

Observers Log

Date MM/DD/YY: 07/14/2010

Vessel	Marcus G. Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Line	MGL1004_RL_B
Sequence	001
Direction	117.12

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	12m
Source Separation	6m
Delta Error Spec	2mS
Cycle (Dist/Time)	Time - 70s

Description	SOL/First Shotpoint 924	EOL/Last Shotpoint 2338
Time (UTC)	02:47	06:35:20
Volume (cu in.)	6600	6520
Description	FGSP 1001	LGSP 2338
Time (UTC)	04:23:15	06:35:20
Volume (cu in.)	6600	6520
Weather	Start of Line	End of Line
Wind (kts)	14 kts, NE	20 kts, NW
Sea State (m)	4-5 ft	4-5 ft
Water Depth (m)	5543	2471

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Auxiliaries	Status
Aux 1-8	Empty
Aux 9 Gun Hydrophone	Empty
Aux 10 Gun Hydrophone	Empty
Aux 11 Gun Hydrophone	Empty
Aux 12 Gun Hydrophone	Empty
Aux 13-16	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 - Internal Time Break
NDR - No Data Recorded	DNP - Do Not Process
N.T.B.P. - Not To Be Processed	

General / Line Comments
SOL FGSP: 1001, Lat: 33°38'59.964"N, Lon: 156°32'59.979"E, Heading: 114, Wind: 18.1 kts NE, Depth: 5470, Seas: 4-5 ft
String 2 Gun 4 turned off due to pressure lost, String 2 Gun 5 turned on Volume 6600
SP 1175 Comm Error, on Gun 7, 8, 9, 10, shut them down and turned on on remaining spares; turned on S3 Gun 05, S4 Gun 05, String 1 Gun 05 new volume 6520 in3
EOL LGSP:2338, Lat: 32°46'08.687"N, Lon: 158°37'24.502"E, Heading: 126.8, Wind: 20.4 kts, NW, Depth: 2471, Seas: 4-5 ft
Line Status:

Time UTC	FILE	SP	Tape	Description
04:28:06		1005		Delta Timing at 3.0ms (String 1, Gun 8)
04: 29:20		1006		Delta Timing at -2.1ms (String 1, Gun 8)
05:43:39		1068		S1G08 No Fire
07:52:21		1175		String 04 Gun 7, 8, 9, 10 comm error from 1175 to 1187 new volume 6520 in3
08:06:34		1187		String 04 Gun 7, 8, 9, 10 disabled S1G05,13G05,S4G05 ENABLED NEW VOLUME 6520
08:44:04		1219		S1G08 delta timing at 5.7ms
08:45:11		1220		S1G08 delta timing at -4.3ms
08:54:27		1228		S3G05 auto fire at 220.1ms
09:02:29		1235		S3G05 Delta Timing at 9.50 ms
09:03:39		1236		S3G05 Delta Timing at -7.2 ms
09:04:48		1237		S3G05 Delta Timing at 12.0 ms
09:07:05		1239		S3G05 Delta Timing at -6.5 ms
09:19:57		1250		S3G05 Auto Fire at 548.5 ms
09:23:30		1253		S3G05 Delta Timing 5.1 ms
09:35:14		1263		S3G05 Auto Fire 535.2 ms
09:38:47		1266		S3G05 Delta Timing at 2.5 ms
09:42:24		1269		S3G05 Delta Timing at -4.4 ms
09:43:34		1270		S3G05 Auto Fire at 596.3 ms
09:43:34		1270		S3G05 Delta Timing at 3.9 ms
09:44:43		1271		S3G05 Delta Timing at -3.1 ms
09:54:14		1279		S3G05 Delta Timing at 5.1 ms
09:55:26		1280		S3G05 Delta Timing at -3.7 ms
10:03:37		1287		S3G05 Delta Timing at 5.6 ms
10:04:47		1288		S3G05 Delta Timing at 2.8 ms
10:05:54		1289		S3G05 Delta Timing at 11.7 ms
10:07:00		1290		S3G05 Delta Timing at 3.3 ms
10:45:53		1323		S3G05 Delta Timing at 4.9 ms
10:47:04		1324		S3G05 Delta Timing at 3.3 ms
12:14:48		1400		S1G08 Delta timing at 4.4 ms
12:15:07		1401		S1G08 Delta timing at 2.7 ms
12:17:06		1402		S1G08 Delta timing at 2.8 ms
12:22:03		1407		S1G08 Delta timing at 5.5 ms
12:56:29		1436		S1G08 Delta timing at 5.4 ms
12:57:40		1437		S1G08 Delta timing at -4.0 ms
14:26:57		1513		S1G08 Delta timing at 5.1 ms
14:30:37		1516		S1G08 Delta timing at 5.0 ms
15:43:41		1578		S1G01 Delta timing at -2.2 ms
16:31:08		1618		S1G08 Delta timing at 4.9 ms
16:32:20		1619		S1G08 Delta timing at-3.6 ms
17:13:08		1652		S1G08 Delta timing at 4.9ms
17:38:20		1672		S1G08 Delta timing at 4.7 ms
19:52:25		1786		S1G08 Delta timing at 4.9 ms
19:53:36		1787		S1G08 Delta timing at 2.8 ms
20:41:59		1828		S1G08 Delta timing at 4.9 ms
20:43:09		1829		S1G08 Delta timing at -3.6 ms
21:12:27		1854		S1G08 Delta timing at 4.8 ms
21:13:36		1855		S1G08 Delta timing at -3.7 ms

21:28:41		1868	S1G08 Delta timing at 4.9 ms
21:29:11		1869	S1G08 Delta timing at 2.8 ms
21:30:58		1870	S1G08 Delta timing at -5.7 ms
00:12:29		2007	S2G08 No Fire
01:21:29		2066	S1G08 Delta timing at 5.0 ms
01:22:29		2067	S1G08 Delta timing at 3.0 ms
01:23:27		2068	S1G08 Delta timing at -5.9 ms
02:03:28		2102	S2G09, S2G10 No fire
02:15:09		2112	S3G08, Auto fire error at 6553.5 ms
02:30:27		2125	S1G08, Delta timing at 5.0 ms
02:30:27		2125	S2G10, No Fire
02:31:37		2126	S1G08, Delta timing at 2.6 ms
02:32:47		2127	S1G08, Delta timing at -5.6 ms
02:33:56		2128	S1G08, Delta timing at 6.4 ms
02:35:07		2129	S1G08, Delta timing at -6.3 ms
02:43:02		2136	S3G05, Delta timing at 2.3 ms
02:53:17		2145	S2G09, No fire
03:00:07		2151	S2G09, S2G10 No Fire
03:00:07		2151	S3G08, Auto fire at 395.1 ms
03:08:15		2158	S2G10, No Fire
03:10:31		2160	S3G08, Auto fire at 6553.5 ms
03:12:50		2162	S2G09, S2G10, No fire
03:34:06		2180	S1G08, Delta timing at 4.6 ms
03:34:06		2180	S2G03, Auto fire at 6527.8 ms
03:35:15		2181	S1G08, Delta timing at -3.5 ms
03:45:53		2190	S2G09, No fire
03:59:59		2202	S2G09, No fire
04:13:43		2214	String2, Gun 03, 05, 06, 07, 08, 09, 10, No fire
04:17:09		2217	S3G08, Auto Fire at 6553.5 ms
04:20:31		2220	S1G08, Delta Timing at 5.3 ms
04:21:40		2221	S1G08, Delta Timing at 3.1 ms
04:22:48		2222	S1G08, Delta Timing at -6.1 ms
04:25:00		2224	S3G08, Auto Fire at 166.6 ms
04:51:52		2248	S2G10, No Fire
05:10:14		2264	S3G08, Auto Fire at 6553.5 ms
05:14:49		2268	S2G03, No Fire
05:29:30		2281	S2G03, No Fire
05:32:08		2283	S3G08, Delta Timing at -2.9ms
05:33:18		2284	S3G08, Delta Timing at 2.1ms
05:40:19		2290	S2G06, No Fire
05:55:27		2303	S3G08, Auto Fire at 691.9 ms
06:00:11		2307	S3G08, Delta Timing at 5.5 ms
06:01:21		2308	S3G08, Delta Timing at 12.2 ms
06:02:31		2309	S3G08, Delta Timing at 3.5 ms
06:10:42		2316	S3G08, Auto fire at 6553.5 ms
06:14:10		2319	S3G08, Auto Fire at 6553.5 ms
06:26:36		2330	S3G08, Auto Fire at 6553.5 ms
06:31:11		2334	S2G10, No Fire
06:32:14		2335	S3G05, Delta timing at 4.3 ms

Time UTC	FILE	SP	Tape	Description
07:24:43		990		S1G08, Delta Timing at 2.6 ms; S3G05, Delta Timing at 7.7 ms
07:25:48		991		S1G08, Delta Timing at -5.7 ms; S3G05, Delta Timing at -5.4 ms
07:33:48		998		S3G08, Delta Timing at 8.2 ms
07:34:57		999		S3G08, Delta Timing at 12.3 ms
07:36:08		1000		S3G08, Delta Timing at 3.4 ms
07:42:05		1005		S3G08, No Fire
08:16:50		1035		S3G08, Auto Fire at 6553.5 ms
08:28:40		1045		S1G08, Delta Timing at 4.7 ms
08:29:53		1046		S1G08, Delta Timing at 2.4ms
08:29:53		1046		S3G08, Auto Fire at 6553.5 ms
08:31:05		1047		S1G08, Delta Timing at -5.4 ms
08:49:05		1062		S3G08, Auto Fire at 6553.5 ms
09:23:36		1091		S3G08, Auto Fire at 6553.5 ms
09:27:13		1094		S3G08, Auto Fire at 6553.5 ms
09:43:33		1108		S3G08, Auto Fire at 6553.5 ms
10:09:30		1130		S3G08, Auto Fire at 6553.5 ms
10:14:17		1134		S1G10 No Fire
10:16:42		1136		S1G08 Delta Timing at 4.9 ms
10:16:42		1136		S1G09 No Fire
10:17:53		1137		S1G08 Delta Timing at 2.7 ms
10:17:53		1137		S3G08 Auto Fire at 6553.5 ms
10:19:03		1138		S1G08 Delta Timing at -5.6 ms
10:32:08		1149		S3G08 Auto Fire at 6553.5 ms
10:38:02		1154		S3G08 Auto Fire at 625.8 ms
10:54:46		1168		S3G08 Auto Fire at 6553.5 ms
11:00:45		1173		S3G08 Auto Fire at 6553.5 ms
11:01:57		1174		S1G08 Delta Timing at 4.9 ms
11:03:09		1175		S1G08 Delta Timing at -3.5 ms
11:11:28		1185		S2G10 No Fire
11:13:55		1184		S2G03 No Fire
11:13:55		1184		S3G08 Auto Fire at 6553.5 ms
11:16:17		1186		S2G03 No Fire
11:16:17		1186		S3G08 Auto Fire at 6553.5 ms
11:22:14		1191		S3G08 Auto Fire at 492.7 ms
11:34:01		1201		S3G08 Auto Fire at 6553.5 ms
11:36:24		1203		S1G08 Delta Timing at 4.6 ms
11:37:35		1204		S1G08 Delta Timing at 3.4 ms
11:38:46		1205		S1G08 Delta Timing at 3.1 ms
11:42:17		1208		S2G05 No Fire
11:51:45		1216		S3G08 AutoFire at 6553.5 ms
11:52:52		1217		S3G08 AutoFire at 6553.5 ms
11:55:50		1219		S3G08 AutoFire at 6553.5 ms
12:00:18		1223		S3G08 AutoFire at 6553.5 ms
12:07:39		1229		S1G08,S1G10 NO FIRE S3G08 AUTO FIRE 151.4 ms
12:10:06		1231		S3G08 AUTO FIRE 6553.5 ms
12:13:38		1234		S3G08 auto fire @ 6553.5 ms
12:14:50		1235		S3G08 auto fire @ 6553.5 ms

