Observers Log

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	1	2	FGSP	711
SP #	711	2510	LGSP	2510

Line	STEEP09
Sequence	001
Direction	348

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	16/09/2008	17/09/08
Time UTC	19:15	06:04
Volume (cu in.)	s1 6600	s1 6600
Streamer Depth (m)	9	9
Wind (kts)	20	20
Sea State (ft)	6-9	6-9
Water Depth (m)	3411	248

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

1936 MMO sighting - powerdown - shots missed 783 - 785

1954 Ramp up begin. Missed shots 836-839

1956 Missed shots 842-845

2017 End ramp up. First good shot 911

0035 Birds 8-10 and 17--20 above depth; depths reset to 10 m and then 9 m to readjust birds. Wing angles were 15.0 - 15.1.

0038 Birds readjusted to proper depth (9 m +/-)

0042 Changed to reel 2; first good shot 967

0351 Changed gun on string 1 from S1G04 to S1G05 because of misfires. Missed shots 2137 and 2154

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	

Line Status:

Time UTC	FILE	SP	Tape	Description
0337	1417	2137	02	No fire error S1G04.
	1418	2138	02	No fire error S1G04.
	1419	2139	02	No fire error S1G04.
	1420	2140	02	No fire error S1G04.
	1421	2141	02	No fire error S1G04.
	1422	2142	02	No fire error S1G04.
	1423	2143	02	No fire error S1G04.
	1424	2144	02	No fire error S1G04.
	1425	2145	02	No fire error S1G04.
	1426	2146	02	No fire error S1G04.
	1427	2147	02	No fire error S1G04.
	1428	2148	02	No fire error S1G04.
	1429	2149	02	No fire error S1G04.
	1430	2150	02	No fire error S1G04.
	1431	2151	02	No fire error S1G04.
	1432	2152	02	No fire error S1G04.
	1433	2153	02	No fire error S1G04.
0341	1434	2154	02	Changed to gun S1G05.
0441	1572	2292	02	Delta timing at 2.2 ms on S1G32
0535	1613	2433	02	No fire error S1G18.
0536	1617	2437	02	No fire error S1G18.
0547	1750	2464	02	No fire error S1G18.
0553	1765	2480	02	No fire error S1G18.
0553	1765	2480	02	No fire error S1G17.
0558	1781	2495	02	No fire error S1G18.
0559	1784	2498	02	No fire error S1G18.
0604	1796	2510	02	Delta timing at 3.5 ms on S1G19
0604	1796	2510	02	Delta timing at 3.9 ms on S1G24

Observers Log

	Vessel	Langseth
	Client	Gulick -- LDEO
	Area	Gulf of Alaska
	Job Number	MGL0814

	Party Chief	B McKiernan
	Ch. Observer	B McKiernan
	Sen. Observer	
	Observers	

	SOL	EOL		
Tape #	3	3	FGSP	996
SP #	0996	1585	LGSP	1585

Line	STEEP15
Sequence	002
Direction	258

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	17/09/2008	17/09/08
Time UTC	06:49	1004
Volume (cu in.)	s1 6600	s1 6600
Streamer Depth (m)	9	9
Wind (kts)	20	20
Sea State (ft)	6 - 9	6-9
Water Depth (m)	218	143

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

No events

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	

Line Status:

Observers Log

Vessel	Langseth		Party Chief	B McKiernan
Client	Gulick -- LDEO		Ch. Observer	B McKiernan
Area	Gulf of Alaska		Sen. Observer	
Job Number	MGL0814		Observers	

	SOL	EOL		
Tape #	4	6	FGSP	1007
SP #	1007	3727	LGSP	3727

Line	STEEP13
Sequence	003
Direction	195

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	17/09/08	18/09/08
Time UTC	1016	0253
Volume (cu in.)	s1 6600	s1 6560
Streamer Depth (m)	9	9
Wind (kts)	20	18
Sea State (ft)	6-9	6-9
Water Depth (m)	133	3766

Cable	Erased Channels	Noisy/Weak Channels
1		47
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

1016 - SOL - N 59 49' 36.577 W 143 50' 07.210
1047 Bird depth assigned to 9 m
1101 Bird depth to 12 m to level out streamer
1158 birds returned to 9 m
0051 shot 3399 bird 3 offline
0206 gun 10 string 2 missfire on steep 13. Alarms were not online for gun screen so officers on watch were not notified of misfires
until 0206 hrs; new volume 6560
0253 - EOL - N 58 39' 54.094 W 144 34' 03.538

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	

Line Status:

Time UTC	FILE	SP	Tape	Description
0206	all files	3594-3596	6	Misfire S1G20
0209	unknown	3602	6	No Fire S1G30
0210	unknown	3604	6	No Fire S1G23
0214	2604	3616	6	No Fire S1G28
0217	2612	3624	6	No Fire S1G21
0218	2622	3625	6	No Fire S1G23
0226	2645	3651	6	No Fire S1G21
0227	2648	3654	6	No Fire S1G26
0231	2661	3665	6	No Fire S1G22
0237	2674	3681	6	No Fire S1G27
0240	2683	3689	6	No Fire S1G24
0242	2688	3695	6	No Fire S1G21
0243	2691	3698	6	No Fire S1G26
0244	2693	3700	6	No Fire S1G23
0245	2697	3703	6	No Fire S1G23
0247	2703	3710	6	No Fire S1G22
0304	no files	3736	6	No Fire S1G21 (No data collection due to end of STEEP 13)

Observers Log

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	07	08	FGSP	923
SP #	922	2830	LGSP	2830

Line	STEEP07
Sequence	004
Direction	54

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters

Total Volume	6560/in3
Work Pressure	2000psi +/- 100psi
Dual Source	no
Depth	9m
Source Separation	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	18/09/08	18/09/08
Time UTC	0652	1954
Volume (cu in.)	s1 6560	S1 6200
Streamer Depth (m)	9	9
Wind (kts)	17 S	
Sea State (ft)		
Water Depth (m)	3704	3161

Cable	Erased Channels	Noisy/Weak Channels
1		47, 50, 21
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

S1G04 off spare on S1G05

S1G20 off spare on S1G15

0906 - S1G12 off due to consecutive no fires

SP 1887 Reel Change; Reel 8 begins with File 967

At 1649 (18/9/08) Gun Array 3 powered down to reattach tow point.

At 1720 Gun Array 3 powered down to add rope.

Starting at ~1830 birds near surface causing excess noise

EOL 1954 - start turn to sink birds to depth

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	

Line Status:

Printed - 03/27/2009 4:22 PM

Time UTC	FILE	SP	Tape	Description
0654	2	922	7	S1G21 No fire
0655	5	925	7	S1G30 No fire
	9	929	7	S1G27 No fire
0708	34	954	7	No Fire Error S1G29
0709	36	956	7	No Fire Error S1G26
0713	45	965	7	No Fire Error S1G26
0717	73	993	7	No Fire Error S1G26
0731	87	1007	7	No Fire Error S1G27
0733	91	1011	7	No Fire Error S1G21
0739	97	1022	7	No Fire Error S1G22
0739	98	1023	7	No Fire Error S1G28
0752	128	1048	7	No Fire Error String 03 - entire string
0802	150	1070	7	No Fire Error S1G26
0803	152	1072	7	No Fire Error S1G23
0814	172	1092	7	No Fire Error S1G27
0818	180	1100	7	No Fire Error S1G22
0824	193	1113	7	No Fire Error S1G26
0828	201	1121	7	No Fire Error S1G28
0840	224	1144	7	No Fire Error S1G23
0842	229	1149	7	No Fire Error S1G22
0844	232	1152	7	No Fire Error S1G21
0848	242	1162	7	No Fire Error S1G23
0849	243	1163	7	No Fire Error S1G29
0853	251	1172	7	No Fire Error S1G29
0856	259	1179	7	No Fire Error S1G27
0904	276	1196	7	No Fire Error S1G12
0905	277	1197	7	No Fire Error S1G12
0905	278	1198	7	No Fire Error S1G12
0906	279	1199	7	No Fire Error S1G12
0906	280	1200	7	No Fire Error S1G12
0910	288	1208	7	No Fire Error S1G24
0914	298	1218	7	No Fire Error S1G30
0919	308	1228	7	No Fire Error S1G27
0931	332	1252	7	No Fire Error S1G28
0933	334	1256	7	No Fire Error S1G23
0933	335	1257	7	No Fire Error S1G23
0935	342	1262	7	No Fire Error S1G27
0939	350	1270	7	No Fire Error S1G26
0940	352	1272	7	No Fire Error S1G30
1006	409	1329	7	No Fire Error S1G22
1012	422	1342	7	No Fire Error S1G24
1020	438	1358	7	No Fire Error S1G30
1025	450	1370	7	No Fire Error S1G28
1036	473	1393	7	No Fire Error S1G29
1039	479	1399	7	No Fire Error S1G30
1043	488	1408	7	No Fire Error S1G28
1101	524	1445	7	Timing Error S1G32
1103	530	1451	7	No Fire Error S1G29
1106	536	1457	7	No Fire Error S1G27

Time UTC	FILE	SP	Tape	Description
1108	540	1461	7	No Fire Error S1G28
1132	592	1513	7	No Fire Error S1G30
1134	597	1518	7	Timing Error S1G32
1135	599	1520	7	No Fire Error S1G28
1138	605	1526	7	No Fire Error String 03 - entire string
1139	607	1528	7	No Fire Error S1G30
1145	621	1542	7	No Fire Error S1G29
1146	623	1544	7	No Fire Error S1G24
1149	630	1551	7	No Fire Error S1G30
1202	661	1582	7	No Fire Error String 03 - entire string
1209	674	1595	7	No Fire Error S1G28
1217	698	1619	7	No Fire Error S1G23
1219	704	1624	7	No Fire Error S1G24
1220	706	1626	7	No Fire S1G22
1225		1629	7	No Fire S1G28
1227	722	1643	7	No Fire S1G29
1234	734	1660	7	No Fire S1G27
1235	736	1661	7	No Fire S1G21
1245	765	1686	7	No Fire S1G23
1248	772	1692	7	No Fire S1G22
1249	773	1694	7	No fire S1G29
1253	784	1704	7	No Fire S1G29
1255	785	1715	7	No Fire S1G28
1317	842	1763	7	No Fire S1G30
1325	861	1781	7	No Fire S1G22
1329	871	1792	7	No fire S1G28
1332	878	1799	7	No Fire S1G24
1408	972	1892	8	No Fire S1G29
1408	973	1893	8	No Fire S1G23
1411	980	1900	8	No Fire S1G28
1413	985	1906	8	No Fire Error S1G30
1414	989	1910	8	No Fire Error String 03 - entire string
1417	996	1917	8	No Fire S1G24
1429	1030	1949	8	No Fire S1G29
1432	1039	1959	8	No Fire S1G29
1438	1052	1973	8	No Fire S1G22
1446	1075	1995	8	String 02 powered down to untangle MAGGIE
1457	1108	2028	8	String 02 powered up, misfire entire string
1458	1109	2029	8	String 02 firing normally
1512		2071	8	Timing Error S1G32
1514	1155	2076	8	Timing Error S1G32
1520	1173	2094	8	Timing Error S1G32
1559	1287	2207	8	Timing Error S1G32
1627	1366	2287	8	Timing Error S1G32
1711	1489	2410	8	Timing Error S1G29
1711	1489	2410	8	Timing Error S1G24
1715	1501	2421	8	Timing Error S1G32
Time UTC	FILE	SP	Tape	Description

