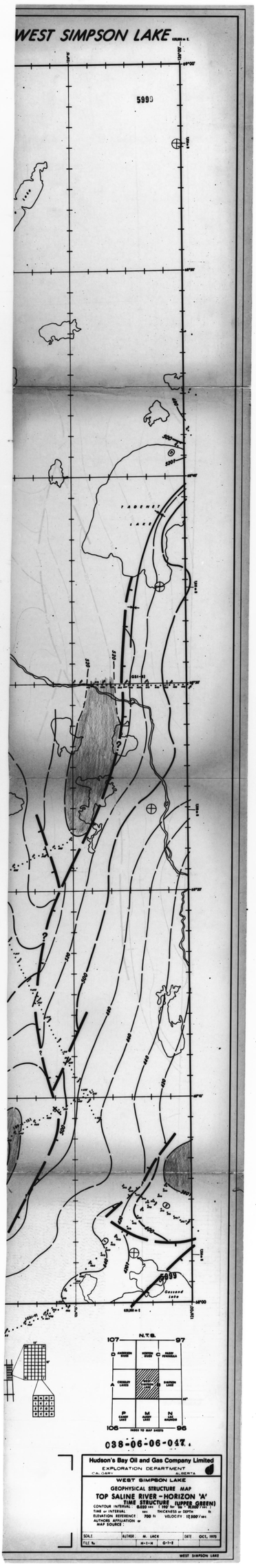
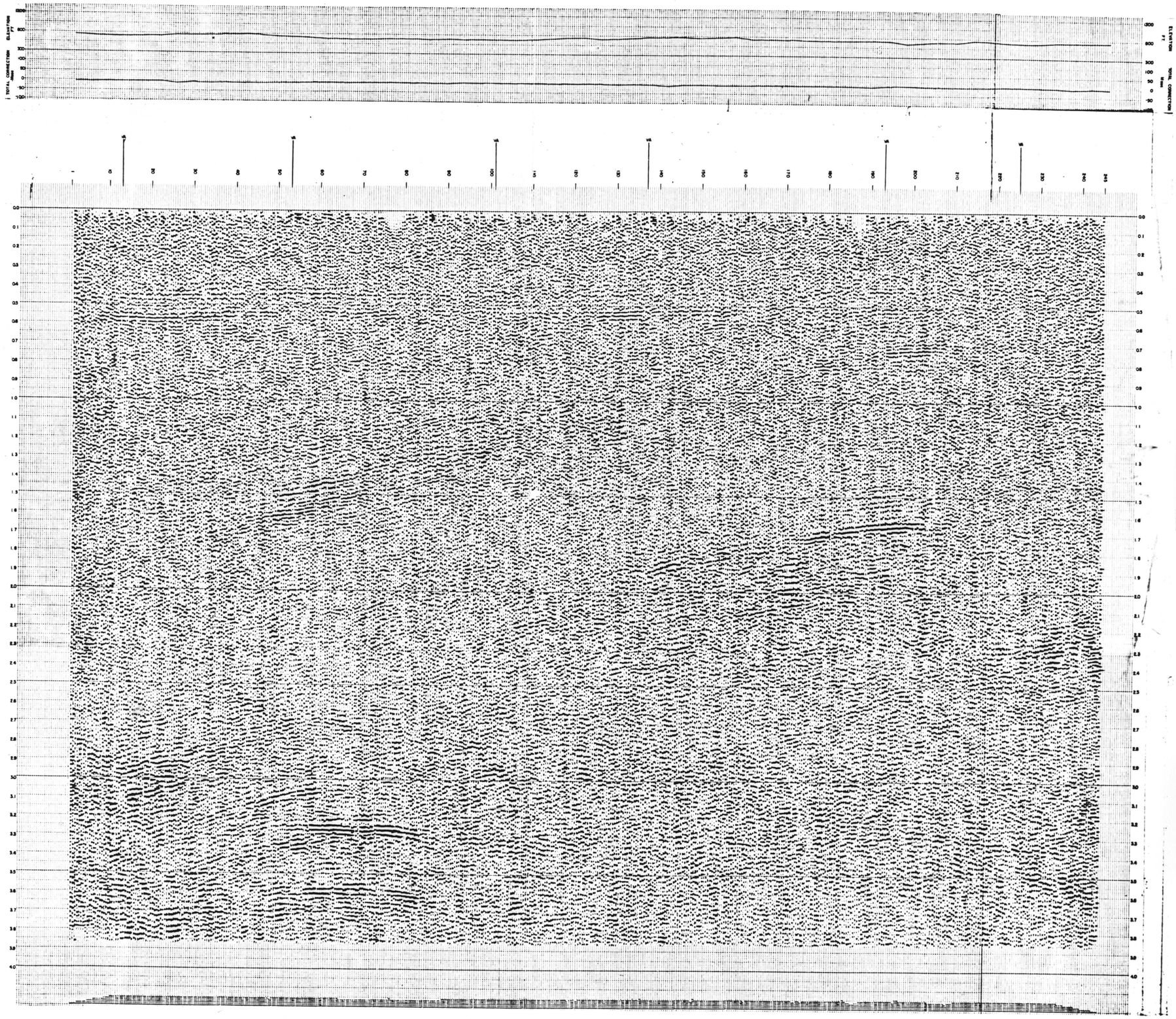

WEST SIMPSON LAKE
5990
5990
N.T.S.
107
97
105
95
038-06-06-047.
Hudson's Bay Oil and Gas Company Limited
EXPLORATION DEPARTMENT
CALGARY ALBERTA
WEST SIMPSON LAKE
GEOPHYSICAL STRUCTURE MAP
TOP SALINE RIVER - HORIZON 'A'
TIME STRUCTURE (UPPER GREEN)
CONTOUR INTERVAL 0.020 sec 100' or 50' 30.000' (?)
TIME or INTERVAL sec THICKENED or DEPTH ft.
ELEVATION REFERENCE 700 ft VELOCITY 12,000'/sec
AUTHORS AFFILIATION or MAP SOURCE
SCALE AUTHOR M. LACK DATE OCT. 1975
FILE No. M-1-M O-1-S
WEST SIMPSON LAKE

038-03-03-017



SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE
PROJECT

HUDSON'S BAY OIL & GAS CO. LTD
CLIENT

LINE No. — NE DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD
FORMATION SELECTION BY: HUDSON'S BAY OIL & GAS CO. LTD
RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

TAPE	X	1600	1600
BIAS	X	16 ms	16 ms
FIELD FILTER	X	8-64	8-64
SWEEP RATE		8/18	

DIGITAL PROCESSING

PROCESS	SEQ.	TYPE	OPERATION STATUS	WINDOW
VIBROSEIS CORRELATION				
RESAMPLE	2			
MIMO	7,12			
DECONVOLUTION	4		9 point	300-3400
FILTER (CONV)	5		30-80Hz 75-90Hz	2-200 200-4,000
FILTER (M.G.)				
DEMULTIPLEX & BIN RECOVER				
STATIC	6	Elev. Sta.	First Break Picks	
RESIDUAL MMO				
TRACE GATHER	3	CDP		
RESTATIC	8	AUTO	10 - 35	700-1600 1700-1900
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS	11			
FILTER (CONV)	14		30-65	1700
RESAMPLE TO 7 msec	15			

DATE JUNE / 1975 DATUM TOC

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
CLIENT

2 — LINE No.

SE — DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD

PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD

RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

TAPE		SPREAD LENGTH	9290 - 220
GAIN			220-3290
SPHERICAL CORRECTION		SP INTERVAL	220
SPHERICAL STRUCTURE	8	S-P INTERVAL	660
VERT. CORRECTION		RECORD LENGTH	6 sec.
VERT. STRUCTURE		SAMPLE INT.	4 msec.
TRACE NUMBER		FOLD	600%

	DIGITAL	ANALOG
RECORDING MEDIUM NTS	DFS IV	
TAPE	9 TRACK 7 TRACK	24 CHANNEL 12 CHANNEL
GAIN	FIXED PROGRAMMED	FIXED PROGRAMMED
FIELD FILTER	124	
SWEEP FREQ	8/10	

DIGITAL PROCESSING

PROCESS	SEQ	TYPE	OPERATOR LENGTH	WINDOW
HYDROSEIS CORRELATION				
RESAMPLE	2			
NMO	7, 12			
DECONVOLUTION	6		19 psec	300-1800
FILTER (CONV)	9		20-60Hz 0-80Hz	0-200 200-4000
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	8	Elev Wx	Few Break Picks	
RESIDUAL NMO				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	IOF 36	1900-6500
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (1st operation after Stack)	11			
FILTER (CONV)	14		30-60	0-4000
RESAMPLE TO 2 msec	15			

DATE JUNE / 1975 DATUM FOC — 7,500 / sec

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS LTD

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
CLIENT

3 — LINE No.

