

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	003	016	FGSP	924
SP #	924	3188	LGSP	3188

Line	MGL1109_MCS01
Sequence	001
Direction	263

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Channel 608 blank or bad data recordings, Channel 484 corrupted/noisey data

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/08/11	06/09/11
Time UTC	1528	0548
Volume (cu in.)	6600	6600
Wind (kts)	S 15	NW 12
Sea State (ft)	3-7	1
Water Depth (m)	4066	4574

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP 924 LAT 56 59.0972 LON 146 43.9048
EOL SP #3188 LAT 56 50 41.02 N LON 148 34 05.31 W
SOL NOISY CHANNELS
EOL NOISY CHANNELS #23, 41, 80, 198, 282, 373, 393, 446

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

[illegible]

# Observers Log

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Job Number	MGL1109

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
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Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	17	50	FGSP	922
SP #	922	6527	LGSP	6527

Line	MGL1109_MCS02
Sequence	002
Direction	137

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/09/11	06/10/11
Time UTC	0940	1926
Volume (cu in.)	6600	6420
Wind (kts)	2	8
Sea State (ft)	1-3	1
Water Depth (m)	4733	4053

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP 922 LAT 56 58 38.318 N LON 148 23 47.934 W
EOL SP 6527 LAT 55 07.6517N LON 145 20.1076W
SOL NOISY CHANNELS #23, 41, 80, 198, 282, 373, 393, 446
Dropped shots 1338, 1339 reset NCC on Spectra
Secured autofire detection S1G2 @ shotpoint 1774, no trace autofires in record. False reporting.
Shut down for whale SP2066, full volume FGSP2354
Channel 608 blank or bad data recordings, Channel 484 corrupted/noise data
Shut down for whale SP2831, full volume FGSP2962
SP 3473 Vol = 6420 cu.in. Gun 3-1 disabled Gun 4-5 enabled
Shut down for whale SP #5867, full volume SP #6132
EOL NOISY CHANNELS ::

Abbreviations	
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FCSP - First Chargable SP	LFFSP - Last Full Fold SP
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
0940	1	922	17	SOL Turn noise at run in
1036	168	1090	18	Reel change, (change we can believe in)
1134	336	1258	19	Reel change
1204	416	1338-1339	19	Dropped shots due to NCC reset
1236	504	1428	20	Reel change
1341	612	1595	21	Reel change
1412	766	1679	21	fire timing error S1G2 4.7 ms
1412	767	1680	21	fire timing error S1G2 -4.0 ms
1413	769	1682	21	auto fire S1G2 210.4 ms
1415	775	1688	21	auto fire S1G2 282.4 ms
1418	783	1696	21	auto fire S1G2 256.0 ms
1419	786	1699	21	auto fire S1G2 288.8 ms
1420	787	1700	21	auto fire S1G2 288.8 ms
1428	800	1723	21	auto fire S1G2 297.6 ms
1429	802	1726	21	auto fire S1G2 213.6 ms
1435	816	1739	21	auto fire S1G2 202.4 ms
1437	820	1745	21	auto fire S1G2 280.0 ms
1437	821	1747	21	auto fire S1G2 222.4 ms
1438	822	1748	21	auto fire S1G2 222.4 ms
1440	827	1753	21	auto fire S1G2 214.4 ms
1440	828	1754	21	auto fire S1G2 214.4 ms
1441	830	1756	21	auto fire S1G2 252.0 ms
1441	831	1757	21	auto fire S1G2 223.2 ms
1443	835	1761	21	auto fire S1G2 118.4 ms
1443	836	1762	21	auto fire S1G2 248.8 ms
1444	840	1764	22	Reel change
1446	845	1769	22	auto fire S1G2 256.0 ms
1447	846	1771	22	auto fire S1G2 260.0 ms
1448	851	1774	22	Turned off autofire detect on S1G2
15:48	1008	1931	23	Reel change
16:41	1143	2066	23	Shut down for whale sighting
1656	1176	2099	24	reel change
1822	1338	2262	24	ramp up started
1825	1344	2268	25	reel change
1858	1430	2354	25	full volume FGSP after shutdown
2025	1680	2604	26	Reel change
2125	1848	2772	27	Reel change
2147	1907	2831	28	shutdown for whales
2223	1977	2901	28	ramp up started
2248	2016	2950	29	reel change
2254	2027	2961	29	Full volume
2255	2028	2962	29	FGSP
2350	2184	3118	30	reel change
06/10/2011				
0005	2225	3159	30	Delta Timing Error S2G09 -2.1ms
0005	2226	3160	30	Delta Timing Error S2G09 2.5ms

0011	2244	3178	30	Delta Timing Error S2G09 2.6ms
0012	2247	3181	30	Delta Timing Error S2G09 -2.1ms
0014	2253	3187	30	Delta Timing Error S2G09 -3.4ms
0049	2352	3286	31	Reel change
0149	2521	3455	32	Reel change
0150	2522	3456	32	Shot error no fire S3G01
0151	2525	3459	32	Shot error no fire S3G01
0152	2527	3461	32	Shot error no fire S3G01
0152	2529	3463	32	auto fire error S3G01
0153	2530	3464	32	no fire error S3G01
0153	2531	3465	32	Delta timing error S3G01
0153	2532	3466	32	Delta timing error S3G01
0154	2533	3467	32	Delta timing error S3G01
0154	2534	3468	32	Delta timing error S3G01
0155	2537	3471	32	no fire error S3G01
0156	2538	3472	32	no fire error S3G01
0156	239	3473	32	S3G01 disabled - S4G05 enabled - new volume 6420 cu. In.
0156	2540	3474	32	delta timing error S4G05
0157	2541	3475	32	delta timing error S4G05
0157	2542	3476	32	delta timing error S4G05
0158	2543	3477	32	delta timing error S4G05
0248	2688	3622	33	Reel change
0345	2856	3790	34	Reel change
0441	3024	3958	35	Reel change
0534	3192	4126	36	Reel change
0626	3360	4294	37	Reel change
0718	3528	4462	38	Reel change
0813	3696	4630	39	Reel change
0904	3864	4798	40	Reel change
1001	4032	4966	41	Reel change
1101	4200	5134	42	Reel change
1204	4368	5302	43	Reel change
1302	4536	5470	44	Reel change
1358	4704	5638	45	Reel change
1457	4872	5806	46	Reel change
1518	4935	5867	46	Shutdown for whales
1605	5040	5974	47	reel change
1645	5130	6064	47	Start ramp up
1715	5198	6132	47	Ramp up complete
1716	5208	6142	48	reel change
1813	5376	6309	49	reel change
1902	5523	6457	49	Begin recovery of PAM
1908	5542	6476	49	Pam recovered
1909	5544	6478	50	Reel change
1928	5595	6527	50	EOL

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Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	51	61	FGSP	987
SP #	926	2645	LGSP	2645

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/11/11	6/11/11
Time UTC	01:22	11:09
Volume (cu in.)	6600	6600
Wind (kts)	5.3	calm
Sea State (ft)	1-3	1-3
Water Depth (m)	4030	3908

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

<b>General / Line Comments</b>
SOL SP 926 Lat 55 09 0.085 Lon 145 23 06.966 GPS data available after Spectra nav data corrected location FGSP 987
EOL SP 2645 LAT 55 52 33.305 N LONG 145 05 20.939 W
SOL NOISY CHANNELS No SOL noise test performed at previous EOL of MCS02
Channel 608 blank or bad data recordings, Channel 484 corrupted/noisey data
EOL NOISY CHANNELS No EOL noise test due to start of turn into next line while still active

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS03
Sequence	003
Direction	13

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
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FCSP - First Chargable SP	LFFSP - Last Full Fold SP
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	

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	62	79	FGSP	1076
SP #	1076	4036	LGSP	4036

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/11/11	06/12/11
Time UTC	1128	0514
Volume (cu in.)	6600	6600
Wind (kts)	calm	12 W
Sea State (ft)	1-3	2-3
Water Depth (m)	3909	4161

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

<b>General / Line Comments</b>
SOL SP 1076 Lat: 55 53. 16.779 Lon: 145 07 38.727 S2G4 OFF S2G5 ON
EOL SP #4036 Lat 55 30 33.586 Long 147 23 01.798
Channel 608 blank or bad data recordings, Channel 484 corrupted/noisey data
SP # 2340 - 2358 Power Down due to Dolphins
SP # 3313 - 3436 Power Down due to Whales
EOL NOISY CHANNELS 41,80, 232, 264, 276, 282, 284, 373, 391, 393, 446 CH # 608 dead

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS04
Sequence	004
Direction	254

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	



[illegible]

# Observers Log

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Job Number	MGL1109

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Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	80	80	FGSP	1008
SP #	1001	1128	LGSP	1128

Line	MGL1109_MCS04a
Sequence	005
Direction	245

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)				
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/12/11	06/12/11
Time UTC	0529	0632
Volume (cu in.)	40	40
Wind (kts)	10.5	9.7
Sea State (ft)	3	3
Water Depth (m)	4163	4163