1720	1515	2434	8	Timing Error S1G32

Observers Log

Vessel	Langseth		Party Chief	B McKiernan
Client	Gulick -- LDEO		Ch. Observer	B McKiernan
Area	Gulf of Alaska		Sen. Observer	
Job Number	MGL0814		Observers	

	SOL	EOL		
Tape #	10	10	FGSP	2690
SP #	2690	2728	LGSP	2728

Line	STEEP07A
Sequence	005
Direction	78

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	19/09/08	19/09/2008
Time UTC	0002	0019
Volume (cu in.)	S1 6300	S1 6300
Streamer Depth (m)	9	9
Wind (kts)	33	33
Sea State (ft)	12-16	12-16
Water Depth (m)	3724	3645

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 SP 2690 POS 59 16' 16.818N 143 31' 23.435W

0012 Birds 02-21 near surface – Will note when birds return to set depth

EOL SP 2728 POS 59 16' 52.728N 143 29' 43.736W – Line ended due to poor streamer response

0019 Powered down to one gun while turning to conserve gun durability

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	

Line Status:

Observers Log

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	11	11	FGSP	3338
SP #	3338		LGSP	3990

Line	STEEP07B
Sequence	006
Direction	66

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	18/09/08	18/09/08
Time UTC	0510	1022
Volume (cu in.)	s1 6380	
Streamer Depth (m)	9	9
Wind (kts)	33	30
Sea State (ft)	9-12	6-9
Water Depth (m)	809	511

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

Position 59'28'23.987N 143'06'47.096 W

EOL 1022 N 59 40.728 W 142 42.026

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	

Line Status:

Printed - 03/27/2009 4:27 PM

Observers Log

		Vessel	Langseth
		Client	Gulick -- LDEO
		Area	Gulf of Alaska
		Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	12	12	**FGSP**	1042
SP #	1042	1644	**LGSP**	1644

Line	**STEEP16**
Sequence	**007**
Direction	**35**

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	19/9/08	19/09/08
Time UTC	1144	1527
Volume (cu in.)	S1 6380	S1 6380
Streamer Depth (m)	9	9
Wind (kts)	15+	15+
Sea State (ft)	6	6
Water Depth (m)	3465.9	79.8

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 STEEP16 - SP 1042 - 59 44'44.322N 142 38'22.087W
EOL STEEP16 - SP 1644 - 60 00 48.489N 142 42 42.015W

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	

Line Status:

Printed - 03/27/2009 4:28 PM

Time UTC	FILE	SP	Tape	Description
11:52		1061	12	Delta Tiiming Error @ 2.2 ms S1G32
12:00		1082	12	Delta Tiiming Error @ 2.2 ms S1G32
12:03	48	1090	12	Delta Tiiming Error @ 2.1 ms S1G31
12:22	100	1141	12	Delta Tiiming Error @ 2.3 ms S1G32
12:25	106	1147	12	Delta Tiiming Error @ 2.6 ms S1G32
14:04	375	1416	12	No fire error S1G18

Observers Log

	SOL	EOL		
Tape #	**13**	**13**	**FGSP**	
SP #	**1036**	**1561**	**LGSP**	

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	**B McKiernan**
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

Line	**STEEP 17**
Sequence	**008**
Direction	**225.21**

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	19/09/08	19/09/08
Time UTC	1555	1847
Volume (cu in.)	S1 4950	
Streamer Depth (m)	9	9
Wind (kts)		
Sea State (ft)	6-9	6
Water Depth (m)	78	153

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

1610 String 02 powered down to repair guns 10 and 2.

Line Status:

Time UTC	FILE	SP	Tape	Description
1602	23	1060	13	No Fire S1G35
1608	45	1082	13	Delta Timng Error at -2.2 ms S1G32
1627	106	1143	13	Delta Timng Error at 2.1 ms S1G32
1628	109	1146	13	Delta Timing Error at 2.3 ms S1G32
1638	141	1178	13	Delta Timing Error at -2.1 ms S1G32

Observers Log

	SOL	EOL		
Tape #	14	14	**FGSP**	990
SP #	990	1088	**LGSP**	1088

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

Line	**STEEP19**
Sequence	**009**
Direction	**315**

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	19-09-08	19-09-08
Time UTC	2030	2145
Volume (cu in.)	S1 6600	6600
Streamer Depth (m)	14	14
Wind (kts)	14	13
Sea State (ft)	3-6	3-6
Water Depth (m)	246	4436

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 N 59 52.427 W 143 23790
EOL N 59 55.183 W 143 22.481

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	

Line Status:

Time UTC	FILE	SP	Tape	Description
2048	34	1023	14	Timing Error S1G14
2100	59	1048	14	Timing Error S1G14
2101	62	1051	14	Timing Error S1G14