12:20:43		1240	S3G08 auto fire @ 159.0 ms
12:23:07		1242	S3G08 auto fire @ 6553.5 ms
12:25:30		1244	S3G08 delta timing @ -9.2 ms
12:26:39		1245	S3G08 delta timing @ -12.3 ms
12:31:25		1249	S3G08 delta timing @ -4.2 ms, S1G09 No Fire
12:32:36		1250	S3G08 delta timing @ -3.1 ms
12:33:47		1251	S3G08 auto fire @ 6553.5 ms
12:36:10		1253	S3G08 auto fire @ 6553.5 ms
12:37:20		1254	S1G08 auto fire @ 5.0 ms
12:38:29		1255	S1G08 delta timing @ 2.9 ms
12:39:38		1256	S1G08 delta timing @ -5.8 ms
12:41:56		1258	S1G08 delta timing @ 5.1 ms
12:44:18		1260	S3G08 auto fire @ 318.9 ms
12:46:38		1262	S3G08 AutoFire at 5998.3 ms
12:56:01		1270	S1G08 Delta timing @ 5.3 ms
12:57:12		1271	S1G08 Delta timing @ -3.9 ms
12:58:22		1272	S3G08 AutoFire at 819.9 ms
13:04:13		1277	S3G08 Auto fire @ 6553.5ms
13:06:33		1279	s3g08 auto fire @ 164.8 ms
13:07:43		1280	s3g08 auto fire @ 164.8 ms
13:08:54		1281	s3g08 auto fire @ 444.2 ms
13:14:45		1286	S3G08 Auto fire @ 6553.5ms
13:17:17		1288	S1G09 No Fire
13:20:00		1289	EOL

Observers Log

Date MM/DD/YY: 07/30/2010

Vessel	Marcus G. Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Line	MGL1004_RL_DD
Sequence	003
Direction	346.937

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	12m
Source Separation	6m
Delta Error Spec	2mS
Cycle (Dist/Time)	Time - 70s

Description	SOL/First Shotpoint 1005	EOL/Last Shotpoint 1323
Time (UTC)	13:20:33	19:49:25
Volume (cu in.)	6520	6520
Description	FGSP	LGSP 1323
Time (UTC)	13:20:33	19:49:25
Volume (cu in.)	6520	6520
Weather	Start of Line	End of Line
Wind (kts)	13.9	17.5
Sea State (m)	1-2	1-2
Water Depth (m)	3025	3147

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Auxiliaries	Status
Aux 1-8	Empty
Aux 9 Gun Hydrophone	Empty
Aux 10 Gun Hydrophone	Empty
Aux 11 Gun Hydrophone	Empty
Aux 12 Gun Hydrophone	Empty
Aux 13-16	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 - Internal Time Break
NDR - No Data Recorded	DNP - Do Not Process
N.T.B.P. - Not To Be Processed	

General / Line Comments	
SOL	
POS 32 56 40.311N 159 04 05.725E	
EOL	
POS 33 23 46.200N 158 56 20.973E	
Line Status:	

Time UTC	FILE	SP	Tape	Description
13:31:36		1014		S3G08 autofire @ 6553.5 ms
13:46:59		1026		S3G08 autofire @ 6553.5 ms
13:48:16		1027		S3G05 delta timing @ 6.8 ms
13:50:50		1029		S3G08 autofire @ 6553.5 ms
13:57:15		1034		S3G08 autofire @ 811.9 ms
14:04:54		1040		S3G08 autofire @ 6553.5 ms
14:08:49		1043		S3G08 autofire @ 6553.5 ms
14:12:33		1046		S3G08 autofire @ 820.0 ms
14:15:04		1048		S3G05 delta timing @ 5.3 ms
14:16:19		1049		S3G08 autofire @ 6553.5 ms
14:18:47		1051		S3G08 autofire @ 915.2 ms
14:20:01		1052		S3G08 autofire @ 6553.5 ms
14:21:16		1053		S3G08 autofire @ 6553.5 ms
14:24:58		1056		S3G05 delta timing @ 3.6 ms
14:28:41		1059		S3G05 delta timing @ 7.5 ms
14:29:56		1060		S3G05 delta timing @ 10.5 ms
14:31:11		1061		S3G05 delta timing @ 2.2 ms
14:32:26		1062		S3G08 autofire @ 409.6 ms
14:33:11		1063		S3G08 autofire @ 6038.2 ms
14:34:15		1064		S3G08 autofire @ 6553.5ms
14:52:17		1078		S3G08 autofire @ 6553.5ms
14:55:57		1081		S3G08 autofire @ 6553.5ms
14:57:11		1082		S3G08 autofire @ 6553.5ms
15:08:12		1091		S3G08 autofire @ 6553.5ms
15:10:38		1093		S3G08 autofire @ 6553.5ms
15:17:54		1099		S3G08 autofire @ 6553.5ms
15:26:19		1106		S3G08 autofire @ 6553.5ms
15:34:46		1113		S3G08 autofire @ 6553.5ms
15:37:09		1115		S3G08 autofire @ 222.1ms
15:52:15		1128		S3G08 autofire at 6553.5ms
15:57:50		1132		S3G08 autofire at 6553.5ms
15:59:05		1133		S3G08 delta timing at -10.6ms
16:01:34		1135		S3G08 autofire at 6653.5ms
16:02:47		1136		S3G08 autofire at 6553.5ms
16:05:14		1138		S3G08 autofire at 6553.5ms
16:08:54		1141		S3G08 autofire at 6553.5ms
16:11:19		1143		S3G08 autofire at 6553.5ms
16:18:33		1149		S3G08 autofire at 164.0ms
16:20:56		1151		S3G08 autofire at 6553.5ms
16:25:41		1155		S3G08 autofire at 6553.5ms
16:26:53		1156		S3G08 autofire at 6553.5ms
16:32:54		1161		S3G08 autofire at 231.6ms
16:37:53		1165		S3G08 delta timing at -4.0ms
16:39:08		1166		S3G08 delta timing at 3.1ms
16:41:40		1168		S3G08 autofire at 6653.5ms
16:42:55		1169		S3G08 autofire at 508.8ms
16:44:11		1170		S3G08 autofire at 6553.5ms

16:45:25		1171	S3G08 autofire at 6553.5ms
16:46:41		1172	S3G08 autofire at 6553.5ms
1650		1175	S3G08 autofire at 6553.5ms
1652		1177	S3G08 autofire at 6553.5ms
1700		1183	S3G08 autofire at 6553.5ms
1703		1185	S3G08 autofire at 6553.5ms
1709		1190	S3G08 autofire at 497.3ms
1710		1191	S3G08 autofire at 571.2ms
1712		1192	S3G08 autofire at 6553.5ms
1714		1194	S3G08 autofire at 6553.5ms
1716		1195	S3G08 autofire at 6553.5ms
1718		1197	S3G08 autofire at 6553.5ms
1723		1201	S3G08 autofire at 527.3ms
1726		1205	S3G08 autofire at 6051.6ms
1733		1209	S3G08 autofire at 571.2ms
1737		1212	S3G08 autofire at 911.9ms
1738		1213	S3G08 autofire at 6553.5ms
1739		1214	S3G08 autofire at 6553.5ms
1742		1216	S3G08 autofire at 6553.5ms
1745		1219	S3G08 autofire at 6553.5ms
1747		1220	S3G08 autofire at 6553.5ms
1751		1224	S3G08 autofire at 727.8ms
1753		1225	S3G08 autofire at 901.8ms
1800		1231	S3G08 autofire at 6553.5ms
1805		1235	S3G08 autofire at 6553.5ms
1807		1237	S3G08 autofire at 6553.5ms
1810		1239	S3G08 autofire at 6553.5ms
1812		1241	S3G08 autofire at 399.0ms
1818		1246	S3G08 autofire at 6553.5ms
1828		1255	S3G08 auto fire 434.1 ms
1841		1266	S3G08 auto fire at 429.2
1843		1267	S1G08 delta timing at 2.1 ms
1844		1268	S1G08 delta timing at 4.2 ms; S3G08 auto fire at 6553.5 ms
1845		1269	S1G08 delta timing at -4.5 ms; S3G08 auto fire at 6553.5 ms
1846		1270	S1G08 auto fire at 6553.5 ms
1848		1271	S3G08 delta timing at -0.9 ms
18:49		1272	S3G08 auto fire at 827.1 ms; Delta timing at 7.1 ms
18:50		1273	S3G08 auto fire at 6553.5 ms
1854		1276	S3G08 auto fire at 6553.5 ms
1905		1286	S3G08 auto fire at 606.2 ms
1908		1288	S3G08 auto fire at 264.6 ms
1916		1295	S3G08 auto fire at 6174.6 ms; delta timing at 7.0 ms
1917		1296	S3G08 delta timing at 12.4 ms, auto fire at 161.9 ms
1918		1297	S3G08 delta timing at 3.5 ms
1920		1298	S3G08 auto fire at 6553.5 ms
1921		1299	S3G08 auto fire at 6553.5 ms
1925		1303	S3G08 auto fire at 6553.5 ms
1930		1307	S3G08 auto fire at 585.7 ms
1932		1309	S3G08 auto fire at 6553.6 ms
1934		1310	S3G08 auto fire at 916.3 ms
1939		1315	S3G08 auto fire at 6553.5 ms
1941		1316	S3G08 auto fire at 6553.5 ms
1942		1317	S3G08 auto fire at 6553.5 ms
1943		1318	S3G08 auto fire at 6553.5 ms
1946		1321	S3G08 auto fire at 309.2 ms
1948		1322	S3G08 auto fire at 6553.5 ms
1949		1323	S3G08 auto fire at 6553.5 ms EOL
1949		1323	EOL

Observers Log

Date MM/DD/YY: 07/30/2010

Vessel	Marcus G. Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Line	MGL1004_RL_D
Sequence	004
Direction	206.734

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	m
Source Separation	6m
Delta Error Spec	2mS
Cycle (Dist/Time)	Time - 70s

Description	SOL/First Shotpoint	EOL/Last Shotpoint
Time (UTC)	20:19:49	0029
Volume (cu in.)	6600	6600
Description	FGSP 966	LGSP 1166
Time (UTC)	20:21:32	0029
Volume (cu in.)	6600	6600
Weather	Start of Line	End of Line
Wind (kts)	18.1	17.5
Sea State (m)	3-5	1-2
Water Depth (m)	3137.7	2919

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Auxiliaries	Status
Aux 1-8	Empty
Aux 9 Gun Hydrophone	Empty
Aux 10 Gun Hydrophone	Empty
Aux 11 Gun Hydrophone	Empty
Aux 12 Gun Hydrophone	Empty
Aux 13-16	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 - Internal Time Break
NDR - No Data Recorded	DNP - Do Not Process
N.T.B.P. - Not To Be Processed	

General / Line Comments
SOL
LAT: 33 23'50.661N LONG: 158 53'23.804E CMG:169.00 WDT: 3137.7 Speed: 4.4 Wind: 181 Seas: 3-5m
First good shot point:: 966
EOL 1166
POS: 33 08 04.847N 158 49 16.144E, WDT 2919m, Seas: 2-4, Winds: 17.5SE.
Line ended early due to Medical emergency
Line Status:

