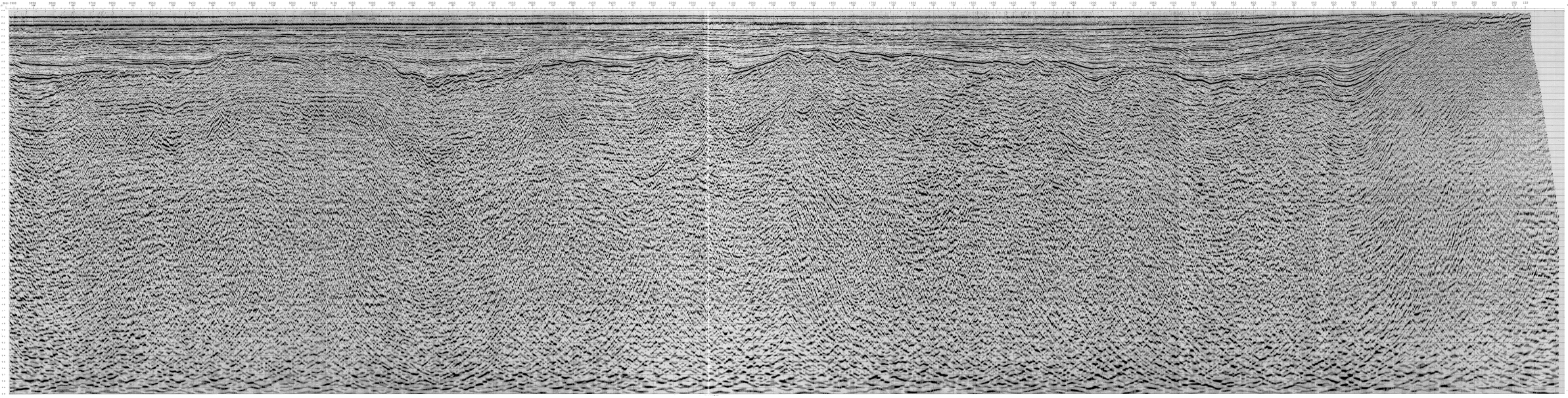
WCS-107

S.P.30J122

1X72OOY WISR RGC TVF
FINITE DIFFERENCE MIGRATION




WESTERN GEOPHYSICAL COMPANY

OFFSHORE ALASKA

WCS-107

SHOT BY WESTERN PARTY NO. N-A-WESTERN MICRONAVA - SEP.1981
PROCESSED BY WESTERN'S DENVER CENTER - MAR.1982
SEISMOGRAPH SERVICE CORP.
MID-OCEAN CONT. EXT.

RECORDING DATA

SOURCE

| | |
|---|---|
| ENERGY SOURCE | AIRGUNS |
| NUMBER OF SOURCES | 4 |
| SOURCE DEPTH | 40 FEET |
| FIRING INTERVAL | 82 FEET |
| SHOT POINT INTERVAL | 82 FEET |
| SHOT POINT LOCATION | RECEIVER |
| SOURCE ARRAY DESIGNATION - WATCHMAN | SOURCE NO. 1A, 500Z-PSI |
| NOMINAL GUN ARRAY SIZE | 1000 CU. IN. - 5000 PSI |

INSTRUMENTS

| | |
|---|---|
| SYSTEM | DIGITAL |
| AMPLIFIER | MDFC FLOATING POINT |
| FILTERS | 5-70 HZ |
| SAMPLE INTERVAL | 4 MILLISECONDS |
| RECORD LENGTH | 8 SECONDS |
| FIELD FORMAT | SEGD REV 0 - SEG-B GAPPED |

CABLE

| | |
|---|---|
| TYPE CABLE | SOLID/MARK |
| CABLE LENGTH | 13,946 FEET |
| DEPTH | 40 FEET |
| GROUP INTERVAL | 82.5 FEET |
| GROUP INTERVAL CHANNELS 1-240 | 82.5 FEET |
| NUMBER OF GEOPHONES PER GROUP | 24 |
| GEOPHONE ARRAY DESIGNATION | 24 - 1M |
| GROUP INTERVALS CHANNELS 1-240 | 82.5 FEET |
| GROUP INTERVALS CHANNELS 241-264 | 165 FEET |

PROCESSING SEQUENCE AND PARAMETERS

A. DEMULTIPLEX
PROCESSING SAMPLING INTERVAL 4 MSEC

B. DESIGNATURE
C. DECONVOLVED BEFORE STACK
OPERATOR LENGTH MINIMUM PHASE INVERSE FILTER
KOMBA LENGTH 1000 MS
PREDICTION DISTANCE 200 MS
GAP 24 TRACE
OPERATOR WINDOW
PREDICTION DISTANCE 4
PREWHITENING
D. COHERENT NOISE FILTER

E. DECONVOLVED AFTER STACK
OPERATOR LENGTH MINIMUM PHASE INVERSE FILTER
GAP 8 TRACE
OPERATOR WINDOW
PREDICTION DISTANCE 160

F. MIGRATION
G. FINITE DIFFERENCE

H. TIME VARIANT FILTER

| | | | INCL. | H.C. |
|---|---|---|---|---|
| 0.00 | 80 | 5 | 10 | 80 |
| 4.00 | 80 | 5 | 10 | 80 |
| 5.00 | 60 | 5 | 10 | 60 |
| 6.00 | 40 | 5 | 10 | 40 |
| 7.00 | 30 | 5 | 10 | 30 |
| 8.00 | 20 | 5 | 10 | 20 |

TIMES ARE TIMES AFTER WATER BOTTOM PRE STACK TIME

LEGEND

INTERPRETATIONS
WATER BOTTOM

POLARITY CONVENTION
RECORDING - COMPRESSION FILM NEGATIVE NUMBER
MIGRATION - COMPRESSION FILM NEGATIVE NUMBER
STACK - COMPRESSION FILM PRINT (RECORDING BLACK)

NOTATIONS
ALL TIMES IN MILLISECONDS
ALASKA REG. NUMBER 0988
DATA DIGITIZED AT 4 MS
DATA CORRECTED TO SEA LEVEL