NE — DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD

PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD

RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

		SURFACE LOCATION	0890 - 8280
			1280 - 8880
			1210
	X		0800
			4 record
			4 msec
			100%

RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	X 7 track 9 track (Kennedy)	7 track 9 track
DRUM	9 track	9 track
FIELD FILTER	X — 124	—
SWEEP FREQ	9/10	—

DIGITAL PROCESSING

PROCESS	SEQ	TYPE	OPERATION LENGTH	WINDOWS
HYPERBOLIC CORRELATION				
RESAMPLE	2			
NMO	7, 12			
DECONVOLUTION	4		19 point	300- 3600
FILTER (CONV)	5		30-60hz 8 - 80hz	0- 1800 1 200- 4 000
FILTER (M.S.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Sta	First Break	Plenty
RESIDUAL NMO				
TRACE GATHER	3	C.D.P.		
RE STATIC	8	AUTO	10 + 35	700- 1800 2 350- 3 800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Constant Vel. Stacks)	8			
FILTER (CONV)	14		25 - 70	0- 4.000
RESAMPLE TO 2 msec	15			

DATE JUNE / 1975 | DATUM 700' | CORRECTED VELOCITY 17, 800'/sec.

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS LTD

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
CLIENT

4 LINE No. — SE DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD
PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD
RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

FOLD	☐	SPREAD LENGTH	9290 - 220 220 - 9290
TRACE	☐	GF INTERVAL	220
SPHERIC REFRACTION	☐	G.P. INTERVAL	660
SPHERIC STRUCTURAL	☒	SHOTPOINT INCR.	4 SEC
REFL. REFRACTION	☐	SAMPLE INT.	4 msec
REFL. STRUCTURAL	☐	FOLD	600%
TRACE EDITING	☐		

RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	☒ 1 TRACK ☐ 7 TRACK ☐ 9 TRACK	☐ VARIABLE DENSITY ☐ VARIABLE AREA ☐ VAR. DEN. + VAR. AREA
BAND	☐ 800 ☒ 1600 ☐ 6250	☐ 800 ☐ 1600 ☐ 6250
FIELD FILTER ☒	124	
SWEEP FREQ ☐	8/18	

DIGITAL PROCESSING

PROCESS	SEQ	TYPE	OPERATION LENGTH	WINDOW
HYDROSEVS CORRELATION				
RESAMPLE	2			
NMO	7,12			
DECONVOLUTION	4		19 point	300-3800
FILTER (CONV)	5		20-60Hz 80-90Hz	0-1200 1200-4000
FILTER (M.G.)				
DEMULTIPLEX & BAR RECOVER	1			
STATIC	6	Elev Wx	First Break Picks	
RESIDUAL NMO				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	10 ± 36	3900-3500
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,13			
TRACE SCALE	15			0
BINARIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Incorporate into Stack)	11			
FILTER (CONV)	14		30-68	0-4000
RESAMPLE TO 2 msec	15			

DATE JUNE / 87'S DATUM 700' CORR. VELOCITY 17,500'/sec

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS INC.

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
CLIENT

5 — LINE No.

NE — DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD

PARTNER FOR SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD

RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

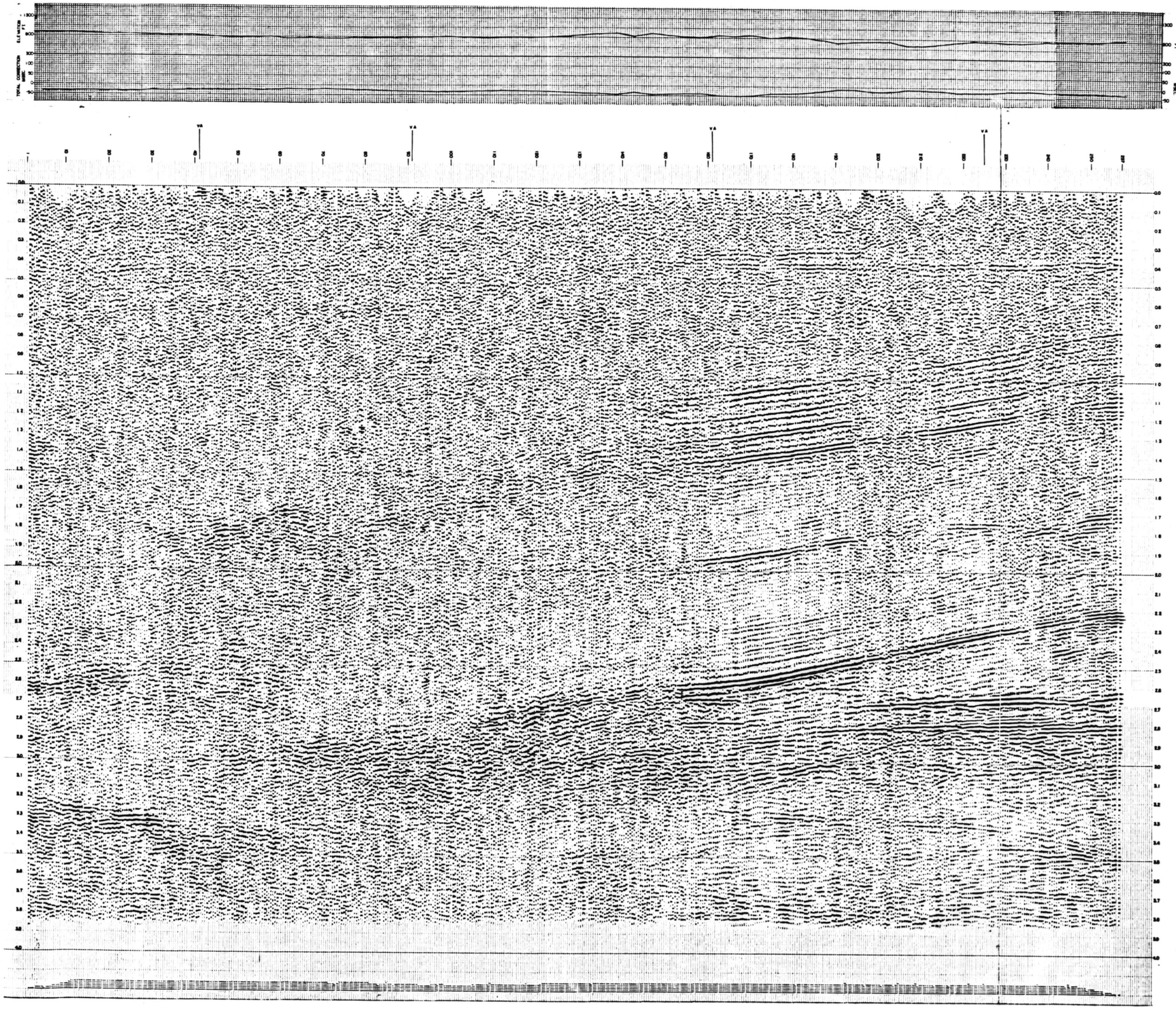
		OFFICE LOCATION	CALGARY
			EDMONTON
			REGINA
	X		CALGARY
			4 weeks
			4 weeks
			CALGARY

RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	X	
GAIN	X	
FIELD FILTER	X — 124	—
SWEEP FREQ	— 8/10	—

DIGITAL PROCESSING

PROCESS	GAIN	TYPE	OPERATOR LENGTH	WINDOW
HYDROSEIS CORRELATION				
RESAMPLE	2			
MIMO	7, 12			
DECONVOLUTION	4		19 point	300-3800
FILTER (CONV)	5		30-60Hz 6-80Hz	0-1500 1200-4000
FILTER (W.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Wx	First Break	Picks
RESIDUAL MIMO				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	[illegible]	3400-3800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (IC spectrum Vel. Stacks)	11			
FILTER (CONV)	14		30 70	0-4 000
RESAMPLE TO 2 msec	16			

DATE JUNE / 1975 | DATUM 700' | CDP/S VELOCITY 17,500'/sec



0038-00-00-02

BEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE
PROSPECT
HUDSON'S BAY OIL & GAS CO. LTD
CLIENT

6 SE
LINE No. DIRECTION

DATA PROCESSED BY: BEFEL J. B ASSOCIATES LTD.
GEOMETRY SOLUTION BY: HUDSON'S BAY OIL & GAS CO. LTD
RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