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP 1001 Lat 55 30 18.426 Long 147 24 42.578
EOL SP 1128 Lat 55 30 01.475 Long 147 31 13.232
SOL NOISY CHANNELS
Shot at 30 second timed interval NOT on distance
EOL NOISY CHANNELS 41, 80, 232, 264, 276, 282, 284, 373, 391, 393, 446, ch#608 dead

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

[illegible]

# Observers Log

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Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	81	136	FGSP	920
SP #	920	10194	LGSP	10194

Line	MGL1109_MCS05
Sequence	006
Direction	95

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/12/11	6/14/2011
Time UTC	0828	1643
Volume (cu in.)	6600	6560
Wind (kts)	17SE	11
Sea State (ft)	2-5	3-5
Water Depth (m)	4167	3434

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments						
SOL SP 920 Lat 55 31 24.414 N LON 147 23 01.819 W						
EOL SP 10194 LAT: 55 33 57.199 LON 140 05 31.407						
SOL NOISY CHANNELS 41,80, 232, 264, 276, 282, 284, 373, 391, 393, 446 CH # 608 dead						
Midnight SP #3535						
SP # 3666-3816 Power Down due to whale SP # 3998 - 4169 Power down due to whale						
SP # 6022-6138 Power Down due to whale SP # 6224-6277 Power Down due to whale						
SP # 5133 Gun 3-10 disabled						
Gun 3-5 enabled VOL = 6560						
Midnight SP #7414 LAT 55 23 39.444 N LON 142 16 43.387 W						
EOL NOISY CHANNELS						
23: 10.719, 41: 20.197, 80: 43.744, 198: 40.2, 263: 11.394, 264: 14.733, 274: 11.865, 303: 27.234, 373: 21.361, 393: 31.271, 396: 11.158						
446: 14.174						

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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	

Time UTC	FILE	SP	Tape	Description
0828	1	920	81	SOL
0850	60	980	81	Comm error S3G06
0854	63	983	81	Comm error S3G09
0927	168	1088	82	Reel change
0947	225	1144	82	Comm error S3G07
1023	336	1256	83	Reel change
1028	350	1269	83	Comm error S3G10
1047	408	1327	83	Comm error S3G07
1106	467	1386	83	Comm error S3G06
1118	504	1424	84	Reel change
1121	512	1432	84	Comm error S3G09
1157	624	1544	84	Comm error S3G06
1213	672	1592	85	Reel change
1225	710	1628	85	Comm error S3G10
1248	782	1702	85	Comm error S3G08
1251	790	1710	85	Comm error S3G09
1301	822	1742	85	Comm error S3G10
1306	840	1760	86	Reel change
1346	961	1881	86	Comm error S3G10
1402	1008	1928	87	Reel change
1438	1119	2039	87	Comm error S3G09
1445	1140	2060	87	Comm error S3G06
1458	1176	2096	88	Reel change
1500	1180	2100	88	Comm error S3G07
1506	1197	2117	88	Comm error S3G06
1601	1344	2264	89	Reel change
1629	1413	2332	89	comm error S3G07
1708	1512	2432	90	Reel change
1722	1546	2466	90	Comm error S3G06
1722	1547	2467	90	Comm error S3G10
1814	1680	2600	91	Reel change
1902	1799	2719	91	S3G10 Delta error 6.6 ms
1902	1800	2720	91	S3G10 Delta error -5.1 ms
1912	1824	2744	91	Gun 3-7 No Fire
1921	1848	2768	92	RC
1956	1937	2857	92	Gun 3-9 No Fire
2025	2016	2936	93	Reel change
2036	2047	2967	93	Comm error S3G08
2110	2140	3060	93	Comm error S3G08
2124	2179	3099	93	Comm error S3G10
2126	2184	3104	94	Reel change
2132	2201	3121	94	Comm error S3G07
2150	2251	3171	94	Gun 3-10 delta error 6.9ms
2150	2252	3172	94	Gun 3-10 delta error -5.0ms
2157	2271	3191	94	Gun 3-8 No Fire

2209	2303	3223	94	Gun 3-10 delta 2.2ms
2215	2321	3241	94	Gun 3-9 No Fire
2216	2325	3245	94	Gun 3-10 delta 2.3ms
2226	2352	3272	95	Reel change
2321	2509	3429	95	Gun 3-9 delta 6.8ms
2322	2510	3430	95	Gun 3-9 delta 4.8ms
2325	2520	3440	96	Reel change
2346	2577	3497	96	Gun 3-10 delta -5.2ms
2349	2585	3505	96	Gun 3-10 delta -5.2ms
June/13/2011				
0000	2630	3535	96	Midnight SP # 3535
0003	2623	3543	96	Gun 3-10 delta 6.5ms
0003	2624	3544	96	Gun 3-10 delta -4.7ms
0004	2627	3547	96	Gun 3-9 No Fire
0008	2638	3558	96	Gun 3-10 Auto Fire False
0010	2644	3564	96	Gun 3-10 Auto Fire False
0010	2645	3565	96	Gun 3-10 Auto Fire False
0025	2688	3608	97	Reel change
0046	2746	3666	97	power down for whale
0116	2815	3735	97	start ramp up
0133	2856	3776	98	Reel change
0147	2892	3812	98	Full volume = 6600
0149	2897	3817	98	FGSP
0151	2903	3823	98	start of turn
0152	2905	3825	98	shot error S3G10 auto fire
0200	2926	3846	98	shot error S3G10 auto fire
0202	2933	3853	98	shot error S3G10 timing error 6.9ms
0203	2934	3854	98	shot error S3G10 timing error -5.2ms
0204	2937	3857	98	shot error S3G10 timing error 437.5ms
0208	2949	3869	98	shot error S3G10 timing error 6.6ms
0208	2950	3870	98	shot error S3G10 timing error -4.8ms
0218	2977	3897	98	shot error S3G10 timing error 5.7ms
0218	2978	3898	98	shot error S3G10 timing error -4.2ms
0234	3024	3944	99	Reel change
0252	3078	3998	99	power down for whale
0328	3165	4085	99	start ramp up
0339	3192	4112	100	Reel change
0422	3300	4220	100	Gun 3-7 No Fire
0431	3326	4246	100	Gun 3-9 No Fire
0443	3360	4280	101	Reel change
0443	3361	4281	101	S3G10 comm error
0535	3513	4433	101	S3G09 comm error
0539	3528	4448	102	Reel change
0557	3579	4499	102	S3G09 comm error
0558	3583	4503	102	S3G08 comm error
0635	3689	4609	102	Gun 3-7 comm error
0638	3696	4616	103	Reel change
0705	3771	4691	103	Gun 3-6 comm error

0729	3840	4760	103	Gun 3-10 comm error
0737	3864	4784	104	Reel change
0815	3971	4889	104	S3G07 comm error
0830	4010	4930	104	S3G06 comm error
0837	4032	4952	105	Reel change
0901	4094	5014	105	S3G06 comm error
0912	4108	5043	105	S3G06 comm error
0917	4142	5058	105	S3G10 Delta Timing @ -4.1 ms
0918	4143	5059	105	S3G10 Delta Timing @ 3.0 ms
0929	4169	5089	105	S3G10 Auto fire @ 161.2
0936	4189	5109	105	S3G10 Auto fire @ 496
0937	4190	5110	105	S3G10 Auto fire @ 605.2
0938	4193	5113	105	S3G10 Auto fire @ 513.2
0938	4194	5114	105	S3G10 Auto fire @ 483.1
0939	4196	5116	105	S3G10 Auto fire @ 942.8
0940	4198	5118	105	S3G10 Auto fire @ 469.2
0940	4200	5120	105	Reel change
0941	4200	5120	106	S3G10 Delta Timing @ 5.7 ms
0941	4201	5121	106	S3G10 Delta Timing @ -4.1 ms
0941	4202	5122	106	S3G10 Auto fire @ 386.3
0942	4204	5124	106	S3G10 Auto fire @ 1013.0
0942	4205	5125	106	S3G10 Auto fire @ 1013.0
0943	4208	5128	106	S3G10 Delta Timing @ 6.0 ms
0943	4209	5129	106	S3G10 Delta Timing @ -4.7 ms
0944	4210	5130	106	S3G10 Auto fire @ 184.6
0945	4213	5133	106	S3G10 Taken Offline
0945	4214	5134	106	S3G05 changed from spare to auto
0946	4215	5135	106	S3G05 Delta Timing @ 2.3 ms
1044	4368	5288	107	Reel change
1135	4507	5331	107	Comm error S3G06
1142	4528	5448	107	Comm error S3G08
1145	4536	5456	108	Reel change
1244	4704	5624	109	Reel change
1315	4790	5709	109	Com error S3G07
1317	4794	5713	109	comm eror S3G08
1345	4872	5792	110	Reel change
1411	4944	5861	110	Comm error S3G09
1446	5040	5960	111	Reel change
1501	5081	6001	111	S3G06 comm error
1501	5101	6001	111	Comm Error S3G06
1508	5101	6021	111	Power down for dolphin
1508	5100	6020	111	Comm error S3G08
1526	5121	6061	111	Comm error S3G10
1529	5127	6067	111	Ramp up after power down
1531	5129	6069	111	Comm error S3G08
1606	5218	6138	112	Ramp up complete FGSP
1610	5227	6147	112	S3G08 comm error
1623	5262	6182	112	S3G06 comm error

