Open-File Report 88-386

PLATE 2

GLIMPCE 1986

UNITED STATES GEOLOGICAL SURVEY

&

GEOLOGICAL SURVEY OF CANADA

LAKE SUPERIOR
LINE: B
FINAL STACK

SOUTHEAST

PROCESSED BY: U.S.G.S.
BRANCH OF PETROLEUM GEOLOGY
GEOPHYSICS GROUP

RECORDING PARAMETERS

RECORDED BY:	G.S.I.	DATE RECORDED:	6/7-SEPT-1986
VESSEL:	CAPT. FRED J. RONICH	SHIP'S #	9000
PRIMARY NAV.:	DECNAV	SECONDARY NAV.:	DECNAV C
			RANGE/RANGE
INSTRUMENT TYPE:	GPS/SONAR/GYRO	SAMPLE RATE:	4.0 MS
# OF GUN ARRAYS:	2 SUB ARRAYS	GUN OPERATING DEPTH:	4 METERS
ARRAY WIDTH:	60 METERS	# OF GUNS:	6
TOT. GUN VOL.:	7700 CU. INCHES	TYPE GUN:	PGC
TAPE FORMAT:	SEG-B 1600 BPI	FIRING DELAY:	55.0 MS
NO. OF CHANNELS:	120	SOURCE INTERVAL:	50.0 METERS
RECORD LENGTH:	20 SECONDS	TRACE INTERVAL:	25.0 METERS
RECORD FILTER:	6.3 HZ	CABLE TYPE:	1237 COLED
LOCUT:	18 DB/OCTAVE	POST TOWING:	NOT/SOUGHT
HICUT:	64 DB/OCTAVE	NEAR TRACE #:	NOT/LATEST
SLOPE:	72 DB/OCTAVE	NEAR TRACE #:	120
60 HZ NOTCH:	OUT	FOLD:	30

SPREAD CONFIGURATION:

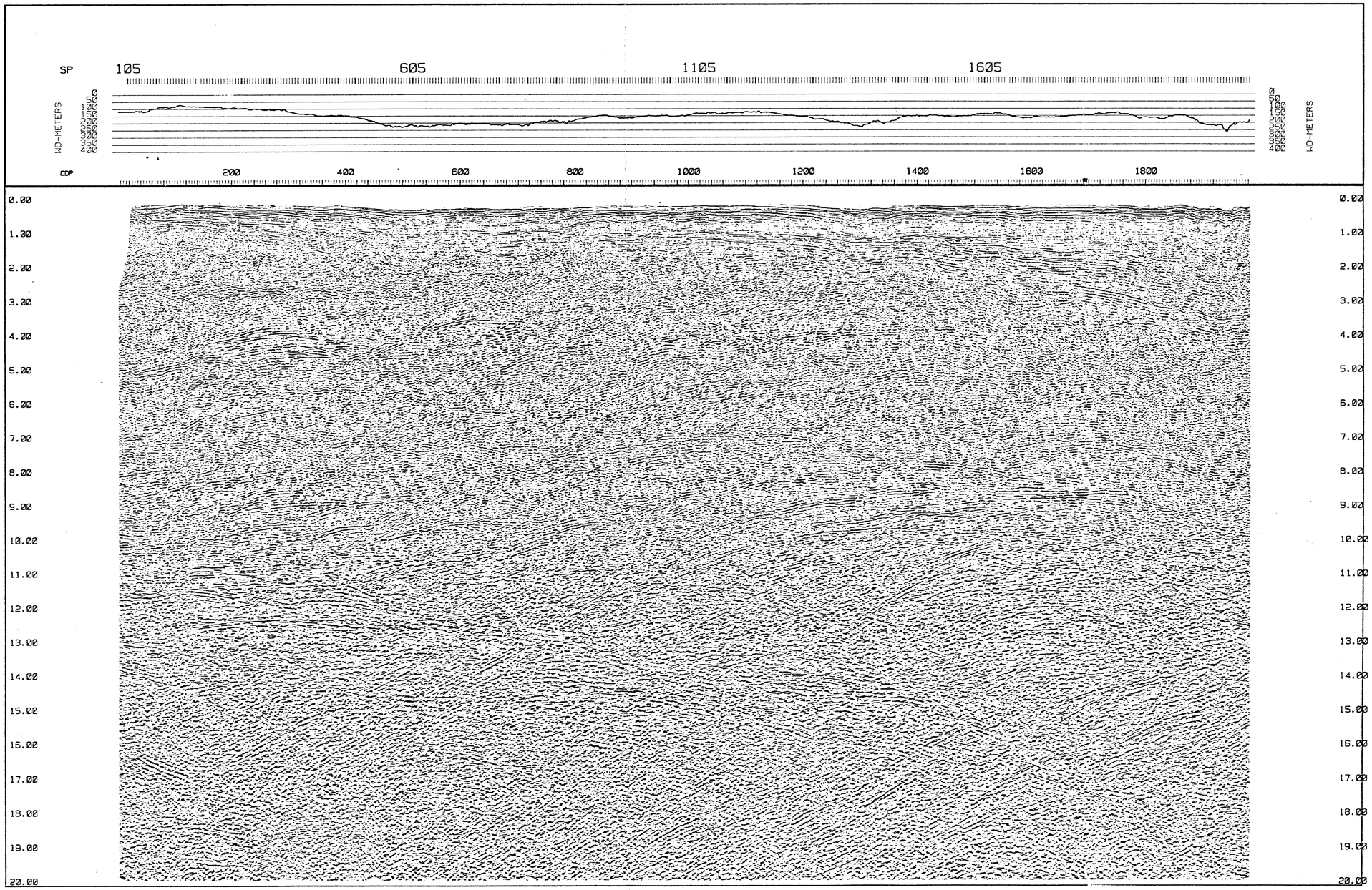
TR 1 → ← 2975 M → ← 236 M → TR 120 → SOURCE → ← 73 M → SHIP ANTENNA