Observers Log

Vessel	Langseth		**Party Chief**	B McKiernan	
Client	Gulick -- LDEO		**Ch. Observer**	B McKiernan	
Area	Gulf of Alaska		**Sen. Observer**		
Job Number	MGL0814		**Observers**		

	SOL	EOL		
Tape #	15	15	**FGSP**	996
SP #	996	1484	**LGSP**	1484

Line	**STEEP18**
Sequence	**010**
Direction	**59**

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	19/09/08	20/09/08
Time UTC	2148	0204
Volume (cu in.)	S1 6600	S1 6600
Streamer Depth (m)	14	9
Wind (kts)	13	12
Sea State (ft)	3-6	3-6
Water Depth (m)	3196.8	99.8

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 N 59 55.183 W 143 22.481

1022: S1G14 off due to timing errors, S1G15 on

2212: birds assigned depth 13m

EOL N 60 01' 31.893 W 142 59' 28.295

Line Status:

Time UTC	FILE	SP	Tape	Description
2203	28	1023	15	Timing Error S1G14
2206	34	1029	15	Timing Error S1G14
2207	36	1031	15	Timing Error S1G14
2208	37	1032	15	Timing Error S1G15 - first shot after gun turned on

Observers Log

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	16	18	FGSP	1031
SP #	1031	3176	LGSP	3176

Line	STEEP 01
Sequence	011
Direction	346

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	09/19/08	09/20/08
Time UTC	02:46	1905
Volume (cu in.)	S1 6600	S1 40
Streamer Depth (m)	9	9
Wind (kts)	10	10
Sea State (ft)	3-6	2-4
Water Depth (m)	84	167.8

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

N 60 02 23.511; W 142 55 45.884; Depth 84 m; Speed 3.3

SOL - STEEP 01 02:46 9/19/08

2015 - S1G12 disabled - consecutive no fires

2018 - S1G14 enabled - Comm errors appear to be gone

1657 20/09/08 MMO called-in a mammal sighting-Porpoise

1704 Back to full gun power-Mammals left the area-Confirmed by MMO Tower

1736 Powered Down Guns-Down to one gun-Compressor Failure

1754 Ramping up strings 01, 03 and 04

1816 Ramp up complete of strings 01, 03, and 04. SP 3061

1838 Guns at full volume SP 3112. At 1840 Gun 4 on string 02 disabled and Gun 5 enabled

1847 Missed SP 3129-3130. Back online with one gun due to compressor failure at SP 3131

1905 EOL - Line Stopped N 59 28.674 W 141 22.647 SP 3176

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	

Printed - 03/27/2009 4:30 PM

Time UTC	FILE	SP	Tape	Description
0318		1098	16	Delta timing error S1G12
1058	980	2008	17	No Fire Error - S1G12
1058	981	2009	17	No Fire Error - S1G12
1059	981	2011	17	No Fire Error - S1G12
1059	982	2012	17	No Fire Error - S1G12
1100	984	2013	17	No Fire Error - S1G12
1100	985	2014	17	No Fire Error - S1G12
1101	985	2015	17	S1G12 diabled - consecutive no fires
1102	989	2019	17	Timing Error S1G14 - first shot after enabled
1102	989	2020	17	Timing Error S1G14
1140	1075	2105	17	Timing Error S1G14
1150	1099	2130	17	Timing Error S1G14
1152	1105	2134	17	Timing Error S1G14
1231	1200	2231	17	Timing Error S1G14
1243	1233	2260	17	Timing Error S1G14
1248	1245	2273	17	Timing Error S1G14
1307	1289	2319	17	Timing Error S1G14
1327	1339	2369	17	Timing Error S1G14
1340	1370	2400	17	Timing Error S1G14
1348	1390	2420	17	Timing Error S1G14
1358	1415	2445	17	Timing Error S1G14
1407	1438	2468	17	Timing Error S1G14
1407	1440	2469	17	Timing Error S1G14
1409	1441	2472	17	Timing Error S1G14
1423	1478	2507	17	Timing Error S1G14
1424	1478	2508	17	Timing Error S1G14
1424	1479	2509	17	Timing Error S1G14
1426	1483	2514	17	Timing Error S1G14
1438	1512	2541	17	Timing Error S1G14
1438	1512	2542	17	Timing Error S1G14
1442	1522	2552	17	Timing Error S1G14
1447	1534	2564	17	Timing Error S1G14
1457	1558	2588	17	Timing Error S1G14
1500	1565	2596	17	Timing Error S1G14
1502	1571	2601	17	Timing Error S1G14
1503	1572	2602	17	Timing Error S1G14
1513	1596	2627	17	Timing Error S1G14
1514	1598	2628	17	Timing Error S1G14
1536	1654	2684	17	Timing Error S1G14
1542	1668	2690	17	Timing Error S1G14
1544	1673	2703	17	Timing Error S1G14
1544	1673	2704	17	Timing Error S1G14
1548	1683	2713	17	Timing Error S1G14
1548	1684	2714	17	Timing Error S1G14
1559	1710	2741	17	Timing Error S1G14
1619	1758	2789	17	Timing Error S1G14
1619	1759	2790	17	Timing Error S1G14
1625	1774	2805	17	Timing Error S1G14
1629	1782	2813	17	Timing Error S1G14