1639	5304	6224	112	Power down for dolphin
1703	5337	6277	112	Ramp up after power down
1712	5376	6348	113	Reel change
1739	5429	6348	113	ramp up complete FGSP
1822	5545	6464	114	Reel change
1900	5649	6568	114	Comm error S3G06
1918	5699	6619	114	Comm error S3G06
1920	5704	6624	114	Comm error S3G06
1933	5743	6662	115	Comm error S3G09
1938	5759	6678	115	Comm error S3G07
1948	5786	6706	115	Comm error S3G06
1958	5816	3736	115	Comm error S3G06
2020	5880	6800	115	Comm error S3G08
2020	5880	6800	116	Reel change
2036	5926	6839	116	Comm error S3G06
2040	5938	6858	116	Comm error S3G09
2080	5969	6889	116	Comm error S3G06
2112	6031	6951	116	Comm error S3G07
2118	6058	6968	117	Reel change
2125	6071	6991	117	Comm error S3G06
2135	6099	7019	117	Comm error S3G09
2217	6216	7136	118	Reel change
2318	6384	7304	119	Reel change
2345	6455	7375	119	Comm Error S3G09
June/14/2011				
0023	6552	7472	120	Reel change
0038	6587	7507	120	Comm Error S3G09
0132	6720	7640	121	Reel change
0229	6874	7794	121	Comm error S3G010
0234	6888	7808	122	Reel change
0302	6967	7887	122	Comm error S3G09
0304	6972	7892	122	Comm error S3G06
0336	7056	7976	123	Reel change
0341	7999	7079	123	Comm error S3G06
0401	7135	8055	123	Comm error S3G08
0431	7219	8139	123	Comm error S3G08
0432	7224	8144	124	Reel change
0453	7279	8199	124	Comm error S3G08
0508	7321	8241	124	Comm error S3G07
0517	7347	8267	124	Comm error S3G07
0533	7392	8312	125	Reel change
0539	7907	8327	125	Comm Error S3G09
0635	7560	8480	126	Reel change
0645	7587	8507	126	Comm error S3G06
0715	7670	8590	126	Comm error S3G08
0722	7687	8607	126	Comm error S3G09
0736	7728	8648	127	Reel change
0750	7745	8665	127	Comm error S3G10



[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	137	146	FGSP	953
SP #	918	2362	LGSP	2362

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/14/11	06/15/11
Time UTC	1926	0446
Volume (cu in.)	6600	6480
Wind (kts)	13	13
Sea State (ft)	3-5	3-5
Water Depth (m)	3428	3510

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

General / Line Comments
SOL SP 918 LAT 55 29 35.010N LON 140 06 05.789W FGSP # 953 LAT 55 30 03.628N LON 140 07 31.769 W
EOL SP 2362 Lat 55 49 07.538 Long 141 05 36.898 <b>TELEMETRY ERRORS REEL 137 DISCARD DATA, FGSP REEL 138</b>
SOL NOISY CHANNELS Midnight SP # 1588
SP # 982 - 1091 Power down due to whales
FGSP # 1092 after Power Down Lat 55 30 03.628N Lon 140 07 31.769W Hdg 295 Spd 4.5kts WD 3475m sea state 3
SP # 1780 Gun 4-10 disabled Gun # 4-5 enabled NEW VOL= 6560 cu.in.
SP # 2239 Gun 2-9,10 disabled Gun 1-5, 2-5 enabled NEW VOL= 6480 cu.in.
EOL NOISY CHANNELS

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS06
Sequence	007
Direction	295

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
1926		918	137	SOL
1939	1	953	138	FGSP
1943	11	963	138	Comm error Gun 3-6
1951	30	982	138	Power Down due to whale
2008	68	1020	138	Start ramp up
2040	139	1091	138	Full volume = 6600
2052	168	1120	139	Reel change
2106	194	1146	139	Comm error Gun 3-9
2107	197	1149	139	Comm error Gun 3-9
2207	331	1283	139	Comm error Gun 3-6
2209	336	1288	140	Reel change
2230	387	1339	140	Comm error S3G09
2234	397	1349	140	Comm error S3G09
2312	504	1456	141	Reel change
June/15/2011				
0010	664	1616	141	Comm error Gun 3-6
0012	672	1624	142	Reel change
0031	725	1677	142	delta error 11.6ms Gun 4-10
0032	728	1680	142	delta error 5.6ms Gun 4-10
0033	730	1682	142	delta error -12.6ms Gun 4-10
0033	731	1683	142	delta error -3.6ms Gun 4-10
0040	751	1703	142	Comm error Gun 3-9
0041	754	1706	142	EXT errors ,,, good shot
0047	772	1724	142	Comm error Gun 3-8
0101	810	1762	142	delta error 11.6ms Gun 4-10
0105	822	1774	142	S4G10 timing error -8.4ms
0106	824	1776	142	S4G10 timing error -9.1ms
0106	825	1777	142	S4G10 timing error 8.7ms
0107	826	1778	142	S4G10 timing error 8.7ms
0107	827	1779	142	S4G10 timing error -4.3ms
0108	828	1780	142	S4G10 OFF S4G05 ON timing error 3.2ms - Volume = 6560
0112	840	1792	143	Reel change
0214	1008	1960	144	Reel change
0236	1066	2018	144	Comm error Gun 3-10
0317	1176	2128	145	Reel change
0359	1287	2239	145	Gun 2-9,10 disabled,,, Gun 1-5, 2-5 enabled NEW VOL = 6480 cu.in.
0359	1288	2240	145	Source Sub-array #2 Powered down ,,, BAD SHOT
0359	1289	2241	145	Source Sub-array #2 Powered down ,,, BAD SHOT
0359	1290	2242	145	Source Sub-array #2 Powered down ,,, BAD SHOT
0420	1344	2296	146	Reel change
0430	1370	2322	146	Start turning to next line
0446	1410	2362	146	EOL

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	147	167	FGSP	1072
SP #	1072	4554	LGSP	4554

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/15/11	06/16/11
Time UTC	0503	0157
Volume (cu in.)	6480	6480
Wind (kts)	14.5	20.2
Sea State (ft)	3-5	3-5
Water Depth (m)	3523	3731

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

General / Line Comments
SOL SP 1072 Lat 55 48 11.433 Long 141 07 10.650
EOL SP 4554 Lat 54 14 36.281 Long 141 19 03.115
SOL NOISY CHANNELS:: Turn noise on streamer;; SP #1241 Turn noise off streamer
EOL NOISY CHANNELS

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS07
Sequence	008
Direction	189

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12dB
Hi-Cut	206Hz/276 dB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
0503	1	1072	147	SOL MGL1109 MCS07
0553	141	1213	147	Comm error S3G07
0602	168	1240	148	Reel Change
0603	169	1241	148	Turn niose off streamer
0700	336	1408	149	Reel Change
0703	343	1415	149	Comm error S3G08
0709	363	1435	149	Comm error S3G10
0715	378	1450	149	Comm error S3G07
0734	432	1504	149	Comm error S3G06
0745	465	1537	149	Comm error S3G06
0754	491	1563	149	Comm error S3G08
0758	504	1576	150	Reel Change
0813	545	1617	150	comm error S3G06
848	640	1712	150	Comm error S3G08
900	672	1744	151	Reel Change
922	731	1803	151	Comm error S3G09
922	732	1804	151	Comm error S3G10
0949	803	1875	151	Comm error S3G07
1003	840	1912	152	Reel Change
1033	918	1990	152	Comm error S3G08
1048	1008	2030	153	Comm error S3G09
1106	1008	2080	153	Reel Change
1208	1176	2248	154	Reel Change
1210	1184	2254	154	Comm error S3G06
1308	1344	2416	155	Reel Change
1407	1512	2584	156	Reel Change
1501	1662	2734	156	Comm error S3G10
1507	1680	2752	157	Reel Change
1515	1702	2774	157	comm error S3G08
15:44	1783	2972	157	comm error S3G06
16:07	1848	2920	158	Reel Change
16:26	1900	2972	158	comm error S3G06
16:43	1948	3020	158	comm error S3G10
17:08	2016	3088	159	Reel Change
18:09	2184	3256	160	Reel Change
19:08	2352	3424	161	Reel Change
1953	2484	3556	161	comm error S3G06
2003	2520	3592	162	Reel Change
2030	2616	3688	162	comm error S3G09
2104	2688	3760	163	Reel Change
2104	2689	3761	163	comm error S3G08
2122	2740	3812	163	comm error S3G06
2204	2856	3928	164	Reel Change
2305	3024	4096	165	Reel Change
2331	3082	4154	165	comm error S3G09
June/16/2011				
0000	3159	4231	165	MIDNIGHT SP

