

GEOLOGICAL SURVEY OF CANADA
UNITED STATES GEOLOGICAL SURVEY

GLIMPCE REFLECTION SURVEY

LAKE HURON - LINE I

SURVEY INFORMATION

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DATE: 20/09/86-21/09/86
CONTRACTOR:
GEOPHOTO SERVICES, LTD.
VESSEL:
M/V FRED AGNICH
RECORDING INSTRUMENTS:
DFS V
SOURCE:
AIRGUN ARRAY (60 GUNS)
127.48 L CAPACITY
RECEIVER:
3024 M STREAMER
120 CHANNEL, 25 M GROUP
TOWING DEPTH: 10 - 14 M
NAVIGATION:
LORAN C
COORDINATES (UTM ZONE 16)
START: 794460 5011845
END: 789575 5119169
START: 451201.7N 831503.3W
END: 460959.3N 831456.5W

DATA:
RECORD LENGTH 20 S
SAMPLE PERIOD 4 MS
HI-CUT 64.0 HZ
LOW-CUT 5.3 HZ
DISTANCE:
SOURCE - 1. GROUP : 230 M
SHOTPOINT INTERVAL: 62.5 M
WATER DEPTH: 16 - 130 M

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DATA PROCESSING SEQUENCE

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BASIC PROCESSING BY
USGS - DENVER

PROCESSING SEQUENCE (A):
DEMULTIPLEX
RESAMPLE TO 8 MS
FK-FILTER IN SHOT DOMAIN
CDP SORT 24 FOLD
AGC 1 S
BRUTE STACK
MULTIPLE SUPPRESSION
NMO CORRECTION
PRE-STACK DECON. (SPIKE)
STACK 24 FOLD
BANDPASS 4/8 - 25/36
POST-STACK DECON. (PRE)
VERTICAL SUM (4 TO 1):
50 M SPACING
AGC (2500 MS)
2-D AMPLITUDE SMOOTHING

ADDITIONAL PROCESSING BY
GEOLOGICAL SURVEY OF CANADA

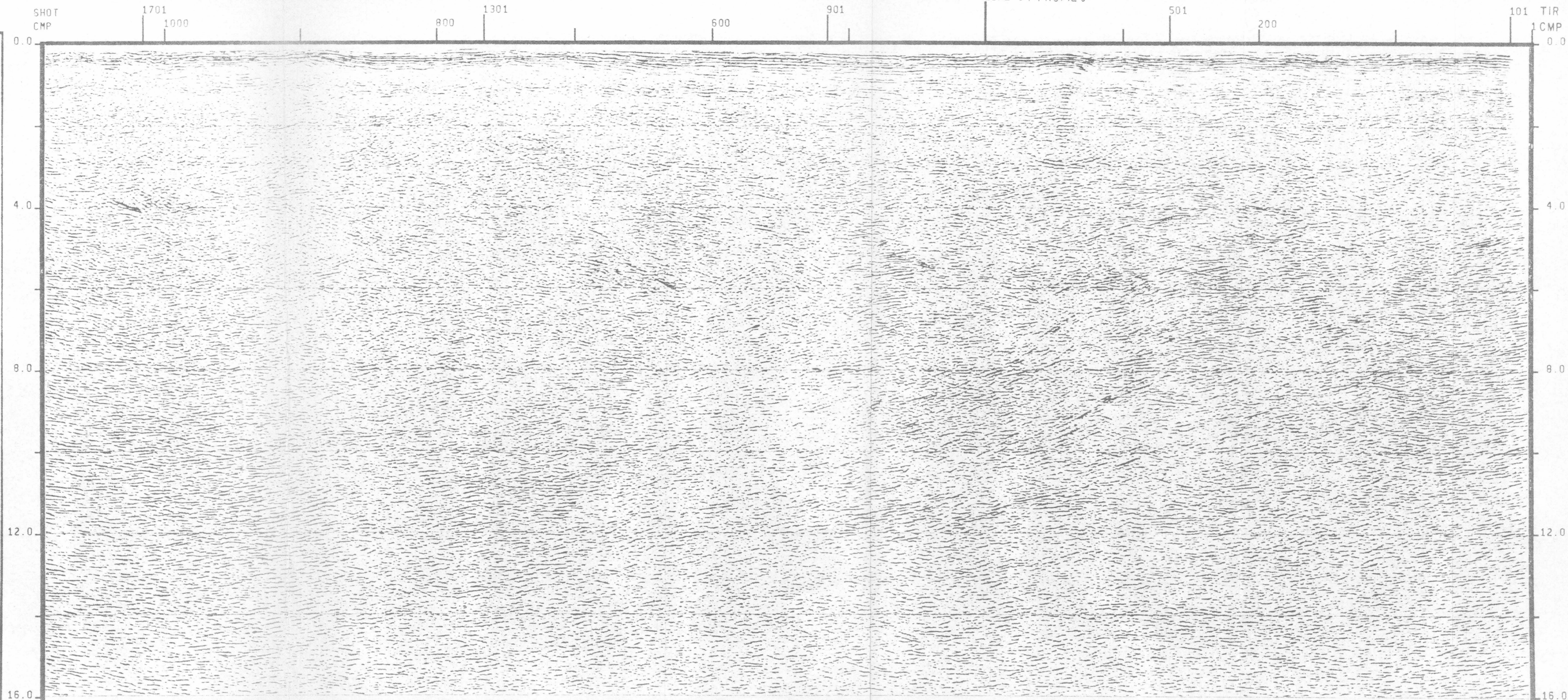
PROCESSING SEQUENCE (B):
MIGRATION VELOCITY TEST
F-K MIGRATION
VERTICAL SUM (2 TO 1):
100 M SPACING
COHERENCY ENHANCEMENT:
9-TRACE SEMBLANCE FOR
DIPS +/- 3.0 KM/S
PASSBAND
DISPLAY:
16 S DATA 1:1 AT 6 KM/S
50 TRACES PER INCH
0.6 INCH PER SEC
VARIABLE AREA

