

# Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>1</b>	<b>1</b>
<b>SP #</b>	<b>1935</b>	<b>2105</b>

<b>Line</b>	<b>MGL2208001N01</b>
<b>Sequence</b>	<b>1</b>
<b>Direction</b>	

Streamer Parameters				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, µB	n/a			
EOL Cable Noise, µB	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	3 m
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
<b>SP</b>	1935	2105
<b>Date MM/DD/YY</b>	8/5/2022	8/5/2022
<b>Time UTC</b>	3:27	3:58
<b>Volume (cu in.)</b>	90 in3	90 in3
<b>Wind (kts)</b>	NE 10 kts	NE 15 kts
<b>Sea State (m)</b>	1 m	1 m
<b>Water Depth (m)</b>	2700 m	2800 m

Cable	Dead Channels
<b>1</b>	
<b>2</b>	
<b>3</b>	
<b>4</b>	


<b>General / Line Comments</b>
<b>Line is to be NTBP</b>
Source: 2 x 45/105 GI Guns

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>2</b>	<b>2</b>
<b>SP #</b>	<b>3071</b>	<b>3547</b>

<b>Line</b>	<b>MGL2208002N02</b>
<b>Sequence</b>	<b>2</b>
<b>Direction</b>	<b>141.4</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu\text{B}$	n/a			
EOL Cable Noise, $\mu\text{B}$	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	3070	3547
Date MM/DD/YY	8/5/2022	8/5/2022
Time UTC	7:15	08:43
Volume (cu in.)	90 in3	90 in3
Wind (kts)	NE 10 kts	NE 23.9 kts
Sea State (m)	1 m	1 m
Water Depth (m)	2785 m	2789 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>3</b>	<b>3</b>
<b>SP #</b>	<b>3974</b>	<b>4800</b>

<b>Line</b>	<b>MGL2208003N03</b>
<b>Sequence</b>	<b>3</b>
<b>Direction</b>	<b>13.0</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu\text{B}$	n/a			
EOI Cable Noise, $\mu\text{B}$	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	3974	4800
Date MM/DD/YY	8/5/2022	8/5/2022
Time UTC	09:00	11:19
Volume (cu in.)	90 in3	90 in3
Wind (kts)	NE 26.0 kts	NE 24 kts
Sea State (m)	1 m	1 m m
Water Depth (m)	2791 m	2727 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>4</b>	<b>4</b>
<b>SP #</b>	<b>4983</b>	<b>5812</b>

<b>Line</b>	<b>MGL2208004N05</b>
<b>Sequence</b>	<b>4</b>
<b>Direction</b>	<b>133</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	4983	5812
Date MM/DD/YY	8/5/2022	8/5/2022
Time UTC	12:41	15:06
Volume (cu in.)	90 in3	90 in3
Wind (kts)	NE 20 kts	NE19.7 kts
Sea State (m)	1 m	1 m
Water Depth (m)	2763 m	2774 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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BOT/EOT - Begin/End of Tape	SI - Seismic Interference
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NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>5</b>	<b>5</b>
<b>SP #</b>	<b>6060</b>	<b>6518</b>

Line	MGL2208005N06
Sequence	5
Direction	9.8

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu\text{B}$	n/a			
EOL Cable Noise, $\mu\text{B}$	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	6060	6518
Date MM/DD/YY	8/5/2022	8/5/2022
Time UTC	15:43	16:55
Volume (cu in.)	90 in3	90 in3
Wind (kts)	NE 24 kts	NE 24 kts
Sea State (m)	1.5 m	1.5 m
Water Depth (m)	2758 m	2718 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
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NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>6</b>	<b>6</b>
<b>SP #</b>	<b>6981</b>	<b>7833</b>

<b>Line</b>	<b>MGL2208006N07</b>
<b>Sequence</b>	<b>6</b>
<b>Direction</b>	<b>233</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu\text{B}$	n/a			
EOL Cable Noise, $\mu\text{B}$	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	7013	7833
Date MM/DD/YY	8/5/2022	8/5/2022
Time UTC	17:33	19:51
Volume (cu in.)	90 in3	90 in3
Wind (kts)	N 25 kts	NE 26.7 kts
Sea State (m)	1.0 m	1 m
Water Depth (m)	2723 m	2786 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>7</b>	<b>7</b>
<b>SP #</b>	<b>7967</b>	<b>8849</b>