0005	3171	4231	165	comm error S3G07
0005	3171	4243	165	comm error S3G07
0012	3192	4264	166	Reel Change
0114	3360	4732	167	Reel Change

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	168	189	FGSP	1017
SP #	1017	4694	LGSP	4694

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/16/11	06/17/11
Time UTC	0209	0227
Volume (cu in.)	6480	6300
Wind (kts)	22.5	18.7
Sea State (ft)	3-5	7-9
Water Depth (m)	3736	3532

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

<b>General / Line Comments</b>
SOL SP 1017 Lat 54 13 44.967 Long 141 18 28.181 S2G09,S2G10, S4G10 off S1G05 on,S2G05 on, S4G05 on. At SOL 6480 cu.in.vol
EOL SP 4694 Lat 53 16 41.884 Long 139 01 42.432
SOL NOISY CHANNELS;; Turn noise on streamer SP #1158 Turn noise off streamer
SP2771 S1G02 excessive timing errors, Gun was spared and S3G05 online New volume 6300in3
SP2989 Shut down Seal
SP3213 FGSP soft start complete. Sea state deteriorates birds CB15-CB22 set to 11 meters
MIDNIGHT SP #4329
EOL NOISY CHANNELS #23, 41, 80, 264, 276, 280, 358, 373, 393, 484, 522, 526, 527, 550, 609

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS08
Sequence	009
Direction	124

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
0209	1	1017	168	SOL MGL1109_MCS08
0310	168	1184	169	Reel Change
0348	253	1270	169	Comm error S3G06
0408	336	1353	170	Reel Change
0506	504	1521	171	Reel Change
0544	606	1623	171	S1G02 delta timing error 1.4 ms
0544	607	1624	171	S1G02 delta timing error -7.9ms
0544	608	1625	171	S1G02 delta timing error 5.3ms
0608	672	1689	172	Reel Change
0714	840	1857	173	Reel Change
0728	872	1889	173	S1G02 delta timing error -8.6ms
0750	926	1943	173	S3G06 comm error
0817	990	2007	173	S3G06 comm error
0823	1008	2025	174	Reel Change
0850	1070	2087	174	S2G02 timing 3.0 ms
0850	1071	2087	174	S2G02 Timing -2.3 ms
0909	1116	2133	174	S1G2 timing -3.9 ms
0915	1131	2148	174	S2G02 timing 3.0 ms
0923	1150	2167	174	Comm error S3G06
0924	1153	2170	174	S1G02 timing 5.9 ms
0932	1174	2191	174	S3G09 comm error
0933	1176	2193	175	Reel Change
0938	1187	2204	175	S1G02 timing 3.4 ms
0938	1188	2205	175	S1G02 timing -2.5 ms
0944	1201	2218	175	S1G02 timing 1.4 ms
0944	1202	2219	175	S1G02 timing -8.1 ms
0946	1205	2222	175	S1G02 timing 3.4 ms
0958	1237	2254	175	S1G02 timing 2.4 ms
0959	1238	2255	175	S1G02 timing -2.1 ms
1002	1246	2263	175	S1G02 timing 3.2 ms
1002	1247	2264	175	S1G02 timing 4.4 ms
1004	1250	2267	175	S1G02 timing -6.5 ms
1005	1252	2269	175	S1G02 timing 2.4 ms
1005	1253	2270	175	S1G02 timing -7.3 ms
1005	1254	2271	175	S1G02 timing 7.6 ms
1006	1255	2272	175	S1G02 timing -2.3 ms
1006	1256	2273	175	S1G02 timing 4.1 ms
1007	1257	2274	175	S1G02 timing 8.5 ms
1007	1258	2275	175	S1G02 timing -3.0 ms
1010	1266	2283	175	S3G08 Comm error
1033	1319	2336	175	S3G08 Comm error
1033	1320	2337	175	S1G02 timing 12.0 ms
1033	1321	2338	175	S1G02 timing -9.2 ms
1033	1322	2339	175	S1G02 timing -2.6 ms
1035	1326	2343	175	S1G02 timing -11.4 ms
1036	1327	2344	175	S1G02 timing -8.6 ms
1036	1328	2345	175	S1G02 timing -3.0 ms



1037	1331	2348	175	S1G02 timing -12.3 ms
1038	1332	2349	175	S1G02 timing 8.9ms
1038	1333	2350	175	S1G02 timing 11.30 ms
1038	1334	2351	175	S1G02 timing -10.8 ms
1039	1335	2352	175	S1G02 timing -4.5 ms
1042	1342	2359	175	S1G02 timing 11.1 ms
1042	1343	2360	175	S1G02 timing -8.7 ms
1042	1344	2361	175	S1G02 timing 8.6 ms
1043	1344	2361	176	Reel Change
1043	1345	2362	176	S1G02 timing -8.8 ms
1043	1346	2363	176	S1G02 timing -3.9 ms
1044	1349	2366	176	S1G02 timing -8.3ms
1044	1350	2367	176	S1G02 timing -2.1 ms
1045	1351	2368	176	S1G02 timing -12.2 ms
1046	1352	2369	176	S1G02 timing -4.6 ms
1046	1354	2371	176	S1G02 timing -12.7 ms
1047	1355	2372	176	S1G02 timing -8.8 ms
1047	1356	2373	176	S1G02 timing 11.0 ms
1047	1357	2374	176	S1G02 timing 2.7 ms
1050	1363	2380	176	S3G07 Comm error
1051	1365	2382	176	S1G02 timing 8.1 ms
1051	1366	2383	176	S1G02 timing -6.3 ms
1055	1374	2391	176	S3G10 Comm error
1057	1380	2397	176	S1G02 timing 11.2 ms
1057	1381	2398	176	S1G02 timing -7.9 ms
1100	1387	2404	176	S1G02 timing 11.7 ms
1100	1388	2405	176	S1G02 timing -8.4 ms
1101	1389	2406	176	S1G02 timing -2.2 ms
1106	1401	2418	176	S1G02 timing 12.0 ms
1106	1402	2419	176	S1G02 timing -8.7ms
1106	1403	2420	176	S1G02 timing -4.0 ms
1145	1511	2528	177	Reel Change
1227	1613	2628	177	S1G02 timing 3.1 ms
1228	1614	2629	177	S1G02 timing 11.4 ms
1234	1629	2646	177	S1G02 timing 3.1 ms
1253	1676	2693	177	3.3 ms timing S1G02
1255	1679	2696	178	Reel Change
1255	1681	2698	178	S1G02 timing 3.9 ms
1256	1682	2699	178	-2.9 ms timing S1G02
1301	1695	2712	178	2.5 ms timing S1G02
1303	1701	2718	178	4.9 ms timing S1G02
1306	1709	2726	178	9.5
1308	1711	2728	178	2.4
1308	1713	2730	178	2.2
1308	1714	2731	178	-12.7
1308	1715	2732	178	4.2
1314	1730	2747	178	4.7
1315	1731	2748	178	-3.1

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	190	203	FGSP	917
SP #	915	3250	LGSP	3250

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/17/11	06/17/11
Time UTC	0849	2200
Volume (cu in.)	6600	6600
Wind (kts)	7.2	16
Sea State (ft)	5-8	3-5
Water Depth (m)	3539	3686

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

<b>General / Line Comments</b>
SOL SP 915 Spectra did not record SOL first shot, FGSP 917 location is LAT 53 17 16.411 N LONG 139 01 13.208W
EOL SP 3250 Lat 53 37.5683 Long 140 40.9510
SOL NOISY CHANNELS #23, 41, 80, 264, 276, 280, 358, 373, 393, 484, 522, 526, 527, 550, 609
*SP #1035, 1231, 2392, 2647* TELEMETRY ERROR May have lost data.
EOL NOISY CHANNELS;; Turn noise on streamer

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS09
Sequence	010
Direction	288

