

# LINE : 88-1

## S. P. : 101 - 2122

(AT NAVIGATION REFERENCE POINT)

### SCALED MIGRATION

NORMAL POLARITY

SOUTHEAST

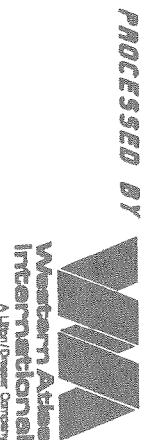
BOAT HEADING 142 DEGREES

## ATLANTIC GEOSCIENCE CENTRE

AREA: OFFSHORE NOVA SCOTIA

### RECORDING DATA

<b>SOURCE</b>	AIRGUN ARRAY	<b>CABLE</b>	LRG-16A KILOSEIS STREAMER
TYPE	11 METERS	TYPE	180 ARRAY
GUN DEPTH	8100 CC	NUMBER OF GROUPS	250 METERS
ARRAY VOLUME	1800 P.S.I.	4NEAR GRP TO 4SOURCE	4800 METERS
ARRAY PRESSURE	76 METERS	4NEAR GRP TO 4FAR GRP	26.67 METERS
GUN ARRAY WIDTH	168 METERS	GROUP INTERVAL	14 METERS
ANTENNA TO 4SOURCE	80 METERS	CABLE DEPTH	
POP INTERVAL			
<b>NAVIGATION</b>			
PRIMARY	LOBAN-C	<b>INSTRUMENTS</b>	LRG 16A
<b>VESSEL</b>		FIELD RECORDER	LOW CUT 6HZ/ 2408/OCT
M/V RESOLUTION	PARTY 115	FILTER	HIGH CUT 87HZ/13208/OCT
SHOT BY:	WESTERN GEOPHYSICAL LTD.	RECORD LENGTH	25.5 SEC
RECORDING DATE:	AUGUST 1988	SAMPLE INTERVAL	4 MSEC
		FORMAT:	SEG-D MULTIPLEXED



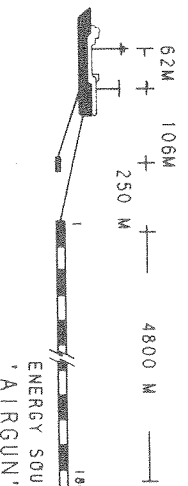
**WESTERN GEOPHYSICAL**

**CALGARY, ALBERTA**

### PROCESSING SEQUENCE AND PARAMETERS

1. FORMAT CONVERSION / DEMULTIPLEX
2. FK NOISE ATTENUATION APPLIED TO SHOTS
3. INSTRUMENT DESIGNATURE  
LRG-16A FIELD RECORDER
4. GEOMETRIC SPREADING COMPENSATION
5. PREDICTIVE DECONVOLUTION  
MINIMUM PHASE INVERSE PREDICTION FILTER  
ONE WINDOW  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 12 MSEC  
NUMBER OF CHANNELS 1  
WHITE NOISE 0.11 Z
6. TRACE BALANCE
7. VELOCITY ANALYSIS (VELAN\*)  
EVERY 3 KILOMETRES
8. FK DEMULTIPLE
9. VELOCITY ANALYSIS (VELAN\*)  
POST FK DEMULTIPLE
10. STRCK 3000Z  
OUTSIDE NOTE
11. RANDOM NOISE ATTENUATION
12. DECIMATION 2/1
13. REFLECTION STRENGTH GAIN
14. RELATIVE AMPLITUDE COMPENSATION  
TIME(MSEC)  
20  
25500
15. DECONVOLUTION AFTER STRCK  
TYPE: 180 WINDOWS  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 60 MSEC  
NUMBER OF CHANNELS 101  
WHITE NOISE 0.11 Z  
MINIMUM PHASE INVERSE FILTER  
FROM WB - 25500 MSEC  
300 MSEC  
60 MSEC
16. BANDPASS FILTER  
LOW CUT 8 HZ
17. FINITE DIFFERENCE MIGRATION  
18. GAIN (RMS)  
128/4096 MSEC
19. DECIMATION 2/1
20. RANDOM NOISE ATTENUATION
21. TIME VARIANT FILTER  
FILTER INTERPOLATION IN TIME AND SPACE  
L.C.(HZ) (1808/OCT) H.C.(HZ) (3608/OCT)  
0 4  
3000 4  
4000 4  
8000 4  
14000 4
22. GAIN (RMS)  
128/4096 MSEC
23. ARRAY FORMING  
1:1:1:1 MIX