SPS			
DATE			
RUN			
FIELD FILTER			
SHOOT FREQ			

DIGITAL PROCESSING

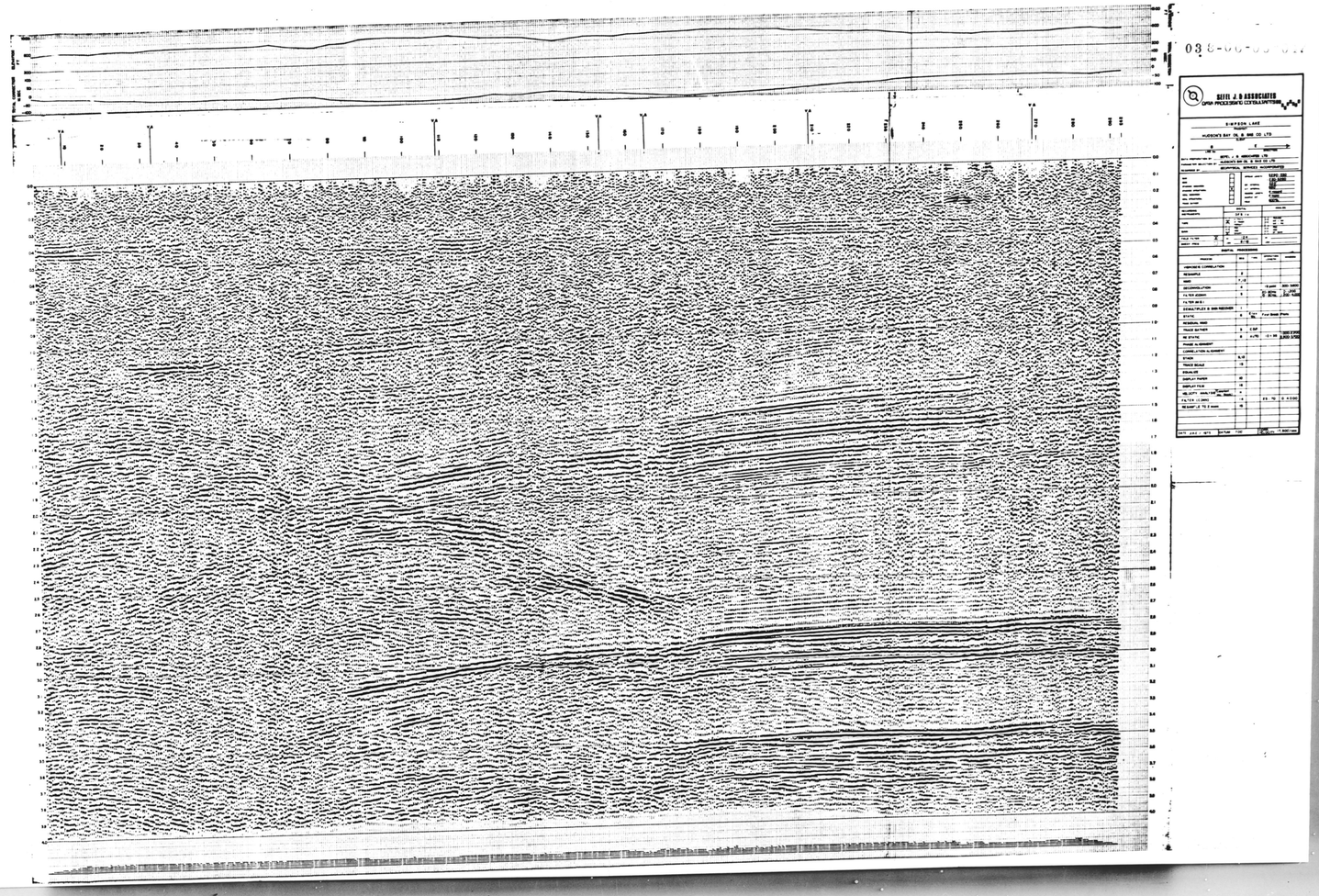
PROCESS	RUN	TYPE	OPERATION (APPLIED TO)	WINDOW
HYDROBEX CORRELATION				
RESAMPLE	2			
MIX	7,13			
DECONVOLUTION	4		19 ppm	300-3800
FILTER (CONV)	5		30-50Hz 50-80Hz	0 - 700 700-4300
FILTER (BIG)				
DEMULTIPLEX & SMB RECOVER				
STATIC	6	Elev SBL	Final Smith Plots	
RESIDUAL MIND				
TRACE GATHER	9	CDP		
RE STATIC	8	AUTO	40 x 55	000-1300 1300-3800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Int. Velocity)				
FILTER (CONV)	14		30-45	0 - 4,000
RESAMPLE TO 2 msec.	15			

DATE JUNE / 1973 DATUM 700 ZONE VELOCITY 7,500 / sec

8-06-06-047-24

7

038-06-06-047-25



SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE

HUDSON'S BAY OIL & GAS CO LTD

EAST

SEFEL J. B ASSOCIATES LTD

HUDSON'S BAY OIL & GAS CO LTD

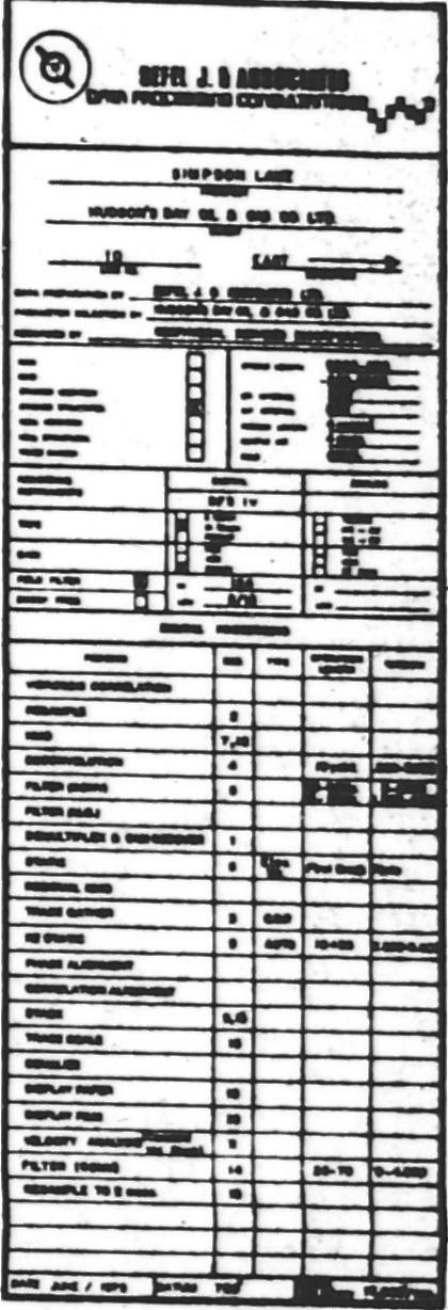
GEOPHYSICAL SERVICES INCORPORATED

	MPD-720
	720-5000
	4 channel
	4 head
	800BPI

RECORDING INFORMATION	DIGITAL	ANALOG
	SEG B	
TAPE	X 7 track 9 track	1/2 in 3/4 in
GAIN	1 2 4 X 8	1 2 4 8
FIELD FILTER X	120	
SWEEP FREQ	8/10	

DIGITAL PROCESSING

PROCESS	RUN	TYPE	OPERATOR LENGTH	RANGE
HYDROSTATIC CORRELATION				
RESAMPLE	2			
MUTE	7, 12			
DECONVOLUTION	4		19 gates	300-3600
FILTER (CONV)	5		25-40 Hz 40-60 Hz	0-1500 1500-5000
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOMBINE	1			
STATIC	6	Edit Elev. Elev.	First Break	Plots
RESIDUAL MUTE				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	8 ± 35	1200-1800 2400-3000
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 10			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	10			
VELOCITY ANALYSIS (Optional vel. Sweep)	11			
FILTER (CONV)	14		25-70Hz	0-4000
RESAMPLE TO 2 msec	15			
DATE JAN / 1975	DATUM 700		CDP FOLD	17, 500/sec



SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
SURVEY

II
LINE No.

