M66 06200002 T.F. 31

SOUTHEAST

U.S.G.S.

OFFSHORE EAST COAST U.S.A.

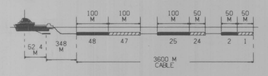
LINE 9

SHOTPOINTS 610-935

TRUE AMPLITUDE SECTION

FIELD DATA

DATE SHOT	OCT -NOV 1975
VESSEL BY DIGICON	M/V GULF SEAL
ENERGY SOURCE	AIR GUN ARRAY
ENERGY SOURCE CAPACITY	1700 CUBIC INCHES
SOURCE DEPTH	9.1 METERS
INLINE SHOT OFFSET	348 METERS
SHOTPOINT INTERVAL	100 METERS
POP INTERVAL	50 METERS
MULTIPLICITY	36 FOLD
STREAMER LENGTH	3600 METERS
STREAMER DEPTH	14 - 18 METERS
GROUP CENTER INTERVAL FARS	50 METERS
NEARS	100 METERS
RECORDING INSTRUMENTS	DFS III
GAIN CONTROL	BINARY GAIN
RECORDING FILTERS LOW	8 HZ
HIGH	124 HZ
SAMPLE RATE	2 MS
RECORD LENGTH	VARIES



DIGITAL PROCESSING

DATUM - SEA LEVEL

TRUE AMPLITUDE RECOVERY

SPHERICAL DIVERGENCE AND EXPONENTIATION WITH:
ALPHA = 4 DB/SECOND
T1 = WATER BOTTOM
T2 = 5 SECONDS

DECONVOLUTION

2 NON-NORMALIZED TIME VARYING DECONVOLUTION FILTERS WERE APPLIED. THE FILTER LENGTHS WERE 240 MS. THE DESIGN GATE START TIME WAS OFFSET AND WATER DEPTH DEPENDENT.

VELOCITY ANALYSIS

A VELOCITY ANALYSIS WAS PERFORMED EVERY 3 KM. USING 7 DEPTH POINTS AT EACH LOCATION. STACKING VELOCITY FUNCTIONS INTERPRETED ARE ANNOTATED AT THE TOP OF THE SECTION AT THE ANALYSIS LOCATIONS.

NORMAL MOVEOUT CORRECTIONS

NMO CORRECTIONS WERE MADE USING THE ABOVE INTERPRETED FUNCTIONS APPLIED AT THEIR LOCATIONS. VELOCITIES AT INTERMEDIATE LOCATIONS WERE DETERMINED BY INTERPOLATION.

CDP STACK

36 FOLD CDP STACK WITH 1/SQRT(FOLD) RECOVERY SCALING

DIGITAL FILTER

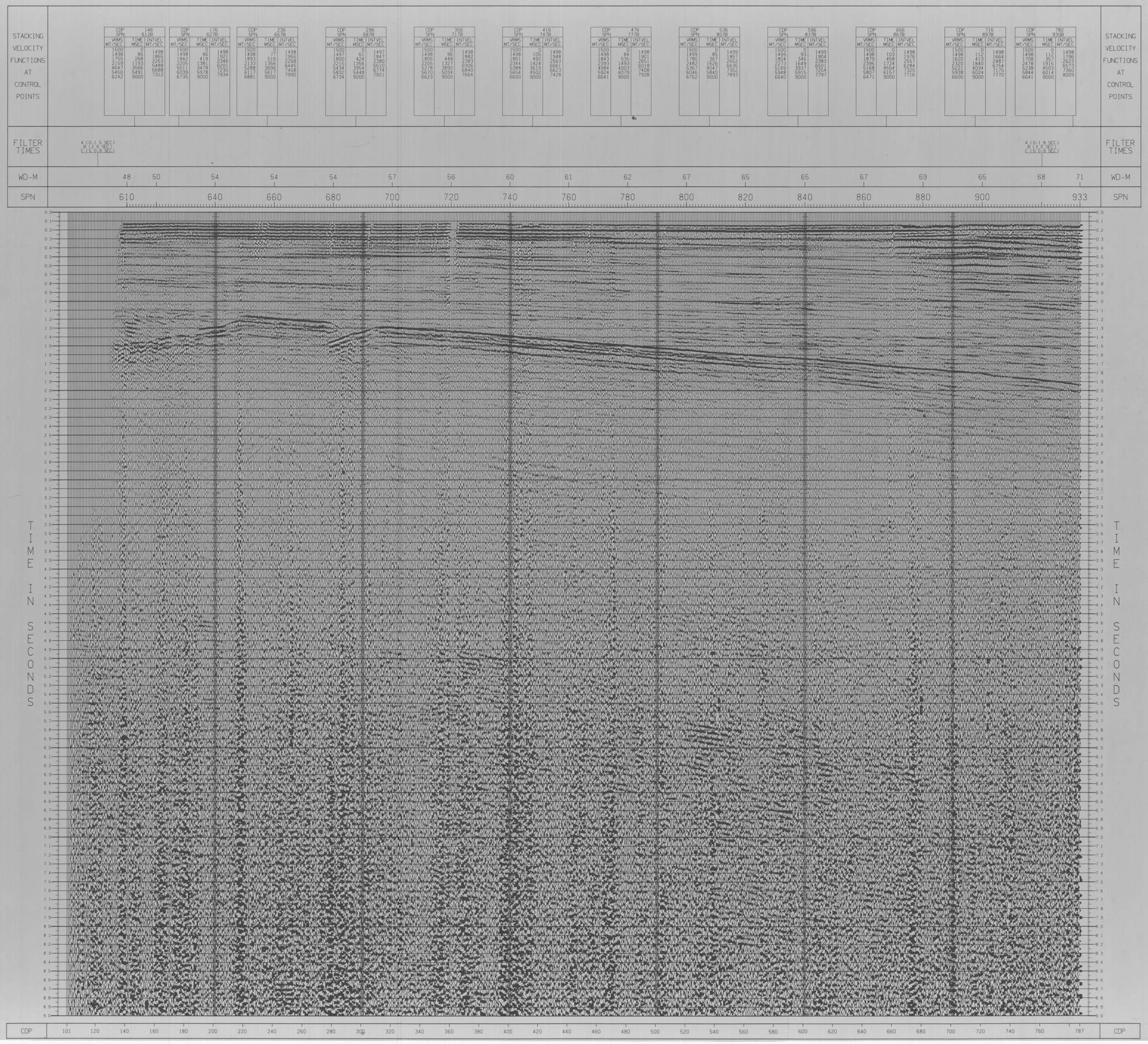
NON-NORMALIZED BANDPASS FILTERS:
FILTER A 10-35 HZ
FILTER B 5-25 HZ
FILTER C 5-20 HZ

SEE SECTION HEADER FOR SPACE-VARIANT FILTER APPLICATION TIMES.

DISPLAY

FULL-SCALE: 2.5 IN/SEC 1.21 KM/IN
HALF-SCALE: 1.25 IN/SEC 2.42 KM/IN

0 1.0MI 2.0MI

GEOPHYSICAL SERVICE INC.
(A SUBSIDIARY OF TEXAS INSTRUMENTS INC.)

PARTY 3078
CHECKED BY _____ 17 MAR 1976