SOUTHEAST

U.S.G.S.

OFFSHORE EAST COAST U.S.A.

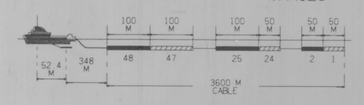
LINE 9

SHOTPOINTS 101-300

SCALED 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
SEE SECTION HEADER FOR SPACE-VARIANT FILTER APPLICATION TIMES.

TIME VARIANT SCALING

1000 MS. GATES STARTING AT THE WATER BOTTOM

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 _____ 19 MAR 1976

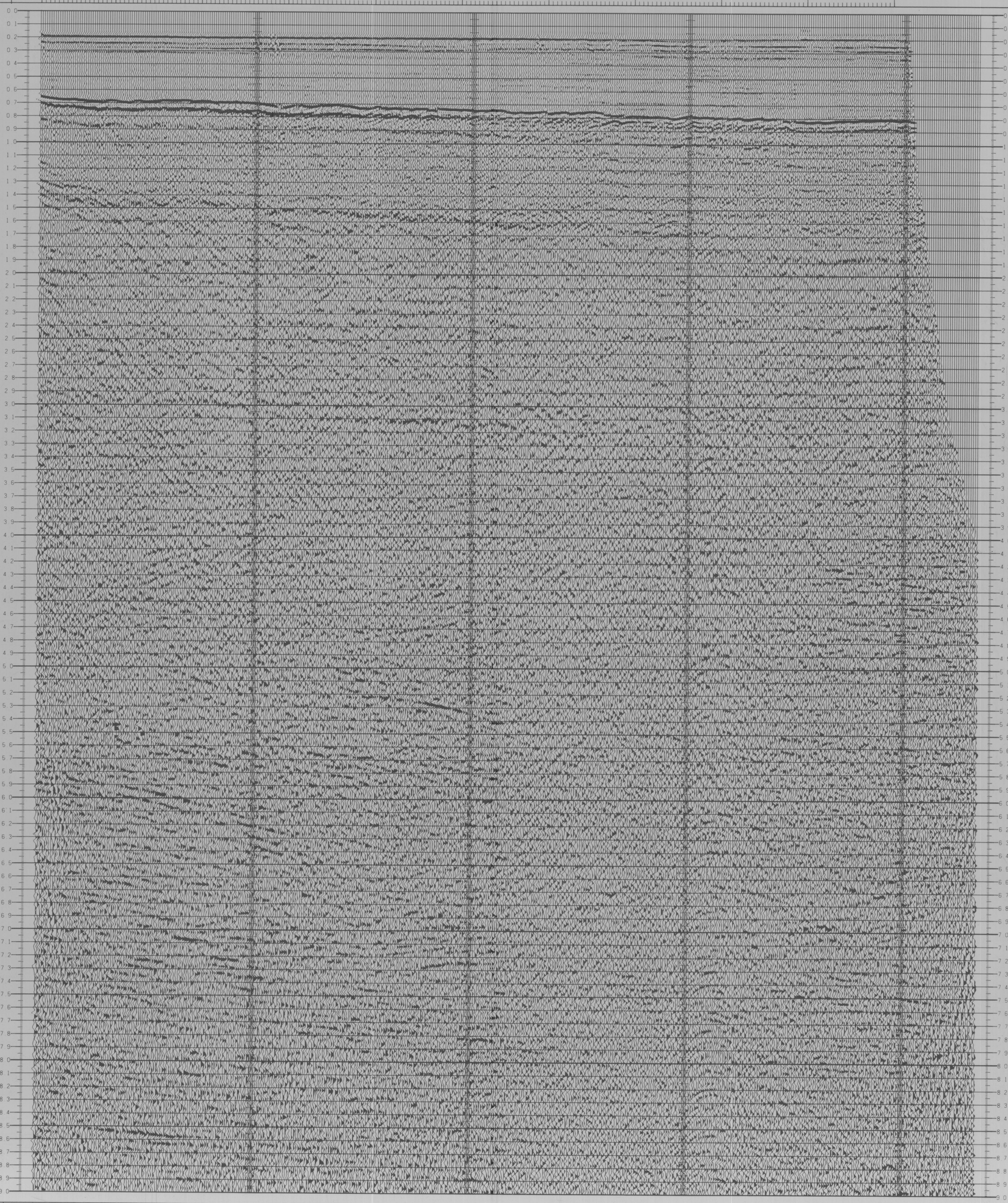
STACKING VELOCITY FUNCTIONS AT CONTROL POINTS

CDP SPN	VRMS MT/SEC	TIME MSEC	INTVEL MT/SEC
158 / 132B	1500	0	
	1499	65	1499
	1803	271	1889
	2072	711	2222
	3212	2228	3625
	5913	5579	7166
	6794	9000	8026
218 / 162B	1500	0	
	1492	77	1492
	1818	280	1928
	2199	850	2364
	3839	2785	4369
	5579	5453	6945
	6647	9000	8017
278 / 192B	1500	0	
	1497	85	1497
	1830	295	1949
	2050	794	2170
	4295	3356	4782
	5391	5240	6927
	6582	9000	7950
338 / 222B	1500	0	
	1499	73	1499
	1816	339	1894
	2058	794	2222
	3978	2681	4550
	6274	5995	7643
	6909	9000	8028
398 / 252B	1500	0	
	1498	57	1498
	1836	321	1902
	2033	800	2155
	3548	2652	4030
	5604	5351	7064
	6647	9000	7933
458 / 282B	1500	0	
	1498	68	1498
	1735	281	1805
	2034	822	2174
	4093	3087	4619
	5732	5322	7423
	6799	9000	8098
518 / NULL	1500	0	
	1498	68	1498
	1834	349	1907
	2097	946	2237
	4568	3521	5189
	5636	5525	7136
	6647	9000	7996

FILTER TIMES: A (0-1.1 SEC) B (2-9 SEC); A (0-1.2 SEC) B (2.2-9 SEC)

WD-M: 27 27 29 31 33 35 37 37 38 38 38

SPN: 103 120 140 160 180 200 220 240 260 280 300



CDP: 101 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 535