02923

SOUTHEAST

U.S.G.S.

OFFSHORE EAST COAST U.S.A.

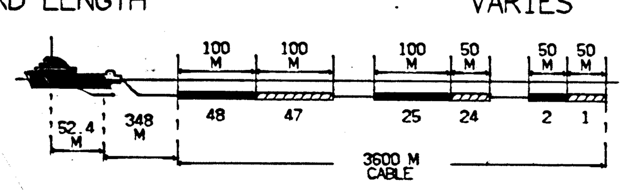
LINE IPOD

SHOTPOINTS 101-310

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	7-28 HZ.
FILTER C	5-25 HZ.
FILTER D	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

0 1.0MI 2.0MI

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

PARTY 3078
CHECKED BY ______________________ 07 MAY 1976

STACKING VELOCITY FUNCTIONS AT CONTROL POINTS

CDP 139, SPN 100

DEPTH MT	INTVEL MT/SEC
0	1473
82	2168
779	2944
1845	3705
2706	4210
5823	6308
23408	

CDP 199, SPN 130

DEPTH MT	INTVEL MT/SEC
0	1473
65	2253
838	2853
1916	3716
2760	4320
6001	6360
23537	

CDP 259, SPN 160

DEPTH MT	INTVEL MT/SEC
0	1476
79	2197
872	2754
1937	3757
2777	4410
6108	6401
23517	

CDP 319, SPN 190

DEPTH MT	INTVEL MT/SEC
0	1473
65	2167
817	2785
1986	3810
2916	4505
6407	6432
23579	

CDP 379, SPN 220

DEPTH MT	INTVEL MT/SEC
0	1472
91	2147
852	2733
2008	3858
2839	4616
6887	6452
23457	

CDP 439, SPN 250

DEPTH MT	INTVEL MT/SEC
0	1472
75	2232
932	2866
2128	3902
3185	4708
7206	6476
23544	

CDP 499, SPN 280

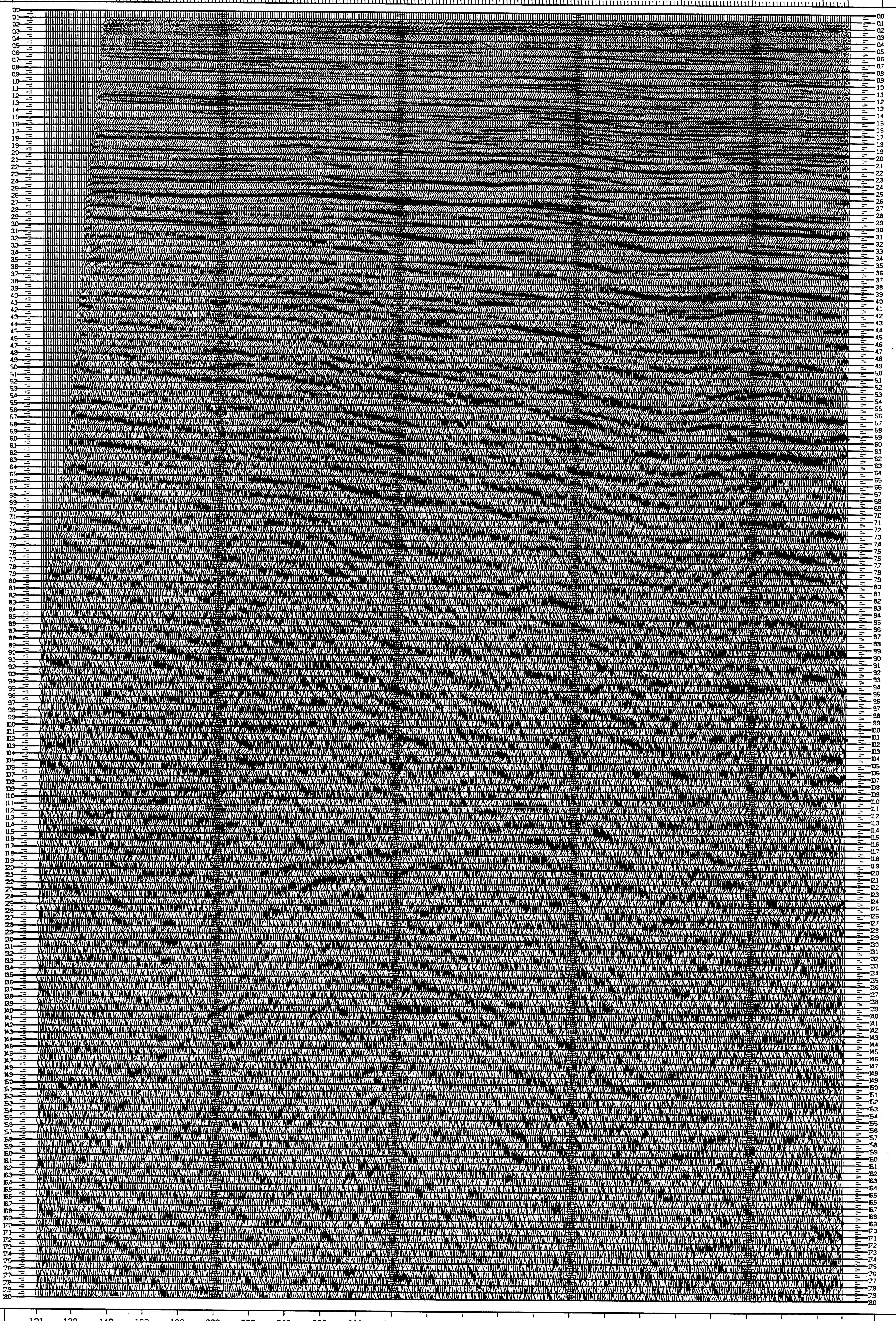
DEPTH MT	INTVEL MT/SEC
0	1473
92	2319
1199	2929
2407	3908
3370	4808
7543	6491
23338	

FILTER TIMES

A (0-1.2 SEC)
B (1.8 SEC)
C (2.3 SEC)
D (4.5-9 SEC)

A (0-1.5 SEC)
B (2.0 SEC)
C (2.5 SEC)
D (4.5-9 SEC)

WD-M	31	33	29	33	33	33	35	38	40	37	38
SPN	101	120	140	160	180	200	220	240	260	280	307



DEPTH IN KM

CDP 101 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 554 CDP