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
0849	1	915	190	SOL Spectra failed to record location data of SOL
0850	3	917	190	FGSP LAT 53 17 16.411 N LONG 139 01 13.208W
0854	14	929	190	Comm error S3G09
0918	80	996	190	comm error S3G06
0922	90	1005	190	comm error S3G06
0932	120	1035	190	<b>TELEMETRY ERROR May have lost data.</b>
0849	1	915	190	SOL Spectra failed to record location data of SOL
0850	3	917	190	FGSP LAT 53 17 16.411 N LONG 139 01 13.208W
0854	14	929	190	Comm error S3G09
0918	80	996	190	comm error S3G06
0922	90	1005	190	comm error S3G06
0943	148	1067	190	String 1 off line for magntometer entanglement volume 4950 in3
0949	168	1083	191	reel change
0952	175	1091	191	String 1 ONLINE full volume 6600in3
1042	316	1231	191	<b>TELEMETRY ERROR May have lost data.</b>
1014	336	1251	192	reel change
1148	504	1418	193	reel change
1157	531	1446	193	Comm error S3G07
1204	552	1467	193	Comm error S3G09
1212	577	1492	193	Comm error S3G07
1244	672	1586	194	reel change
1312	755	1670	195	comm error S3G10
1341	840	1755	195	reel change
1421	954	1869	195	Comm error S3g09
1430	984	1896	195	comm error S3G09
1434	994	1909	195	Comm error S3g10
1439	1007	1922	195	reel change
1440	1009	1924	196	comm error S3G06
1536	1175	2090	197	reel change
1601	1250	2165	197	comm error S3G09
1610	1277	2192	197	comm error S3G06
1619	1302	2217	197	comm error S3G06
1632	1344	2259	198	reel change
1716	1477	2392	198	<b>TELEMETRY ERROR May have lost data.</b>
1725	1512	2427	199	reel change
1812	1662	2577	199	Comm error S3G09
1817	1680	2595	200	reel change
1835	1737	2647	200	<b>TELEMETRY ERROR May have lost data. M33, M34</b>
1852	1789	2704	200	Comm error S3G09
1858	1810	2725	200	Comm error S3G09
1910	1848	2763	201	Reel change
1913	1856	2771	201	comm error S3G06
1917	1869	2783	201	comm error S3G06
2006	2016	2931	202	reel change
2015	2042	2957	202	Comm error S3G08
2054	2154	3069	202	Comm error S3G08
2104	2184	3099	203	reel change

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	204	208	FGSP	1031
SP #	1031	1740	LGSP	1740

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/17/11	06/18/11
Time UTC	2224	0231
Volume (cu in.)	6600	6600
Wind (kts)	15	14.3
Sea State (ft)	5-7	3-5
Water Depth (m)	3699	3638

<b>General / Line Comments:</b>
SOL SP #1031 Lat 53 37 02.821N Lon 140 43 03.541W Streamer in turn
EOL SP #1740 Lat 53 17 56.031 Long 140 44 31.447
SOL NOISY CHANNELS;; Turn noise on streamer SP # 1128 Turn noise off streamer Lat 53 34 23.445N Lon 140 43 31.521W
MIDNIGHT SP # 1302
SP #1704 start of turn to next line, continue recording
EOL NOISY CHANNELS

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS10
Sequence	011
Direction	185.4

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	209	209	FGSP	N/A
SP #	1061	1067	LGSP	N/A

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/18/11	06/18/11
Time UTC	0238	0246
Volume (cu in.)	6600	6600
Wind (kts)	13.9	13.9
Sea State (ft)	3-5	3-5
Water Depth (m)	3629	3629

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS11
Sequence	012
Direction	N/A

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP #1061 Lat 53 17 31.000 Long 140 44 02.787
EOL SP #1067 Lat 53 17 12.959 Long 140 43 19.015
SOL NOISY CHANNELS
DP on the bridge broke and we overshot the line. Positioning was all messed up, so we ended the line and started a new one (MCS11A).
This line is no good. Kindly disregard.
EOL NOISY CHANNELS

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable SP	FFSP - 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	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	210	233	FGSP	1091
SP #	1091	5104	LGSP	5104

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/18/11	06/19/11
Time UTC	0257	0247
Volume (cu in.)	6600	6600
Wind (kts)	9.1	1.5
Sea State (ft)	3-5	1-3
Water Depth (m)	3617	3153

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

General / Line Comments
SOL SP #1091 Lat 53 17 18.035 Long 140 42 03.831
EOL SP #5104 Lat 54 22 01.153 Long 138 15 32.752
SOL :: Turn noise on streamer SP # 1190 Turn noise off streamer
Air leak on gun string one causing noise in record SP 2954

EOL NOISY CHANNELS

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS11A
Sequence	013
Direction	52.3

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable SP	FFSP - 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
0257	1	1091	210	SOL MGL1109 MCS11A
0313	42	1133	210	Comm error S3G07
0317	52	1143	210	Comm error S3G06
0401	168	1259	211	Reel Change
0427	234	1325	211	Comm error S3G06
0506	336	1427	212	Reel Change
0541	428	1519	212	Comm error S3G07
0605	491	1582	212	No Fire S4G10
0605	492	1583	212	No Fire S4G10
0605	493	1584	212	No Fire S4G10
0606	494	1585	212	No Fire S4G10
0606	495	1586	212	S4G10 OFF S4G05 ON delta error 4.9ms volume=6560
0607	497	1588	212	No Fire S4G09
0607	498	1589	212	No Fire S4G02, G08, G09
0608	499	1590	212	No Fire S4G02, G03 G08, G09
0608	500	1591	212	No Fire S4G02, G03, G07, G08, G09
0608	501	1592	212	No Fire S4G02, G03, G04, G07, G08, G09
0609	502	1593	212	No Fire S4G02, G09
0609	504	1595	213	Reel Change
0611	507	1598	213	S4G05 OFF S4G10 ON Volume=6600 / S4G10 No Fire
0617	525	1616	213	Comm error S3G06
0623	541	1632	213	Comm error S3G09
0659	636	1627	213	Comm error S3G10
0707	657	1748	213	Comm error S3G09
0715	672	1763	214	Reel Change
0821	840	1931	215	Reel Change
0831	867	1958	215	Comm error S3G06
0902	948	2039	215	Comm error S3G06
0905	957	2048	215	Comm error S3G08
0911	973	2064	215	Comm error S3G08
0923	1008	2099	216	Reel Change
0931	1028	2119	216	Comm error S3G07
1006	1132	2223	216	Comm error S3G07
1023	1176	2267	217	Reel Change
1053	1264	2355	217	Comm error S3G07
1102	1291	2382	217	Comm error S3G06
1120	1344	2435	218	Reel Change
1220	1512	2603	219	Reel Change
1238	1568	2659	219	Comm error S3G06
1319	1680	2771	220	Reel Change
1330	1714	2803	220	Comm error S3G09
1420	1848	2939	221	Reel Change
1426	1863	2954	221	Comm error S3G06
1512	1988	3079	221	Comm error S3G09
1521	2016	3107	222	Reel Change
1548	2085	3176	222	Comm error S3G10
1548	2086	3177	222	Comm error S3G06

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	234	245	FGSP	1261
SP #	1025	2901	LGSP	2901

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/19/11	6/19/2011
Time UTC	0350	1528
Volume (cu in.)	0	3300
Wind (kts)	9.5	5-10
Sea State (ft)	1-3	2-5
Water Depth (m)	3171	3457

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

General / Line Comments
SOL SP #1025 Lat 54 19.610 Long 138 12.601
EOL SP #2901 LAT 53 37 01.482 Lon 138 58 17.891
SOL NOISY CHANNELS
Guns powered down at SOL due to seal playing in the guns.
EOL NOISY CHANNELS
Test not performed

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS12
Sequence	014
Direction	220

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	n/a

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable SP	FFSP - 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
0330	1	1025	234	FSP_Powered Down for Seal near Source
04:40	127	1155	234	Begin Ramp up of Source
04:54	163	1191	243	Telemetry Error on Streamer
04:56	169	1197	235	Reel Change
04:56	170	1198	235	Telemetry Error on Streamer
05:03	187	1215	235	Telemetry Error on Streamer
05:12	206	1234	235	Telemetry Error on Streamer
05:12	208	1236	235	Telemetry Error on Streamer
05:16	216	1244	235	Telemetry Error on Streamer
05:17	218	1246	235	Telemetry Error on Streamer
05:18	223	1251	235	Telemetry Error on Streamer
05:19	226	1254	235	Telemetry Error on Streamer
05:22	233	1261	235	Ramp up complete FGSP 6600in3 source Volume
05:24	239	1267	235	Comm Error S3G10
0531	256	1284	235	Telemetry Error on Streamer
0536	266	1294	235	Telemetry Error on Streamer
0612	337	1365	236	Reel Change
0623	383	1412	237	Telemetry Error on Streamer
0711	504	1543	237	RC
0725	551	1580	237	Telemetry Error on Streamer
0725	552	1581	237	Comm Error S3G08
0735	578	1607	237	Comm Error S3G09
0738	586	1615	237	S1G01 timing error -3.4 ms
0740	592	1621	237	S1G01 timing error -10.5 ms
0740	593	1622	237	S1G01 timing error -4.4 ms
0741	594	1623	237	S1G01 timing error -7.1 ms
0741	595	1624	237	S1G01 timing error -3.0 ms
0741	596	1625	237	S1G01 timing error 5.2 ms
0743	601	1630	237	S1G01 timing error 2.6 ms
0745	606	1635	237	S1G01 timing error 2.9 ms
0746	608	1637	237	S1G01 timing error -2.1 ms
0748	613	1642	237	S1G01 timing error -2.1 ms
0807	664	1689	237	Telemetry Error on Streamer
0810	672	1697	238	Reel Change
0835	739	1768	238	S1G01 timing error @ 4.3ms
0836	741	1770	238	S1G01 timing error @ -3.2ms
0836	742	1771	238	S1G01 timing error @ -2.3ms
0840	752	1781	238	S3G10 comm error
0853	787	1816	238	Comm Error S3G06
0854	790	1819	238	S1G01 timing error @ 3.6ms
0854	791	1820	238	S1G01 timing error @ -2.2ms
0855	793	1822	238	S3G10 comm error
0855	794	1823	238	S1G01 timing error @ -3.6ms
0905	817	1846	238	S3G09 comm error
0913	840	1869	239	Reel Change
0948	937	1966	239	Comm Error S3G06
0951	943	1972	239	Comm Error S3G10

