DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Open-File Report 88-386

PLATE 5

GLIMPCE 1986

UNITED STATES GEOLOGICAL SURVEY

&

GEOLOGICAL SURVEY OF CANADA

LAKE SUPERIOR
LINE: G
FINAL STACK

SOUTHEAST

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

RECORDING PARAMETERS

RECORDED BY:	G.S.I.	DATE RECORDED:	11-SEPT-1986
VESSEL:	M/V FRED J. AGNICH	PARTY #:	2995
PRIMARY NAV.:	GEONAV SAT/SONAR/GYRO	SECONDARY NAV.:	LORAN C RANGE/RANGE
INSTRUMENT TYPE:	DFS-V	SAMPLE RATE:	4.0 MS
# OF GUN ARRAYS:	6 SUB ARRAYS	GUN OPERATING DEPTH:	6 METERS
ARRAY WIDTH:	80 METERS	# OF GUNS:	60
TOT. GUN VOL.:	7780 CU. INCHES	TYPE GAIN:	PGC
TAPE FORMAT:	SEG-B 1600 BPI	FIRING DELAY:	51.2 MS
NO. OF CHANNELS:	120	SOURCE INTERVAL:	62.5 METERS
RECORD LENGTH:	20 SECONDS	TRACE INTERVAL:	25.0 METERS
RECORD FILTER:		CABLE TYPE:	120T COLD
LOCUT:	5.3 HZ.	POSITIONING:	SAT/SONAR
SLOPE:	18 DB/OCTAVE	LINE STARTS AT:	SOUTHEAST
HICUT:	64 HZ.	NEAR TRACE #:	120
SLOPE:	72 DB/OCTAVE		
60 HZ NOTCH:	OUT	FOLD:	24

SPREAD CONFIGURATION:

TR 1 ——— TR 120 SOURCE * SHIP ANTENNA <>

<——— 2975 M ———>

<- 232 M ->

<—— 73 M ——>

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 24 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 - 2000 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 24 FOLD
17 BANDPASS FILTER

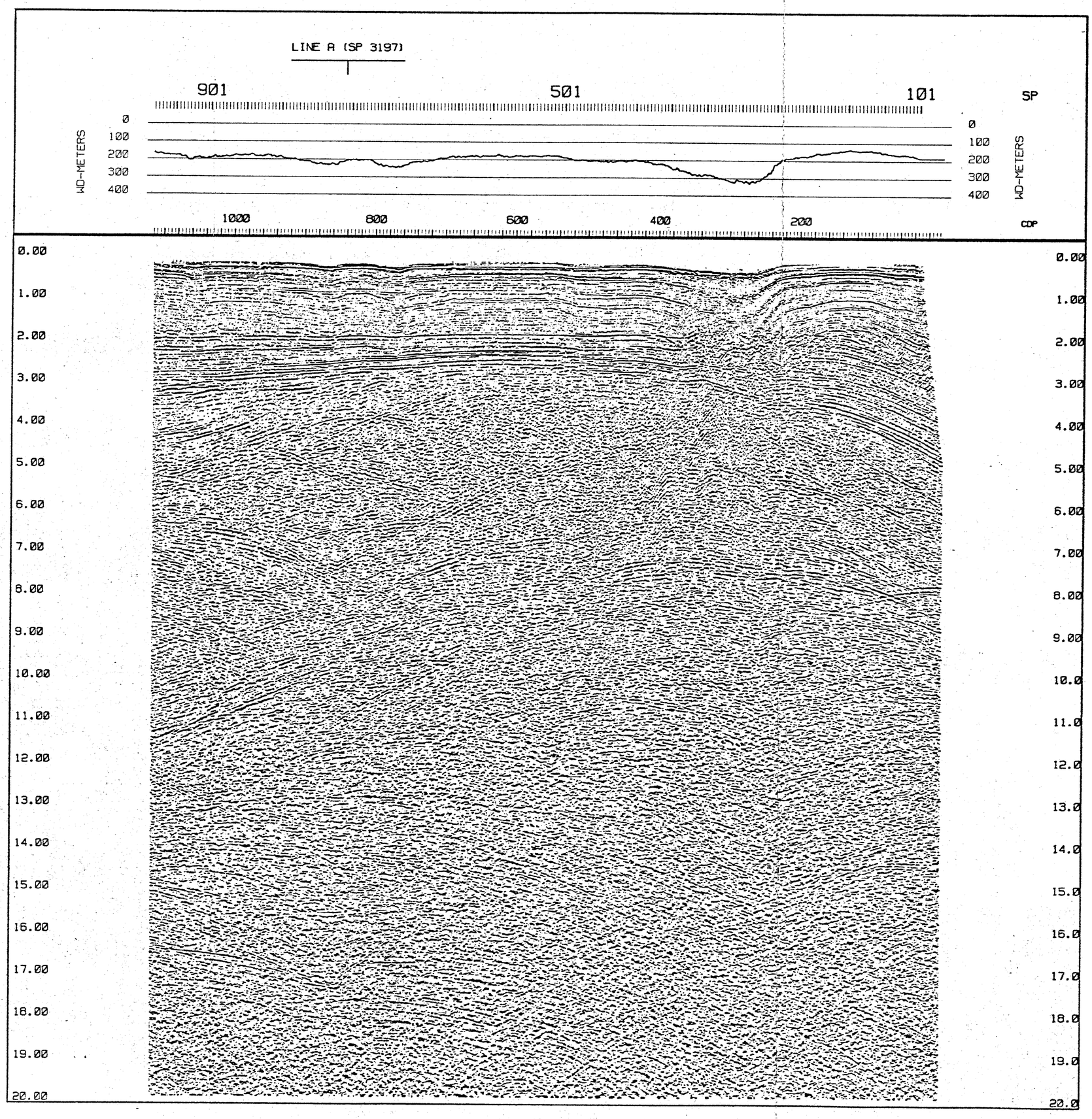
TIME:	BANDPASS:
0 - 2000 MS	4/8 - 30/36
5000 - 8000 MS	4/8 - 28/31
12000 - 20000 MS	3/5 - 25/30

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: 6000 - 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: 100
- VERTICAL SCALE: .6 INCHES / SEC
- DISPLAY DATE: FEBRUARY 10, 1988



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