 2 ms Environment:

True Vertical Depth Corrections Applied: YES  
 Source of True Vertical Depth Data: DIPMETER  
 Maximum Hole Deviation: 39 DEG

Run	Date	Tool Type	Bit Size/Depth	Casing Size/Depth	Top Depth	Bottom Depth
VSP	Date	Gun OTHER	Hydro OTHER	Gun OTHER	Hydro OTHER	Gun OTHER
Hydro	OTHER	OTHER	OTHER	OTHER	OTHER	OTHER

**GEOGRAM MODEL ASSUMPTIONS**  
 Equal time slice model of horizontal plane layers.  
 Plane acoustic waves at normal incidence.  
 No intrinsic attenuation.

**POLARITY**  
 An upgoing wave, reflected by an increase in acoustic impedance with depth, is displayed as a white trough under normal polarity.

**SIGNATURES**  
 All signatures displayed in the Geogram results correspond to a wavelet convolved with a reflection coefficient of -0.5 (A decrease in acoustic impedance with depth).

**REMARKS**

The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, accept in the case of gross or willful negligence on our part be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, 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.

CLIENT = ESSO AUSTRALIA LTD.  
 FIELD = WILDCAT  
 WELL = BLACKBACK 1 (ST-1/ST-2)

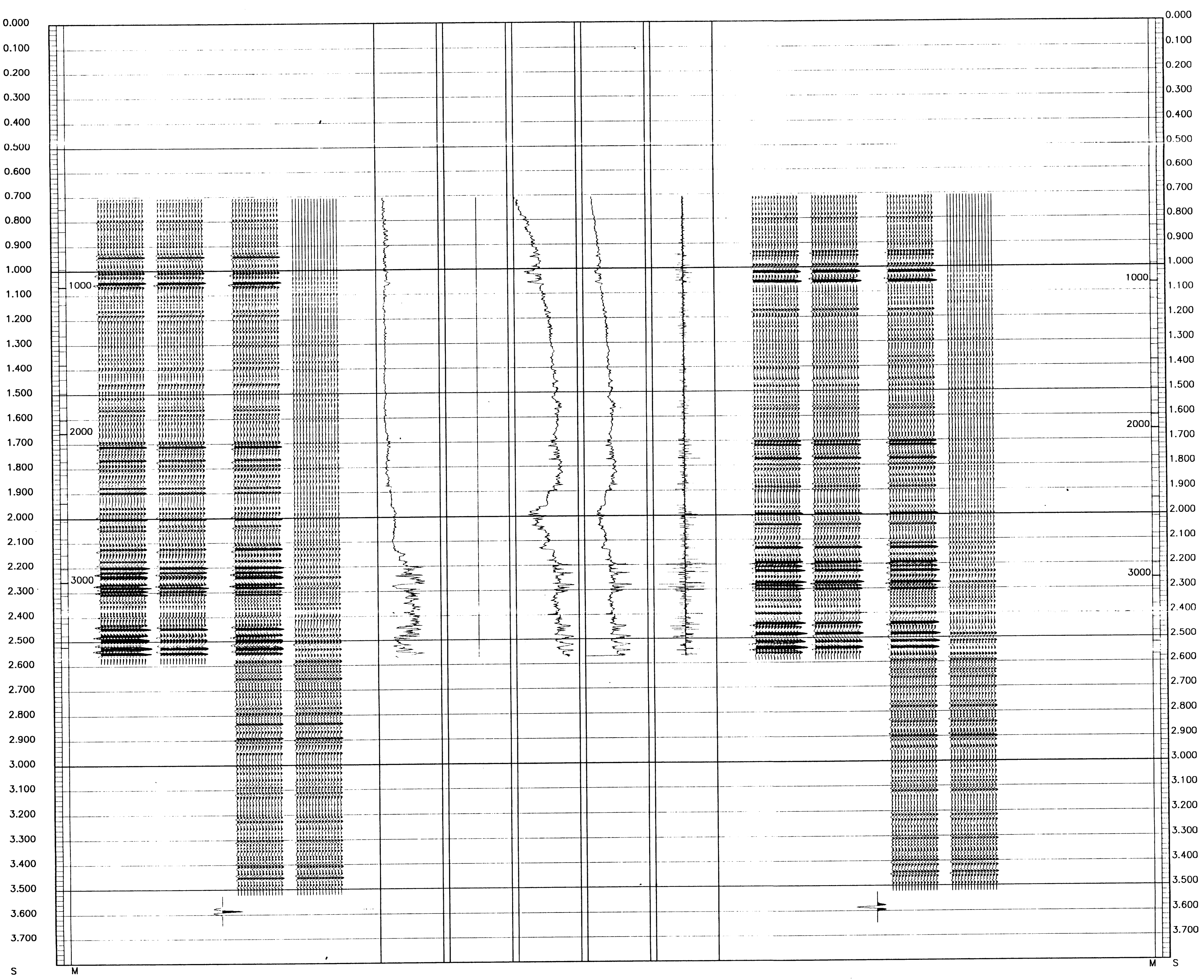
**\*\* GEOGRAM \*\***

45 HERTZ ZERO PHASE  
 RICKER WAVELET

BLACKBACK 1

PRIMARIES AND MULTIPLES REVERSE POLARITY
PRIMARIES WITH TRANSMISSION LOSS REVERSE POLARITY
PRIMARIES REVERSE POLARITY
REFLECTION
ACOUSTIC IMPEDANCE
SONIC
DENSITY
GAMMA RAY
MULTIPLES ONLY NORMAL POLARITY
PRIMARIES AND MULTIPLES NORMAL POLARITY
PRIMARIES WITH TRANSMISSION LOSS NORMAL POLARITY
PRIMARIES NORMAL POLARITY

0.200  
 -0.200  
 50000.000 PPS/C  
 10000.000 PPS/C  
 50.000 US/F  
 150.000 US/F  
 2.800 G/C3  
 1.800 G/C3  
 200.000 GAPI  
 0.000 GAPI



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 FIELD WILDCAT  
 WELL BLACKBACK 1 (ST-1/ST-2)  
 COUNTRY AUSTRALIA