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	246	252	FGSP	1047
SP #	1023	2178	LGSP	2178

Line	MGL1109_OBS1
Sequence	015
Direction	305

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	150			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	N/A

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Description	SOL/FQCSP	EOL/LQCSP
FSID	1023	
Date MM/DD/YY	06/19/11	6/20/11
Time UTC	1552	1155
Volume (cu in.)	3300	6600
Wind (kts)	5-10	calm
Sea State (ft)	2-5	1-3
Water Depth (m)	3458	3699

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP #1023 Lat 53 37 23.884 Long 139 00 44.124
EOL SP 2178 Lat 54 24 14.894 Long 141 17 55.451 W
SOL NOISY CHANNELS No noise test performed at EOL of previous line due to turn noise on cable.
EOL NOISY CHANNELS No test performed due to turn onto next line

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	



[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	253	262	FGSP	1005
SP #	1005	2609	LGSP	2609

Line	MGL1109_OBS2
Sequence	016
Direction	5

Streamer Parameters				
	1	2	3	4
Length (m)	8100	EOL 6KM		
Auxiliaries				
Shotpoint Interval: (m)	150			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	N/A

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/20/11	6/21/2011
Time UTC	1158	1507
Volume (cu in.)	6600	5490
Wind (kts)	calm	13kts
Sea State (ft)	1-3	1-3
Water Depth (m)	3695	3549

Cable	EOL High Noise Channels (in u-bar)
1	439, 440, 442 DEAD
1	224-228, 382, 441 Noisy

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP1005 Lat 054 24 24.603 n Long 141 18 02.420 W
EOL SP2609 Lat 56 33 38.389N Lon 140 59 19.369 W
SOL NOISY CHANNELS:: Turn noise on streamer
SP # 1050 Guns shut off for Dolphin, power down
SP # 1521 - 1528 Guns shut off for Seal
SP #1727 Midnight shot point
SP #1843 - 1858 Recording system out of External mode due to Telemetry errors
SP #1859 Recording system back in External mode <b>SP2009 Syntrak Set to 6 kilometer cable with 468 channels</b>
SP#2369 Disabled S2G06, S2G07 due to comm errors. S2g05 enabled at SP2371 New volume 6570in3
SP#2547 Shut down S2 due to comm errors. Enable S1G05, S3G05, S4G05. New Vol= 5490in3
EOL NOISY CHANNELS
224=40uB, 225=185uB, 226=25uB, 227=14uB, 228= noisy, 382=noisy, 441=noisy

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
1158	1	1005	253	SOL
1204	6	1011	253	End of turn
1213	15	1020	253	No fire entire gun array.
1250	49	1054	253	Power down for dolphin
1255	55	1060	253	Full volume 6600 in3
1454	168	1172	254	Reel change
1523	197	1201	254	OBS201 crossing
1535	210	1213	254	S3G10 comm error
1537	212	1215	254	S3G06 comm error
1630	263	1268	254	S3G09 comm error
1710	305	1310	254	S3G10 comm error
1740	336	1340	255	Reel change
1741	337	1341	255	Comm error S3G07
1741	337	1341	255	OBS202 crossing
1805	362	1366	255	Comm error S3G07
1814	371	1375	255	Comm error S3G08
2027	504	1508	256	Reel change
2038	517	1521	256	Shut down for Seal
2045	525	1529	256	Full volume 6600 in3
2214	612	1617	256	Comm error S3G06
2311	672	1676	257	Reel change
2339	701	1705	257	Streamer Telemetry errors BAD SHOT
2341	703	1707	257	Streamer Telemetry errors BAD SHOT
June/21/2011				
	719	1723		Streamer Telemetry errors BAD SHOT
0007	727	1731	257	Streamer Telemetry errors BAD SHOT
	728	1732	257	Streamer Telemetry errors BAD SHOT - Comm error S3G06
0010	732	1736	257	Streamer Telemetry errors BAD SHOT
	744	1748	257	Streamer Telemetry errors BAD SHOT
	745	1749	257	Streamer Telemetry errors BAD SHOT
0027	748	1752	257	Streamer Telemetry errors BAD SHOT
0028	749	1753	257	Streamer Telemetry errors BAD SHOT
0030	751	1755	257	Streamer Telemetry errors BAD SHOT
	753	1757	257	Streamer Telemetry errors BAD SHOT
0035	756	1760	257	OBS205 crossing
	776	1780	257	Streamer Telemetry errors BAD SHOT
	778	1782	257	Streamer Telemetry errors BAD SHOT
0119	800	1804	257	Streamer Telemetry errors BAD SHOT
0145	824	1828	257	Comm error S3G10
0150	828	1832	257	Streamer Telemetry errors BAD SHOT
0154	831	1835	257	Streamer Telemetry errors BAD SHOT
0159	837	1841	257	Streamer Telemetry errors BAD SHOT
0200	838	1843	257	Recording system taken out of External mode
			258	TELEMETRY ERRORS ON TAPE, DNP
0217	857	1859	259	Recording system back in External mode
0243	881	1883	259	Streamer Telemetry errors BAD SHOT
0248	886	1888	259	Streamer Telemetry errors BAD SHOT

0249	887	1889	259	Streamer Telemetry errors BAD SHOT
0258	896	1898	259	Streamer Telemetry errors BAD SHOT
0301	889	1901	259	OBS206 crossing
0303	901	1903	259	Streamer Telemetry errors BAD SHOT
0305	903	1905	259	Streamer Telemetry errors BAD SHOT
0310	908	1910	259	Streamer Telemetry errors BAD SHOT
0311	909	1911	259	Streamer Telemetry errors BAD SHOT
0317	914	1916	259	Streamer Telemetry errors BAD SHOT
0319	916	1918	259	Streamer Telemetry errors BAD SHOT
0320	917	1919	259	Streamer Telemetry errors BAD SHOT
0321	918	1920	259	Streamer Telemetry errors BAD SHOT
0323	920	1922	259	Streamer Telemetry errors BAD SHOT
0324	921	1923	259	Streamer Telemetry errors BAD SHOT
0325	922	1924	259	Streamer Telemetry errors BAD SHOT
0327	925	1927	259	Streamer Telemetry errors BAD SHOT
0330	928	1930	259	Streamer Telemetry errors BAD SHOT
0331	929	1931	259	Streamer Telemetry errors BAD SHOT
0332	930	1932	259	Streamer Telemetry errors BAD SHOT
0333	931	1933	259	Streamer Telemetry errors BAD SHOT
0334	932	1934	259	Streamer Telemetry errors BAD SHOT
0335	933	1935	259	Streamer Telemetry errors BAD SHOT
0336	934	1936	259	Streamer Telemetry errors BAD SHOT
0337	935	1937	259	Streamer Telemetry errors BAD SHOT
0338	936	1938	259	Streamer Telemetry errors BAD SHOT
Intermittent telemetry errors				
0436	996	1998	259	Comm Error S3G09
0445	1001	2008	260	Reel change
0446	1002	2009	260	Powered streamer down to only 6 Km (468 channels) to avoid telemetry errors.
0517	1034	2041	260	Crossing OBS #207
0535	1053	2060	260	Comm error S3G10
0536	1054	2061	260	Comm error S3G06
0731	1169	2176	261	Reel change
0736	1174	2181	261	Crossing OBS #208
0821	1217	2224	261	Comm error S3G08
1040	1346	2354	261	Comm error S3G06
1054	1360	2367	261	comm error S2G06, S2G07
1055	1361	2368	261	comm error S2G06, S2G07
1056	1362	2369	261	S2G06, S2G07 OFF S2G05 enabled no fire
1057	1363	2370	261	Timing error 3.4 ms
1058	1364	2371	261	New volume 6570
1114	1379	2386	261	Comm error S3G06
1240	1459	2466	262	Reel change
1354	1528	2536	262	Comm error S2G04, 05, 08, 09, 10
1355	1529	2537	262	No fire S2G04, 05, 08, 09, 10
1358	1532	2540	262	comm error S2G06, S2G07
1359	1533	2541	262	Comm error S2G06, 07, 09
1400	1534	2542	262	No Fire S2G01
1400	1534	2542	262	comm error S2G06, 07