SE
DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD
PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD
PROCESSED BY: GEOPHYSICAL SERVICES INCORPORATED

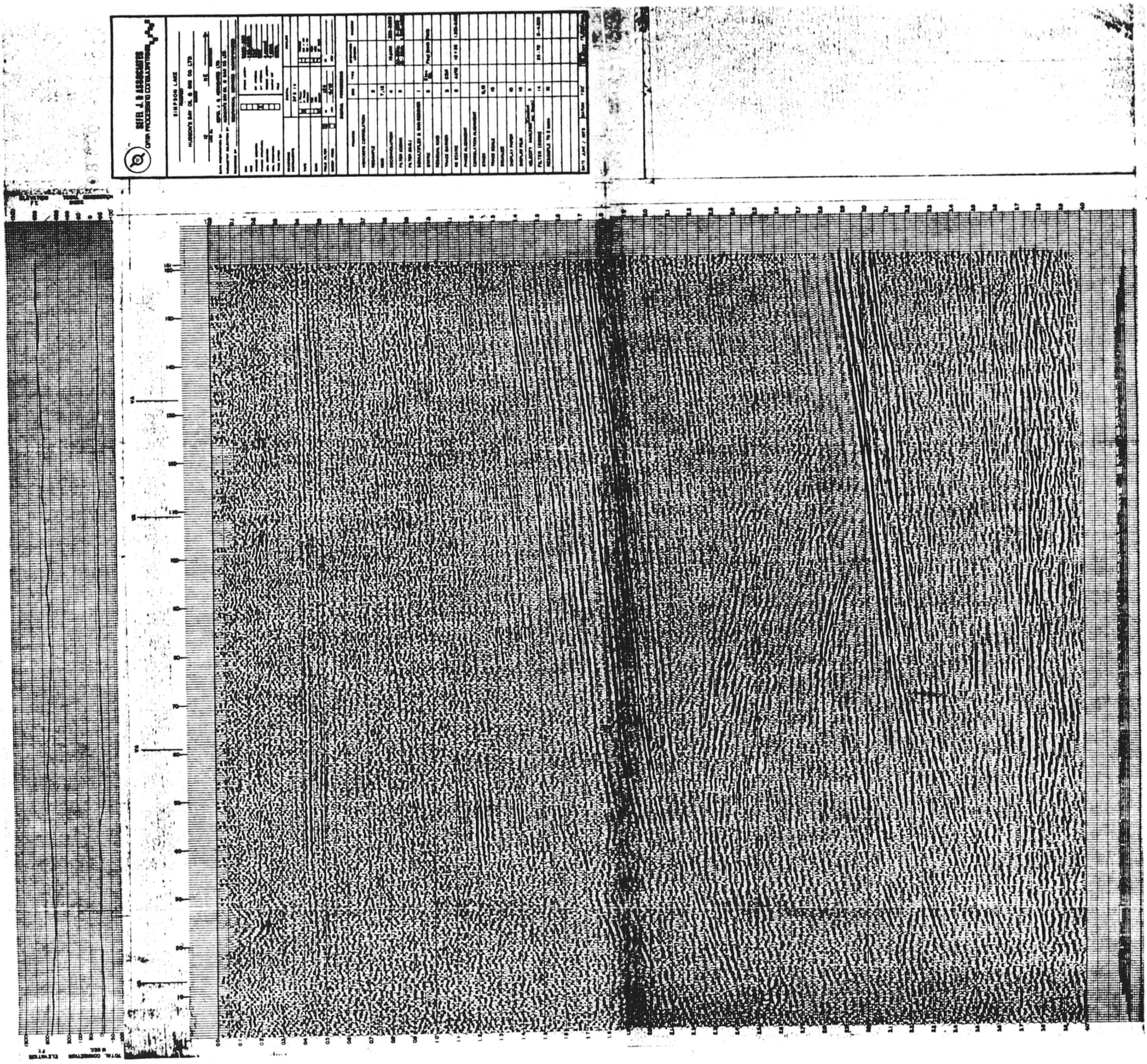
		SPREAD LENGTH	1280 - 220 220 - 5280
		SHOT INTERVAL	220
	E	G.I. INTERVAL	660
		RECORDING LENGTH	4 seconds
		SAMPLE RATE	4 msec
		FOLD	600%

	DIGITAL	FIELD GAIN
RECORDING INSTRUMENT	DFS IV	
TAPE	[X] 9 TRACK 800 BPI [ ] 7 TRACK 556 BPI	[ ] SYNCHRO [ ] 24 - 36 [ ] 36 - 48 [X] 48 - 60 [ ] 60 - 72 [ ] 72 - 84 [ ] 84 - 96
GAIN	[ ] 24 DB [ ] 36 DB [X] 48 DB	
PEAK FILTER [X]	124	
SWEEP FREQ	8/10	

DIGITAL PROCESSING

PROCESS	RUN	PASS	OPERATION LENGTH	WINDOW
VIBROSEIS CORRELATION				
RESAMPLE	2			
NMO	7, 12			
DECONVOLUTION	4		19 point	300 - 3400
FILTER (CONV)	5		20 - 30Hz 3 - 80Hz	1 - 1900 200 - 4 000
FILTER (IM 5)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Wx	Final Datum Plane	
RESIDUAL NMO				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	8 ± 30	1800 - 2 800 3400 - 3600
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Computer Plot, Stacks)	11			
FILTER (CONV)	14		30 - 50Hz / 0 - 67.0 75 - 80Hz / 270 - 4000	
RESAMPLE TO 2 msec	16			

DATE MAP / WPS | DATUM 700' | CDP'S 17, 500 / sec



038-06-06-047

SEISMOGRAPH SERVICES (U.K.) LIMITED
DATA PROCESSING CONSULTANTS

SIMPSON LAKE
PROJECT
HUDSON'S BAY OIL & GAS CO LTD
CLIENT

13 EXT.	
LINE NO.	LINE
DATA PROCESSED BY	SEISMOGRAPH SERVICES (U.K.) LIMITED
PROCESSED FOR	HUDSON'S BAY OIL & GAS CO LTD
PROCESSED BY	SEISMOGRAPH SERVICES INCORPORATED

SPS		SHOT LINES	1600-2000
SHOT INTERVAL		REC. LINES	1-192
REC. INTERVAL		SHOT INT.	220
REC. INTERVAL		REC. INT.	110
			5 SECONDS
			1.5 SECONDS
			1500 FT.

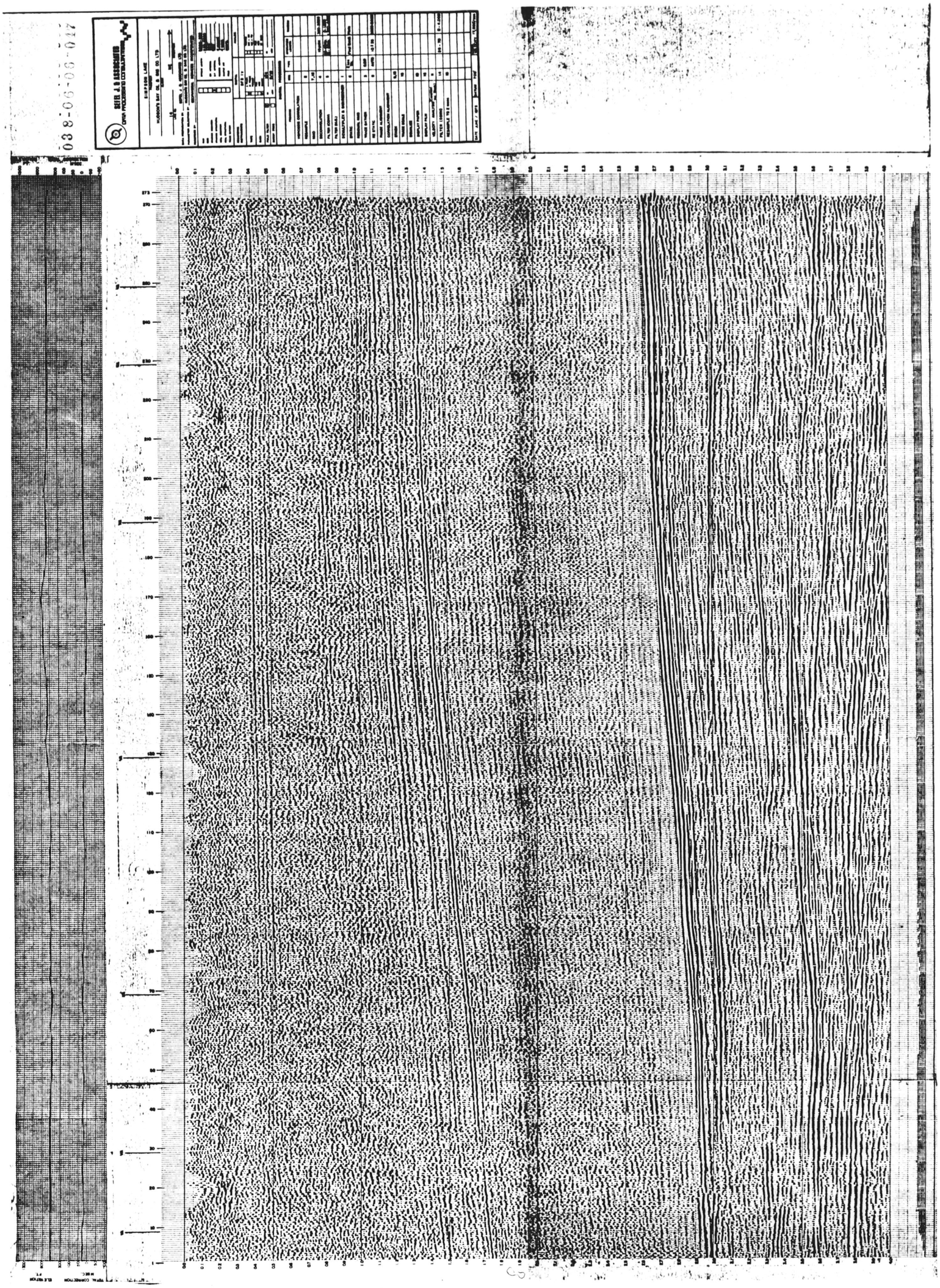
	DIGITAL	ANALOG
RECORDING INSTRUMENTS	DFS II	
TAPE	9 TRACK	
	1600 BPI	
DATA	SEG B	
	32 BIT	
FIELD FILTER	12 DB	
SAMPLE RATE	8 MS	