SCALER  
1.20  
1.20



ENERGY SOURCE:  
'AIRGUN'

SHOTPOINT LOCATED AT NAVIGATION REFERENCE POINT.  
A GUN AND CABLE CORRECTION TO SEA LEVEL OF  
+17 MSEC HAS BEEN APPLIED DURING PLAYBACK.

POLARITY CONVENTION:  
RECORDING: COMPRESSION PULSE NEGATIVE NUMBER  
PROCESSING: COMPRESSION PULSE NEGATIVE NUMBER  
DISPLAY: NORMAL POLARITY  
COMPRESSION PULSE NEGATIVE NUMBER  
(DECREASING BLACK)

LINE : 88-1A  
 S. P. : 2062 - 4472

(AT NAVIGATION REFERENCE POINT)

SCALED MIGRATION  
 NORMAL POLARITY

SOUTHEAST

BOAT HEADING 142 DEGREES

# ATLANTIC GEOSCIENCE CENTRE

AREA: OFFSHORE NOVA SCOTIA

## RECORDING DATA

**SOURCE**  
 TYPE  
 GUN DEPTH  
 ARRAY VOLUME  
 GUN PRESSURE  
 GUN ARRAY WIDTH  
 ANTENNA TO SOURCE  
 POP. INTERVAL

AIRGUN ARRAY  
 11 METERS  
 8100 CC  
 1800 P.S.I.  
 76 METERS  
 169 METERS  
 80 METERS

**CABLE**  
 TYPE  
 NUMBER OF GROUPS  
 #NEAR GRP TO SOURCE  
 #NEAR GRP TO FAR GRP  
 GROUP INTERVAL  
 CABLE DEPTH

LRS-16A KILOSEIS STREAMER  
 180 ARRAY  
 290 METERS  
 4800 METERS  
 26.67 METERS  
 14 METERS

## NAVIGATION

PRIMARY  
 VESSEL  
 M/V RESOLUTION  
 SHOT BY:  
 RECORDING DATE:

LOHAN-C  
 PARTY 115  
 WESTERN GEOPHYSICAL LTD.  
 AUGUST 1988

## INSTRUMENTS

FIELD RECORDER  
 FILTER  
 RECORD LENGTH  
 SAMPLE INTERVAL  
 FORMAT:

LRS-99A  
 LOW CUT 6HZ / 2408/OCT  
 HIGH CUT 87HZ/13208/OCT  
 25.5 SEC  
 4 MSEC  
 SEG-D MULTIPLEXED

PROCESSED BY  
  
 Western Atlas  
 International  
 A Libco/Devcon Company

WESTERN  
 GEOPHYSICAL

CALGARY, ALBERTA

## PROCESSING SEQUENCE AND PARAMETERS

1. FORMAT CONVERSION / DEMULTIPLEX
2. FK NOISE ATTENUATION
3. SUBSAMPLE TO 6 MSEC
4. ADJACENT TRACE SUM  
180 TRACES/SHOT --- 90 TRACES/SHOT
5. WAVE EQUATION MULTIPLE ATTENUATION  
APPLIED TO 20 SECONDS OF DATA
6. INSTRUMENT DESIGNATURE  
LRS-16A FIELD RECORDER
7. GEOMETRIC SPREADING COMPENSATION
8. PREDICTIVE DECONVOLUTION  
MINIMUM PHASE INVERSE PREDICTION FILTER  
ONE WINDOW  
DESIGN WINDOW ADJUSTED WITH CHANGING WATER BOTTOM  
OPERATOR LENGTH  
PREDICTION DISTANCE  
NUMBER OF CHANNELS  
WHITE NOISE  
0.1 %
9. TRACE BALANCE
10. VELOCITY ANALYSIS (VELAN#)  
EVERY 5 KILOMETRES
11. FK DEMULTIPLE
12. VELOCITY ANALYSIS (VELAN#)  
POST FK DEMULTIPLE
13. STRACK 2 X 3000%  
TRACE WEIGHTS APPLIED  
WHERE WATER BOTTOM = 1.0 SECOND  
OUTSIDE MUTE
14. RANDOM NOISE ATTENUATION
15. REFLECTION STRENGTH GAIN
16. RELATIVE AMPLITUDE COMPENSATION  
TIME(MSEC)  
20  
25500
17. SPATIALLY MERGE DATASETS  
10 - 20 SECONDS MEAN APPLIED  
120 - 25.5 SECONDS NO MEAN APPLIED

SCALER  
 1.40  
 1.13

18. DECONVOLUTION AFTER STACK  
TYPE: MINIMUM PHASE INVERSE FILTER  
TWO WINDOWS FROM 95 - 22500 MSEC  
DESIGN WINDOWS ADJUSTED WITH CHANGING WATER BOTTOM  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 80 MSEC  
NUMBER OF CHANNELS 101  
WHITE NOISE 0.1 %
19. BANDPASS FILTER  
LOW CUT 6 HZ
20. FINITE DIFFERENCE MIGRATION
21. WATER BOTTOM MUTE
22. GAIN (GCG)  
1000 MSEC
23. DECLINATION 2/1
24. RANDOM NOISE ATTENUATION
25. TIME VARIANT FILTER  
FILTER INTERPOLATION IN TIME AND SPACE  
TIMES VARY RELATIVE TO WATER BOTTOM  
LOCATION TIME(MSEC) L.C.(HZ) H.C.(HZ)  
SHALLOW 4 3000 4 50  
W.B. 4 4000 4 40  
8000 4 30  
14000 4 20
- W.B. 6 4000 4 70  
3500 MSEC 6000 4 50  
7500 4 40  
10000 4 30  
15000 4 20
- W.B. 8 5000 4 80  
5000 MSEC 7000 4 50  
9000 4 40  
11000 4 30  
13000 4 20
26. GAIN (AGC)
27. ARRAY FORMING  
1111 MIX

SHOTPOINT LOCATED AT NAVIGATION REFERENCE POINT.  
 A GUN AND CABLE CORRECTION TO SEA LEVEL OF  
 +17 MSEC HAS BEEN APPLIED DURING PLAYBACK.

POLARITY CONVENTION: NEGATIVE NUMBER  
 RECORDING: COMPRESSION PULSE NEGATIVE NUMBER  
 COMPRESSION PULSE NEGATIVE NUMBER



# LINE : 88-2

## S.P. : 310 - 700

(AT NAVIGATION REFERENCE POINT)

SCALED MIGRATION  
NORMAL POLARITY

SOUTHEAST

BOAT HEADING 348 DEGREES

### ATLANTIC GEOSCIENCE CENTRE

AREA : OFFSHORE NOVA SCOTIA

#### RECORDING DATA

<b>SOURCE</b>	AIRGUN ARRAY	<b>CABLE</b>	LRS-16A KILOSEIS STREAMER
TYPE	11 METERS	TYPE	180 ARRAY
GUN DEPTH	8100 CC	NUMBER OF GROUPS	250 METERS
ARRAY VOLUME	1800 P.S.I.	NEAR GRP TO SOURCE	4800 METERS
ARRAY PRESSURE	76 METERS	NEAR GRP TO FAR GRP	26.67 METERS
GUN ARRAY WIDTH	168 METERS	GROUP INTERVAL	14 METERS
ANTENNA TO SOURCE	80 METERS	CABLE DEPTH	
POP INTERVAL			
<b>NAVIGATION</b>		<b>INSTRUMENTS</b>	LRS 18A
PRIMARY	LORAN-C	FIELD RECORDER	6HZ/ 24DB/OCT
<b>VESSEL</b>		FILTER	HIGH CUT 87HZ/132DB/OCT
M/V RESOLUTION	PARTY 115	RECORD LENGTH	25.5 SEC
SHOT BY:	WESTERN GEOPHYSICAL LTD.	SAMPLE INTERVAL	4 MSEC
RECORDING DATE:	AUGUST 1988	FORMAT:	SEG-D MULTIPLEXED

