02934

SOUTHEAST

U.S.G.S.

OFFSHORE EAST COAST U.S.A.

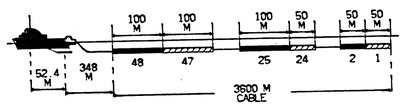
LINE IPOD

SHOTPOINTS 4300-4450

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	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	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 = WB + 5.5 SECONDS

DECONVOLUTION

A SINGLE 320 MS. WHITENING DECONVOLUTION FILTER WAS APPLIED. THE FILTER DESIGN GATE IS 4 SECONDS LENGTH STARTING AT THE WATER BOTTOM

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 :
10-35 AT BASEMENT 5-20 AT BASEMENT+1.0 SEC

TIME VARIANT SCALING

1000 MS. GATES STARTING AT THE WATER BOTTOM

DIP-FILTERING

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

STACKING VELOCITY FUNCTIONS AT CONTROL POINTS

CDP 139 / SPN 4299	
DEPTH MT	INTVEL MT/SEC
4500	1500
5302	1609
5567	1693
5795	1925
6343	2390
6819	5401
8167	6800
17907	

CDP 199 / SPN 4329	
DEPTH MT	INTVEL MT/SEC
4500	1507
5316	1641
5566	1710
5842	1925
6342	2307
6810	5408
8159	6804
17906	

CDP 259 / SPN 4359	
DEPTH MT	INTVEL MT/SEC
4500	1507
5327	1611
5592	1693
5823	1936
6360	2270
6816	5408
8157	6800
17839	

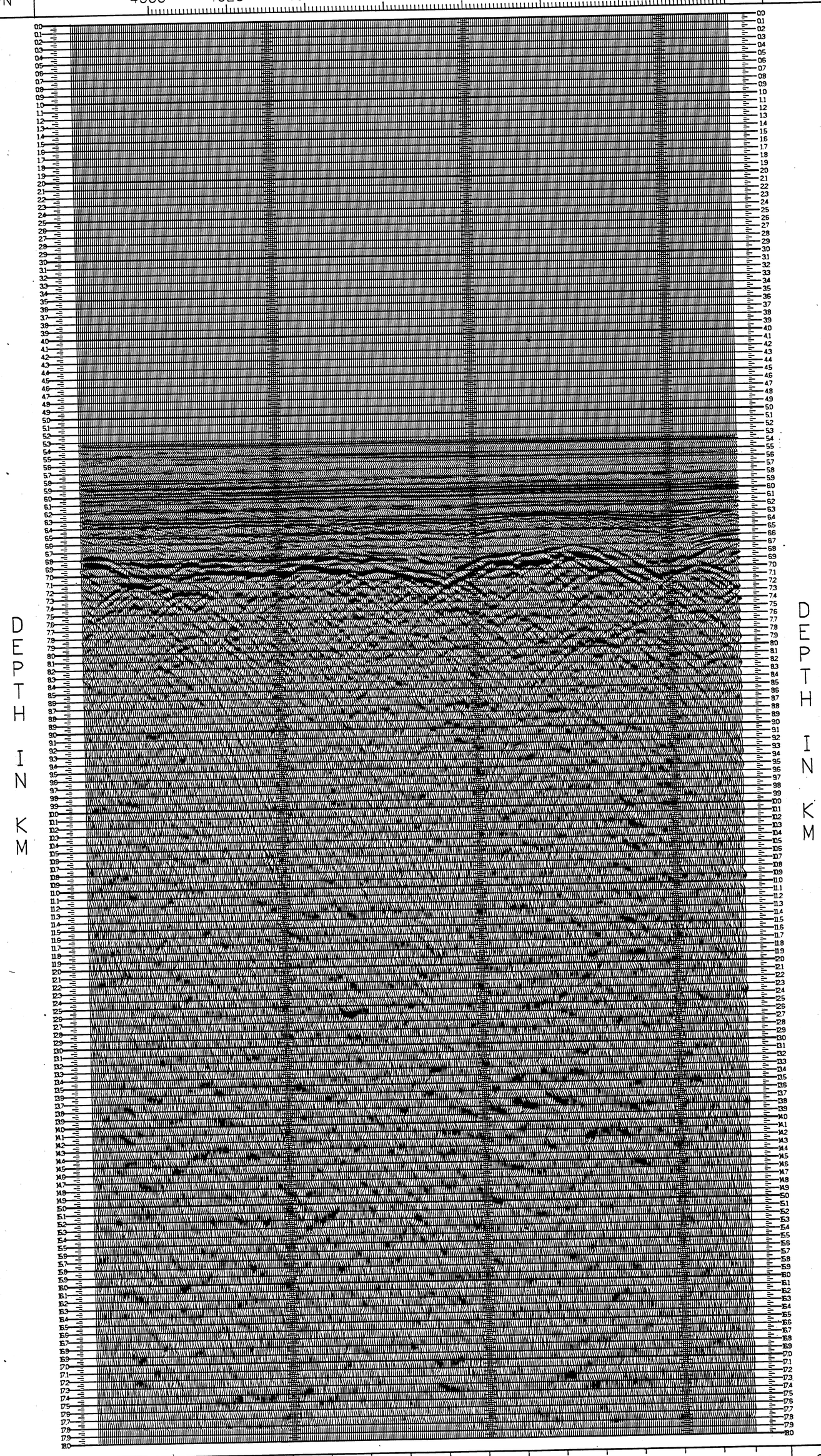
CDP 319 / SPN 4389	
DEPTH MT	INTVEL MT/SEC
4500	1507
5319	1613
5631	1701
5823	1923
6283	2217
6702	5398
8049	6806
18070	

CDP 379 / SPN 4419	
DEPTH MT	INTVEL MT/SEC
4500	1507
5316	1619
5613	1747
5822	1908
6321	2385
6840	5401
8203	6801
17888	

STACKING VELOCITY FUNCTIONS AT CONTROL POINTS

WD-M: 5314 5316 5319 5322 5324 5327 5329 5332

SPN: 4300 4320 4340 4360 4380 4400 4420 4440



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