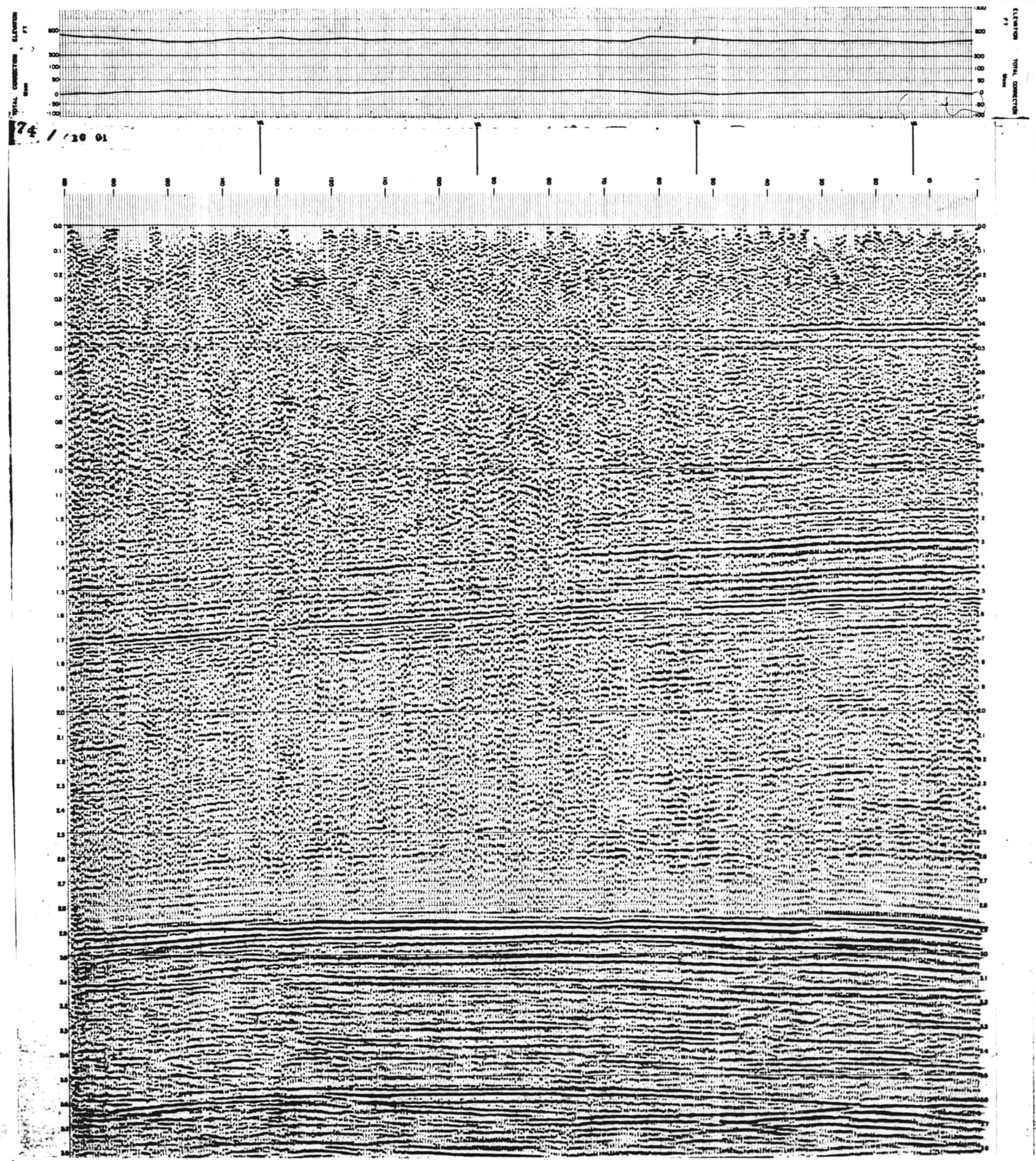
DIGITAL PROCESSING

PROCESS	MIX	TYPE	OPERATOR LENGTH	WINDOW
HYDROSTATIC CORRELATION				
RESAMPLE	2			
MIXER	7,12			
DECONVOLUTION	4		10 gate	300-3400
FILTER (DOPH)	5		30-40/50-60	2.1-3.0/3.4-4.0
FILTER (MIX)				
DERIVATIVES & SMOOTHING	1			
STATIC	6	Elev Sol	Final Datum Phase	
RESIDUAL MIXER				
TRACE GATHER	3	0.020		
RE STATIC	8	AUTO	10 + 25	1.8-2.4/2.6-3.2
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,10			
TRACE SCALE	10			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	10			
VELOCITY ANALYSIS (Interval Vel. Panel)	11			
FILTER (CONV)	14		30-40	2.1-3.0
RESAMPLE TO 2 msec	15			

DATE JUNE / 1973 DATUM 700' FINAL SUP

038-00-00-017





SIMPSON 4.

SEFEL J. B ASSOCIATES
OMNI PROCESSING CONSULTANTS INC.

SIMPSON LAKE
PROSPECT
HUDSON'S BAY OIL & GAS CO LTD
CLIENT

LINE No. 15 — DIRECTION NW

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD
PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD
PROCESSED BY: GEOPHYSICAL SERVICES INCORPORATED

TYPE		SOURCE LOCATION	SEPC-220
			L20-2220
SOURCE DEPTH		SP No.	220
SOURCE INTERVAL		No. of SPNTS	2000
SPN INTERVAL		SOURCE TYPE	4 SHOTS
FOLD SYSTEM			4 SHOTS
		FOLD	2000%

RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	9 Track 800 BPI	Tape No. Speed Gain Filters
Gain	FIXED	FIXED 24 dB
FIELD FILTER	24 dB/8	
SWEEP FREQ	8/16	

DIGITAL PROCESSING

PROCESS	SEQ	TYPE	OPERATION LENGTH	WINDOW
VIBROSEIS CORRELATION				
RESAMPLE	2			
NMO	7,12			
DECONVOLUTION	4		19 point	300-3600
FILTER (COMM)	5		50-60Hz / 8-10Hz	0-1200 / 1200-4000
FILTER (M.G.)				
DEMULTIPLEX & SNR RECOVER	1			
STATIC	6	Elev Wthr.	First Break Picks	
RESIDUAL NMO				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	10*36	2300-3800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Conventional Semblance Sheets)	11			
FILTER (COMM)	14		88 - FC	0-4000
RESAMPLE TO 2 msec	16			

DATE JUNE / 1973 | DATUM 700' | DATUM VELOCITY 17,500'/sec

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
CLIENT

IS-A
LINE No.

NE
DIRECTION

DATA PREPARATION BY: SEFEL J. B ASSOCIATES LTD

PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD

RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

TAPE	☐	SPREAD LENGTH	5280-220
GAIN	☐		220-5280
SPHERICAL CORRECTION	☐	SHOT INTERVAL	220
SPHERICAL EXTRAPOLATION	☒	CDP INTERVAL	660
FINAL CORRECTION	☐	RECORDING LENGTH	4.2 seconds
FINAL EXTRAPOLATION	☐	SAMPLE RATE	4 msec
TRACE EDITING	☐	FOLD	600%

RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	☒	☐
GAIN	☒	☐
FIELD FILTER	☒	☐
SWEEP FREQ	☐	☐

DIGITAL PROCESSING

PROCESS	SEQ.	TYPE	OPERATION LENGTH	WINDOW
VIBROSEIS CORRELATION				
RESAMPLE	2			
NMO	7, 12			
DECONVOLUTION	4		19 point	300-3800
FILTER (CONV)	5		30-60Hz 8-80Hz	0-1200 1200-4000
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev. Sta.	First Break Picks	
RESIDUAL NMO				
TRACE GATHER	3	CDP		
RESTATIC	8	AUTO	10 + 35	2200-3800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Constant Vel. Stack)	11			
FILTER (CONV)	14		25 - 70	0 - 4000
RESAMPLE TO 2 msec	15			

DATE JUNE / 1973 | DATUM 700' | CONST. VELOCITY 17,500'/sec

SEFEL J. & ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE

HUDSON'S BAY OIL & GAS CO. LTD.