PROCESSING SEQUENCE

1 DEMULTIPLEX
2 RECORDING GAIN REMOVAL
3 GEOMETRY DEFINITION
4 TRACE EDITING
5 RESAMPLE TO 8.0 MS
6 F-K FILTERING IN SHOT DOMAIN
  RANGE: 4 - 45 HZ
  FILTER LENGTH: 31 POINTS
  FILTER WIDTH: 13 TRACES
  MOVEOUT RANGE: +/- 5 MS/TRACE
7 CDP SORT 30 FOLD
8,18 AUTOMATIC GAIN CONTROL
  GATE LENGTH: 1000 MS
9,11 VELOCITY ANALYSIS
10 PRELIMINARY STACK
12 MULTIPLE SUPPRESSION IN CDP DOMAIN
  CORR. VEL.: 1700 M/S
  APPL. GATE: 300 - 3000 MS
13 NORMAL MOVEOUT CORRECTION
14 FIRST BREAK NOISE SUPPRESSION (MUTE)
15 PRE-STACK DECONVOLUTION
  TYPE: SPIKING
  OPERATOR LENGTH: 59 POINTS
  TIME WINDOW: 0 - 4000
  TYPE: SPIKING
  OPERATOR LENGTH: 59 POINTS
  TIME WINDOW: 3000 - 12000
  TYPE: SPIKING
  OPERATOR LENGTH: 59 POINTS
  TIME WINDOW: 10000 - 20000
16 STACK 30 FOLD
17 BANDPASS FILTER

TIME:	BANDPASS:
0 - 2000 MS	4/8 - 30/36
5000 - 8000 MS	4/8 - 28/31
10000 - 20000 MS	3/5 - 25/30

19 POST-STACK DECONVOLUTION
  TYPE: 2ND ZERO CROSS.
  OPERATOR LENGTH: 53 POINTS
  TIME WINDOW: 0 - 5000
  TYPE: 2ND ZERO CROSS.
  OPERATOR LENGTH: 53 POINTS
  TIME WINDOW: 5000 - 20000
20 VERTICAL SUM (4 TO 1)
21 AUTOMATIC GAIN CONTROL
  GATE LENGTH: 2500 MS
22 POST STACK AMPLITUDE MODULATION
  TWO-DIMENSIONAL SMOOTHING OVER
  3 TRACES HORIZONTALLY AND 3 SAMPLES
  VERTICALLY
23 DISPLAY
  TRACES PER INCH: 120
  VERTICAL SCALE: .6 INCHES / SEC
  DISPLAY DATE: APRIL 4, 1988



Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey