vsfusion
A Baker Hughes - CGG Company

BASS STRAIT OIL COMPANY

WELL NAME: MOBY-1
ZERO OFFSET VSP SURVEY

ENCLOSURE 6A

VSP PROCESSING SEQUENCES DISPLAY

SHOT BY BAKER ATLAS   13 OCTOBER, 2004
PROCESSED BY VSFUSION   OCTOBER, 2004
PROJECT CODE BSOC01

ACQUISITION INFORMATION

—CABLE—

DRILL FLOOR (DF) ELEVATION	22 M ABOVE MSL
WATER DEPTH (DW)	53.9 M BELOW MSL
MINIMUM DEPTH (DF) :	90 M
MAXIMUM DEPTH (DF)	650 M

—SOURCE—

ENERGY SOURCE	SLEEVE GUN
NUMBER OF GUN	4
TOTAL GUN VOLUME	600 CU.IN
GUN DEPTH	5 M BELOW MSL
SOURCE DISTANCE FROM WELLHEAD	46.3 M
SOURCE AZIMUTH FROM WELLHEAD	193.7 DEG. N

—INSTRUMENTS—

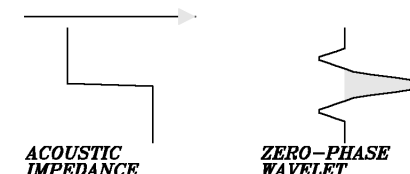|	
RECORDING SYSTEM	DSS 16CH A/D
SAMPLING INTERVAL	1 MS
RECORD LENGTH	4 SECONDS
DOWNHOLE RECEIVER TYPE	AWS 1300 GM
ELECTRIC LOGGING COMPANY	BAKER ATLAS

ZVSP PROCESSING SEQUENCE

1. CONVERT FROM SEG-Y FORMAT TO SEISLINK-X FORMAT
2. EDIT/SUM/PICK ARRIVALS
3. GEOMETRY SURVEY APPLIED
4. VELOCITY COMPUTATIONS
5. SPHERICAL DIVERGENCE-GEOMETRY SPREADING CORRECTION (T**1.7)
6. FK ANALYSIS TO DETERMINE FREQUENCY CONTENTS
7. ESTIMATION OF DOWNGOING P-WAVES :
     FIRST BREAK ALIGNED AT 200 MSEC.
8. SUBTRACTION OF DOWNGOING P-WAVES WITH 9-TRACE MEDIAN FILTER
9. ZERO BANDPASS FILTER : 5,10 - 120,180 HZ
10. SHIFT UPGOING WAVES TO TWO-WAY VERTICAL TIME BELOW DATUM
11. VSP DECONVOLUTION OF UPGOING WAVES :
     DECON OPERATOR DESIGNED USING 500 MSEC OF DOWNWAVES
     TO SHAPE WAVETRAIN TO A SPIKE
12. ZERO BANDPASS FILTER : 5,10 - 120,180 HZ
13. ENHANCEMENT OF DECONVOLVED UPWAVES USING 9-POINT MEDIAN FILTER
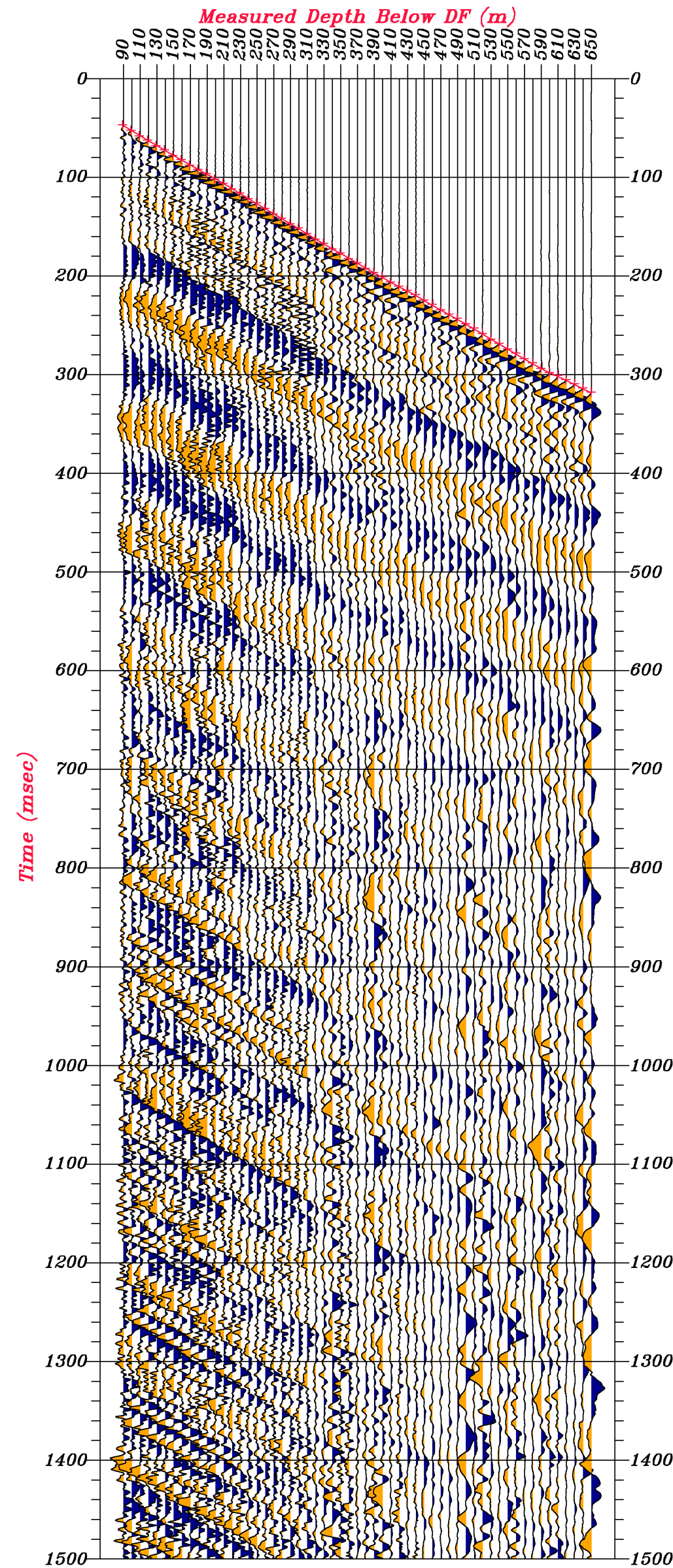14. AUTOMATIC GAIN CONTROL (AGC) 700 MSEC