Time UTC	FILE	SP	Tape	Description
2030		974		Auto Fire at 547.2ms
2042		983		S2G05 No Fire
2043		984		S3G08 Auto Fire at 128.1ms
2047		987		S3G08 Auto Fire at 6553.5ms
2048		988		S3G05 Delta Timing at -2.9ms
2059		997		S2G03 No Fire
2107		1003		S2G03 No Fire
2148		1036		S3G06 No fire
2149		1037		S1G09 No fire
2227		1068		S2G05 No Fire
2232		1073		S1G10 No Fire
2244		1082		S3G05 Delta Timing at 4.0ms
2244		1083		S3G08 Delta Timing at 1.4ms
2245		1083		S1G08 No fire
2245		1083		S3G08 Delta Timing at 12.3ms
2247		1084		S3G08 Delta Timing at 3.4ms
2314		1106		S1G10 No Fire; S3G08 Delta Timing at -9.6ms
2315		1107		S3G08 Delta Timing at -12.0ms
2316		1108		S3G08 Delta Timing at -2.9ms
0024		1163		S1G07 No fire; S3G05 Delta timing at 2.2 ms

Time UTC	FILE	SP	Tape	Description
1204		1167		S3G08 delta timing at 9.9ms
1206		1168		S3G08 delta timing at 11.6ms
1207		1169		S3G08 delta timing at 3.2ms
1215		1176		S3G08 delta timing at 1.5ms
1220		1180		S3G08 delta timing at -6.8ms
1221		1181		S3G08 delta timing at 4.9ms
1222		1182		S3G08 delta timing at -5.8ms
1224		1183		S3G08 delta timing at 12.2ms
1247		1203		S3G08 delta timing at 1.4ms
1249		1204		S3G08 delta timing at 12.3ms
1250		1205		S3G08 delta timing at 3.4ms
1303		1216		S3G08 delta timing at 7.2ms
1312		1223		S3G08 delta timing at -8.8ms
1313		1224		S3G08 delta timing at -12.6ms
1350		1255		S3G08 delta timing at 5.4ms
1352		1256		S3G08 delta timing at 12.4ms
1353		1257		S3G08 delta timing at 3.2ms
1354		1258		S3G08 delta timing at -8.6ms
1357		1261		S3G08 delta timing at 3.2ms
1404		1267		S3G08 delta timing at -6.6ms
1441		1298		S3G08 delta timing at -6.2ms
1501		1314		S3G08 delta timing at -11.7ms
1502		1315		S3G08 delta timing at -3.7ms
1531		1339		S3G08 delta timing at -8.5ms
1533		1340		S3G08 delta timing at 5.1ms
1542		1348		S3G08 delta timing at -9.4ms
1557		1361		S3G08 delta timing at 12.7ms
1600		1363		S3G08 delta timing at -8.7ms
1603		1366		S3G08 delta timing at 1.9ms
1609		1371		S3G08 delta timing at -6.9ms
1610		1372		S3G08 delta timing at -6.9ms
1635		1393		S3G08 delta timing at 1.7ms
1637		1394		S3G08 delta timing at 12.3ms
1638		1395		S3G08 delta timing at 3.5ms
1644		1400		S3G08 delta timing at 1.5ms
1645		1401		S3G08 delta timing at 12.3ms
1654		1408		S3G08 delta timing at 1.5ms
1832		1491		S3G08 delta timing at -1.4ms
1851		1506		S3G08 delta timing at -8.3ms
1858		1512		S3G08 delta timing at -7.5ms
1859		1513		S3G08 delta timing at 12.1ms
1900		1514		S3G08 delta timing at 10.1ms
1904		1517		S3G08 delta timing at 8.0ms
1926		1535		S3G08 delta timing at 9.3ms
2010		1571		S3G08 delta timing at -9.9ms
2025		1583		S3G08 delta timing at -8.7ms
2100		1613		S3G08 delta timing at -9.5ms
2303		1715		S3G08 delta timing at -6.2ms
2335		1742		S3G08 delta timing at -7.9ms
2337		1743		S3G08 delta timing at 12.4ms
2338		1744		S3G08 delta timing at 2.9ms
0020		1779		S3G08 delta timing at -8.7ms
0021		1780		S3G08 delta timing at 12.2ms
0023		1781		S3G08 delta timing at -2.5ms
0116		1825		S3G08 delta timing at -9.8ms
0117		1826		S3G08 delta timing at 7.4ms
0247		1901		S3G08 delta timing at -7.4ms
0249		1902		S3G08 delta timing at 12.1ms
0250		1903		S3G08 delta timing at -3.4ms
0313		1922		S3G08 delta timing at -12.5ms
0314		1923		S3G08 delta timing at -3.8ms
0341		1945		S3G08 delta timing at -3.5ms
0342		1946		S3G08 delta timing at 9.0ms
0343		1948		S3G08 delta timing at -12.3ms
0346		1949		S3G08 delta timing at -3.2ms
0409		1968		S3G08 delta timing at -5.9ms
0410		1969		S3G08 delta timing at 11.0ms
0411		1970		S3G08 delta timing at -12.2ms
0413		1971		S3G08 delta timing at 11.9ms
0414		1972		S3G08 delta timing at -3.5ms

Observers Log

Date MM/DD/YY: 08/09/2010

Vessel	Marcus G. Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Line	MGL1004_RL_C
Sequence	006
Direction	357.7

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	12m
Source Separation	6m
Delta Error Spec	2mS
Cycle (Dist/Time)	Time - 70s

Description	SOL/First Shotpoint 969	EOL/Last Shotpoint
Time (UTC)	05:12:18	12:24:14
Volume (cu in.)	6600	6600
Description	FGSP 969	LGSP 1326
Time (UTC)	05:12:18	12:24:14
Volume (cu in.)	6600	6600
Weather	Start of Line	End of Line
Wind (kts)	19.8	20.1
Sea State (m)	3-5	1-3
Water Depth (m)	2851	2728

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Auxiliaries	Status
Aux 1-8	Empty
Aux 9 Gun Hydrophone	Empty
Aux 10 Gun Hydrophone	Empty
Aux 11 Gun Hydrophone	Empty
Aux 12 Gun Hydrophone	Empty
Aux 13-16	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 - Internal Time Break
NDR - No Data Recorded	DNP - Do Not Process
N.T.B.P. - Not To Be Processed	

General / Line Comments
SOL POS: 32 02 01.240N, 158 12 26.849E, Heading: 357.7, Wind: 19.8, Depth: 2851, Seas: 3-5, Speed: 4.4
FGSP 969
EOL Lat: 32 30.0113N Lon: 158 7.3422E
LGSP 1326
Seas: 3-5ft Speed: 4.4knts
Line Status:

Time UTC	FILE	SP	Tape	Description
0523		970		S3G08 Delta Timing at 8.0 ms
0524		971		S3G08 Delta Timing at -4.3 ms
0559		1001		S3G08 Delta Timing at 11.4 ms
0601		1002		S3G08 Delta Timing at -8.5 ms
0602		1003		S3G08 Delta Timing at -2.2 ms
0611		1011		S3G08 Delta Timing at -7.6 ms
0612		1012		S3G08 Delta Timing at 12.1 ms
0613		1013		S3G08 Delta Timing at -3.4 ms
0616		1015		S3G08 Delta Timing at 8.1 ms
0617		1016		S3G08 Delta Timing at -6.3 ms
0626		1024		S3G08 Delta Timing at 5.0 ms
0627		1025		S3G08 Delta Timing at -12.2 ms
0629		1026		S3G08 Delta Timing at 2.6 ms
0659		1052		S3G08 Delta Timing at 11.8 ms
0704		1056		S3G08 Delta Timing at -7.7 ms
0705		1057		S3G08 Delta Timing at 12.2 ms
0719		1069		S3G08 Delta Timing at -7.0 ms
0720		1070		S3G08 Delta Timing at 11.7 ms
0721		1071		S3G08 Delta Timing at -7.9 ms
0722		1072		S3G08 Delta Timing at -7.3 ms
0724		1073		S3G08 Delta Timing at -11.3 ms
0725		1074		S3G08 Delta Timing at -2.9 ms
0726		1075		S3G08 Delta Timing at 6.4 ms
0727		1076		S3G08 Delta Timing at -5.6 ms
0729		1078		S3G08 Delta Timing at -8.8 ms
0731		1079		S3G08 Delta Timing at 10.2 ms
0747		1093		S3G08 Delta Timing at -6.5ms
0749		1094		S3G08 Delta Timing at 11.8ms
0750		1095		S3G08 Delta Timing at -3.4ms
0756		1100		S3G08 Delta Timing at 5.6ms
0757		1101		S3G08 Delta Timing at 12.2ms
0758		1102		S3G08 Delta Timing at 3.4ms
0818		1119		S3G08 Delta Timing at 9.3ms
0824		1124		S3G08 Delta Timing at -5.5ms
0825		1125		S3G08 Delta Timing at 11.2ms
0826		1126		S3G08 Delta Timing at -3.7ms
0849		1145		S3G08 Delta Timing at 2.6ms
0850		1146		S3G08 Delta Timing at 12.3ms
0851		1147		S3G08 Delta Timing at 3.4ms
0902		1162		S3G08 Delta Timing at 9.5ms
0910		1163		S3G08 Delta Timing at -7.1ms
0912		1165		S3G08 Delta Timing at 1.4ms
0914		1166		S3G08 Delta Timing at 12.4ms
0928		1178		S3G08 Delta Timing at 12.2ms
0929		1179		S3G08 Delta Timing at -9.1ms
0930		1180		S3G08 Delta Timing at -2.2ms
0942		1190		S3G08 Delta Timing at -9.5ms
0943		1191		S3G08 Delta Timing at -12.0ms
0944		1192		S3G08 Delta Timing at -3.0ms
1001		1206		S3G08 Delta Timing at -8.9ms
1002		1207		S3G08 Delta Timing at 12.6ms
1004		1208		S3G08 Delta Timing at 4.3ms
1005		1209		S3G08 Delta Timing at 3.2ms
1006		1210		S3G08 Delta Timing at -5.7ms
1007		1211		S3G08 Delta Timing at -2.9ms
1008		1212		S3G08 Delta Timing at 7.1ms

1009		1213	S3G08 Delta Timing at -4.7ms
1011		1214	S3G08 Delta Timing at 8.6ms
1012		1215	S3G08 Delta Timing at 11.7ms
1013		1216	S3G08 Delta Timing at -2.5ms
1014		1217	S3G08 Delta Timing at 3.1ms
1015		1218	S3G08 Delta Timing at -5.8ms
1017		1219	S3G08 Delta Timing at -3.2ms
1020		1222	S3G08 Delta Timing at -9.6ms
1021		1223	S3G08 Delta Timing at 2.6ms
1023		1224	S3G08 Delta Timing at 5.7ms
1026		1227	S3G08 Delta Timing at 10.2ms
1027		1228	S3G08 Delta Timing at -7.5ms
1030		1230	S3G08 Delta Timing at 10.2ms
1031		1231	S3G08 Delta Timing at -8.1ms
1032		1232	S3G08 Delta Timing at -2.1ms
1048		1245	S3G08 Delta Timing at -12.4ms
1049		1246	S3G08 Delta Timing at 9.3ms
1050		1247	S3G08 Delta Timing at 2.5ms
1051		1248	S3G08 Delta Timing at -7.7ms
1052		1249	S3G08 Delta Timing at 4.4ms
1053		1250	S3G08 Delta Timing at 3.2ms
1057		1253	S3G08 Delta Timing at 9.7ms
1058		1254	S3G08 Delta Timing at 11.8ms
1059		1255	S3G08 Delta Timing at 3.2ms
1105		1260	S3G08 Delta Timing at 4.4ms
1107		1261	S3G08 Delta Timing at 12.3ms
1108		1262	S3G08 Delta Timing at -3.2ms
1109		1263	S3G08 Delta Timing at 12.1ms
1110		1264	S3G08 Delta Timing at -3.3ms
1114		1267	S3G08 Delta Timing at -10.1ms
1115		1268	S3G08 Delta Timing at -11.7ms
1116		1269	S3G08 Delta Timing at -3.0ms
1121		1273	S3G08 Delta Timing at 6.9ms
1122		1274	S3G08 Delta Timing at 12.4ms
1123		1275	S3G08 Delta Timing at 3.3ms
1124		1276	S3G08 Delta Timing at -8.6ms
1126		1277	S3G08 Delta Timing at -11.9ms
1127		1278	S3G08 Delta Timing at -4.6ms
1132		1282	S3G08 Delta Timing at -2.2ms
1133		1283	S3G08 Delta Timing at 8.4ms
1134		1284	S3G08 Delta Timing at -4.6ms
1135		1285	S3G08 Delta Timing at -2.6ms
1136		1286	S3G08 Delta Timing at -3.0ms
1138		1287	S3G08 Delta Timing at 3.1ms
1139		1288	S3G08 Delta Timing at 7.3ms
1140		1289	S3G08 Delta Timing at 11.3ms
1141		1290	S3G08 Delta Timing at 7.3ms
1142		1291	S3G08 Delta Timing at -5.8ms
1147		1295	S3G08 Delta Timing at -8.9ms
1148		1296	S3G08 No fire
1154		1301	S3G08 Delta Timing at 2.4ms
1157		1303	S3G08 Delta Timing at -6.7ms
1159		1305	S3G08 Delta Timing at 11.8ms
1204		1309	S3G08 Delta Timing at 9.8ms
1207		1312	S3G08 Delta Timing at -8.9ms
1218		1321	S3G08 Delta Timing at -11.3ms
1224		1326	EOL LGSP