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

	SOL	EOL		
Tape #	263	294	FGSP	1050
SP #	1050	8027	LGSP	8027

Line	MGL1109_MCS13
Sequence	017
Direction	282

Streamer Parameters				
	1	2	3	4
Length (m)	6000			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	468			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	NA

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/21/2011	06/23/11
Time UTC	1550	0607
Volume (cu in.)	6600	6600
Wind (kts)	12kts from N	12
Sea State (ft)	1-3	3-5
Water Depth (m)	3535	4170

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP#1050 LAT 56 35 58.342N LON 141 0120.195W
EOL SP #8027 Lat 57 1148.106 Long 146 38 37.501
SOL NOISY CHANNELS 224=40uB, 225=185uB, 226=25uB, 227=14uB, 228= noisy, 382=noisy, 441=noisy
439, 440, 442 DEAD
224-228, 382, 441 Noisy
1400 - Sonars from USS Lake Erie impacting Lanseth Sonar Recording
EOL NOISY CHANNELS

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP - First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
1550	1	1050	263	FGSP.....VOL 6600in3 Turn noise visible on cable
1558	19	1069	263	Comm Error S3G07
1615	64	1114	263	Comm Error S3G06
1715	230	1279	264	Reel change
1734	283	1333	264	Comm error S3G06
1747	319	1369	264	Power down seal
1752	334	1384	264	Full power FGSP 1384
1819	411	1461	264	Comm error S3G08
1836	459	1508	265	Reel change
1842	478	1528	265	Comm error S3G10
1939	648	1698	265	Comm error S3G10
1954	688	1740	266	Reel change
2008	732	1780	266	Comm error S3G06
2008	734	1782	266	Comm error S3G08
2047	843	1892	266	Comm error S3G07
2055	865	1914	266	Comm error S3G08
2059	876	1925	266	Comm error S3G08
2115	917	1966	267	Reel change
2131	965	2013	267	Comm error S3G09
2150	1019	2067	267	Comm error S3G09
2226	1121	2169	267	Comm error S3G06
2234	1146	2195	268	Reel change
2308	1244	2292	268	Comm error S3G06
2312	1256	2304	268	Comm error S3G06
2320	2377	2325	268	Comm error S3G09
2334	1318	2366	268	Comm error S3G07
2354	1375	2424	269	Reel change
June/22/2011				
0003	1402	2451	269	Comm error S3G06
0026	1469	2517	269	Comm error S3G10
0113	1604	2653	270	Reel change
0132	1657	2706	270	Comm error S3G06
0135	1665	2714	270	Comm error S3G09
0135	1667	2716	270	Comm error S3G06
0231	1833	2882	271	Reel change
0307	1945	2994	271	Comm error S3G07
0336	2036	3085	271	Comm error S3G06
0343	2062	3111	272	Reel change
0351	2085	3134	272	Comm error S3G08
0443	2261	3310	272	Comm error S3G08
0452	2291	3340	273	Reel change
0453	2292	3311	273	Comm error S3G07
0505	2334	3383	273	Comm error S3G07
0556	2503	3552	273	Comm error S3G07
0601	2520	3569	274	Reel change
0708	2749	3798	275	Reel change
0710	2753	3802	275	Comm error S3G09

0717	2775	3827	275	Comm error S3G10
0721	2789	3838	275	Comm error S3G09
0743	2856	3905	275	Comm error S3G10
0806	2928	3978	275	Comm error S3G06
0810	2941	3991	275	Comm error S3G10
0822	2978	4028	276	Reel change
0857	3088	4138	276	Comm error S3G06
0935	3208	4258	277	Reel change
0954	3265	4315	277	Comm error S3G07
1005	3300	4350	277	Comm error S3G09
1025	3364	4414	277	Comm error S3G06
1046	3429	4479	277	Comm error S3G09
1048	3436	4486	278	Reel change
1050	3443	4493	278	Comm error S3G07
1156	3640	4690	278	Comm error S3G06
1204	3664	4714	279	Reel change
1251	3799	4848	279	Comm error S3G07
1311	3857	4906	279	Comm error S3G09
1317	3872	4921	279	Comm error S3G06
1324	3894	4944	280	Reel change
1336	3929	4979	280	Comm error S3G06
1340	3941	4991	280	Comm error S3G06
1356	3989	5039	280	Com error S3G06
1420	4062	5112	280	Auto fire 293.1 ms S1G02
1437	4113	5163	280	Auto fire 340.9 ms S1G02
1441	4124	5174	281	Reel change
1442	4130	5180	281	Com error S3G06
1445	4137	5187	281	Comm error S3G07
1454	4167	5217	281	Comm error S3G07
1508	4208	5258	281	Comm error S3G06
1536	4293	5343	281	Comm error S3G06
1555	4352	5402	282	Reel change
1645	4502	5551	282	Comm error S3G09
1647	4509	5557	282	Auto Fire
1701	4547	5596	282	Comm error S3G09
1714	4582	5632	283	Reel change
1735	4639	5689	283	Comm error S3G06
1825	4774	5824	283	Comm error S3G07
1838	4809	5859	284	Reel change
1903	4881	5931	284	Comm error S3G08
1938	4981	6031	284	Comm error S3G09
1950	5016	6066	284	Comm error S3G06
1958	5039	6089	285	Reel change
2003	5054	6104	285	Comm error S3G06
2114	5268	6317	286	Reel change
2144	5353	6402	286	Comm error S3G07
2230	5497	6546	287	Reel change
2318	5658	6707	287	Comm error S3G06



[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	295	323	FGSP	1031
SP #	1028	7695	LGSP	7695

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/23/11	06/24/11
Time UTC	0613	2051
Volume (cu in.)	6600	6560
Wind (kts)	14.3	14.3
Sea State (ft)	3-5	3-5
Water Depth (m)	4166	3690

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

<b>General / Line Comments</b>
SOL SP 1028 Lat 57 11 29.946 Long 146 39 23.275
EOL SP 7695 Lat 55 04 24.221 Long 150 26 48.970
SOL NOISY CHANNELS:: turn noise on streamer; SP # 1194 turn noise off streamer
SP # 3942 Midnight
SP #4464 Possible Earthquake starts to show on records SP # 4525 noise decreasing
SP # 4401 - 4551 Power down due to whale
SP#4906 Secured S2G10 delta timing errors, S2G05 enabled New Volume 6560 in3
SP#7274 Spectra/GPS errors began- 18:27 on 6/24/2011 continued to 19:13. FGSP 7398
EOL NOISY CHANNELS

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS14
Sequence	018
Direction	232.57

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	N/A

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable SP	FFSP - 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
0613	1	1028	295	SOL
0630	57	1086	295	Comm error S3G08
0658	150	1179	295	Comm error S3G07
0703	165	1194	295	Turn noise gone from cable
0723	230	1259	296	Reel change
0856	356	1385	296	Comm error S3G10
0807	360	1385	296	Comm error S3G06
0812	375	1389	296	Comm Error S3G09
0815	381	1409	296	Comm error S3G10
0842	461	1489	297	Reel change
0857	505	1533	297	Comm error S3G10
0928	593	1621	297	Comm Error S3G09
0933	607	1635	297	Comm error S3G07
1003	687	1717	298	Reel change
1020	732	1762	298	S1G02 Autofire error @ 294.7 ms
1028	755	1785	298	S1G02 Autofire error @ 360.2 ms
1033	769	1799	298	Comm Error S3G09
1037	780	1810	298	Comm error S3G06
1051	820	1850	298	Comm error S3G08
1052	824	1854	298	Comm error S3G06
1108	869	1899	298	Comm error S3G10
1125	916	1946	299	Reel change
1146	976	2006	299	Comm error S3G06
1209	1041	2069	299	Comm error S3G08
1227	1088	2116	299	Comm error S3G06
1248	1145	2175	300	Reel change
1323	1240	2270	300	Comm error S3G06
1411	1373	2403	301	Reel change
1530	1588	2616	301	Comm Error S3G09
1535	1601	2631	302	Reel change
1556	1655	2685	302	Comm Error S3G09
1705	1832	2862	303	Reel change
1734	1907	2937	303	Comm Error S3G09
1828	2036	3066	303	Comm error S3G10
1839	2062	3092	304	Reel change
1906	2127	3157	304	Comm error S3G07
2012	2290	3319	305	Reel change
2017	2305	3334	305	Comm error S3G06
2040	2366	3395	305	Comm error S3G10
2127	2493	3522	305	Comm error S3G08
2134	2514	3543	305	Comm Error S3G09
2136	2519	3548	306	Reel change
2140	2529	3558	306	Comm error S3G08
2144	2541	3570	306	Comm error S3G10
2209	2611	3640	306	delta timing error 2.4ms
2237	2689	3718	306	Comm error S3G08
2254	2738	3767	306	Comm error S3G10