DATA PREPARATION BY: SEFEL J. & ASSOCIATES LTD.
PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO. LTD.
PROCESSED BY: GEOPHYSICAL SERVICES INCORPORATED

GAIN		SPHERICAL DIVERGENCE	1/R2 - 1/R3
AGC			
SPHERICAL DIVERGENCE		SP WINDOW	1000
SPHERICAL EXPONENTIAL		SP OFFSET	0
TRACE BALANCING		SP SMOOTHING	1 second
TRACE EQUALIZING		SAMPLE SP	4 msec
TRACE EDITING		FIELD	1/2 fold

	DIGITAL	ANALOG
RECORDING INSTRUMENTS	DFS IV	
TAPE	1 inch 9 track	1/2 inch
GAIN	AGC FIXED PROG.	AGC FIXED PROG.
FIELD FILTER	10 - 12.5	10 -
SWEEP FREQ	8/18	-

DIGITAL PROCESSING

PROCESS	SEQ.	TYPE	SPECIFICATION (graphic)	REMARKS
WORKSTATION CORRELATION				
RESAMPLE	2			
MIX	7, 12			
DECONVOLUTION	4		19 pulse	300-3600
FILTER (CONV)	5		30-50Hz 60-80Hz	3-30Hz
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Wx	Final Datum	Plots
RESIDUAL MIX				
TRACE GATHER	3	C.D.P.		
RE STATIC	8	AUTO	HOR. 30	
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (medium res. Stack)	11			
FILTER (CONV)	14		25 - 70	
RESAMPLE TO 2 msec	15			

DATE: June / 1975 | DATUM: 700' | VELOCITY: 17,500'/sec

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS INC.

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO LTD
CLIENT

17 — LINE No.

SE — DIRECTION

DATA PROCESSED BY: SEFEL J. B ASSOCIATES LTD

PARTICULAR SELECTION BY: HUDSON'S BAY OIL & GAS CO LTD

RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

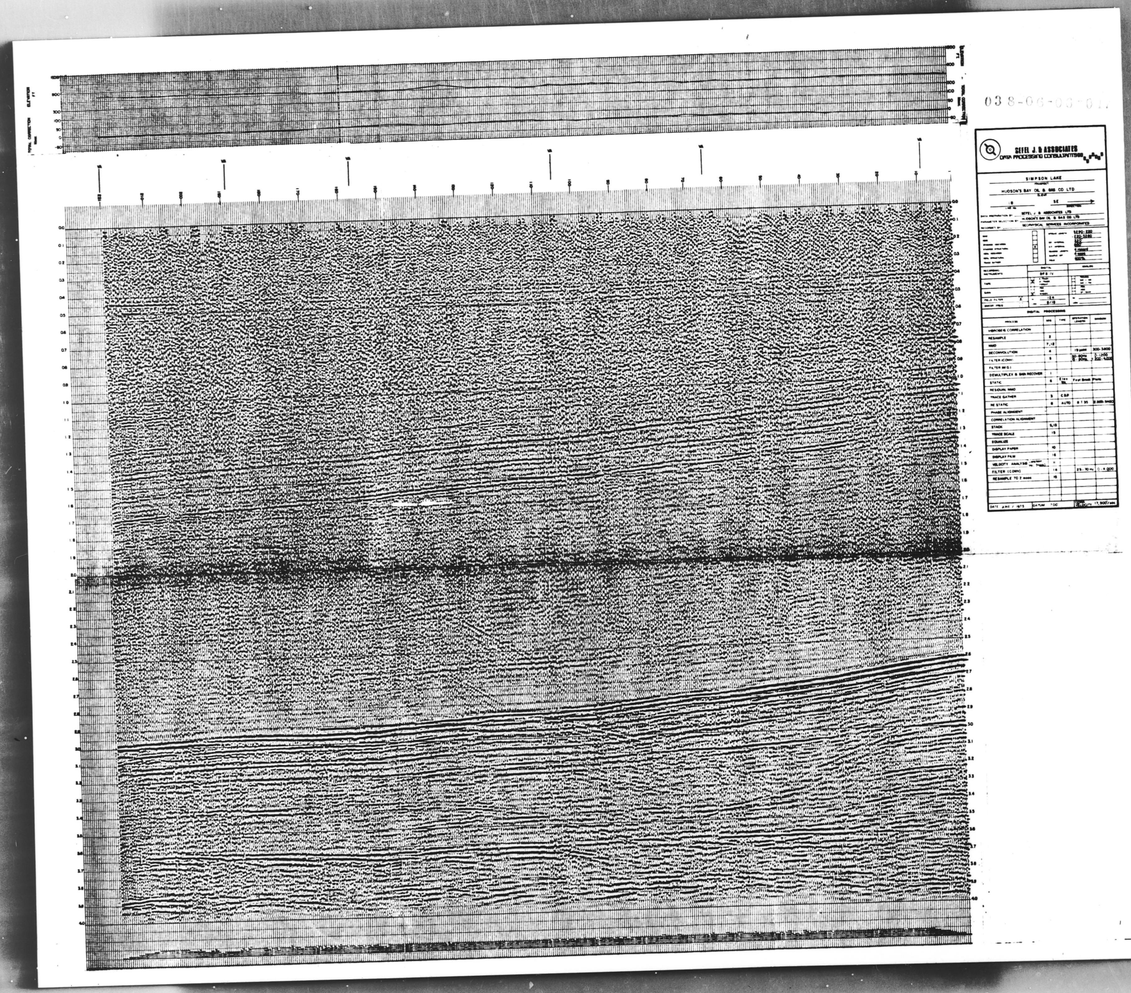
			6800 - 8200
			2800 - 6800
			220
			660'
			4 record
			4 mons
			600%

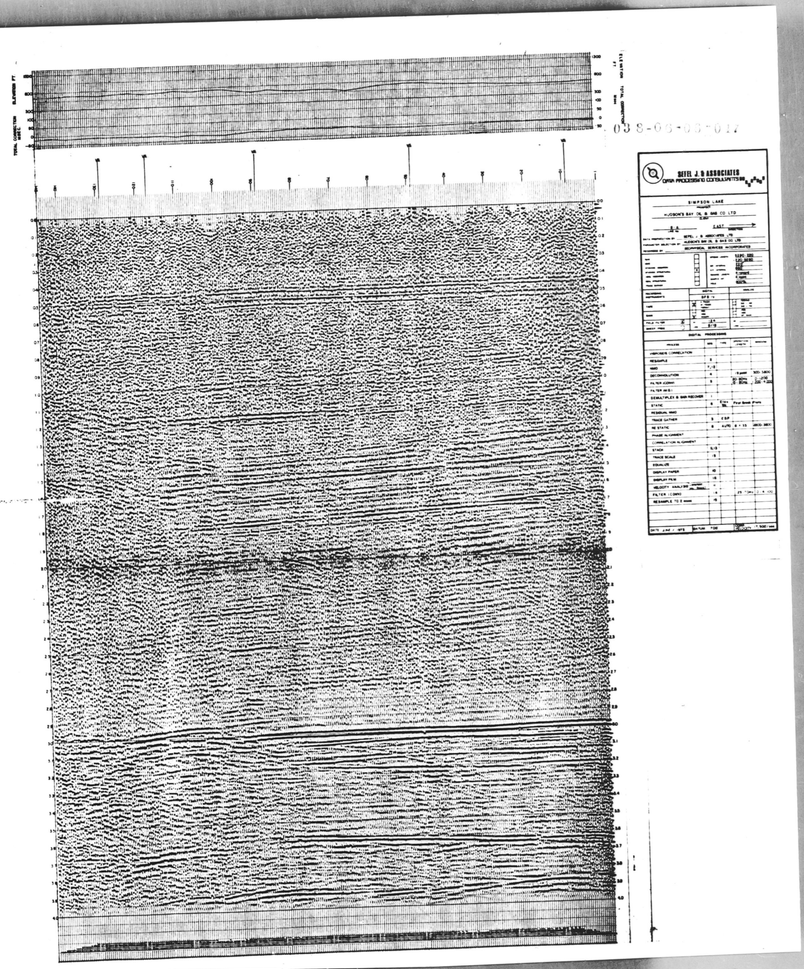
RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	X	
Gain	X	
FIELD FILTER	X — 124	
SHOOP PROG	☐ — 8/10	

DIGITAL PROCESSING

PROCESS	SEQ	TYPE	OPERATION LENGTH	WINDOW
VIBROSEIS CORRELATION				
RESAMPLE	2			
NMO	7,12			
DECONVOLUTION	4		19 point	300 - 3600
FILTER (CONV)	5		80-90Hz 0 - 30Hz	0 - 1500 1500 - 4000
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Trim	First Break	Picks
RESIDUAL NMO				
TRACE GATHER	3	C.D.P.		
RE STATIC	8	AUTO	10 + 30	400 - 3400 3400 - 3800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (IC analysis incl. Stack)	11			
FILTER (CONV)	14		25 - 70	0 - 4000
RESAMPLE TO 2 msec	16			

DATE JUNE / 1975 | DATUM 700' | CONST. VELOCITY 17,500'/sec


038-06-03-01
SEITEL J D ASSOCIATES
DATA PROCESSING CONTRACTORS


038-06-03-017
SEITEL J D ASSOCIATES
DATA PROCESSING CONTRACTORS

SEFEL J. S ASSOCIATES
DATA PROCESSING CONSULTANTS LTD

SIMPSON LAKE
PROSPECT

HUDSON'S BAY OIL & GAS CO. LTD
CLIENT

18 - B
LINE NO.