Line	MGL2208007N01a
Sequence	7
Direction	99.9

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	8000	8849
Date MM/DD/YY	8/5/2022	8/5/2022
Time UTC	21:13	23:33
Volume (cu in.)	90 in3	90 in3
Wind (kts)	N 19 kts	N 23 kts
Sea State (m)	1.0 m	2.0 m
Water Depth (m)	2778 m	2747 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>8</b>	<b>9</b>
<b>SP #</b>	<b>8920</b>	<b>11260</b>

<b>Line</b>	<b>MGL2208008P01</b>
<b>Sequence</b>	<b>8</b>
<b>Direction</b>	<b>290</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	8920	11260
Date MM/DD/YY	8/13/2022	8/13/2022
Time UTC	16:00	22:12
Volume (cu in.)	90 in3	90 in3
Wind (kts)	NW7.1 kts	nw7.8 kts
Sea State (m)	1 m	1 m
Water Depth (m)	2940 m	2897 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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# Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition		
Navigation	Paul Parolski	Cody Bahlau

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>10</b>	<b>10</b>
<b>SP #</b>	<b>12059</b>	<b>12623</b>

<b>Line</b>	<b>MGL2208009P02</b>
<b>Sequence</b>	<b>9</b>
<b>Direction</b>	<b>198.8</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, µB	n/a			
EOL Cable Noise, µB	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
<b>SP</b>	12059	12623
<b>Date MM/DD/YY</b>	8/13/2022	8/14/2022
<b>Time UTC</b>	22:37	00:00
<b>Volume (cu in.)</b>	90 in3	90 in3
<b>Wind (kts)</b>	NW11.2 kts	NW 9.2 kts kts
<b>Sea State (m)</b>	1 m	1 m m
<b>Water Depth (m)</b>	2901 m	2908 m m

Cable	Dead Channels
1	
2	
3	
4	


<b>General / Line Comments</b>
Source: 2 x 45/105 GI Guns
Missed shots 12469-12493

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition		
Navigation	Paul Parolski	Cody Bahlau

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>11</b>	<b>12</b>
<b>SP #</b>	<b>13571</b>	<b>16045</b>

<b>Line</b>	<b>MGL2208010P03</b>
<b>Sequence</b>	<b>10</b>
<b>Direction</b>	<b>102.9</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, µB	n/a			
EOL Cable Noise, µB	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
<b>SP</b>	13571	16045
<b>Date MM/DD/YY</b>	8/14/2022	8/14/2022
<b>Time UTC</b>	00:22	06:51
<b>Volume (cu in.)</b>	90 in3	90 in3
<b>Wind (kts)</b>	NW 5.9 kts	N 8.2 kts kts
<b>Sea State (m)</b>	1 m	1 m m
<b>Water Depth (m)</b>	2910 m	2968 m m

Cable	Dead Channels
1	
2	
3	
4	


<b>General / Line Comments</b>
Source: 2 x 45/105 GI Guns

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>13</b>	<b>13</b>
<b>SP #</b>	<b>17021</b>	<b>18018</b>

Line	MGL2208011P04
Sequence	11
Direction	183.8

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	17021	18018
Date MM/DD/YY	08/14/2022	08/14/2022
Time UTC	07:14	10:17
Volume (cu in.)	90 in3	90 in3
Wind (kts)	N9.3 kts	N7.5 kts
Sea State (m)	1 m	1 m
Water Depth (m)	2965.9 m	2637.3 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
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FGSP- First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>14</b>	<b>15</b>
<b>SP #</b>	<b>19022</b>	<b>21465</b>

<b>Line</b>	<b>MGL2208012P05</b>
<b>Sequence</b>	<b>12</b>
<b>Direction</b>	<b>293.2</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, µB	n/a			
EOL Cable Noise, µB	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
<b>SP</b>	19022	21465
<b>Date MM/DD/YY</b>	08/14/2022	08/14/2022
<b>Time UTC</b>	10:45	18:01
<b>Volume (cu in.)</b>	90 in3	90 in3
<b>Wind (kts)</b>	N8.9 kts	W 5.2 kts
<b>Sea State (m)</b>	1 m	1 m
<b>Water Depth (m)</b>	2996.4 m	2907.9 m