Time UTC	FILE	SP	Tape	Description
1629	1783	2814	17	Timing Error S1G14
1636	1797	2828	17	Timing Error S1G14
1636	1798	2829	178	Timing Error S1G14
1644	1819	2449	17	Timing Error S1G14
1646	1823	2854	17	Timing Error S1G14
1648	1827	2859	17	Timing Error S1G14
1649	1828	2860	17	Timing Error S1G14
1654	1939	2871	17	No Fire S1G32
1654	1840	2872	17	No Fire S1G32
1655	1841	2873	17	No Fire S1G32
1655	1842	2874	17	No Fire S1G32
1656	1844	2876	17	No Fire S1G32
1710	1876	2907	17	Timing Error S1G14
1710	1877	2908	17	No Fire S1G35
1712	1882	2912	17	Timing Error S1G14
1712	1883	2913	17	Timing Error S1G14
1715	1888	2918	17	No Fire S1G32
1719	1897	2827	17	No Fire S1G35
1722	1904	2934	17	No Fire S1G35
1722	1906	2936	17	No Fire S1G35
1724	1910	2940	17	Timing Error S1G14
1724	1911	2941	17	Timing Error S1G14
1728	1920	2950	17	Timing Error S1G14
1730	1925	2955	17	Timing Error S1G14
1731	1927	2957	17	Timing Error S1G14
1733	1931	2961	17	Timing Error S1G14
1734	1933	2963	18	Timing Error S1G14
1734	1933	2963	18	No Fire S1G35
1735	1936	2966	18	No Fire S1G35
1836	2076	3106	18	No Fire S1G35
1839	2084	3114	18	No Fire S1G14
1840	285	3115	18	No Fire S1G14
1841	2087	3117	18	Timing Error S1G15

Observers Log

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	19		FGSP	3448
SP #	3448		LGSP	

Line	STEEP01
Sequence	011
Direction	131

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to	
Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	20/09/08	21/09/08
Time UTC	2055	2225
Volume (cu in.)	S1 6600	S1 5700
Streamer Depth (m)	9	9
Wind (kts)	10	
Sea State (ft)	3-6'	
Water Depth (m)	185	

Cable	Erased Channels	Noisy/Weak Channels
1		21,47
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

2011 Air gun ramp up start - N 59 26.035 W 141 15.612
2054 Ram up complete - S1G14 off due to consecutive no fires.
2055 SOL N 59 24.346 W 141 11.156
2100 S1G12 off - S1G14 on
2101 SIG14 off - S1G25 on - total volume 6420 cu in
2105 S1G35 on - total volume 6600 cu in
2219 S1G35 OFF DUE TO NO FIRES VOLUME NOW 6420
2343 Gun strings 3 and 4 powered down and pulled in.
0215 SP 4354 all strings firing - volume 5700 (guns 04, 12, 14, 21, 32, and 35 off)
2155 MMO Sighting – Power down to one gun LGSP 7679
2212 Begin ramp up SP 7732
2222 MMO Sighting – SHUT DOWN – All guns off
2225 EOL STEEP01_Seg2 Seq 11, Tape 23, LGSP7766 N 59 12.498, W 138 14.006

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	

Printed - 03/27/2009 4:31 PM

Time UTC	FILE	SP	Tape	Description
2055	1	3448	19	S1G15 no fire error
2057	8	3455	19	S1G12 no fire error
2058	9	3456	19	S1G12 no fire error
2058	11	3457	19	S1G12 no fire error
2059	13	3459	19	S1G12 Timing error
2100	14	3461	19	S1G12 off - S1G14 on
2100	15	3462	19	SiG14 no fire error
2100	16	3463	19	S1G14 off S1G25 on
2101	17	3464	19	Timing error S1G25
2101	18	3465	19	Timing error S1G25
2105	28	3475	19	S1G35 on
2105	28	3475	19	S1G35 timing error
2119	65	3512	19	S1G35 No fire
2125	81	3527	19	S1G35 No fire
2126	83	3531	19	S1G35 No fire
2127	86	3534	19	S1G35 No fire
2128	90	3538	19	S1G35 No fire
2131	98	3546	19	S1G35 No fire
2134	105	3553	19	S1G35 No fire
2136	110	3558	19	S1G35 No fire
2137	113	3561	19	S1G35 No fire
2137	125	3573	19	S1G35 No fire
2143	129	3577	19	S1G35 No fire
2145	136	3584	19	S1G35 No fire
2147	139	3587	19	S1G35 No fire
2150	148	3596	19	S1G35 No fire
2153	155	3603	19	S1G35 No fire
2154	156	3606	19	S1G35 No fire
2154	160	3608	19	S1G35 No fire
2155	163	3611	19	S1G35 No fire
2159	172	3620	19	S1G35 No fire
2201	180	3627	19	S1G35 No fire
2203	184	3632	19	S1G35 No fire
	199	3647	19	S1G35 NO FIRE
	204	3650	19	S1G35 NO FIRE
2211	208	3654	19	S1G35 NO FIRE
2340	452	3900	19	S1G31 No fire
2340	452	3900	19	S1G32 No fire
2340	453	3901	19	S1G32 No fire
2340	454	3902	19	S1G32 No fire
2341	455	3903	19	S1G32 No fire
2342	456	3904	19	S1G32 No fire
2342	457	3905	19	S1G32 No fire
2343	458	3906	19	S1G32 No fire
0216	907	4354	19	Timing error strings 3-4; first shot online
0217	908	4355	19	no fire 29,25,21,22,40,34,31
0217	909	4356	19	no fire 21
0217	910	4357	19	no fire 21,35,32
0217	911	4358	19	no fire 21,32