2258	2749	3778	307	Reel change
2338	2856	3885	307	Comm error S3G06
June/24/2011				
0004	2924	3953	307	Missed Shot Point
0025	2978	4007	308	Reel change
0121	3117	4147	308	Comm error S3G10
0154	3207	4236	309	Reel change
0250	3371	4401	309	Power down for whale
0315	3435	4464	310	Reel change
0315	3435	4464	310	Possible Earthquake starts to show on records
0322	3451	4481	310	Start ramp up
0341	3496	4525	310	Earthquake noise decreasing
0352	3522	4552	310	Resume full volume
0440	3665	4695	311	Reel change
0441	3670	4700	311	Comm Error S3G09
0503	3739	4770	311	Comm error S3G10
0544	3872	4902	311	No Fire S2G10
0544	3873	4903	311	No Fire S2G10
0545	3874	4904	311	No Fire S2G10
0545	3875	4905	311	No Fire S2G10
0545	3876	4906	311	S2G10 OFF S2G05 ON - No Fire on S2G05
0546	3877	4907	311	delta timing error 8.7ms S2G05
0546	3878	4908	311	delta timing error -6.4 ms S2G05
0550	3894	4924	312	Reel change
0605	3943	4973	312	Comm error S3G06
0613	3974	5004	312	Comm error S3G07
0624	4009	5039	312	Comm error S3G10
0625	4012	5042	312	Comm error S3G09
0631	4032	5062	312	Comm error S3G09
0657	4123	5153	313	Reel change
0754	4316	5344	313	Comm error S3G06
0802	4341	5369	313	Comm error S3G09
0816	4355	5383	314	Reel change
0827	4425	5453	314	Comm error S3G10
0917	4585	5613	315	Reel change
1029	4809	5841	316	Reel change
1101	4913	5946	316	Comm error S3G09
1143	5038	6071	316	Comm error S3G09
1144	5039	6072	317	reel change
1203	5093	6126	317	Autofire error @ 205.8ms S1G02
1226	5169	6197	317	Comm error S3G10
1304	5262	6301	318	Reel change
1349	5405	6438	318	Comm error S3G10
1406	5455	6488	318	Comm error S3G06
1421	5497	6529	319	Reel change
1442	5563	6596	319	Auto fire 336.4 ms S1G02
1446	5573	6606	319	Power down for whale
1450	5589	6622	319	Full volume 6560 in3

[illegible]

# Observers Log

Vessel	Marcus G. Langseth
Client	Ginger Barth -USGS 1
Area	Gulf of Alaska, Northeast Pacific
Job Number	MGL1109

	SOL	EOL		
Tape #	324	340	FGSP	919
SP #	918	4799	LGSP	4799

Streamer Parameters				
	1	2	3	4
Length (m)	8100			
Auxiliaries				
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	176			
Group Interval: (m)	12.5			
Number of channels	636			
Streamer Depth (m)	9.0			
SOL Cable Noise, µB	NA			
EOL Cable Noise, µB	NA			

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	06/24/11	06/25/11
Time UTC	2337	2153
Volume (cu in.)	6600	6420
Wind (kts)	12.9	8.6
Sea State (ft)	3-5	5-7
Water Depth (m)	4111	215

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckiernan - 00:00-12:00	James Alan DeLong- 12:00-24:00	
Navigation Leader	David Martinson - 00:00-12:00	David Ng-Li - 12:00-24:00	

Line	MGL1109_MCS15
Sequence	019
Direction	325.87

Source Parameters	
Total Volume	6600/in3
Work Pressure	1950psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
COS to COS	

Recording Parameters	
Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	N/A
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 2

Cable	EOL High Noise Channels (in u-bar)
1	
2	
3	
4	

ProMax - QC the above channels

Auxiliaries	
Aux. 1-8	Empty
Aux. 13-16	Empty
Aux 9 Gun hydrophone	Empty
Aux 10 Gun hydrophone	Empty
Aux 11 Gun hydrophone	Empty
Aux 12 Gun hydrophone	Empty

General / Line Comments
SOL SP 918 Lat 55 04 10.479 Long 150 21 45.025
EOL SP 4799 Lat 56 30 00.064 Long 152 07 47.678
SOL NOISY CHANNELS:: Turn noise on streamer ; SP # 1020 Turn noise off streamer
EOL NOISY CHANNELS

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargable SP
FCSP - First Chargable 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	

Time UTC	FILE	SP	Tape	Description
2337	1	918	324	SOL MGL1109 MCS15 Seq 19
2352	44	961	324	Comm error S3G06
June/25/2011				
0020	127	1044	324	Comm error S3G06
0053	224	1141	324	Comm error S3G07
0055	229	1146	325	Reel change
0108	270	1187	325	Comm error S3G08
0146	385	1302	325	Comm error S3G08
0204	441	1358	325	Comm error S3G10
0210	459	1376	326	RC
0220	489	1406	326	No Fire S3G01
0221	491	1408	326	No Fire S3G01
0222	493	1411	326	Comm error S3G06
0222	494	1412	326	No Fire S3G01
0223	498	1416	326	No Fire S3G01
0224	500	1418	326	auto fire S3G01
0224	501	1419	326	S3G01 OFF S3G05 ON - volume = 6420
0225	502	1420	326	delta timing error 3.3ms S3G05
0313	649	1566	326	Comm error S3G05
0326	687	1605	327	Reel change
0328	693	1610	327	Comm error S3G10
0444	916	1833	327	Comm error S3G06
0444	917	1834	328	Reel change
0527	1044	1961	328	Comm error S3G09
0602	1146	2063	329	Reel change
0634	1242	2159	329	Comm error S3G06
0648	1284	2001	329	Comm error S3G06
0649	1286	2003	329	Comm error S3G07
0700	1320	2237	329	Auto fire S1G02 false
0718	1375	2292	330	Reel change
0732	1416	2333	330	Auto fire S1G02 false
0748	1464	2382	330	Comm error S3G06
0750	1469	2387	330	Comm error S3G06
0752	1477	2395	330	Comm error S3G02
0814	1540	2458	330	Comm error S3G09
0830	1588	2506	330	Comm error S3G09
0835	1604	2522	331	Reel change
0840	1619	2537	331	Comm error S3G08
0858	1674	2592	331	Comm error S3G06
0914	1720	2638	331	Auto fire S1G02 @ 275.3 ms
0920	1736	2654	331	Auto fire S1G02 @ 177.3 ms
0931	1770	2688	331	Comm error S3G09
0935	1782	2700	3312	Auto fire S1G02 194.4
0939	1793	2711	331	Auto fire S1G02 @ 275.3 ms
0951	1832	2750	332	Reel change
1004	1871	2789	332	Comm error S3G08
1008	1880	2798	332	Auto fire S1G02 @ 261.0 ms

1052	2013	2930	332	Comm error S3G06
1054	2020	2937	332	Auto fire S1G02 @ 290.1 ms
1108	2062	2980	333	Reel change
1148	2181	3099	333	False Autofire S1G02
1207	2237	3155	333	False Autofire S1G02
1217	2268	3186	333	False Autofire S1G02
1221	2282	3200	333	False Autofire S1G02
1224	2291	3209	334	Reel change
1230	2306	3224	334	Comm error S3G10
1232	2312	3230	334	Comm error S3G08
1343	2519	3438	335	Reel change
1344	2521	3438	335	comm error S3G06
1345	2523	3439	335	False Autofire S1G02
1432	2646	3563	335	False Autofire S1G02
1433	2650	3567	335	False Autofire S1G02
1446	2685	3602	335	comm error S3G06
1455	2710	3627	335	comm error S3G06
1510	2747	3664	336	Reel change
1533	2871	3788	336	Comm Error S3G07
1555	2876	3795	336	Comm Error S3G09
1629	2975	3892	337	Reel change
1648	3026	3943	337	False Autofire S1G02
1744	3181	4098	337	False Autofire S1G02
1753	3206	4124	338	Reel change
1759	3222	4139	338	False Autofire S1G02
1826	3296	4214	338	False Autofire S1G02
1831	3311	4229	338	False Autofire S1G02
1838	3329	4247	338	False Autofire S1G02
1845	3348	4266	338	False Autofire S1G02
1848	3358	4276	338	Comm error S3G08
1900	3390	4308	338	False Autofire S1G02
1907	3410	4328	338	False Autofire S1G02
1908	3412	4330	338	Comm Error S3G07
1910	3418	4336	338	False Autofire S1G02
1917	3436	4354	339	Reel change
1918	3438	4356	339	False Autofire S1G02
1918	3440	4358	339	False Autofire S1G02
1921	3446	4364	339	False Autofire S1G02
1944	3513	4430	339	Comm error S3G09
2037	3665	4582	340	Reel change
2038	3667	4584	340	Comm error S3G07
2128	3810	4727	340	Comm error S3G06
2145	3858	4775	340	Comm error S3G09
2150	3873	4790	340	Comm error S3G09
2153	3882	4799	340	EOL MCS15