Cable	Dead Channels
1	
2	
3	
4	


<b>General / Line Comments</b>
Source: 2 x 45/105 GI Guns

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

[illegible]



# Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition		
Navigation	Paul Parolski	Cody Bahlau

	SOL	EOL
Tape #	16	17
SP #	22030	24913

Line	MGL2208013P07
Sequence	13
Direction	116.6

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, µB	n/a			
EOL Cable Noise, µB	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	22030	24913
Date MM/DD/YY	08/14/2022	08/15/2022
Time UTC	18:59	02:08
Volume (cu in.)	90 in3	90 in3
Wind (kts)	S 4.5 kts	NW 11.3 kts
Sea State (m)	0.5 m	0.5 m
Water Depth (m)	2914.6 m	3014.2 m

Cable	Dead Channels
1	
2	
3	
4	


General / Line Comments
Source: 2 x 45/105 GI Guns

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>18</b>	<b>19</b>
<b>SP #</b>	<b>25844</b>	<b>28334</b>

<b>Line</b>	<b>MGL2208014P08</b>
<b>Sequence</b>	<b>14</b>
<b>Direction</b>	<b>271.0</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, µB	n/a			
EOL Cable Noise, µB	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
<b>SP</b>	25844	28334
<b>Date MM/DD/YY</b>	08/15/22	08/15/22
<b>Time UTC</b>	03:11	10:09
<b>Volume (cu in.)</b>	90 in3	90 in3
<b>Wind (kts)</b>	N 12.2 kts	N 6.9 kts
<b>Sea State (m)</b>	0.5 m	0.5 m
<b>Water Depth (m)</b>	3012 m	2929 m

Cable	Dead Channels
1	
2	
3	
4	


<b>General / Line Comments</b>
Source: 2 x 45/105 GI Guns

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

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## Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>20</b>	<b>20</b>
<b>SP #</b>	<b>29051</b>	<b>29181</b>

<b>Line</b>	<b>MGL2208015P09</b>
<b>Sequence</b>	<b>15</b>
<b>Direction</b>	<b>353.4</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	29051	29181
Date MM/DD/YY	08/15/2022	08/15/2022
Time UTC	10:35	10:57
Volume (cu in.)	90 in3 in3	90 in3 in3
Wind (kts)	NW7.8 kts	N3.1 kts
Sea State (m)	0.5 m	0.5 m
Water Depth (m)	2922 m	2926 m

Cable	Dead Channels
1	
2	
3	
4	

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Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N T R P - Not To Be Processed	

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Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	
Navigation		
		Cody Bahlau

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>21</b>	<b>22</b>
<b>SP #</b>	<b>30002</b>	<b>32263</b>

<b>Line</b>	<b>MGL2208016P10</b>
<b>Sequence</b>	<b>16</b>
<b>Direction</b>	<b>82.4</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	30002	32263
Date MM/DD/YY	08/15/2022	08/15/2022
Time UTC	11:16	17:12
Volume (cu in.)	90 in3 in3	90 in3 in3
Wind (kts)	W4 kts	NE3.5 kts
Sea State (m)	0.5 m	0.5 m
Water Depth (m)	2928 m	3003 m

Cable	Dead Channels
1	
2	
3	
4	

[illegible][illegible]

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

[illegible]



## Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>23</b>	<b>24</b>
<b>SP #</b>	<b>34143</b>	<b>36984</b>

<b>Line</b>	<b>MGL2208017P11</b>
<b>Sequence</b>	<b>17</b>
<b>Direction</b>	<b>10.6</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	34143	36984
Date MM/DD/YY	08/17/2022	08/18/2022
Time UTC	22:49	08:23
Volume (cu in.)	90 in3 in3	90 in3 in3
Wind (kts)	N24.8 kts	N17 kts
Sea State (m)	2 m	1.5 m
Water Depth (m)	2977 m	2922 m

Cable	Dead Channels
1	
2	
3	
4	

[illegible][illegible]