TOTAL LENGTH: 109.1 KM

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PLOT SCALE 1 : 200000

NOV. 20, 1987



COMMISSION GÉOLOGIQUE DU CANADA
UNITED STATES GEOLOGICAL SURVEY

PROJET GLIMPCE - SISMIQUE RÉFLEXION

LAC HURON - PROFIL I

PARAMETRES DU LEVE

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DATE: 20/09/86-21/09/86
CONTRACTEUR:
GEOPHOTO SERVICES, LTD.
VAISSEAU:
M/Y FRED AGNICH
EQUIPEMENT D'ENREGIS.:
DFS V
SOURCE:
RES. CANNONS A AIR (60)
127.48 L DE CAPACITE
CAPTEURS:
FLUTE DE 3024 M
120 CANAUX, ESPAC. 25 M
PROF. FLUTE: 10 - 14 M
NAVIGATION:
LORAN C
COORDONNEES (UTM ZONE 16)
DEBUT: 794460 5011845
FIN : 789575 5119169
DEBUT: 451201.7N 831503.3 O
FIN : 460959.3N 831456.5 O

DONNEES :
LONG. D'ENR. 20 S
PAS D'ECHANTILLONNAGE 4 MS
PASSE HAUT 64.0 HZ
PASSE BAS 5.3 HZ
DISTANCE:
SOURCE - 1. GROUPE : 230 M
INTERVALLE DE TIR: 62.5 M
PROF. D'EAU: 16 - 130 M

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SEQUENCE DE TRAITEMENT

TRAITEMENT DE BASE PAR USGS - DENVER SEQUENCE (A): DEMULTIPLEXAGE RE-ECHANTILLONNAGE A 8 MS FILTRE EN FREQUENCE (TIRS) COUVERTURE MULTIPLE 2400 Z CONTRÔLE AUTO. DE GAIN 1 S SOMMATION BRUTE SUPPRESSION DES MULTIPLES CORRECTION DE COURBURE DECON. PRE-SOMMATION SOMMATION DE 24 TRACES BANDE PASSANTE 4/8 - 25/36 DECON. POST-SOMMATION SOMME VERTICALE (4 A 1): ESPACE. 50 M CONTR. AUTO. GAIN (2500 MS) LISSAGE AMPLITUDE A 2-D	TRAITEMENT SUPPL. PAR COMMISSION GÉOLOGIQUE DU CANADA SEQUENCE (B): TEST MIGRATION VITESSE MIGRATION EN FREQUENCE SOMME VERTICALE (2 A 1): ESPACE. 100 M RÉAUSSEMBLEMENT DE COHERENCE: SEMBLANCE A 9 TRACES POUR PENDAGES +/- 3.0 KM/S FILTRAGE REPRESENTATION: 16 S DE DONNEES. 1:1 A 6 KM/S 50 TRACES PAR POUCE 0.6 POUCE PAR SEC AIRE VARIABLE LONGUEUR TOTALE: 109.1 KM
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ÉCHELLE 1 : 200000

20 NOV. 1987