COMMENTS

SEISMIC REFERENCE DATUM IS MEAN SEA LEVEL (MSL)
WATER VELOCITY = 1500 M/SEC.
TWO-WAY VERTICAL TIME IS REFERENCED BELOW DATUM OF MSL
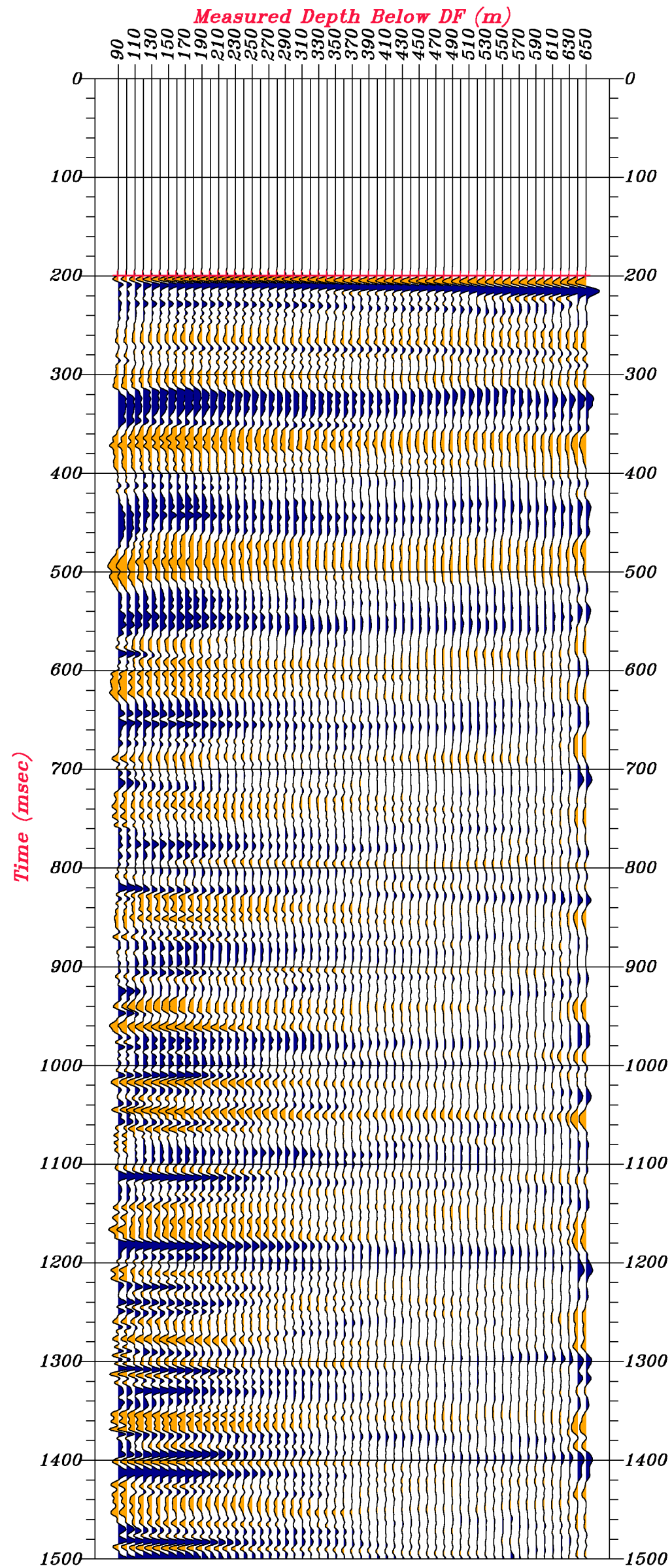TWO-WAY VERTICAL TIME SCALE IS 20 CM/SEC.