0218	912	4359	19	no fire 21,32
0218	913	4360	19	no fire 21,32
0218	914	4361	19	no fire 21,32
0219	915	4362	19	no fire 21,32
0219	916	4363	19	no fire 21,32
0219	917	4364	19	no fire 21,32
0220	918	4365	19	no fire 32
0220	919	4366	19	no fire 21,32
0221	920	4368	19	no fire,32
0221	921	4369	19	no fire 32
0222	922	4370	19	no fire 32
0222	923	4371	19	no fire 21,32
0222	924	4372	19	no fire 32
0223	925	4373	19	no fire 21,32
0223	926	4374	19	no fire 32
0223	927	4375	19	no fire 21,32
0224	928	4376	19	no fire 21,32
0224	929	4377	19	no fire 32
0224	930	4378	19	no fire 21,32
0225	931	4379	19	no fire 21,32
0225	932	4380	19	no fire 21,32
0308	1056	4504	19	no fire 05
1427	2932	6387	22	no fire 05

Observers Log

Vessel	Langseth
Client	Gulick -- LDEO
Area	Gulf of Alaska
Job Number	MGL0814

Party Chief	B McKiernan
Ch. Observer	B McKiernan
Sen. Observer	
Observers	

	SOL	EOL		
Tape #	24	28	FGSP	953
SP #	953	5152	LGSP	5152

Line	STEEP02M
Sequence	013
Direction	222

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	29/09/08	
Time UTC		
Volume (cu in.)	S1 6560	
Streamer Depth (m)	9	9
Wind (kts)		
Sea State (ft)		
Water Depth (m)		

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

FGSP 953 @ 0136 hrs N 59 47 57611 W 139 43 36902 Depth 114 Tension 3277

SP 1647 Shut down Gun 7 string 02 due to multiple no fires

0540-0620 Bird Depth Changed to 6m for birds 15-27

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	

Line Status:

Time UTC	FILE	SP	Tape	Description
0138	6,7,8		24	shots called SP=0 3x
0140	9	960	24	shots recorded correctly after 3 error shots
0235	175	1144	24	telemetry error: missing seismic data
0239		1153	24	telemetry error: missing seismic data
0240		1154	24	telemetry error: missing seismic data
0242	196	1161	24	telemetry error: missing seismic data
0242	196	1163	24	telemetry error: missing seismic data
0243	198	1164	24	telemetry error: missing seismic data
0243		1166	24	telemetry error: missing seismic data
0244		1167	24	telemetry error: missing seismic data
0244		1169	24	telemetry error: missing seismic data
0253	227	1192	24	telemetry error: missing seismic data
0515	633	~1600	24	Module telemetry error
0527	667	1634	24	Module telemetry error
0528	669	1636	24	Module telemetry error
0530	674	1641	24	No Fire S1G17
0530	675	1642	24	Autofire S1G17
0531	676	1643	24	Delta Timing Error S1G17
0531	677	1644	24	No Fire S1G17
0531	678	1645	24	No Fire S1G17
0532	679	1646	24	No Fire S1G17
0532	680	1647	24	Delta Timing Error S1G17
0538	694	1662	24	Module telemetry error
12:58	1960	2923	26	No fire S1G25
1607	2506	3473	26	telemetry error: missing seismic data
1608	2508	3475	26	telemetry error: missing seismic data
1608	2509	3476	26	telemetry error: missing seismic data
1608	2510	3477	26	telemetry error: missing seismic data
1820	2871	3838	26	telemetry error: missing seismic data
1841	2927	3895	27	Birds 15 and 16 set at 9 m
1853	2958	3926	27	telemetry error: missing seismic data
1856	2966-2968	3934-3936	27	telemetry error: missing seismic data
1903	2982-2984	3950-3952	27	telemetry error: missing seismic data
1903	2986	3954	27	telemetry error: missing seismic data
1904	2990-2992	3958-3960	27	telemetry error: missing seismic data
1906	2994-2996	3962-3964	27	telemetry error: missing seismic data
1907	2998-3001	3966-3969	27	telemetry error: missing seismic data
1909	3003-3007	3971-3975	27	telemetry error: missing seismic data
1913	3013-3018	3981-3986	27	telemetry error: missing seismic data
1917	3024	3991	27	telemetry error: missing seismic data
1918	3026-3033	3995-4002	27	telemetry error: missing seismic data
1931	3057	4024	27	telemetry error: missing seismic data
1933	3063-3066	4030-4033	27	telemetry error: missing seismic data
1941	3084	4051	27	telemetry error: missing seismic data
1948	3099	4066	27	telemetry error: missing seismic data
1951	3107	4074	27	telemetry error: missing seismic data
1955	3118	4085	27	telemetry error: missing seismic data
2026	3192	4159	27	telemetry error: missing seismic data
2027	3194	4161	27	telemetry error: missing seismic data

2029	3198	4165	27	telemetry error: missing seismic data
2207	3457	4424	27	telemetry error: missing seismic data
2219	3505	4456	27	MMO powerdown
2224	3505	4465	27	Guns at Full power

Observers Log

Vessel	Langseth		**Party Chief**	B McKiernan	
Client	Gulick -- LDEO		**Ch. Observer**	B McKiernan	
Area	Gulf of Alaska		**Sen. Observer**		
Job Number	MGL0814		**Observers**		

	SOL	EOL		
Tape #	29	32	**FGSP**	616
SP #	361	4305	**LGSP**	4305

Line	**STEEP11**
Sequence	**014**
Direction	**331**

Streamer Parameters

	1	2	3	4
Length	8000			
Auxiliaries				
Shotpoint Interval:	50			
Offset CS - CFG				
Group Interval:				
Number of channels	636			
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	9m
Center Source to Nav. Antenna	

