W783 Discovery Bay-1 W.C.R.

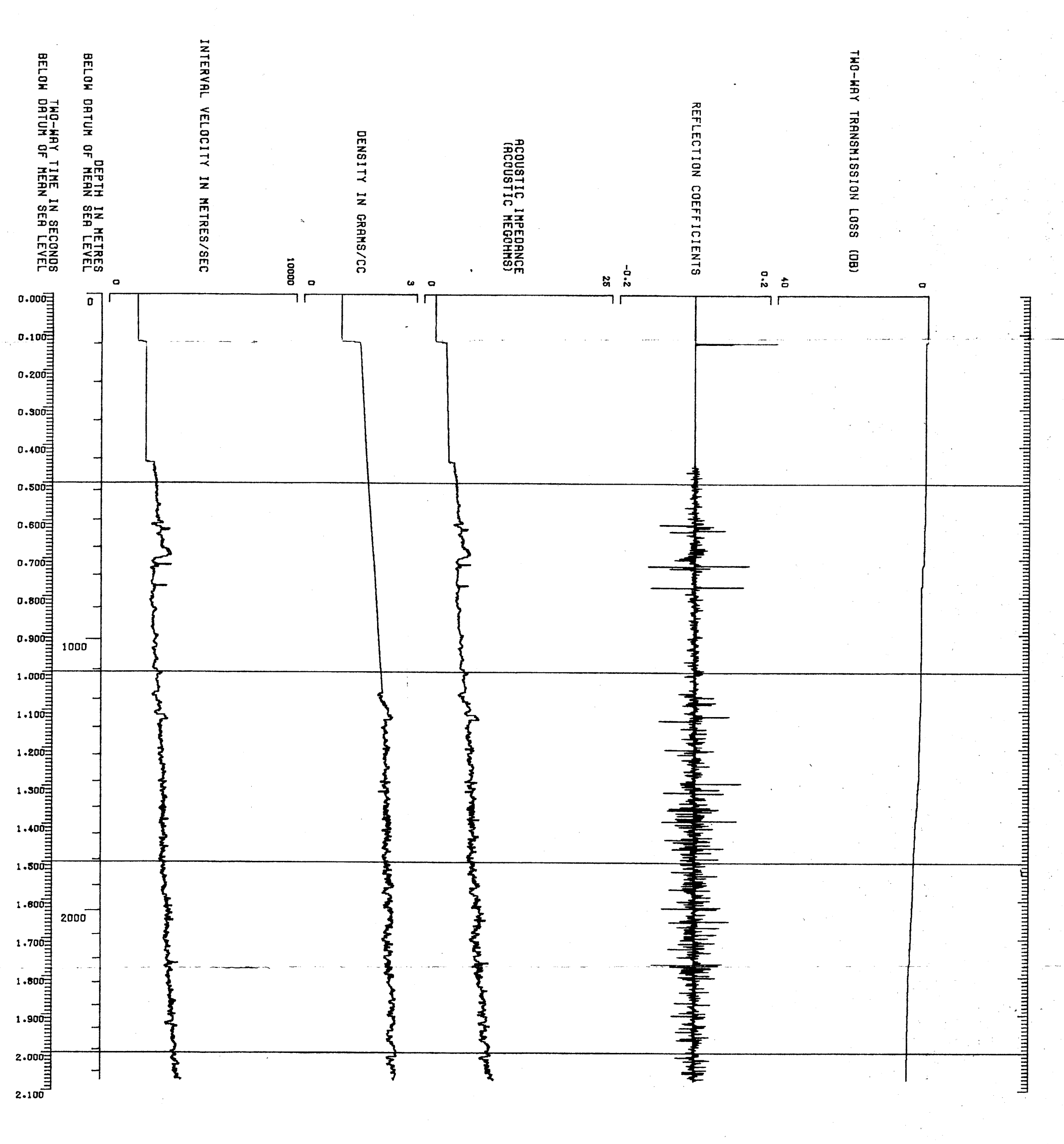
Seismograph Service (England) Limited

SYNTHETIC SEISMOGRAM MARINE

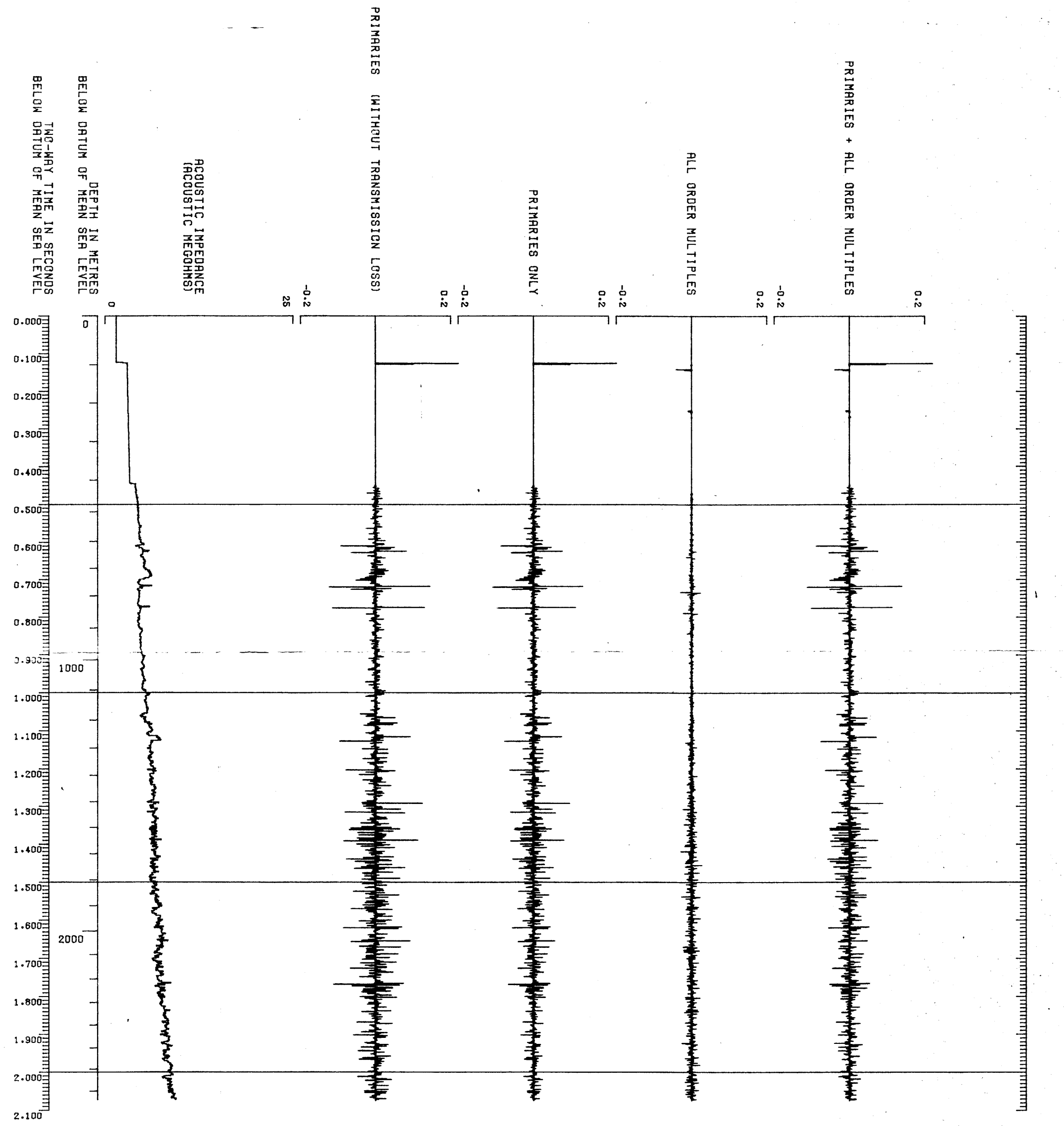
FILING No.	
COMPANY	PHILLIPS AUSTRALIAN OIL COMPANY
WELL	DISCOVERY BAY No 1
FIELD	WILDCAT
COUNTRY	AUSTRALIA (OFFSHORE)
LOCATION:	38° 24′ 42.944″ S 141° 04′ 20.588″ E
SOURCE OF PRINCIPAL DATA	CALIBRATED SONIC LOG
SOURCE OF SUPPLEMENTARY DATA	CLIENT, DENSITY LOG
SOURCE AND TYPE	AIRGUN ARRAY
DEPTH OF SOURCE	6 m
DEPTH OF DETECTOR	13 m
SYNTHETIC TIME-LAYER INTERVAL	.002s TWO-WAY
BASIC DATA DIGITISED	CONTINUOUSLY IN DEPTH
DEPTH SCALE	NON LINEAR IN METRES
TWO-WAY TIME SCALE	10 cm/s
DATUM	MSL
WATER VELOCITY	1524 m/s
DEPTH OF WATER	96.6 m
VELOCITY MODEL:	from seabed to top of log at 1954 m/s

REMARKS: The reflection coefficient produced by the velocity interface at the top of the log is unrealistic and has not been included in the Synthetic Seismogram.