DISPLAY CONVENTION

NORMAL POLARITY

AN INCREASE IN ACOUSTIC IMPEDANCE
IS DISPLAYED AS A PEAK

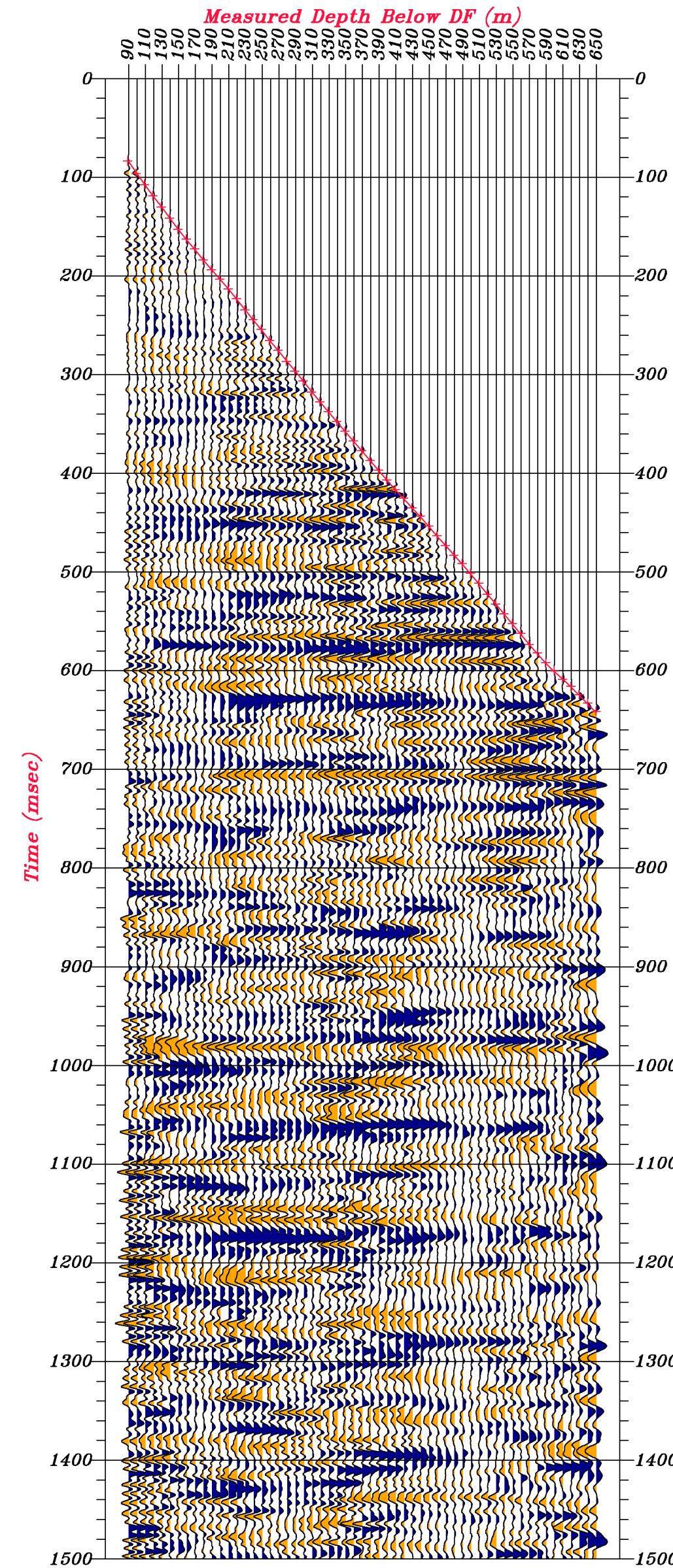ACOUSTIC IMPEDANCE   ZERO-PHASE WAVELET
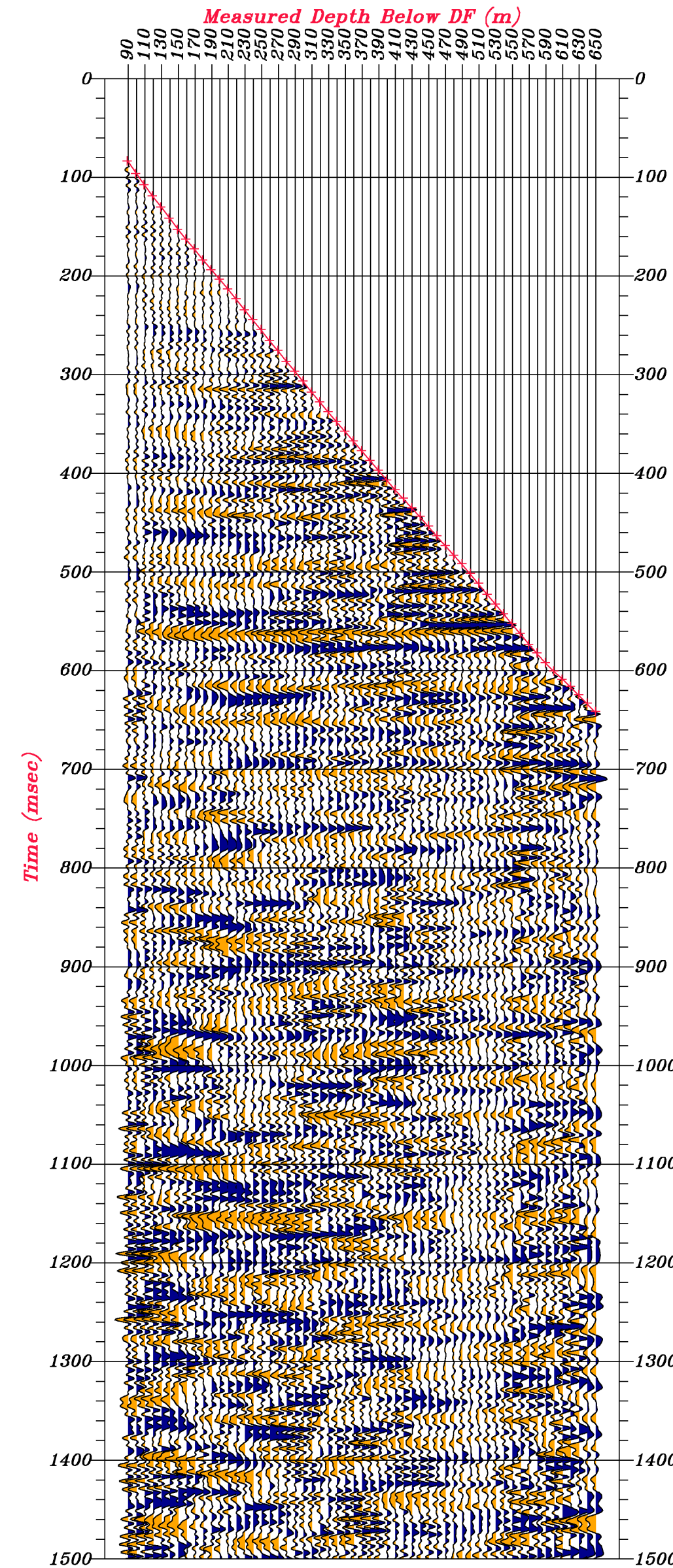

ZVSP STACKED DATA
RECORDED ONE-WAY TIME (MSEC)

DOWNGOING WAVE
TIMES ALIGNED AT 200 MSEC

UPGOING WAVE
TWO-WAY TIME BELOW MSL (MSEC)

DECONVOLVED UPGOING WAVE
TWO-WAY TIME BELOW MSL (MSEC)

ENHANCED DECONVOLVED UPGOING WAVE
TWO-WAY TIME BELOW MSL (MSEC)