Observers Log

Date MM/DD/YY: 08/09/2010

Vessel	Marcus G. Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Line	MGL1004_RL_CC
Sequence	007
Direction	61.554

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	12m
Source Separation	6m
Delta Error Spec	2mS
Cycle (Dist/Time)	Time - 70s

Description	SOL/First Shotpoint 1003	EOL/Last Shotpoint 1325
Time (UTC)	12:26:07	18:56:15
Volume (cu in.)	6600	6500
Description	FGSP 1004	LGSP 1325
Time (UTC)	12:27:29	18:56:15
Volume (cu in.)	6600	6500
Weather	Start of Line	End of Line
Wind (kts)	25.3	21.1
Sea State (m)	1-3	3-5
Water Depth (m)	2725	2477

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Auxiliaries	Status
Aux 1-8	Empty
Aux 9 Gun Hydrophone	Empty
Aux 10 Gun Hydrophone	Empty
Aux 11 Gun Hydrophone	Empty
Aux 12 Gun Hydrophone	Empty
Aux 13-16	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 - Internal Time Break
NDR - No Data Recorded	DNP - Do Not Process
N.T.B.P. - Not To Be Processed	

General / Line Comments
SOL: 32°33'12.487"N 158°07'29.104"E HDG: 60.6 Wind: 25.3 WDT: 2725 Seas: 3-5ft Speed: 4.1
FGSP: 1004
EOL: 32°46'34.138"N 158°36'45.339"E HDG: 69.6 Speed: 4.4 WDT: 2477 Wind: 21.1 Seas: 3-5
LGSP: 1325
SP 1251 S3G08, S4G10 Disabled New Vol: 6320 in3
SP 1253 S3G05 Enabled New Vol 6500 in3
SP 1258 S3G05 Disabled S4G05 Enabled New Vol 6500 in3

Line Status:

Time UTC	FILE	SP	Tape	Description
1226		1003		S3G08 delta timing at 7.5ms
1229		1005		S3G08 delta timing at 8.2ms
1239		1013		S3G08 delta timing at -10.5ms
1247		1020		S2G03-G10 No fire
1248		1021		S3G08 delta timing at -9.6ms
1254		1026		S3G08 delta timing at 12.5ms
1256		1028		S3G08 delta timing at 4.6ms
1258		1030		S3G08 delta timing at -5.6ms
1300		1031		S3G08 delta timing at 11.1ms
1317		1045		S3G08 delta timing at 5.4ms
1318		1046		S3G08 delta timing at 12.7ms
1319		1047		S3G08 delta timing at 9.0ms
1320		1048		S3G08 delta timing at -6.1ms
1327		1054		S3G08 delta timing at 11.2ms
1340		1065		S3G08 delta timing at -5.8ms
1341		1066		S3G08 delta timing at 4.4ms
1351		1074		S3G08 delta timing at 11.9ms
1400		1081		S3G08 delta timing at -5.0ms
1404		1085		S3G08 delta timing at -9.8ms
1406		1087		S3G08 delta timing at -4.7ms
1408		1088		S3G08 delta timing at 4.4ms
1409		1089		S3G08 delta timing at 6.8ms
1428		1105		S3G08 delta timing at 11.1ms
1429		1106		S3G08 delta timing at -8.3ms
1430		1107		S3G08 delta timing at -2.1ms
1431		1108		S3G08 delta timing at 10.6ms
1432		1109		S3G08 delta timing at -10.2ms
1434		1110		S3G08 delta timing at 3.7ms
1438		1113		S3G08 delta timing at 10.0ms
1450		1123		S3G08 delta timing at -8.7ms
1456		1128		S3G08 delta timing at -6.9ms
1458		1130		S3G08 delta timing at -1.7ms
1500		1131		S1G02-G10 No fire; vol 5310 cu in
1501		1132		S1G01-G10 No fire; vol 4950 cu in
1502		1133		S3G08 delta timing at -1.6ms
1517		1145		S3G08 delta timing at 10.7ms
1522		1149		S3G08 delta timing at 7.5ms
1542		1165		S3G08 delta timing at -0.8ms
1607		1186		S3G08 delta timing at -4.4ms
1606		1185		S2G10 did not fire
1616		1194		S3G08 delta timing at 12.1ms
1617		1195		S3G08 delta timing at -9.0ms
1618		1196		S3G08 delta timing at 11.1ms
1619		1197		S3G08 delta timing at -8.9ms
1622		1199		S3G08 delta timing at 10.8ms
1623		1200		S3G08 delta timing at -7.9ms
1630		1205		S2G10 did not fire vol 6380 cu. In.

1636		1211	S3G08 delta timing at 10.8ms
1639		1213	S3G08 delta timing at -8.5ms
1642		1216	S3G08 delta timing at -4.7ms
1656		1227	S3G08 delta timing at -6.8ms
1657		1228	S3G08 delta timing at 11.5ms
1658		1229	S3G08 delta timing at -3.6ms
1701		1232	S3G08 delta timing at 1.5ms
1703		1233	S3G08 delta timing at 1.5ms
1704		1234	S2G10 did not fire vol 6380 cu. In.
1719		1246	S4G10 did not fire vol 6380 cu. In
1720		1247	S2G10 did not fire vol 6380 cu. In.
1721		1248	S2G10 did not fire vol 6380 cu. in.
1721		1248	S3G08 delta timing error at -8.3ms
1722		1249	S3G08 delta timing error at 12.7ms
1723		1250	S3G08 delta timing error at -9.8ms
1725		1251	S3G08 and S4G10 Disabled Vol 6320 cu. In
1732		1253	S3G05 enabled Vol 6500 cu in
1733		1257	S3G05 delta timing error at 4.4ms
1733		1258	S3G05 disabled S4G05 enabled Vol 6500 cu in
1733		1258	S4G05 delta timing error at 3.6ms
1734		1259	S4G05 delta timing error at -2.7ms
1753		1274	S2G10 No Fire Vol 6280 cu in
1754		1275	S2G10 No Fire Vol 6280 cu in
1815		1292	S2G10 No Fire Vol 6280 cu in
1856		1325	EOL

Observers Log

Date MM/DD/YY: 08/09/2010

Vessel	Marcus G. Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Line	MGL1004_RL_EA
Sequence	008
Direction	117.352

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	12m
Source Separation	6m
Delta Error Spec	2mS
Cycle (Dist/Time)	Time - 70s

Description	SOL/First Shotpoint	EOL/Last Shotpoint
Time (UTC)	20:05:07	20:56:03
Volume (cu in.)	6500	6500
Description	FGSP	LGSP
Time (UTC)	20:05:07	20:56:03
Volume (cu in.)	6500	6500
Weather	Start of Line	End of Line
Wind (kts)	22.8	SE 10-15 kts
Sea State (m)	1-2	1-2
Water Depth (m)	2473	5368

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Auxiliaries	Status
Aux 1-8	Empty
Aux 9 Gun Hydrophone	Empty
Aux 10 Gun Hydrophone	Empty
Aux 11 Gun Hydrophone	Empty
Aux 12 Gun Hydrophone	Empty
Aux 13-16	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 - Internal Time Break
NDR - No Data Recorded	DNP - Do Not Process
N.T.B.P. - Not To Be Processed	

General / Line Comments
SOL
POS: 32 47 16.990N, 158 35 26.614E; CMG: 163.4; SPEED: 4.2; SEAS: 1-2; DPT: 2473; WIND: 22.8
S3G05, S3G08, S4G10 DISABLED; S4G05 ENABLED, TOTAL VOLUME: 6500/N3
FGSP 987
EOL Pos: 31 57 00.42 N 160 27 00.375 E Winds: SE 10 15 Kts Seas: 1-2m CMG: 116.26 Speed: 4.4 WDT: 5368
LGSP: 2210
Line Status: Complete

Time UTC	FILE	SP	Tape	Description
2034		1010		S2G10 NO FIRE, VOLUME 6280/N3
2040		1015		S3G10 NO FIRE, VOLUME 6280/N3
2043		1017		S3G07, 08, 09 NO FIRE, VOUME 6280/N3
2158		1078		S2G10 NO FIRE, VOLUME 6500/N3
2215		1092		S2G10 NO FIRE, VOLUME 6280/N3
0004		1180		S2G10 NO FIRE, VOLUME 6280/N3
0007		1182		S2G03 NO FIRE
0022		1195		S2G10 NO FIRE
0029		1200		S2G03 NO FIRE
0034		1204		S2G10 NO FIRE
0124		1244		S2G09 NO FIRE
0203		1275		S2G09, S2G10 NO FIRE
0300		1322		S2G03 NO FIRE
0320		1339		S2G09, S2G10 NO FIRE
0338		1354		S2G09 NO FIRE
0430		1396		S2G09 NO FIRE
0506		1427		S2G09 NO FIRE
0508		1428		S2G09, S2G10 NO FIRE
0607		1478		S2G10 NO FIRE
0631		1498		S2G10 NO FIRE VOL: 6280
0632		1499		S2G09, S2G10 NO FIRE VOL:6060
0646		1511		S2G10 NO FIRE VOL: 6280
1438		1897		S2G01 No fire vol 6140
1535		1944		S2G03 No fire

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	0004	0012	FGSP	1008
SP #	925	9287	LGSP	9287

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			193	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/11/2010	08/13/2010
Time UTC	10:26:56	06:44:35
Volume (cu in.)	6600	6600
Streamer Depth (m)	9.0	9.0
Wind (kts)	4.6	18.5
Sea State (ft)	1-3	1-3
Water Depth (m)	5403	5497

General / Line Comments	
SOL 31 56 01.319N 160 29 07.281E SP 925 FGSP:1008	
EOT SP: 2279 File No.: 1273 UTC: 1745 Reel changed from 0004 to 0005	
EOT SP: 3551 File No.: 2546 UTC: 0031 Reel changed from 0005 to 0006	
EOT SP: 4138 File No.: 3133 UTC: 0339 Reel changed from 0006 to 0008	
Reel 0007 skipped, acquisition file restarted at 0008	
EOT SP: 5499 File No.: 1274 UTC: 1033 Reel changed from 0008 to 0009	
EOT SP: 6720 File No.: 2547 UTC: 1715 Reel changed from 0009 to 0010	
EOT SP: 7992 File No.: 3820 UTC: 2355 Reel changed from 0010 to 0011	
EOT SP: 9266 File No.: 5093 UTC: 0637 Reel changed from 0011 to 0012	
EOL 33 39 48.437N 156 31 06.900E SP:9287 LGSP: 9287	
Line Status:	