PROCESSED BY  **WESTERN GEOPHYSICAL**  
 Western Atlas International  
 A Liberty/Dresser Company  
 CALGARY, ALBERTA

#### PROCESSING SEQUENCE AND PARAMETERS

1. FORMAT CONVERSION / DEMULTIPLEX
2. FK NOISE ATTENUATION APPLIED TO SHOTS
3. INSTRUMENT DESIGNATURE  
LRS-16A FIELD RECORDER
4. GEOMETRIC SPREADING COMPENSATION
5. PREDICTIVE DECONVOLUTION  
MINIMUM PHASE INVERSE PREDICTION FILTER  
ONE WINDOW  
DESIGN WINDOW ADJUSTED WITH CHANGING WATER BOTTOM  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 12 MSEC  
NUMBER OF CHANNELS 1  
WHITE NOISE 0.1 %
6. TRACE BRNANCE
7. VELOCITY ANALYSIS (VELAN<sup>o</sup>)  
EVENTS KILOMETRES
8. FK DEMULTIPLE
9. FK NOISE ATTENUATION APPLIED TO RECEIVERS
10. VELOCITY ANALYSIS (VELAN<sup>o</sup>)  
POST FK DEMULTIPLE
11. STRACK 3000Z  
OUTSIDE NOTE
12. RANDOM NOISE ATTENUATION
13. DECIMATION 2/1
14. REFLECTION STRENGTH GAIN
15. RELATIVE AMPLITUDE COMPENSATION  
TIME(MSEC) 20  
SCALER 1.10  
25500 1.30
16. DECONVOLUTION AFTER STRACK  
TYPE1  
TWO WINDOWS  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 50 MSEC  
NUMBER OF CHANNELS 101  
WHITE NOISE 0.1 %
17. BANDPASS FILTER  
LOW CUT 6 HZ
18. FINITE DIFFERENCE MIGRATION
19. GAIN (RMS)  
128/4096 MSEC
20. DECIMATION 2/1
21. RANDOM NOISE ATTENUATION
22. TIME VARIANT FILTER  
FILTER INTERPOLATION IN TIME AND SPACE  
TIME(MSEC) 1  
L.C.(HZ) 13608/OCT1  
H.G.(HZ) 13608/OCT1
23. GAIN (RMS)  
128/4096 MSEC
24. ARRAY FORMING  
1:1:1 MIX
25. DECIMATION 2/1

# LINE S.P.

88-3A-01 120 - 165  
 88-3A-02 166 - 229  
 88-3A-03 230 - 341  
 88-3A-04 342 - 372

(AT NAVIGATION REFERENCE POINT)

