SOUTHEAST

U.S.G.S.

OFFSHORE EAST COAST U.S.A.

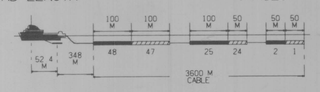
LINE 9

SHOTPOINTS 890-1135

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 _____ 22 MAR 1976

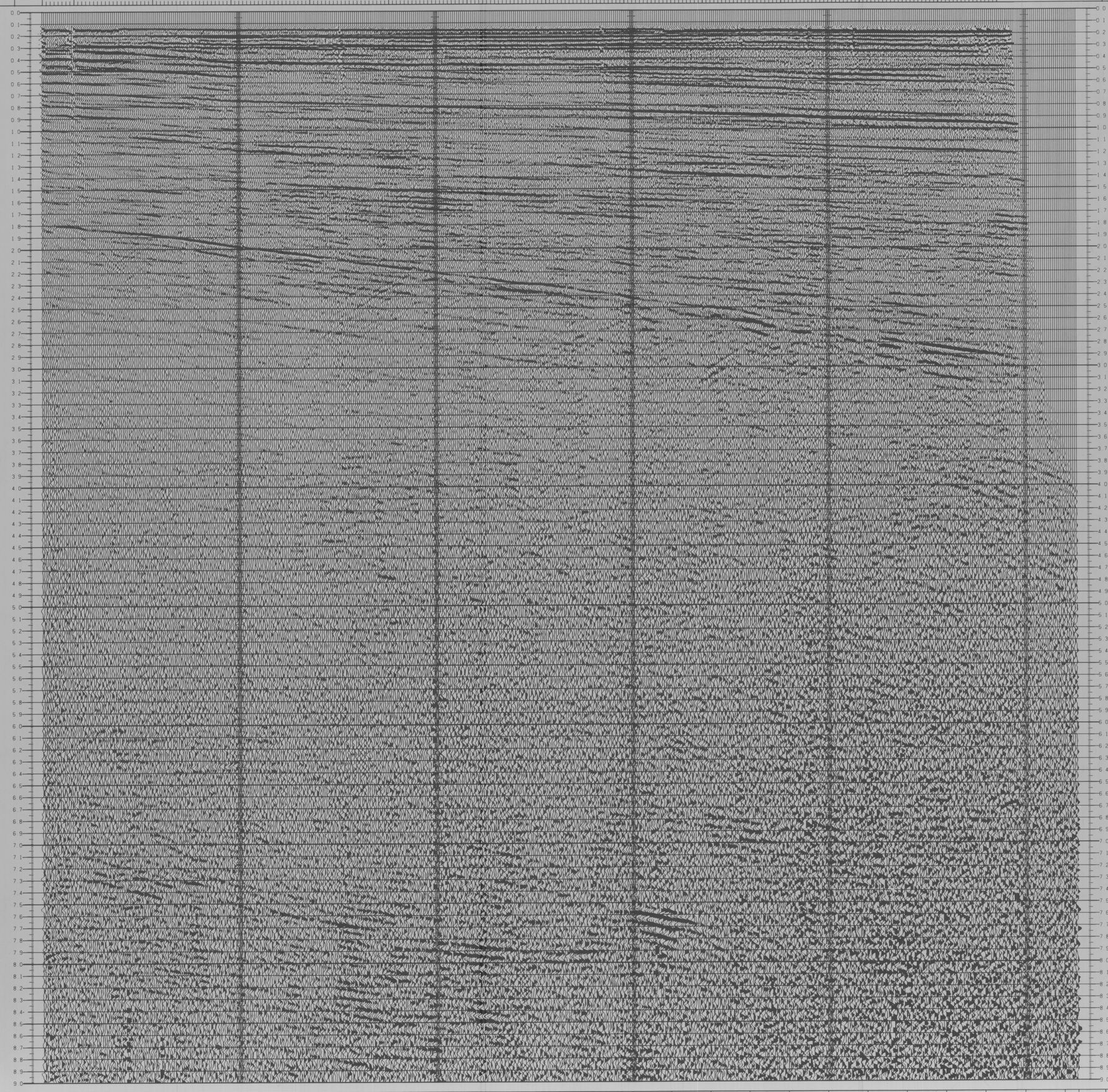
STACKING VELOCITY FUNCTIONS AT CONTROL POINTS

CDP SPN	VRMS MT/SEC	TIME MSEC	INTVEL MT/SEC
108 / 896B	1500	0	1498
	1498	93	1684
	1646	439	2515
	2335	1825	6718
	5216	4041	7182
	5936	6027	7968
	6676	9000	
176 / 930B	1500	0	1498
	1498	93	1762
	1698	364	2627
	2475	1890	6556
	5235	4473	7307
	5830	5991	8015
	6641	9000	
236 / 960B	1500	0	1498
	1498	96	1895
	1817	451	2619
	2463	2034	6742
	5039	3994	7432
	6030	6317	8092
	6711	9000	
296 / 990B	1500	0	1498
	1498	104	1975
	1872	438	2816
	2632	1941	6735
	5121	3899	7733
	6223	6213	8080
	6852	9000	
356 / 1020B	1500	0	1498
	1498	94	1992
	1908	499	2982
	2779	2247	6335
	4678	3991	7691
	6000	6426	8053
	6652	9000	
416 / 1050B	1500	0	1499
	1499	93	1855
	1733	495	2887
	2698	2404	6493
	4852	4504	7292
	5770	6714	7971
	6401	9000	
476 / 1080B	1500	0	1500
	1499	130	1862
	1776	510	2988
	2787	2547	6549
	4763	4429	7164
	5574	6263	7885
	6366	9000	
536 / 1110B	1500	0	1498
	1498	112	2049
	1955	582	3092
	2890	2770	6489
	4530	4332	6982
	5471	6500	7580
	6130	9000	
596 / NULL	1500	0	1498
	1498	113	2068
	1972	595	3345
	3113	2902	6625
	4568	4311	6915
	5516	6682	7793
	6183	9000	

FILTER TIMES: A (0-1.8 SEC) B (3.0 SEC) C (5.0-9 SEC)

WD-M: 69 69 69 73 73 78 78 77 77 79 82 84 83 82

SPN: 892 920 940 960 980 1000 1020 1040 1060 1080 1100 1120 1135



CDP: 101 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 627