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_ML_A
Sequence	009
Direction	298.19

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
1054	2	1008	0004	FGSP
1745	1273	2279	0004	EOT 0004 changed to tape 0005
1847	1460	2466	0005	S1G04 delta timing error at -2.1ms
1849	1467	2473	0005	S2G02 delta timing error at 2.3ms
1850	1469	2475	0005	S2G02 delta timing error at 3.5ms
2246	2221	3219	0005	S1G04 delta timing error at -2.5ms
0013	2494	3495	0005	S1G04 delta timing at -2.7ms
0031	2546	3551	0006	EOT 0005 change to tape 0006
0339	3133	4138	0006	EOT 0006 change to tape 0008
0400	32	4205	0008	S1G04 delta timing at -2.2ms
0603	419	4592	0008	S2G03-G10, no fire
0604	420	4593	0008	S2G02-G10, no fire
0604	421	4594	0008	S2G02, delta timing at 3.0 ms
0609	435	4608	0008	String2, G01-G10, NO FIRE, 4950 Volume
0609	436	4609	0008	String2, G02-G09, NO FIRE
0610	437	4610	0008	String2, G01-G10, NO FIRE, 4950 Volume
0610	438	4611	0008	String2, G01-G10, NO FIRE, 4950 Volume
0610	439	4612	0008	String2, G01-G10, NO FIRE, 4950 Volume
0610	440	4613	0008	String2, G01-G10, NO FIRE, 4950 Volume
0611	441	4614	0008	String2, G01-G10, NO FIRE, 4950 Volume
0611	442	4615	0008	String2, G01-G10, NO FIRE, 4950 Volume
0611	443	4616	0008	String2, G01-G10, NO FIRE, 4950 Volume
0612	444	4617	0008	S2G02, Delta timing at 2.9 ms; S2G04 Delta timing at 2.4 ms
0908	1003	5177	0008	S2G02, Delta timing at 2.2 ms
1033	1274	5449	0008	EOT 0008 changed to tape 0009
1249	1706	5877	0009	S2G02 delta timing at 2.1ms
1345	1878	6051	0009	S2G02 delta timing at -2.1ms
1417	1979	6152	0009	S2G02 delta timing at -2.1ms
1425	2005	6178	0009	S2G02 delta timing at -2.2ms
1435	2039	6212	0009	S2G02 delta timing at 2.2ms
1439	2052	6224	0009	S2G02 delta timing at 2.3ms
1446	2073	6246	0009	S2G02 delta timing at -2.1ms
1508	2141	6314	0009	S1G04 delta timing at -2.4ms
1509	2145	6318	0009	S2G02 delta timing at -2.1ms
1522	2186	6359	0009	S2G02 delta timing at 2.1ms
1529	2211	6384	0009	S2G02 delta timing at -2.3ms
1546	2263	6436	0009	S2G02 delta timing at 2.1ms
1628	2397	6570	0009	S2G02 delta timing at -2.2ms
1700	2500	6673	0009	S2G02 delta timing at 2.1ms
1715	2547	6720	0009	EOT 0009 changed to tape 0010
1722	2568	6741	0010	S2G02 delta timing at 2.1ms
1738	2622	6795	0010	S2G02 delta timing at -2.1ms
1743	2638	6811	0010	S2G02 delta timing at -2.1ms
1810	2726	6897	0010	S2G02 delta timing at -2.2ms
1914	2929	7102	0010	S1G04 delta timing error at -2.4ms
2023	3150	7319	0010	S2G02 delta timing error at -2.1ms
2030	3172	7343	0010	S2G02 delta timing error at -2.1ms

2044	3214	7386	0010	S2G02 delta timing error at -2.2ms
2052	3240	7411	0010	S2G02 delta timing error at -2.1ms
2059	3288	7435	0010	S2G02 delta timing error at 2.1ms
2144	3407	7577	0010	S1G04 delta timing error at -2.1ms
2203	3470	7636	0010	S2G02 delta timing error at -2.2ms
2219	3513	7685	0010	S2G02 delta timing error at -2.1ms
2225	3534	7706	0010	S2G02 delta timing error at -2.1ms
2236	3566	7739	0010	S1G04 delta timing error at -2.1ms
2237	3572	7745	0010	S2G02 delta timing error at 2.1ms
2253	3621	7794	0010	S3G08 no fire
2355	3820	7992	0010	EOT 0010 change to tape 0011
0023	3907	8079	0011	S2G02 delta timing error at 2.2ms
0119	4083	8255	0011	S2G02 delta timing error at 2.4ms
0153	4191	8363	0011	S1G04 delta timing error at -2.9ms
0224	4289	8462	0011	S1G04 delta timing error at -2.1ms
0253	4383	8555	0011	S1G04 delta timing error at -2.4ms
0313	4448	8620	0011	S1G04 delta timing error at -2.1ms
0615	5023	9196	0011	S1G04 delta timing error at -2.3ms
0637	5093	9266	0011	EOT 0011 change to tape 0012

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	0013	0018	FGSP	916
SP #	916	8368	LGSP	8368

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/13/10	08/15/2010
Time UTC	9:53:58	08:08:24
Volume (cu in.)	6600	6600
Streamer Depth (m)	9.0	9.0
Wind (kts)	16.6	12.7
Sea State (ft)	1-3	1-3
Water Depth (m)	5524	5614

General / Line Comments				
SOL	33 41 12.106N	156 32 12.506E	SP:916	
EOT	0013	SP 2189		
EOT	0014	SP 3461		
EOT	0015	SP 4734		
EOT	0016	SP 6008		
EOT	0017	SP 7281		
EOT	0018	SP 8368		
EOL	30 28 18.560N	157 41 05.900E	SP 8368	
Line Status:				

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_ML_B
Sequence	010
Direction	164.9

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to	
Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
0953	0001	916	0013	FSP, FGSP
1032	0090	1005	0013	S3G08 No Fire
1240	0397	1312	0013	S1G04 delta timing at -2.3ms
1857	1273	2189	0013	EOT 0013 Changed to tape 0014
2342	1956	2872	0014	S2G01 Misfire @ 10.6ms
2342	1957	2873	0014	S2G01 Misfire @ -3.9ms
0337	2546	3461	0014	EOT 0014 Changed to tape 0015
1137	3820	4734	0015	EOT 0015 Changed to tape 0016
1320	4098	5013	0016	S1G08 delta timing at -1.2ms
1320	4099	5014	0016	S1G08 delta timing at 7.1ms
1321	4100	5015	0016	S1G08 delta timing at -4.7ms
1510	4417	5332	0016	S3G08 No Fire
1858	5092	6008	0016	EOT 0016 Changed to tape 0017
2253	5799	6714	0017	S1G08 delta timing at 10.1ms
2254	5800	6715	0017	S1G08 delta timing at 11.4ms
2254	5801	6716	0017	S1G08 delta timing at 3.0ms
0205	6365	7281	0017	EOT 0017 changed to tape 0018
08:08:24	7453	8368	0018	EOL, EOT 0018

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	0019	0021	FGSP	807
SP #	0801	3374	LGSP	3374

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/15/10	8/16/10
Time UTC	11:23:35	01:52:58
Volume (cu in.)	6600	6420
Streamer Depth (m)	9.0	9
Wind (kts)	20.4	24.7
Sea State (ft)	1-3	1-3
Water Depth (m)	5621	4903

General / Line Comments
SOL 30 28 57.230N 157 46 37.558E SP 0807
EOT SP
1406 SP: 1265 Disabled S1G02, Enabled S1G05 New Volum 6420 IN3
EOL POS: 30 42.71316N 156 27.57377E
EOT SP2075 19 to 20
Ended line early due to medical emergency
Line Status:

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_ML_7
Sequence	011
Direction	282.6

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to	
Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
11:23	0001	0801	0019	FSP
11:23	0002	0802	0019	FGSP
1310	0304	1104	0019	S2G02 delta timing at -3.6ms
1311	0305	1105	0019	S2G02 delta timing at 9.5ms
1311	0306	1106	0019	S2G02 delta timing at -5.7ms
1328	0355	1155	0019	S1G02 No fire
1328	0356	1156	0019	S1G02 No fire
1339	0386	1186	0019	S1G02 delta timing at -7.3ms
1339	0387	1187	0019	S1G02 delta timing at 12.0ms
1340	0388	1188	0019	S1G02 delta timing at -5.0ms
1343	0399	1199	0019	S1G02 No fire
1357	0441	1241	0019	S1G02 No fire
1358	0442	1242	0019	S1G02 No fire
1358	0443	1243	0019	S1G02 No fire
1358	0444	1244	0019	S1G02 No fire
1359	0445	1245	0019	S1G02 No fire
1359	0446	1246	0019	S1G02 No fire
1400	0447	1247	0019	S1G02 No fire
1400	0448	1248	0019	S1G02 No fire
1400	0449	1249	0019	S1G02 No fire
1401	0450	1250	0019	S1G02 No fire
1401	0451	1251	0019	S1G02 No fire
1401	0452	1252	0019	S1G02 No fire
1402	0453	1253	0019	S1G02 No fire
1402	0454	1254	0019	S1G02 No fire
1403	0456	1256	0019	S1G02 No fire
1403	0457	1257	0019	S1G02 No fire
1404	0461	1261	0019	S1G02 No fire
1405	0463	1263	0019	S1G02 No fire
1405	0464	1264	0019	S1G02 No fire
1406	0465	1265	0019	New vol 6420 IN3; Turned off S1G02, turned on S1G05
1406	0466	1266	0019	S1G01 delta timing at -3.8ms
1406	0467	1267	0019	S1G05 delta timing at 3.6ms
1407	0468	1268	0019	S1G05 delta timing at -3.0ms
2208	1900	2700	0020	Interminant sea noise
2303	2068	2868	0020	S1G06 No Fire
2309	2088	2888	0020	S1G09 No Fire
2356	2226	3026	0020	S1G04 No Fire
0021	2301	3101	0020	S1G06 No Fire
0031	2330	3130	0020	S1G04 No Fire
0048	2382	3182	0020	S1G05 No fire
0049	2383	3183	0020	S1G08 No fire
0054	2397	3197	0020	S1G04 No Fire
0112	2451	3251	0020	S1G03 No fire
0115	2460	3260	0020	S1G10 No fire
0117	2466	3266	0020	S1G07 No fire
0124	2486	3286	0020	S1G08 No fire

0125	2491	3291	0020	S1G08 No fire
0126	2493	3293	0020	S1G10 No fire
0126	2494	3294	0020	S1G08, G10 No fire
0129	2502	3302	0020	S1G06, G10 No fire
0130	2504	3304	0020	S1G01 No fire
0131	2509	3309	0020	S1G07 No fire
0132	2512	3312	0020	S1G07 No fire
0134	2516	3316	0020	S1G03, G04 No fire
0134	2517	3317	0020	S1G07 No fire
0135	2520	3320	0020	S1G08 No fire
0135	2521	3321	0020	S1G03 No fire
0136	2522	3322	0020	S1G03 No fire
0137	2525	3325	0020	S1G09, G10 No fire
0138	2528	3328	0020	S1G05 No fire
0139	2530	3330	0020	S1G10 No fire
0139	2531	3331	0020	S1G09 No Fire
0139	2533	3333	0020	S1G04 - G10 No fire
0140	2534	3334	0020	S1G10 No fire
0140	2536	3336	0020	S1G01 - S1G10 No fire, switched comms
0141	2539	3339	0020	S1G08 No fire
0143	2546	3346	0020	EOT 0020 Change to tape 0021
0144	2548	3348	0021	S1G06 No Fire
0145	2551	3351	0021	S1G09 No fire
0148	2559	3359	0021	S1G07 No fire
0149	2562	3362	0021	S1G08 No fire
0149	2564	3364	0021	S1G03 No fire
0150	2566	3366	0021	S1G07 No fire
0152	2573	3373	0021	S1G06 No fire