Recording Parameters

Record Length	16s
Total recording delay	0
Sample Rate	2ms
Polarity	
Low-Cut	2Hz /12DB
Hi-Cut	206Hz/276 DB
Tape Format	SEGD rev. 1

Description	SOL/FQCSP	EOL/LQCSP
FSID		
Date dd/mm/yy	30/09/08	
Time UTC	0244	
Volume (cu in.)	S1 6380	
Streamer Depth (m)	9	9
Wind (kts)		
Sea State (ft)		
Water Depth (m)		

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

0627 Depth of all birds changed to 12m due to bad weather; SP 998

9/30/08 - 2024 S1G18 of f due to no fires, volume at 5840

EOL at 0155 hrs UTC SP # 4305 File # 3943

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	

Line Status:

Time UTC	FILE	SP	Tape	Description
05:08	389	752	29	Timing Error S1G32
	1515	1877	29	Telemetry Error
12:31	1680	2042	29	No Fire S1G20
12:31	1681	2043	29	Timing Error S1G20 3.1 ms
12:31	1682	2044	29	Timing Error S1G20 7.5 ms
12:32	1683	2045	29	Timing Error S1G20 6.3 ms
12:32	1684	2046	29	Timing Error S1G20 8.2 ms
12:32	1685	2047	29	Timing Error S1G20 2.2 ms
12:45	1718	2080	29	No Fire S1G20
12:45	1719	2081	29	No Fire S1G20
12:46	1720	2082	29	No Fire S1G20
12:46	1721	2083	29	No Fire S1G20
12:47	1722	2084	29	No Fire S1G20; Disabled S1G20; S1G18 online
12:47	1723	2085	29	No Fire S1G18
12:47	1724	2086	29	No Fire S1G18
	1730	2092	29	No Fire S1G18
12:50	1732	2094	29	No Fire S1G18
12:51	1733	2095	29	No Fire S1G18
12:51	1735	2097	29	No Fire S1G18
12:51	1736	2098	29	No Fire S1G18
12:52	1739	2101	29	No Fire S1G18
12:54	1744	2106	29	No Fire S1G18
12:55	1746	2108	29	No Fire S1G18
12:55	1747	2109	29	No Fire S1G18
12:57	1751	2113	29	No Fire S1G18
12:59	1757	2119	29	No Fire S1G18
13:00	1759	2121	29	No Fire S1G18
13:02	1766	2128	29	No Fire S1G18
13:03	1769	2131	29	No Fire S1G18
13:04	1771	2133	29	No Fire S1G18
13:05	1774	2136	29	No Fire S1G18
13:06	1776	2138	29	No Fire S1G18
13:07	1780	2142	29	No Fire S1G18
13:08	1781	2143	29	No Fire S1G18
13:10	1787	2149	29	No Fire S1G18
13:12	1792	2154	29	No Fire S1G18
13:13	1796	2158	29	No Fire S1G18
13:15	1801	2163	29	No Fire S1G18 and S1G22
13:16	1804	2166	29	No Fire S1G18
13:17	1805	2167	29	No Fire S1G18
13:17	1806	2168	29	No Fire S1G18
13:18	1808	2170	29	No Fire S1G18
13:23	1821	2183	29	No Fire S1G18 and S1G22
13:23	1823	2185	29	No Fire S1G18
13:29	1838	2200	30	No Fire S1G18
13:31	1844	2206	30	No Fire S1G18
13:32	1845	2207	30	No Fire S1G18
13:32	1846	2208	30	No Fire S1G18
13:37	1858	2220	30	No Fire S1G18

13:38	1863	2225	30	No Fire S1G18
13:39	1865	2227	30	No Fire S1G18
13:41	1870	2232	30	No Fire S1G18
13:42	1871	2234	30	No Fire S1G18
13:42	1872	2235	30	No Fire S1G18
13:42	1873	2236	30	No Fire S1G18
13:43	1874	2237	30	No Fire S1G18
13:43	1875	2241	30	No Fire S1G18
13:45	1879	2243	30	Timing in S1G25 String 03 enabled
13:45	1881	2249	30	No Fire S1G18
13:48	1887	2257	30	No Fire S1G12
13:51	1895	2264	30	No Fire S1G18
13:54	1902	2275	30	No Fire S1G18
13:54	1903	2284	30	No Fire S1G18
13:58	1913	2285	30	No Fire S1G18
14:01	1922	2284	30	No Fire S1G18
14:02	1923	2285	30	No Fire S1G18
14:02	1925	2287	30	No Fire S1G18
14:03	1926	2288	30	No Fire S1G18
14:05	1932	2294	31	No Fire S1G18
14:06	1934	2296	31	No Fire S1G18
14:08	1939	2301	31	No Fire S1G18
14:08	1940	2302	31	No Fire S1G18
14:10	1944	2306	31	No Fire S1G18
14:10	1945	2307	31	No Fire S1G18
14:11	1947	2309	31	No Fire S1G18
14:13	1954	2316	31	No Fire S1G18
14:14	1956	2318	31	No Fire S1G18
14:16	1961	2323	31	No Fire S1G18
14:16	1962	2324	31	No Fire S1G18
14:18	1966	2328	31	No Fire S1G18
14:19	1969	2331	31	No Fire S1G18
14:22	1977	2339	31	No Fire S1G18
14:23	1979	2341	31	No Fire S1G18
14:26	1986	2348	31	No Fire S1G18
1431	2001	2363	31	No Fire S1G18
1432	2002	2364	31	No Fire S1G18
1432	2003	2365	31	No Fire S1G18
1434	2008	2370	31	No Fire S1G18
1435	2010	2371	31	Timing error S1G12
1435	2012	2373	31	No Fire S1G18
1437	2014	2376	31	No Fire S1G18
1440	2023	2384	31	No Fire S1G18
1444	2032	2394	31	No Fire S1G18
1445	2035	2396	31	No Fire S1G18
1445	2035	2397	31	No Fire S1G18
1447	2040	2402	31	No Fire S1G18
1449	2043	2405	31	No Fire S1G18
1454	2060	2419	31	No Fire S1G18
1459	2068	2430	31	No Fire S1G18
1501	2074	2436	31	No Fire S1G18