EAST
DIRECTION

DATA PREPARATION BY: SEFEL J. S ASSOCIATES LTD
PARAMETER SELECTION BY: HUDSON'S BAY OIL & GAS CO. LTD
RECORDED BY: GEOPHYSICAL SERVICES INCORPORATED

FIELD		SPREAD LENGTH	5600 - 8200
GEOL			1200 - 5600
STATICS CORRECTION		SP INTERVAL	200
STATICS STRUCTURE	X	SP NO.	28
VEL. CORRECTION		RECEIVER GROUPS	4 record
VEL. STRUCTURE		SAMPLE INT.	4 msec
TRACE EDITING		FOLD	800%

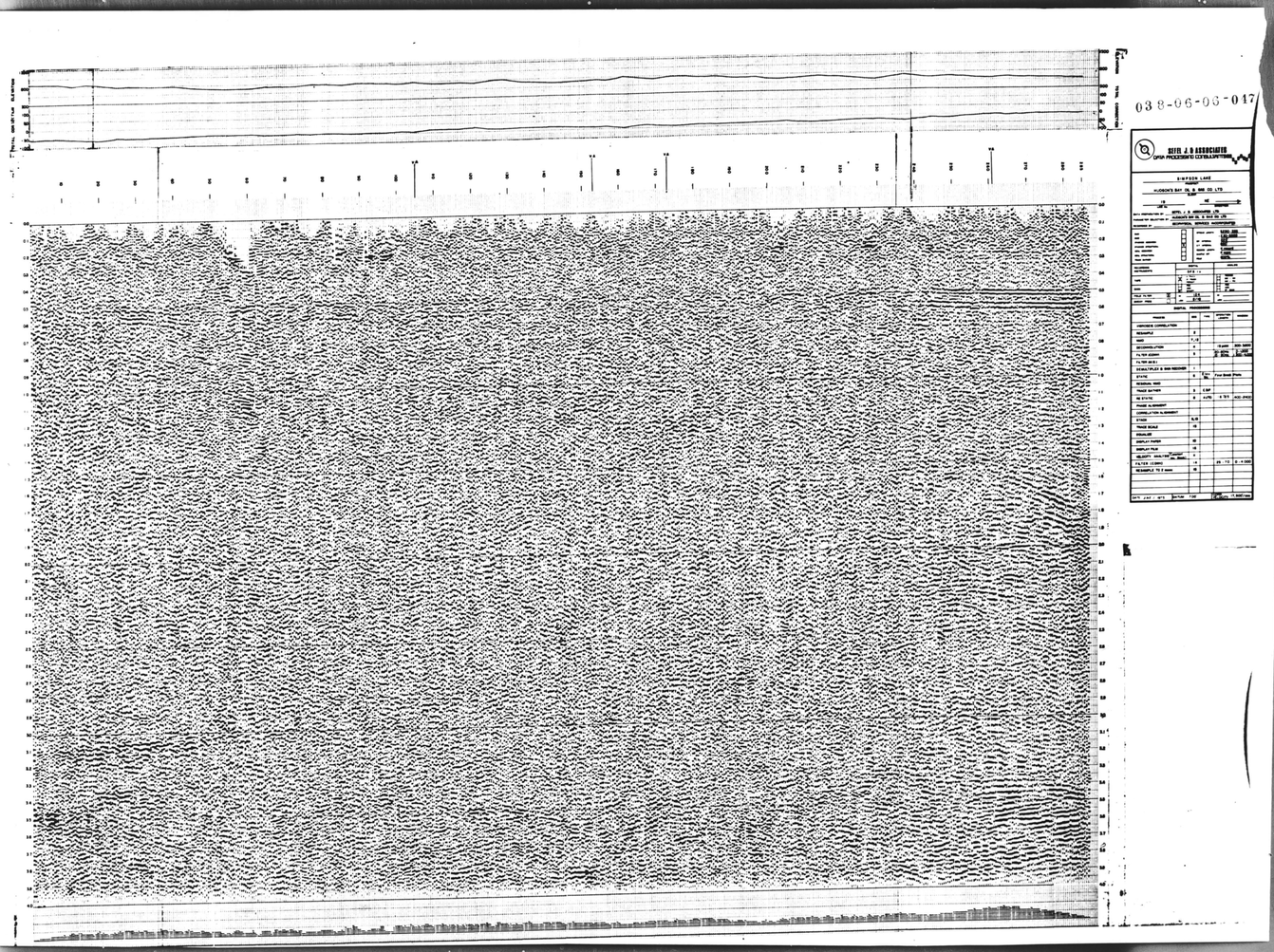
RECORDING INSTRUMENTS	DIGITAL	ANALOG
	DFS IV	
TAPE	X 9 TRACK X 7 TRACK 800 BPI	9 TRACK 7 TRACK 800 BPI
GAIN	X FIXED VAR. X PROGR.	FIXED VAR. PROGR.
FIELD FILTER	X	
SWEEP FREQ		

DIGITAL PROCESSING

PROCESS	SEQ	TYPE	OPERATOR LENGTH	WINDOW
VIBROSEIS CORRELATION				
RESAMPLE	2			
MISC	7, 12			
DECONVOLUTION	6		19 point	300 - 3800
FILTER (CONV)	9		20 - 60Hz 18 - 50Hz	0 - 1200 1200 - 4300
FILTER (REG.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Shot	First Break Picks	
RESIDUAL MISC				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	101 - 25	400 - 2 800 2 800 - 3 800
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	5, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Semblance vs. Panel)	4			
FILTER (CONV)	9		25 - 70Hz	0 - 4 300
RESAMPLE TO 2 msec	15			

DATE: JUNE / 1975 | DATUM: TOC | VELOCITY: 17 500 / sec

038-06-06-047-4



038-06-06-047

SIMPSON LAKE
SURVEY
HUDSON'S BAY OIL & GAS CO. LTD.
SURVEY
LS 48 W
UNIT No. 1 DISTRICT
SEISMIC J. D. ASSOCIATES LTD.
HUDSON'S BAY OIL & GAS CO. LTD.
GEOPHYSICAL SERVICES, INCORPORATED

BEEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SHIPSON LAKE

HUDSON'S BAY OIL & GAS CO LTD

27-A

BEEL J. B ASSOCIATES LTD

HUDSON'S BAY OIL & GAS CO LTD.

GEOPHYSICAL SERVICES INCORPORATED

	DIGITAL	
	DFS IV	

DIGITAL PROCESSING

VIBROSEIS CORRELATION				
RESAMPLE	2			
MUTE	7,12			
DECONVOLUTION	4			
FILTER (CDP/SR)	5			
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6		Final Datum Plane	
RESIDUAL MUTE				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	10 + 30	
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,10			
TRACE SCALE	10			
DISPLAYS				
DISPLAY PAPER	10			
DISPLAY FILM	10			
VELOCITY ANALYSIS (Control Vel. Profile)	11			
FILTER (CDP/SR)	14		25 - 70	0 - 4000
RESAMPLE TO 2 msec	15			

DATE JUNE / 69'S DATUM 700' VELOCITY 17,000'/sec.