Observers Log

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern McKeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_test
Sequence	012
Direction	97.6

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
1		
2		
3		
4		

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
Aux. 16: Port Outer hydrophone	

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
07:55	80	3696	9022	String 02 No Fire
07:55	83	3697	9022	String 02 No Fire
08:06	88	3728	9022	String 03 No Fire
08:20	127	3773	9022	String 01, S1G04 Delta timing at -2.1 ms
09:38	360	4001	9022	String 03, S3G08 No Fire
10:01		4068	9022	EOT 9022 SP 4068
10:01		4068	9022	EOL MG1004_ML_Test

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	1023	1025	FGSP	3194
SP #	3162	6286	LGSP	6286

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/22/2010	08/24/2010
Time UTC	10:47	03:33
Volume (cu in.)	6600	6600
Streamer Depth (m)	9.0	9.0
Wind (kts)	8.4	8.9
Sea State (ft)	1	2-3
Water Depth (m)	4834	5617

General / Line Comments
SOL 30 41 36.008N 156 34 14.662E
EOT 1023 SP 4435
EOT 1024 SP 5708
EOT 1025 SP 6286
EOL 30 57 19.707N, 154 58 00.058E
Line Status:

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_7R
Sequence	013
Direction	263

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to	
Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
1245	0379	3540	1023	S1G01 No Fire, S2G01-G10 No Fire
1245	0380	3541	1023	S2G01-G10 No Fire
1246	0381	3542	1023	S2G01-G10 No Fire
1246	0382	3543	1023	S2G01-G10 No Fire
1246	0383	3544	1023	S2G01-G10 No Fire
1247	0384	3545	1023	S2G01-G10 No Fire
1247	0385	3546	1023	S2G01-G10 No Fire
1247	0386	3547	1023	S2G01-G10 No Fire
1248	0387	3548	1023	S2G01-G10 No Fire
1248	0388	3549	1023	S3G08 delta timing at 2.6ms
1250	0395	3556	1023	S3G08 delta timing at 3.2ms
1251	0396	3557	1023	S3G08 delta timing at -2.9ms
1252	0402	3563	1023	S3G08 delta timing at 3.9ms
1253	0403	3564	1023	S3G08 delta timing at -2.7ms
1254	0406	3567	1023	S3G08 delta timing at 3.2ms
1254	0408	3569	1023	S3G08 delta timing at -3.2ms
1255	0409	3570	1023	S3G08 turned off; 6540 cu ft
1321	0491	3652	1023	S1G04 delta timing at -2.1ms
1729	1273	4435	1023	EOT 1023 Changed to tape 1024
2100	1934	5095	1024	S2G04 delta timing at 2.1ms
2236	2230	5388	1024	S2G04 delta timing at 2.1ms
0324	3100	6261	1025	S2G04 delta timing at -2.1ms
0333	3125	6286	1025	EOL 30 57 19.707N, 154 58 00.058E

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

	SOL	EOL		
Tape #	1026	1028	FGSP	1001
SP #	825	4501	LGSP	4501

Line	MGL1004_ML_6
Sequence	014
Direction	57

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to	
Nav. Antenna	

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. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	8/24/2010	8/25/10
Time UTC	07:13	2:54
Volume (cu in.)	6600	6600
Streamer Depth (m)	9.0	9.0
Wind (kts)	10.3	10.3
Sea State (ft)	1-3	1-3
Water Depth (m)	5652	3939

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

General / Line Comments
SOL 30 54 25.769N, 154 55 21.069E SP 1026
EOT SP
EOT 1026 SP 2098
EOT 1027 SP 3373
EOT 1028
EOL SP 4501 LAT: 31 47 59.023N, LON: 156 33 01.080E
Line Status:

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
07:29	54	879	1026	String 02 Delta timing at -2.1 ms
07:34	69	894	1026	String 02 Delta timing at -2.1 ms
07:40	87	912	1026	String 02 Delta timing at -2.2 ms
1253	1046	1871	1026	S4G04 No fire
0211	1273	2098	1026	EOT 1026; start tape 1027
2015	2417	3243	1027	S2G04 delta timing at 2.1ms
2056	2545	3373	1027	EOT 1027; Start tape 1028
0121	3399	4208	1028	s1go4 delta timing @ -2.2 ms
0141	3450	4270	1028	S4G04 No fire
0257	4271	4501	1028	EOT 1028, EOL

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	1029	1031	FGSP	1005
SP #	1005	4247	LGSP	

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	8/25/2010	08/25/2010
Time UTC	02:55	20:29
Volume (cu in.)	6600	6460
Streamer Depth (m)	9.0	9.0
Wind (kts)	11.0	8.8
Sea State (ft)	2.4	1-2
Water Depth (m)	3914	2748

General / Line Comments
SOL 31 48' 01.034"N, 156 33' 07.500E SP 1005
EOT 1029 SP 2277
EOT 1030 SP 3551
SP: 2853 S2G4 Disabled S2G5 Enabled
From SP: 3424 to 2184 intermittent S2 G7-10 No Fire Vol: 5980 in3
SP: 4006 S2 G8-10 Disabled Vol: 6100 in3
SP 4010 S1 G5, S3 G5, S4 G5 Enabled
SP 4013 S3 G5 Disabled Vol: 6460 in3
MISSED shots 4185-4193 due to operator error early disable of spectra re-enabled to complete run out.
EOL: SP 4247, LAT: 32 05 08.453N LON: 158 14 00.682E
Line Status:

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_ML_5
Sequence	015
Direction	78.309

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to	
Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
0917	1164	2168	1029	S1G04 delta timing at -2.1 ms
0953	1273	2277	1029	EOT 1029, Start of Tape 1030
1232	1744	2748	1030	S2G04 delta timing at 3.9ms
1305	1843	2847	1030	S2G04 delta timing at 3.9ms
1306	1845	2849	1030	S2G04 No fire
1306	1846	2850	1030	S2G04 No fire
1306	1847	2851	1030	S2G04 No fire
1307	1848	2852	1030	S2G04 No fire
1307	1849	2853	1030	S2G04 No fire
1307	1850	2854	1030	S2G05 delta timing at 5.2ms, S2G04 turned off
1308	1851	2855	1030	S2G05 delta timing at -3.7ms
1608	2419	3423	1030	S2 G5-G10 No Fire
1608	2420	3425	1030	S2 G5-G10 No Fire
1608	2421	3426	1030	S2 G5 de;ta timing error at 2.8ms
1609	2422	3427	1030	S2 G1-G10 No Fire
1609	2423	3428	1030	S2 G1-G10 No Fire
1609	2424	3429	1030	S2 G1-G10 No Fire
1610	2425	3430	1030	S2 G1-G10 No Fire
1610	2426	3431	1030	S2 G1-G10 No Fire
1610	2427	3432	1030	S2 G1-G10 No Fire
1611	2428	3433	1030	S2 G1-G10 No Fire
1611	2429	3434	1030	S2 G2, G5-G10 No Fire
1612	2431	3436	1030	S2 G1-G10 No Fire
1612	2432	3437	1030	S2 G1-G10 No Fire
1612	2433	3438	1030	S2 G5-G10 No Fire
1627	2479	3484	1030	S2 G5-G10 No Fire
1627	2479	3485	1030	S2 G5-G10 No Fire
1631	2492	3497	1030	S2 G5 No Fire
1631	2495	3500	1030	S2 G5-G10 & S1G4 No Fire
1632	2496	3501	1030	S2 G5-G10 No Fire
1644	2635	3540	1030	S2 G7-G10 No Fire
1644	2536	3541	1030	S2 G7-G10 No Fire
1647	2546	3551	1031	EOT 1030 Switched to Tape 1031
1656	2574	3579	1031	S1 G4 & S2 G5-10 No Fire
1656	2575	2680	1031	S2 G6-10 No Fire
1657	2576	3581	1031	S2 G7-10 No Fire
1657	2577	3582	1031	S2 G7-10 No Fire
1657	2578	3583	1031	S2 G7-10 No Fire
1658	2579	3584	1031	S2 G1-10 No Fire
1658	2580	3585	1031	S2 G1-10 No Fire
1701	2591	3596	1031	S2 G3 No Fire
1704	2599	3603	1031	S2 G5, G7-10 No Fire
1704	2600	3604	1031	S2 G7-10 No Fire
1712	2624	3629	1031	S2 G5-G10 No Fire
1712	2625	3630	1031	S2 G5-G10 No Fire
1712	2626	3631	1031	S2 G5-G10 No Fire
1714	2631	3636	1031	S2 G5-G10 No Fire

1714	2632	3637	1031	S2 G5-G10 No Fire
1721	2654	3659	1031	S2 G7-10 No Fire
1721	2655	3660	1031	S2 G7-10 No Fire
1725	2664	3669	1031	S2 G7-10 No Fire
1725	2665	3670	1031	S2 G7-10 No Fire
1733	2693	3698	1031	S2 G7-10 No Fire
1734	2694	3699	1031	S2 G7-10 No Fire
1739	2711	3716	1031	S2 G7-10 No Fire
1740	2712	3717	1031	S2 G7-10 No Fire
1755	2760	3764	1031	S2 G3, G6-10 No Fire Vol: 5670 in3
1755	2761	3765	1031	S2 G6-10 No Fire
1812	2183	3818	1031	S2 G3, G7-10 No Fire Vol: 5940 in3
1813	2184	3819	1031	S2 G7-10 No Fire
1910	2995	4000	1031	S2 G7-10 No Fire
1910	2996	4001	1031	S2 G7-10 No Fire
1911	2997	4002	1031	S2 G8-10 No Fire
1911	2998	4003	1031	S2 G8-10 No Fire
1911	2999	4004	1031	S2 G8-10 No Fire
1912	3000	4005	1031	S2 G8-10 No Fire
1912	3001	4006	1031	S2 G8-10 Disabled Vol: 6100 in3
1913	3005	4010	1031	S1 G5, S3 G5, S4 G5 Enabled
1913	3005	4010	1031	S1 G5 No Fire
1914	3006	4011	1031	S1 G5 Delta Timing at 4.1 ms, S3 G5 No Fire, S4 G5 Delta timing at 2.3ms
1914	3007	4012	1031	S1 G5 Delta Timing at -2.3 ms, S3 G5 No Fire, S4 G5 Delta timing at -2.3ms
1914	3008	4013	1031	S3 G5 No Fire
1914	3008	4013	1031	S3 G5 Disabled Vol: 6460 in3
/	/	4184-4194	1031	Miss shots due to spectra disable OPERATOR ERROR
2027	3226	4239	1031	S1G03 no fire
2029		4247	1031	EOL, MGL1004_ML_5

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

	SOL	EOL		
Tape #	1032	1032	FGSP	887
SP #	803	1625	LGSP	1625

Line	MGL1004_C
Sequence	016
Direction	26.32°

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, μ B				
EOL Cable Noise, μ B				

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to Nav. Antenna	

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. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/26/2010	08/26/2010
Time UTC	01:01:48	05:37
Volume (cu in.)	6600	6560
Streamer Depth (m)	9.0	9.0
Wind (kts)	9.5	8.0
Sea State (ft)	1-3	1-3
Water Depth (m)	2957	2557