## SCALED MIGRATION

NORMAL POLARITY

NORTHEAST

BOAT HEADING 38 DEGREES

# ATLANTIC GEOSCIENCE CENTRE

AREA: OFFSHORE NOVA SCOTIA

### RECORDING DATA

<b>SOURCE</b>	AIRGUN ARRAY	<b>CABLE</b>	LRS-16A KILOSEIS STREAMER
TYPE	11 METERS	TYPE	120 ARRAY
GUN DEPTH	8100 CC	NUMBER OF GROUPS	250 METERS
ARRAY VOLUME	1800 P.S.I.	NEAR GRP TO SOURCE	3200 METERS
ARRAY PRESSURE	76 METERS	NEAR GRP TO FAR GRP	26.67 METERS
GUN ARRAY WIDTH	168 METERS	GROUP INTERVAL	14 METERS
ANTENNA TO SOURCE	53.34 METERS	CABLE DEPTH	
POP INTERVAL			
<b>NAVIGATION</b>			
PRIMARY	LORAN-C	<b>INSTRUMENTS</b>	
<b>VESSEL</b>	WESTERN GEOPHYSICAL LTD.	FIELD RECORDER	LOW CUT 6HZ/ 240B/OCT
M/V RESOLUTION	PARTY 115	FILTER	HIGH CUT 87HZ/1320B/OCT
SHOT BY:	WESTERN GEOPHYSICAL LTD.	RECORD LENGTH	25.5 SEC
RECORDING DATE:	AUGUST 1988	SAMPLE INTERVAL	4 MSEC
		FORMAT:	SEG-D MULTIPLEXED

PROCESSED BY  WESTERN GEOPHYSICAL  
 Western Atlas International  
 A Libco/Devcon Company  
 CALGARY, ALBERTA

### PROCESSING SEQUENCE AND PARAMETERS

1. FORMAT CONVERSION / DEMULTIPLEX
2. FK NOISE ATTENUATION APPLIED TO SHOTS
3. INSTRUMENT DESCRIPTION  
LRS-16A FIELD RECORDER
4. GEOMETRIC SPREADING COMPENSATION
5. PREDICTIVE DECONVOLUTION  
MINIMUM PHASE INVERSE PREDICTION FILTER  
ONE WINDOW  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 12 MSEC  
NUMBER OF CHANNELS 1  
WHITE NOISE 0.1 X
6. TRACE BALANCE
7. VELOCITY ANALYSIS (VELM\*)  
EVERY 3 KILOMETRES
8. FK DEMULTIPLE
9. FK NOISE ATTENUATION APPLIED TO RECEIVER
10. VELOCITY ANALYSIS (VELM\*)  
POST FK DEMULTIPLE
11. STRCK 3000X  
OUTSIDE NOTE
12. RANDOM NOISE ATTENUATION
13. DECIMATION 2/1
14. REFLECTION STRENGTH GAIN
15. RELATIVE AMPLITUDE COMPENSATION  
TIME(MSEC)  
SCALER  
0 1.50  
25500 0.95
16. DECONVOLUTION AFTER STACK  
TYPE: MINIMUM PHASE INVERSE FILTER  
TWO WINDOWS FROM NB -- 25500 MSEC  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 60 MSEC  
NUMBER OF CHANNELS 101  
WHITE NOISE 0.1 X
17. BANDPASS FILTER  
LOW CUT 6 HZ
18. FINITE DIFFERENCE MIGRATION
19. GAIN (RMS)  
128/4096 MSEC
20. DECIMATION 2/1
21. RANDOM NOISE ATTENUATION
22. TIME VARIANT FILTER  
FILTER INTERPOLATION IN TIME AND SPACE  
TIME(MSEC) L.C.(HZ) H.C.(HZ)  
(180B/OCT) (360B/OCT)
23. GAIN (RMS)  
128/4096 MSEC
24. ARRAY FORMING  
11.11 MIX

# LINE : 88-4

## S. P. : 101 - 870

(AT NAVIGATION REFERENCE POINT)