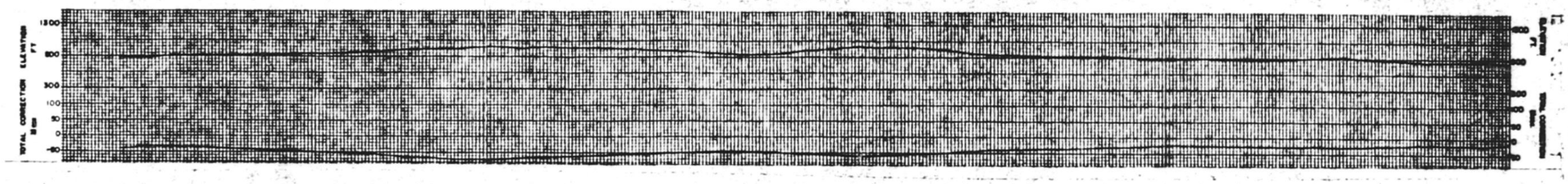
SEFEL J. B. ASSOCIATES

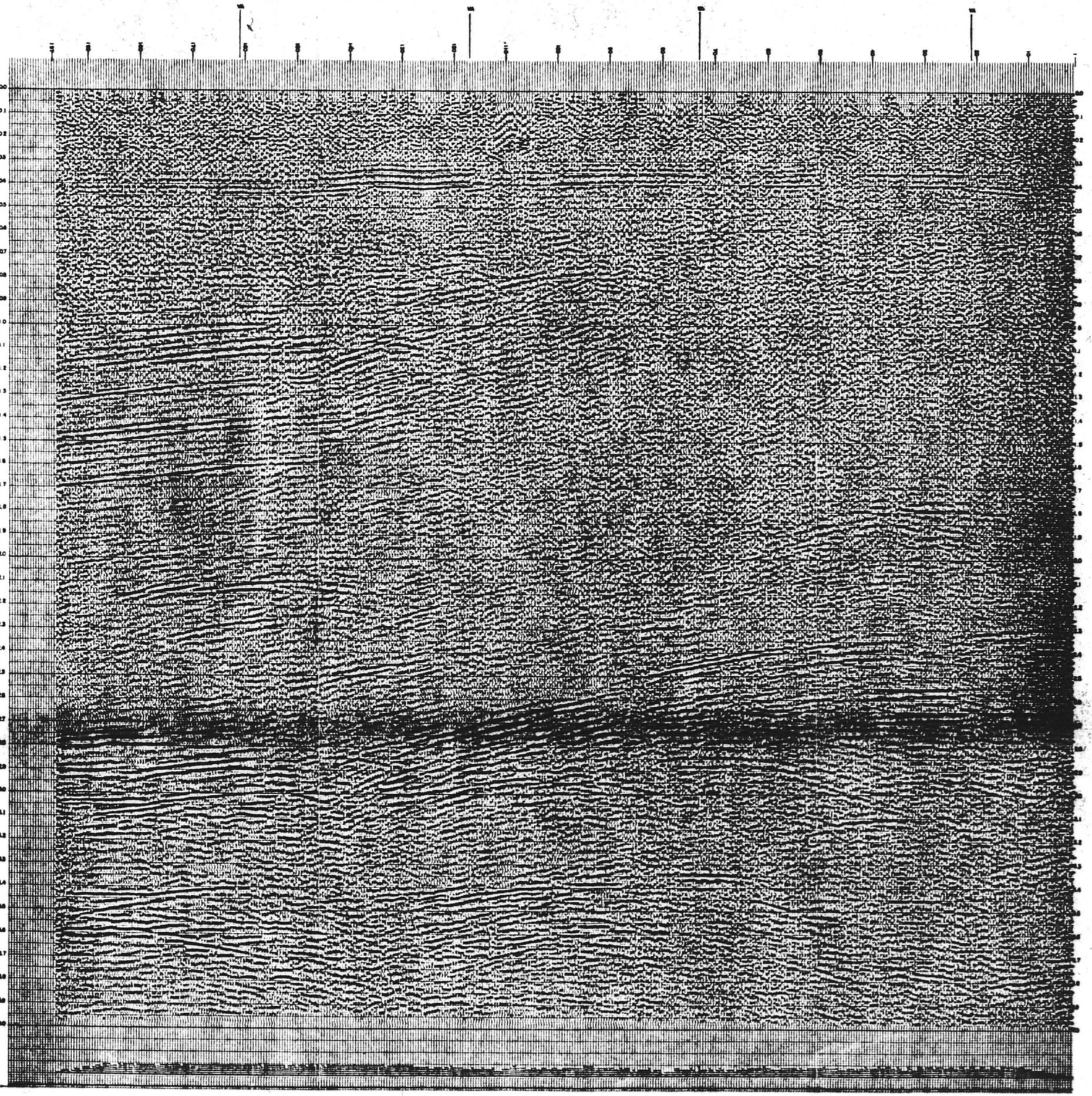
DATA PROCESSING CONSULTANTS

SIMPSON LANE

HUDSON'S BAY OIL & GAS CO. LTD.

038-06-06-047





SEISMOGRAPH SERVICE (ENGLAND) LIMITED

SIMPSON LAKE

HUDSON'S BAY OIL & GAS CO LTD

EAST

DATA RECORDED BY	SEISMOGRAPH SERVICE (ENGLAND) LTD.
PARAMETER SELECTION BY	HUDSON'S BAY OIL & GAS CO. LTD.
PROCESSED BY	SEISMOGRAPH SERVICE (ENGLAND) LIMITED

SPREAD	
SPREAD DESIGN	
SPREAD DIMENSIONS	
SHOT INTERVAL	
GEOPHONE INTERVAL	
GEOPHONE ARRAY	
RECORDING EQUIPMENT	
RECORDING MEDIUM	
RECORDING FORMAT	
SAMPLE RATE	
RECORD LENGTH	
SHOT DEPTH	
SHOT HOLE DIAMETER	
CHARGE SIZE	
DELAY	

	DIGITAL	ANALOG
DATE	DAY MONTH YEAR	
TIME		
GAIN		
FIELD FILTER		
ARRAY TYPE		

DIGITAL PROCESSING

PROCESS	SEQ.	TIME	OPERATOR CONTROL	VARIABLE
HORIZONTAL CORRELATION				
RESAMPLE	2			
TIMED	7, 15			
DECONVOLUTION	4		10 points	200-3400
FILTER (ODMS)	5			
FILTER (4-40)				
DEMULTIPLEX & SIDE RECENCY	1			
STATIC	6	Elev. Rep.	Plot Shots	Plot
RESIDUAL TIMED				
TRACE BALANCE	3	4.0P		
RE STATIC	8	4xFD	+01.00	300-4.000 6000-9000
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9,10			
TRACE EQUAL	11			
DEMULTIPLEX				
DISPLAY PAPER	12			
DISPLAY FILM	13			
VELOCITY ANALYSIS (Optional Pre Stack)	1			
FILTER (ODMS)	14		50 - 70	
RESAMPLE TO 2 mSEC	15			
DATE JUNE / 1973	DATUM FOC		VEL. FT./SEC/sec.	

SEFEL J. B ASSOCIATES
DATA PROCESSING CONSULTANTS

SIMPSON LAKE

HUDSON'S BAY OIL & GAS CO LTD

30 — NE

Data acquisition by: SEFEL J. B ASSOCIATES LTD

Parameter selection by: HUDSON'S BAY OIL & GAS CO LTD

Recorded by: GEOPHYSICAL SERVICES INCORPORATED

RECORDING INSTRUMENTS	DIGITAL	
	DFS IV	
TAPE	[X] 9 Track [ ] 7 Track	[ ] 1600 [ ] 800 [ ] 556
GAIN	[ ] 16 [X] 32 Binary	[ ] 16 [ ] 8 [ ] 4 Binary
FIELD FILTER	[X] In 124 Hz	In Hz
SWEEP FREQ	[ ] Out 8/16	Out Hz

DIGITAL PROCESSING

PROCESS	RUN	TYPE	OPERATION LENGTH	WINDOW
HYDROSEIS CORRELATION				
RESAMPLE	2			
NMO	7, 12			
DECONVOLUTION	4?		19 point	300- 3600
FILTER (CONV)	5		20- 60Hz 25- 80Hz	0 - 1,500 1,500 - 4,000
FILTER (M.G.)				
DEMULTIPLEX & GAIN RECOVER	1			
STATIC	6	Elev Shs	Final Datum Plane	
RESIDUAL NMO				
TRACE GATHER	3	CDP		
RE STATIC	8	AUTO	40 + 25	400 - 800ms 2 500 - 3400
PHASE ALIGNMENT				
CORRELATION ALIGNMENT				
STACK	9, 13			
TRACE SCALE	15			
EQUALIZE				
DISPLAY PAPER	10			
DISPLAY FILM	16			
VELOCITY ANALYSIS (Constant Vel. Stacks)	11			
FILTER (CONV)	14		25 - 70	0 - 4 300
RESAMPLE TO 2 msec	15			

DATE JUNE / 1975 — Disk Pack 700 — CDP Velocity 17, 500 / sec.