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

[illegible]

Abbreviations	
SOL/EOL - Start/End of Line	LGSP - Last Good SP
FGSP- First Good SP	LCSP - Last Chargeable SP
FCSP - First Chargeable 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
0105	0010	813	1032	S1G01, S2G01 No fire
0106	0013	816	1032	S1G01 No fire
0107	0015	818	1032	S1G01 No fire
0110	0025	828	1032	S2G04 No fire
0111	0028	831	1032	S2G01 No fire
0117	0042	845	1032	S2G08-G10 No fire
0117	0043	846	1032	S2G08-G10 No fire
0127	0070	873	1032	S1G01 No fire
0132	0084	887	1032	FGSP
0139	0104	907	1032	S2G09,G10 No fire
0139	0105	908	1032	S2G09,G10 No fire
0155	0148	951	1032	S1G01 No fire
0155	0149	952	1032	S1G01 No fire
0159	0162	965	1032	S2G08-G10 No fire
0200	0163	966	1032	S2G08-G10 No fire
0205	0179	982	1032	S2G08-G10 No fire
0206	0180	983	1032	S2G08-G10 No fire
0234	0259	1062	1032	S1G03 No fire
0258	0330	1133	1032	S2G09-G10 No fire
0259	0331	1134	1032	S2G09-G10 No fire
0301	0338	1141	1032	S2G02 No fire
0311	0366	1169	1032	S1G02 No fire
0317	0383	1186	1032	S1G04 No fire
0320	0393	1196	1032	S2G06-G10 No fire
0320	0394	1197	1032	S2G06-G10 No fire
0346	0473	1276	1032	S2G08-G10 No fire
0347	0474	1277	1032	S2G08-G10 No fire
0441	0640	1443	1032	S1G01, S2G01 No fire
0442	0646	1449	1032	S2G02-G10, No Fire
0443	0647	1450	1032	S2G02-G10, No Fire
0443	0648	1451	1032	S2G06-G10, No Fire
0444	0649	1452	1032	S2G07-G10, No Fire
0446	0656	1459	1032	S2G03-G10, No Fire
0446	0657	1460	1032	S2G04-G10, No Fire
0449	0667	1470	1032	S2G06-G10, No Fire
0450	0668	1471	1032	S2G06-G10, No Fire
0454	0682	1485	1032	S2G04, No Fire
0458	0695	1498	1032	S2G09, S2G10, No Fire
0458	0696	1499	1032	S2G09, S2G10, No Fire
0501	0704	1507	1032	S2G10, Comm Error
0501	0705	1508	1032	S2G10, Comm Error
0501	0706	1509	1032	S2G10, Comm Error
0502	0707	1510	1032	S2G10, Comm Error
0502	0708	1511	1032	S2G10, Comm Error
0502	0709	1512	1032	S2G10, Comm Error
0503	0710	1513	1032	S2G10, Comm Error
0503	0711	1514	1032	S2G10, Comm Error

0503	0712	1515	1032	S2G10, Comm Error
0504	0713	1516	1032	S2G10, Comm Error
0504	0714	1517	1032	S2G10, Comm Error
0504	0715	1518	1032	S2G10, Comm Error
0505	0716	1519	1032	S2G10, Comm Error
0505	0717	1520	1032	S2G10, Comm Error
0505	0718	1521	1032	S2G10, Comm Error
0506	0719	1522	1032	S2G10, Comm Error
0506	0720	1523	1032	S2G10, Comm Error (spare S2G10, Fire S2G05, 6560 Vol)
0506	0721	1524	1032	S2G05, No Fire, S2G10, Comm Error
0507	0722	1525	1032	S2G05, No Fire, S2G10, Comm Error
0507	0723	1526	1032	S2G10, Comm Error
0507	0724	1527	1032	S2G10, Comm Error
0508	0725	1528	1032	S2G10, Comm Error
0508	0726	1529	1032	S2G10, Comm Error
0508	0727	1530	1032	S2G10, Comm Error
0509	0728	1531	1032	S2G10, Comm Error
0509	0729	1532	1032	S2G10, Comm Error
0509	0730	1533	1032	S2G10, Comm Error
0510	0731	1534	1032	S2G10, Comm Error
0510	0732	1535	1032	S2G10, Comm Error
0510	0733	1536	1032	S2G10, Comm Error
0511	0734	1537	1032	S2G10, Comm Error
0511	0735	1538	1032	S2G10, Comm Error
0511	0736	1539	1032	S2G10, Comm Error
0512	0737	1540	1032	S2G10, Comm Error
0512	0738	1541	1032	S2G10, Comm Error
0512	0739	1542	1032	S2G10, Comm Error
0513	0740	1543	1032	S2G10, Comm Error
0513	0741	1544	1032	S2G10, Comm Error
0513	0742	1545	1032	S2G10, Comm Error
0514	0743	1546	1032	S2G10, Comm Error
0514	0744	1547	1032	S2G10, Comm Error
0514	0745	1548	1032	S2G10, Comm Error
0515	0746	1549	1032	S2G10, Comm Error
0515	0747	1550	1032	S2G10, Comm Error
0515	0748	1551	1032	S2G10, Comm Error
0516	0749	1552	1032	S2G10, Comm Error
0516	0750	1553	1032	S2G10, Comm Error
0516	0751	1554	1032	S2G10, Comm Error
0517	0752	1555	1032	S2G09, No Fire
0518	0758	1561	1032	S2G10, delta timing at 5.2 ms
0518	0759	1562	1032	S2G10, delta timing at -3.8 ms
0519	0761	1564	1032	S2G09, S2G10, No Fire
0519	0762	1565	1032	S2G09, No Fire; S2G10, Comm Error
0519	0763	1566	1032	S2G10, Comm Error
0520	0764	1567	1032	S2G10, Comm Error
0520	0765	1568	1032	S2G10, Comm Error

0520	0766	1569	1032	S2G05, delta timing at 3.7 ms; S2G10, Comm Error
0521	0767	1570	1032	S2G05, delta timing at -2.5 ms; S2G10, Comm Error
0521	0768	1571	1032	S2G10, Comm Error
0521	0769	1572	1032	S2G10, Comm Error
0522	0770	1573	1032	S2G10, Comm Error
0522	0771	1574	1032	S2G10, Comm Error
0522	0772	1575	1032	S2G10, Comm Error
0523	0773	1576	1032	S2G10, Comm Error
0523	0774	1577	1032	S2G10, Comm Error
0523	0775	1578	1032	S2G10, Comm Error
0524	0776	1579	1032	S2G10, Comm Error
0524	0777	1580	1032	S2G10, Comm Error
0542	0778	1581	1032	S2G10, Comm Error
0525	0779	1582	1032	S2G10, Comm Error
0525	0780	1583	1032	S2G10, Comm Error
0525	0781	1584	1032	S2G10, Comm Error
0526	0782	1585	1032	S2G10, Comm Error
0526	0783	1586	1032	S2G10, Comm Error
0526	0784	1587	1032	S2G10, Comm Error
0527	0785	1588	1032	S2G10, Comm Error
0527	0786	1589	1032	S2G10, Comm Error
0527	0787	1590	1032	S2G10, Comm Error
0528	0788	1591	1032	S2G10, Comm Error
0528	0789	1592	1032	S2G10, Comm Error
0528	0790	1593	1032	S2G10, Comm Error
0529	0791	1594	1032	S2G10, Comm Error
0529	0792	1595	1032	S2G10, Comm Error
0529	0793	1596	1032	S2G10, Comm Error
0530	0794	1597	1032	S2G10, Comm Error
0530	0795	1598	1032	S2G10, Comm Error
0530	0796	1599	1032	S2G10, Comm Error
0530	0797	1600	1032	S2G10, Comm Error
0531	0798	1601	1032	S2G10, Comm Error
0531	0799	1602	1032	S2G10, Comm Error
0531	0800	1603	1032	S2G10, Comm Error
0531	0801	1604	1032	S2G10, Comm Error
0532	0802	1605	1032	S2G10, Comm Error
0532	0803	1606	1032	S2G10, Comm Error
0532	0804	1607	1032	S2G10, Comm Error
0532	0805	1608	1032	S2G10, Comm Error
0533	0806	1609	1032	S2G10, Comm Error
0533	0807	1610	1032	S2G10, Comm Error
0533	0808	1611	1032	S2G10, Comm Error
0533	0809	1612	1032	S2G10, Comm Error
0534	0810	1613	1032	S2G10, Comm Error
0534	0811	1614	1032	S2G10, Comm Error
0534	0812	1615	1032	S2G10, Comm Error
0535	0813	1616	1032	S2G10, Comm Error

0535	0814	1617	1032	S2G10, Comm Error
0535	0815	1618	1032	S2G10, Comm Error
0536	0816	1619	1032	S2G10, Comm Error
0536	0817	1620	1032	S2G10, Comm Error
0536	0818	1621	1032	S2G10, Comm Error
0537	0819	1622	1032	S2G10, Comm Error
0537	0820	1623	1032	S2G10, Comm Error
0537	0821	1624	1032	S2G10, Comm Error
0538	0822	1625	1032	S2G10, Comm Error
0526	0797	1600	1032	Powered down gun strings for marine mammals; new vol 60 cu in

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	1033	1035	FGSP	1550
SP #	1435	4766	LGSP	4766

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/26/2010	08/27/2010
Time UTC	08:38	02:21
Volume (cu in.)	6600	6520
Streamer Depth (m)	9.0	9.0
Wind (kts)	5.5	4.6
Sea State (ft)	1-3	1-3
Water Depth (m)	2562	2949

General / Line Comments		
SOL 32 15 19.591N 158 18 06.873E	SP 1435	
EOT SP S2G09 disabled S2G05 enabled SP 1836 vol 6560 cu in		
EOT 1033 change to tape 1034, File 1274 SP 2720		
EOT 1034 change to tape 1035, File 2549 SP 3996		
at SP 4684 changed volume to 6520. Turned off guns 7,8, 10 on String 2 and turned on gun 5 string 1, gun 5 string 4		
EOL 33°36'49.925"N 159°03'15.792"E SP 4766, EOT 1035		
Line Status:		

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_ML_CR
Sequence	017
Direction	20.8

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
08:59	90	1535	1033	String 01, S1G06 No Fire
08:59	90	1535	1033	String 02, S2G06 No Fire
09:28	149	1595	1033	String 01, S1G04 No Fire
09:34	168	1614	1033	String 01, S1G01 No Fire
09:34	168	1614	1033	String 02, S2G01 No Fire
09:35	173	1617	1033	String 01, S1G01 No Fire
09:39	182	1628	1033	String 01, S1G02 No Fire
09:39	182	1628	1033	String 02, S2G09 No Fire
09:39	182	1628	1033	String 02, S2G10 No Fire
09:39	184	1629	1033	String 01, S1G02 No Fire
09:39	184	1629	1033	String 02, S2G09 No Fire
09:39	184	1629	1033	String 02, S2G10 No Fire
10:26	329	1776	1033	String 02, S2G01 No Fire
10:31	348	1794	1033	String 02, S2G01 No Fire
10:33	350	1797	1033	String 02, S2G09 No Fire
10:33	350	1797	1033	String 02, S2G10 No Fire
10:33	353	1800	1033	String 02, S2G09 No Fire
10:34	354	1801	1033	String 02, S2G09 No Fire
10:34	356	1802	1033	String 02, S2G09 No Fire
10:35	356	1803	1033	String 02, S2G09 No Fire
10:35	357	1804	1033	String 02, S2G09 No Fire
10:35	359	1805	1033	String 02, S2G09 No Fire
10:35	360	1806	1033	String 02, S2G09 No Fire
10:36	361	1807	1033	String 02, S2G09 No Fire
10:36	362	1808	1033	String 02, S2G09 No Fire
10:37	363	1810	1033	String 01, S1G02 No Fire
10:37	363	1810	1033	String 02, S2G09 No Fire
10:37	364	1811	1033	String 02, S2G09 No Fire
10:37	365	1812	1033	String 02, S2G09 No Fire
10:37	366	1813	1033	String 02, S2G09 No Fire
10:38	367	1814	1033	String 02, S2G09 No Fire
10:38	368	1815	1033	String 02, S2G09 No Fire
10:38	369	1816	1033	String 02, S2G09 No Fire
10:39	370	1817	1033	String 02, S2G09 No Fire
10:39	371	1818	1033	String 02, S2G09 No Fire
10:39	372	1819	1033	String 02, S2G09 No Fire
10:40	373	1820	1033	String 02, S2G09 No Fire
10:40	374	1821	1033	String 02, S2G09 No Fire
10:40	375	1822	1033	String 02, S2G09 No Fire
10:41	376	1823	1033	String 02, S2G09 No Fire
10:41	377	1824	1033	String 02, S2G09 No Fire
10:41	378	1825	1033	String 02, S2G09 No Fire
10:42	379	1826	1033	String 02, S2G09 No Fire
10:42	380	1827	1033	String 02, S2G09 No Fire
10:42	381	1828	1033	String 02, S2G09 No Fire
10:42	382	1829	1033	String 02, S2G09 No Fire
10:43	383	1830	1033	String 02, S2G09 No Fire

