02921

SOUTHEAST

U.S.G.S.

OFFSHORE EAST COAST U.S.A.

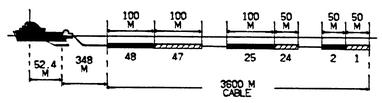
LINE A

SHOTPOINTS 83-263

DEPTH SECTION

FIELD DATA

DATE SHOT	:	SEPT-NOV 1974
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	:	346 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	:	62 HZ.
SAMPLE RATE	:	4 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 2.2 TIMES THE TWO-WAY WATER TIME. DESIGN GATE START TIME IS 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.

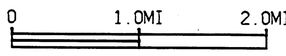
SEE SECTION HEADER FOR SPACE-VARIANT FILTER APPLICATION TIMES.

TIME VARIANT SCALING

1000 MS. GATES STARTING AT THE WATER BOTTOM

DEPTH CONVERSION DISPLAY

FULL-SCALE:	1.66 IN/KM	1.21 KM/IN
HALF-SCALE:	.83 IN/KM	2.42 KM/IN



GSI

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

PARTY 3078
CHECKED BY _____ 05 MAY 1976

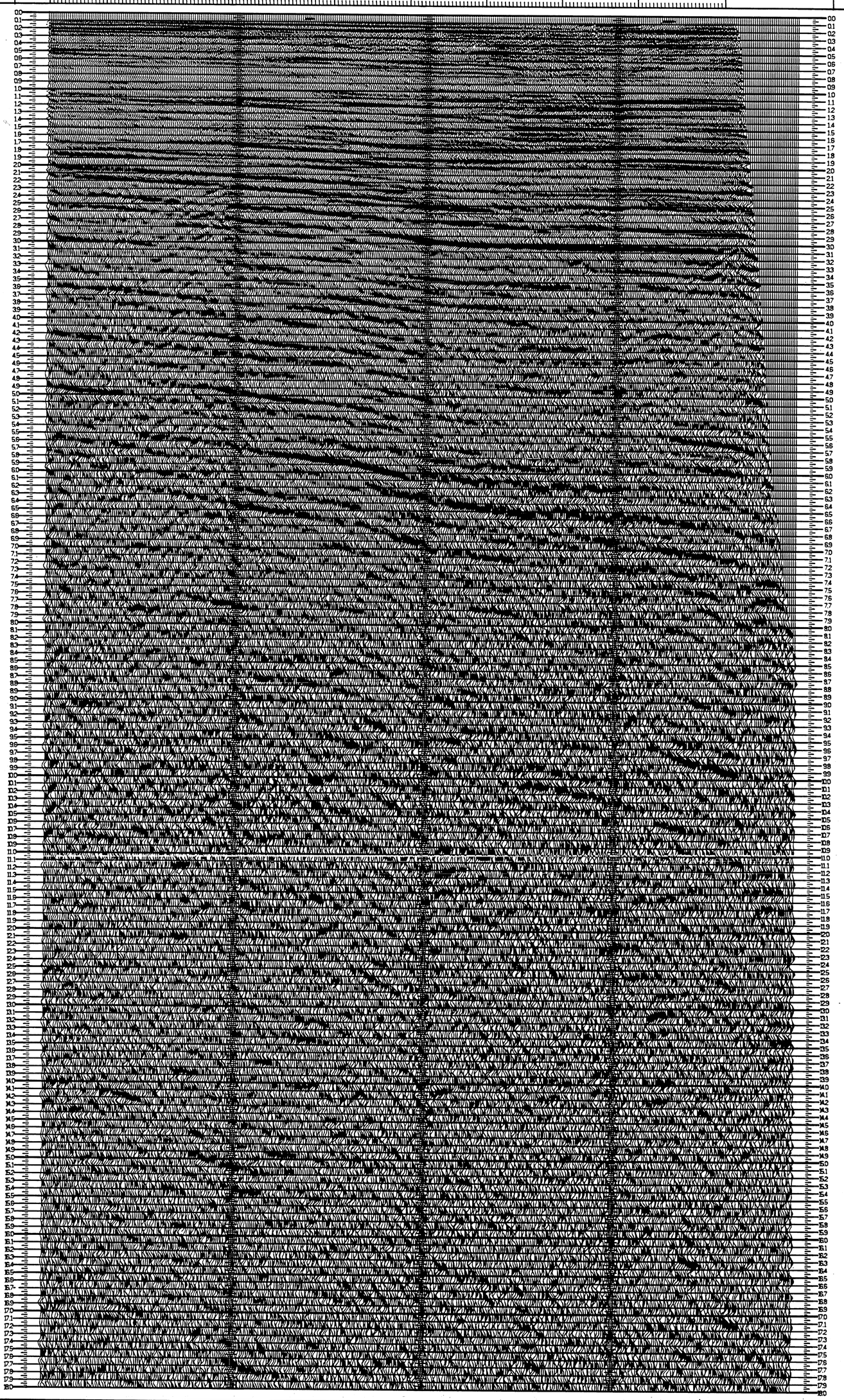
STACKING VELOCITY FUNCTIONS AT CONTROL POINTS

CDP 139 SPN 104		CDP 199 SPN 134		CDP 259 SPN 164		CDP 319 SPN 194		CDP 379 SPN 224		CDP 439 SPN 254	
DEPTH MT	INTVEL MT/SEC	DEPTH MT	INTVEL MT/SEC	DEPTH MT	INTVEL MT/SEC	DEPTH MT	INTVEL MT/SEC	DEPTH MT	INTVEL MT/SEC	DEPTH MT	INTVEL MT/SEC
0	1471	0	1471	0	1469	0	1470	0	1471	0	1472
138	2125	145	2174	109	2173	88	2205	95	2159	132	2134
464	2856	557	2954	612	3095	591	3156	653	3022	729	3033
1676	3313	1641	3460	1751	3419	1940	3572	1768	3617	1942	3633
2118	4036	2274	4134	2334	4081	2500	4196	2490	4134	2674	4130
4576	5307	4643	5408	4974	5409	5188	5595	4999	5569	5503	5566
12222	6184	12548	6273	12557	6217	12874	6292	12819	6304	12332	6380
22394		22753		22546		23026		22886		22651	

FILTER TIMES: A (0-1.1 SEC) B (1.6 SEC) C (2.1-9 SEC); A (0-1.2 SEC) B (1.8 SEC) C (2.3-9 SEC)

WD-M: 16 19 21 23 24 26 26 29 31 29

SPN: 85 120 140 160 180 200 220 240 263



CDP: 101 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 496