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

Time UTC	File	SP	Tape	Description
22:49	21080	34143	23	SOL MGL2208017P11 - 2 guns, 90 in3
23:59	21432	34495	23	midnight shot point
06:10	23133	36196	24	BOT #24
08:23	23921	36984	24	EOL MGL2208017P11 - 2 guns, 90 in3

## Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>25</b>	<b>25</b>
<b>SP #</b>	<b>37064</b>	<b>39046</b>

Line	MGL2208018P12
Sequence	18
Direction	276.7

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	37064	39046
Date MM/DD/YY	08/18/2022	08/18/2022
Time UTC	08:34	13:52
Volume (cu in.)	90 in3 in3	90 in3 in3
Wind (kts)	N20.9 kts	N24.7 kts
Sea State (m)	1.5 m	1.5 m
Water Depth (m)	2915 m	2896 m

Cable	Dead Channels
1	
2	
3	
4	

[illegible][illegible]

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

Time UTC	File	SP	Tape	Description
08:34	23923	37064	25	SOL MGL2208018P12 - 2 guns, 90 in3
13:52	25905	39046	25	EOL MGL2208018P12 - 2 guns, 90 in3

Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	Cody Bahlau
Navigation		

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>26</b>	<b>26</b>
<b>SP #</b>	<b>40060</b>	<b>40885</b>

Line	MGL2208019P13
Sequence	19
Direction	178.6

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu\text{B}$	n/a			
EOL Cable Noise, $\mu\text{B}$	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	40060	40885
Date MM/DD/YY	08/18/2022	08/18/2022
Time UTC	14:03	16:00
Volume (cu in.)	90 in3 in3	90 in3 in3
Wind (kts)	N18 kts	NE 12.1 kts
Sea State (m)	1.5 m	1.5 m
Water Depth (m)	2897 m	2907 m

Cable	Dead Channels
1	
2	
3	
4	

[illegible][illegible]

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

[illegible]

Observers Log	
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Vessel	Marcus G. Langseth
Client	NSF - Spinelli
Area	Cascadia
Job Number	MGL2208

Shift	00:00-12:00	12:00-00:00
Science Officer	Cody Bahlau	
Acquisition	Paul Parolski	
Navigation		
		Cody Bahlau

	<b>SOL</b>	<b>EOL</b>
<b>Tape #</b>	<b>27</b>	<b>28</b>
<b>SP #</b>	<b>41070</b>	<b>43829</b>

<b>Line</b>	<b>MGL2208020P14</b>
<b>Sequence</b>	<b>20</b>
<b>Direction</b>	<b>110</b>

Streamer Parameters				
	1	2	3	4
Length (m)	900			
Auxiliaries	n/a			
Shotpoint Interval: (m)	25			
Offset CS - CNG (m)	n/a			
Group Interval: (m)	6.25			
Number of channels	144			
Streamer Depth (m)	4			
SOL Cable Noise, $\mu$ B	n/a			
EOL Cable Noise, $\mu$ B	n/a			

Source Parameters	
Total Volume	90 in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	4
Sub-array Separation	0 m
COS to COS	single source

Description	SOL/FGSP	EOL/LGSP
SP	41070	43829
Date MM/DD/YY	08/18/2022	08/18/2022
Time UTC	16:11	23:32
Volume (cu in.)	90 in3 in3	90 in3 in3
Wind (kts)	N14.4 kts	N 6.9 kts
Sea State (m)	1.5 m	1 m
Water Depth (m)	2905.9 m	2984.4 m

Cable	Dead Channels
1	
2	
3	
4	

[illegible][illegible]

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable SP	LFSP - Last Full Fold SP
FOLSP - First Overlap SP	Fa - Feather Angle
BOT/EOT - Begin/End of Tape	SI - Seismic Interference
NDR - No Data Recorded	ITB - Imitation Time Break
NDR - No Data Recorded	ITB - Internal Time Break
N.T.B.P. - Not To Be Processed	

Time UTC	File	SP	Tape	Description
16:11	26736	41070	27	SOL MGL2208020P14 - 2 guns, 90 in3
21:44	28789	43123	28	BOT #28
23:32	29495	43829	28	EOL MGL2208020P14 - 2 guns, 90 in3