M4634

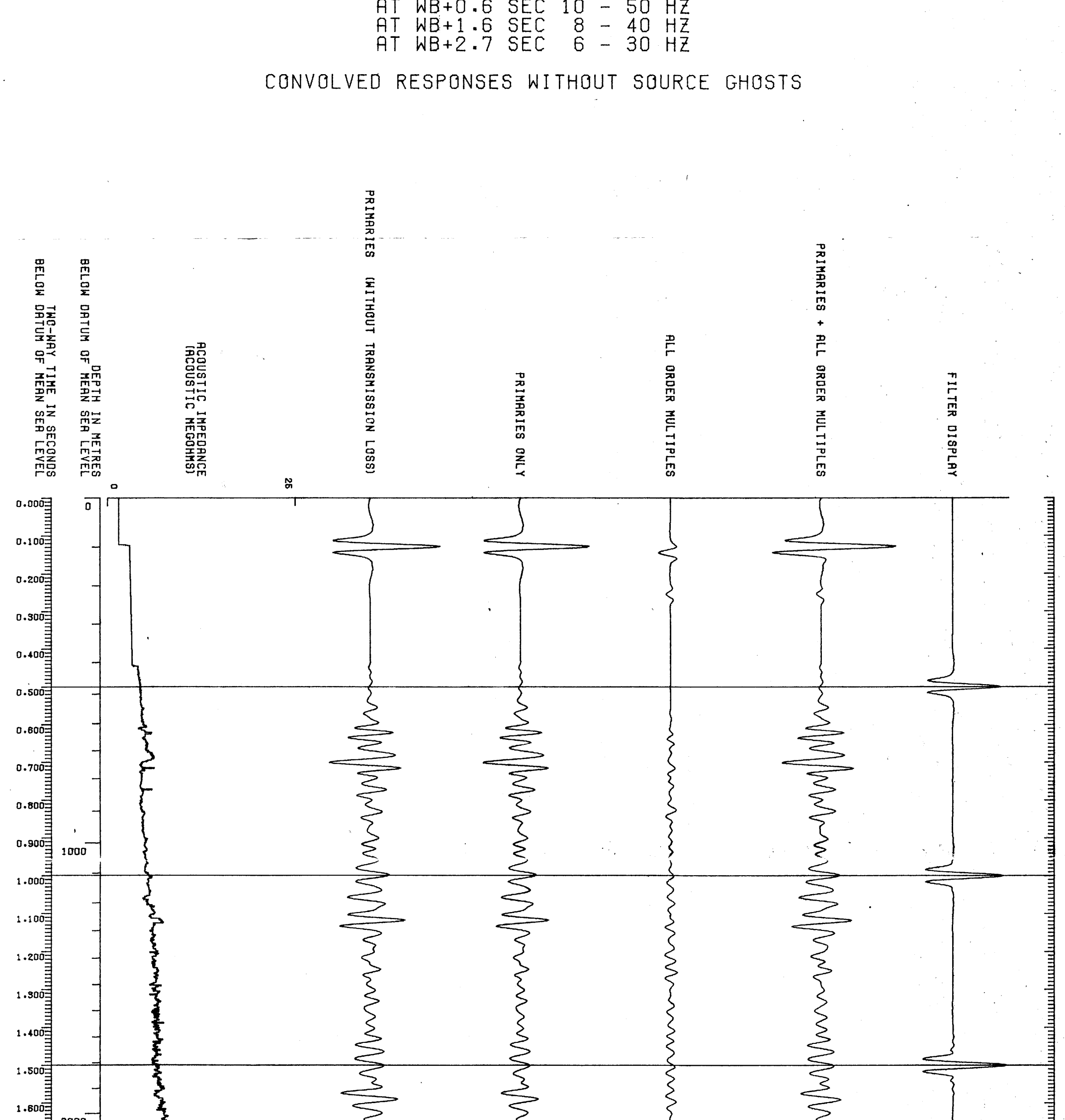


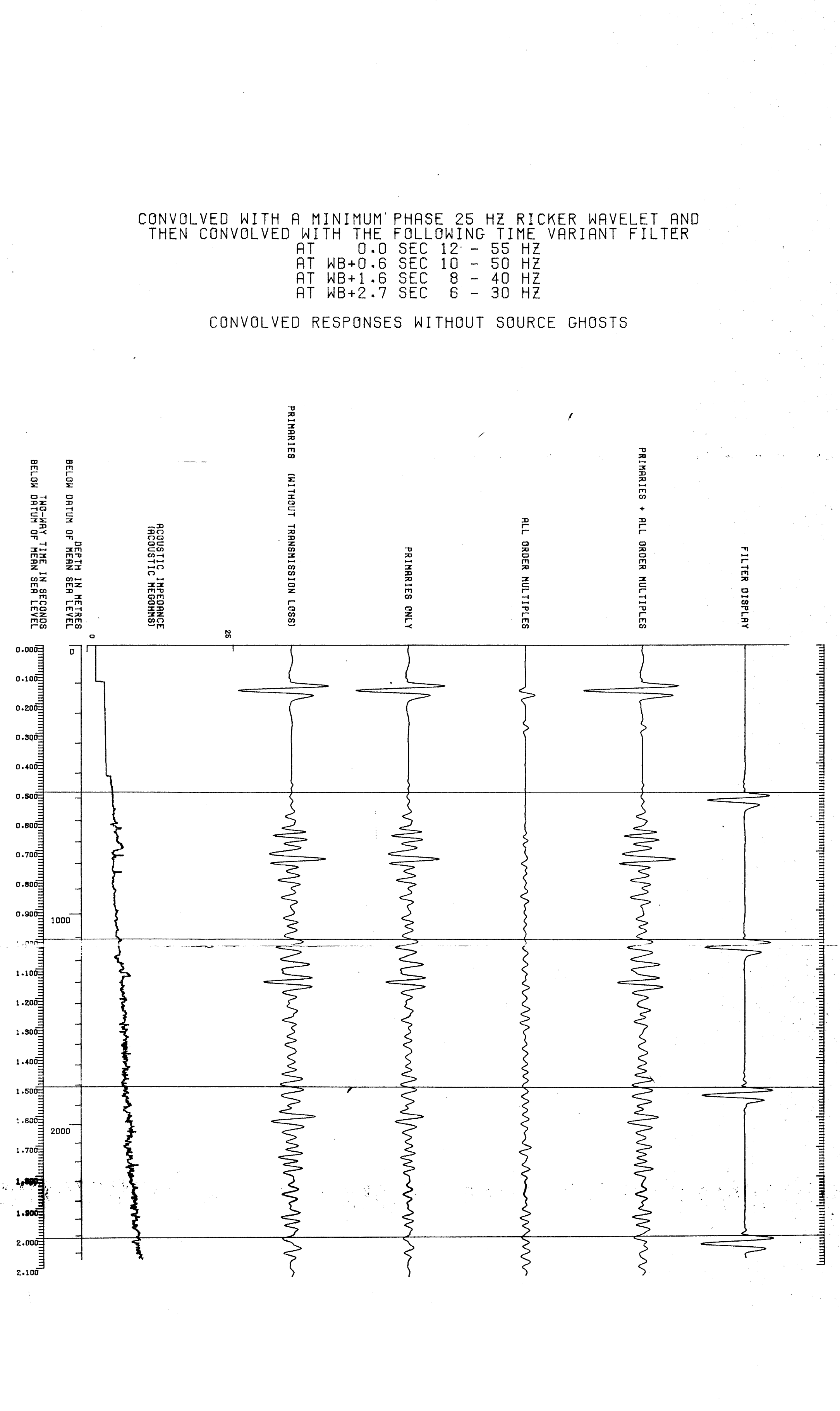
SPIKE RESPONSES WITHOUT SOURCE GHOSTS



CONVOLVED WITH A ZERO PHASE 25 HZ RICKER WAVELET AND
THEN CONVOLVED WITH THE FOLLOWING TIME VARIANT FILTER
AT 0.0 SEC 12 - 55 HZ
AT WB+0.6 SEC 10 - 50 HZ
AT WB+1.6 SEC 8 - 40 HZ
AT WB+2.7 SEC 6 - 30 HZ

CONVOLVED RESPONSES WITHOUT SOURCE GHOSTS



CONVOLVED WITH A MINIMUM PHASE 25 HZ RICKER WAVELET AND
THEN CONVOLVED WITH THE FOLLOWING TIME VARIANT FILTER
AT 0.0 SEC 12 - 55 HZ
AT WB+0.6 SEC 10 - 50 HZ
AT WB+1.6 SEC 8 - 40 HZ
AT WB+2.7 SEC 6 - 30 HZ

CONVOLVED RESPONSES WITHOUT SOURCE GHOSTS