10:43	384	1831	1033	String 02, S2G09 No Fire
10:43	385	1832	1033	String 02, S2G09 No Fire
10:44	386	1833	1033	String 02, S2G09 No Fire
10:44	387	1834	1033	String 02, S2G09 No Fire
10:44	388	1835	1033	String 02, S2G09 No Fire
10:45	389	1836	1033	String 02, S2G09 No Fire
10:45	389	1836	1033	Volume change to 6560 cubic inches
10:45	390	1837	1033	String 02, S2G05 Delta timing at 5.3 ms
10:45	394	1838	1033	String 02, S2G05 Delta timing at -3.6 ms
11:00	442	1885	1033	String 01, S1G01 No Fire
11:02	443	1889	1033	String 01, S1G04 No Fire
11:02	443	1889	1033	String 02, S2G10 No Fire
11:02	443	1890	1033	String 02, S2G10 No Fire
11:09	466	1912	1033	String 02, S2G10 No Fire
11:09	466	1913	1033	String 02, S2G10 No Fire
11:10	467	1914	1033	String 02, S2G10 No Fire
11:10	468	1915	1033	String 02, S2G10 No Fire
11:10	469	1916	1033	String 02, S2G05 Delta timing at 2.5 ms
11:10	469	1916	1033	String 02 No Fire
11:10	469	1916	1033	String 02 No Fire
11:10	470	1917	1033	String 02 Comm Error
11:10	470	1917	1033	String 02 Comm Error
11:10	470	1917	1033	String 02 Comm Error
11:10	472	1918	1033	String 02 Comm Error
11:10	475	1918	1033	String 02 Comm Error
11:11	477	1918	1033	String 02 Comm Error
11:11	478	1920	1033	String 02 Comm Error
11:12	479	1921	1033	String 02 Comm Error
11:12	480	1922	1033	String 02 No Fire
11:14	481	1927	1033	String 02 No Fire
11:14	482	1928	1033	String 02 No Fire
11:14	483	1929	1033	String 02 No Fire
11:15	483	1930	1033	String 02 No Fire
11:26	515	1967	1033	String 01, No Fire
11:26	515	1967	1033	String 02, No Fire
11:36	555	1998	1033	String 01, No Fire
11:36	555	1998	1033	String 02, No Fire
11:41	567	2012	1033	String 02, No Fire
11:41	568	2013	1033	String 02, No Fire
11:49	590	2037	1033	String 02, No Fire
11:49	591	2038	1033	String 02, No Fire
11:50	593	2040	1033	String 02, No Fire
11:50	595	2041	1033	String 02, No Fire
12:55	799	2245	1033	S1G01 No fire
13:06	832	2278	1033	S2G01 No fire
13:06	835	2281	1033	S1G01 No fire
13:13	855	2301	1033	S1G01 No fire
13:13	857	2303	1033	S1G02 No fire

13:19	875	2321	1033	S1G01, S2G01 No fire
13:22	885	2331	1033	S1G06, S2G06 No fire
13:22	886	2332	1033	S2G07-G10 No fire
13:23	887	2333	1033	S2G07-G10 No fire
13:42	947	2393	1033	S1G01 No fire
15:04	1205	2651	1033	S2G06-G10 No fire
15:04	1206	2652	1033	S2G06-G10 No fire
15:26	1274	2720	1033	EOT 1033 change to tape 1034
15:28	1283	2729	1034	S2G05-G10 No fire
15:29	1284	2730	1034	S2G05-G10 No fire
1611	1416	2863	1034	S1G4, S2G4 No Fire
1623	1456	2903	1034	S1G1 No Fire
1627	1469	2916	1034	S2G1 No Fire
1629	1476	2923	1034	S1G4 No Fire
1649	1537	2984	1034	S1G1 , S2G1 No Fire
1709	1601	3047	1034	S1G3 No Fire
1727	1656	3103	1034	S1G4 No Fire
1750	1729	3176	1034	S1G4, S2G4 No Fire
1752	1735	3182	1034	S1G6, S2G6 No Fire
1807	1784	3231	1034	S2G2 No Fire
1815	1810	3257	1034	S1G2 No Fire
1838	1883	3330	1034	S2G8 No Fire
1916	2004	3451	1034	S1G4, S2G4 No Fire
1917	2007	3454	1034	S1G1 , S2G1 No Fire
1918	2009	3456	1034	S1G6 No Fire
1926	2035	3482	1034	S1G2 No Fire
1932	2054	3501	1034	S1G1 No Fire
1937	2071	3518	1034	S2G8, S2G10 No Fire
1937	2072	3519	1034	S2G8, S2G10 No Fire
1944	2094	3541	1034	S1G1 No Fire
1954	2126	3573	1034	S1G01, S2G04 No fire
1954	2127	3574	1034	S2G06-10 no fire
1955	2128	3574	1034	S2G06-10 no fire
1956	2132	3579	1034	S2G10 no fire
2121	2397	3844	1034	S2G02 delta timing at 2.1ms
2208	2545	3992	1034	S3G10 no fire
2208	2549	3996	1034	EOT 1034, Start tape 1035
0147	3221	4668	1035	S2G07-G10 Comm error
0147	3222	4669	1035	S2G07-G10 Comm error
0147	3223	4670	1035	S2G07-G10 Comm error
0148	3224	4671	1035	S2G07-G10 Comm error
0148	3225	4672	1035	S2G07-G10 Comm error
0148	3226	4673	1035	S2G07-G10 Comm error
0149	3227	4674	1035	S2G01-G10 No fire
0149	3228	4675	1035	S2G01-G10 No fire
0149	3229	4676	1035	S2G01-G10 No fire
0150	3230	4677	1035	S2G07-G10 Comm error
0150	3231	4678	1035	S2G07-G10 Comm error

0150	3232	4679	1035	S2G07-G10 Comm error
0151	3233	4680	1035	S2G07-G10 Comm error
0151	3234	4681	1035	S1G05 delta timing @ 4.3ms, S2G08-G10 comm error, S1G05 enabled, S2G07 disabled
0152	3235	4682	1035	S1G05 delta timing @ -3.2ms, S2G10 comm error, S3G05 enabled, S2G08 disabled
0152	3236	4683	1035	S3G05 No fire
0152	3237	4684	1035	new vol 6520
0153	3240	4687	1035	S3G05 disabled, S4G05 enabled, S4G05 delta timing at 5.8ms
0154	3241	4688	1035	S4G05 delta timing at -4.5ms
0221	3319	4766	1035	End of Line, EOT 1034

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern McKeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

	SOL	EOL		
Tape #	1040	1043	FGSP	1001
SP #	817	4865	LGSP	4865

Line	MGL1004_ML_B2
Sequence	019
Direction	296.233

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, μ B				
EOL Cable Noise, μ B				

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to Nav. Antenna	

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. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID	1	4049
Date MM/DD/YY	08/28/2010	08/29/2010
Time UTC	19:20:59	18:15:17
Volume (cu in.)	6600	6600
Streamer Depth (m)	9.0	9.0
Wind (kts)	13.5	8.4
Sea State (ft)	1-2	1-2
Water Depth (m)	5435	5839

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

[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
1920	1	817	1040	Start of Line
2028	174	1001	1040	FGSP
2142	407	1223	1040	S1G08 delta timing at 3.7ms
2143	408	1224	1040	S1G08 delta timing at -2.8ms
0224	1273	2089	1040	EOT 1040 change to 1041
0425	1650	2467	1041	S3G09, No Fire
0926	2546	3362	1041	EOT 1041/SOT 1042
1011	2669	3486	1042	String 03, S3G06 No Fire
1551	3641	4458	1042	S1G4 No Fire
1652	3819	4636	1042	EOT 1042/SOT 1043
1815	4049	4865	1043	End of Line

Observers Log

Vessel	Langseth
Client	Jun Korenaga
Area	Shatsky Rise, Northwest Pacific
Job Number	MGL1004

	SOL	EOL		
Tape #	1036	1039	FGSP	1001
SP #	803	5695	LGSP	5695

Streamer Parameters				
	1	2	3	4
Length			6000	
Auxiliaries				
Shotpoint Interval:			50	
Offset CS - CNG			167	
Group Interval:			12.5	
Number of channels			468	
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date MM/DD/YY	08/27/2010	08/28/2010
Time UTC	11:37	14:58
Volume (cu in.)	6600	6600
Streamer Depth (m)	9.0	9.0
Wind (kts)	17.9	11.0
Sea State (ft)	1-3	3-6
Water Depth (m)	3041	5474

General / Line Comments		
SOL	33°34'55.453"N	159°08'58.883"E SP 803
S3G05 off since start of line		
EOT 1036 change to 1037 SP 2076 File 1273		
EOT 1037 change to 1038 SP 3349 File 2546		
EOT 1038 change to 1039 SP 4622 File 3819		
EOL 33°39'04.136"N 156°30'54.287"E SP 5695		
Line Status:		

Chief Science Officer	Robert Steinhaus		
Science Officer	David Martinson		
Acquisition Leader	Bern Mckeirnan - 00:00-12:00	Mike Tatro - 12:00-24:00	
Navigation Leader	David Ng-Li - 00:00-12:00	Mike Zhang - 12:00-24:00	

Line	MGL1004_ML_D2
Sequence	018
Direction	272.455

Source Parameters	
Total Volume	6600/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	8m
Center Source to	
Nav. Antenna	

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. 1

Cable	Erased Channels	Noisy/Weak Channels
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
Aux. 16: Port Outer hydrophone	

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
1245	199	1001	1036	FGSP
1339	362	1164	1036	S1G04 delta timing at -2.2ms
1525	679	1481	1036	S2G04 delta timing at -2.1ms
1749	1897	1094	1036	S3G10 No fire
1849	1273	2076	1036	EOT 1036 Switched to Tape 1037
1854	1285	2088	1037	S1G8 Delta Timing Error at 3.0ms
1854	1286	2089	1037	S1G8 Delta Timing Error at -2.2ms
0144	2546	3349	1037	EOT 1037 change to 1038
0154	2575	3378	1038	S4G02 delta timing at -2.1ms
0536	3263	4066	1038	S3G07 No Fire
0840	3819	4622	1038	EOT 1038 changed to 1039
1033	4150	4953	1039	S3G08 No Fire
1458	4892	5695	1039	EOL and EOT 1039