### SCALED MIGRATION

NORMAL POLARITY

SOUTHEAST

BOAT HEADING 315 DEGREES

## ATLANTIC GEOSCIENCE CENTRE

AREA : OFFSHORE NOVA SCOTIA

#### RECORDING DATA

<b>SOURCE</b>		<b>CABLE</b>	
TYPE	AIRGUN ARRAY	TYPE	LRS-16A KILOSEIS STREAMER
GUN DEPTH	11 METERS	NUMBER OF GROUPS	120 ARRAY
ARRAY VOLUME	8100 CG	NEAR GRP TO *SOURCE	250 METERS
ARRAY PRESSURE	1800 P.S.I.	NEAR GRP TO *FAR GRP	3200 METERS
GUN ARRAY WIDTH	76 METERS	GROUP INTERVAL	26.67 METERS
*ANTENNA TO *SOURCE	168 METERS	CABLE DEPTH	14 METERS
POP INTERVAL	53.34 METERS		
<b>NAVIGATION</b>		<b>INSTRUMENTS</b>	
PRIMARY	LORAN-C	FIELD RECORDER	LRS 16A
<b>VESSEL</b>		FILTER	LOW CUT 6HZ/ 2408/OCT
M/V RESOLUTION	PARTY 115	RECORD LENGTH	HIGH CUT 87HZ/13208/OCT
SHOT BY:	WESTERN GEOPHYSICAL LTD.	SAMPLE INTERVAL	25.5 SEC
RECORDING DATE:	AUGUST 1988	FORMAT:	4 MSEC
			SEG-0 MULTIPLEXED

PROCESSED BY



Western Atlas  
International  
A Union/Downer Company

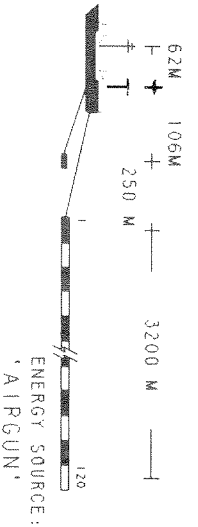
WESTERN  
GEOPHYSICAL

CALGARY, ALBERTA

#### PROCESSING SEQUENCE AND PARAMETERS

1. FORMAT CONVERSION / DEMULTIPLEX
2. FK NOISE ATTENUATION APPLIED TO SHOTS
3. INSTRUMENT DESIGNATURE  
LRS-16A FIELD RECORDER
4. GEOMETRIC SPREADING COMPENSATION
5. PREDICTIVE DECONVOLUTION  
MINIMUM PHASE PREDICTION FILTER  
ONE WINDOW  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 12 MSEC  
NUMBER OF CHANNELS 1  
WHITE NOISE 0.1 %
6. TRACE BRNANCE
7. VELOCITY ANALYSIS (VELAN\*)  
EVERY 5 KILOMETRES
8. FK DEMULTIPLE
9. VELOCITY ANALYSIS (VELAN\*)  
POST FK DEMULTIPLE
10. STRCK 3000%
11. RANDOM NOISE ATTENUATION  
OUTSIDE WOTE
12. DECIMATION 2/1
13. REFLECTION STRENGTH GAIN
14. RELATIVE AMPLITUDE COMPENSATION
15. DECONVOLUTION AFTER STACK  
TYPE: TWO WINDOWS  
OPERATOR LENGTH 300 MSEC  
PREDICTION DISTANCE 60 MSEC  
NUMBER OF CHANNELS 101  
WHITE NOISE 0.1 %
16. BANDPASS FILTER  
LOW CUT 6 HZ
17. FINITE DIFFERENCE MIGRATION
18. GAIN (RMS)  
128/4096 MSEC
19. DECIMATION 2/1
20. RANDOM NOISE ATTENUATION
21. TIME VARIANT FILTER  
FILTER INTERPOLATION IN TIME AND SPACE  
TIME(MSEC) L.C.(HZ) H.C.(HZ)  
(1808/0CT) (3608/0CT)
22. GAIN (RMS)  
2000 4 40  
11000 4 40  
13000 4 40  
128/4096 MSEC
23. ARRAY FORMING  
1:1:1 MIX

SCALER  
1.40  
20  
25500  
1.15



SHOTPOINT LOCATED AT NAVIGATION REFERENCE POINT.  
A GUN AND CABLE CORRECTION TO SEA LEVEL OF  
+17 MSEC HAS BEEN APPLIED DURING PLAYBACK.

POLARITY CONVENTION:  
RECORDING: COMPRESSION PULSE NEGATIVE NUMBER  
PROCESSING: COMPRESSION PULSE NEGATIVE NUMBER  
DISPLAY: NORMAL POLARITY  
COMPRESSION PULSE TROUGH  
(DECREASING BLACK)

PLOTTING GAIN:

11 08