1502	2076	2438	31	No Fire S1G18
1502	2077	2439	31	No Fire S1G18
1504	2080	2442	31	No Fire S1G18
1504	2081	2443	31	No Fire S1G18
1504	2082	2444	31	No Fire S1G18
1507	2088	2450	31	No Fire S1G18
1509	2093	2455	31	No Fire S1G18
1510	2095	2456	31	No Fire S1G18
1511	2097	2459	31	No Fire S1G18
1513	2103	2465	31	No Fire S1G18
1515	2106	2468	31	No Fire S1G18
1516	2109	2470	31	No Fire S1G18
1516	2109	2471	31	No Fire S1G18
1519	2115	2477	31	No Fire S1G18
1519	2117	2479	31	No Fire S1G18
1520	2118	2480	31	No Fire S1G18
1521	2122	2484	31	No Fire S1G18
1522	2123	2485	31	No Fire S1G18
1522	2124	2486	31	No Fire S1G18
1524	2129	2491	31	No Fire S1G18
1525	2130	2492	31	No Fire S1G18
1525	2131	2493	31	No Fire S1G18
1526	2132	2494	31	timing error S1G12
1526	2133	2495	31	timing error S1G12
1527	2135	2497	31	timing error S1G11
1534	2154	2514	31	No Fire S1G18
1536	2156	2518	31	No Fire S1G18
1541	2167	2529	31	No Fire S1G18
1545	2177	2537	31	No Fire S1G18
1545	2178	2538	31	No Fire S1G18
1545	2179	2539	31	No Fire S1G18
1548	2185	2545	31	No Fire S1G18
1552	2191	2553	31	No Fire S1G18
1606	2218	2580	31	No Fire S1G18 and S1G16
1612	2229	2591	31	No Fire S1G18
1625	2259	2621	31	No Fire S1G18
1628	2265	2627	31	No Fire S1G18
1631	2272	2634	31	No Fire S1G18
1631	2273	2635	31	No Fire S1G18
1634	2279	2641	31	No Fire S1G18
1645	2295	2667	31	No Fire S1G18
1646	2296	2670	31	No Fire S1G18
1648	2301	2675	31	No Fire S1G18
1652	2311	2855	31	No Fire S1G18
1654	2316	2690	31	No Fire S1G18
1656	2320	2694	31	No Fire S1G18
1656	2322	2696	31	No Fire S1G18
1657	2325	2699	31	No Fire S1G18
1659	2329	2703	31	No Fire S1G18
1702	2336	2710	31	No Fire S1G18
1702	2337	2711	31	No Fire S1G18

1707	2361	2723	31	Telemetry Error
1708	2364	2726	31	No Fire S1G18
1712	2373	2735	31	No Fire S1G18 and S1G16
1712	2375	2737	31	No Fire S1G18
1714	2380	2742	31	No Fire S1G18
1715	2381	2743	31	No Fire S1G18
1715	2382	2744	31	No Fire S1G18
1717	2386	2748	31	No Fire S1G18
1721	2397	2759	31	No Fire S1G18
1725	2409	2771	31	No Fire S1G18
1728	2415	2778	31	No Fire S1G18
1730	2421	2784	31	No Fire S1G18
1731	2424	2787	31	No Fire S1G18
1731	2425	2788	31	No Fire S1G18
1732	2426	2789	31	No Fire S1G18
1732	2428	2797	31	No Fire S1G18
1734	2436	2797	31	No Fire S1G18
1735	2438	2799	31	No Fire S1G18
1740	2451	2812	31	No Fire S1G18
1741	2455	2816	31	No Fire S1G18
1743	2460	2821	31	No Fire S1G18
1745	2466	2827	31	No Fire S1G18
1749	2477	2838	31	No Fire S1G18
1750	2480	2841	31	No Fire S1G18
1751	2482	2843	31	No Fire S1G18
1751	2483	2844	31	No Fire S1G18
1752	2485	2846	31	No Fire S1G18
1754	2492	2853	31	No Fire S1G18
1755	2493	2854	31	No Fire S1G18
1759	2506	2867	31	No Fire S1G18
1800	2508	2869	31	No Fire S1G18
1805	2522	2883	31	No Fire S1G18
1807	2528	2889	31	No Fire S1G18
1812	2540	2901	31	No Fire S1G18
1813	2542	2903	31	No Fire S1G18
1813	2544	2905	31	No Fire S1G18
1816	2551	2912	31	No Fire S1G18
1816	2553	2914	31	No Fire S1G18
1817	2556	2917	31	No Fire S1G18
1820	2561	2923	31	No Fire S1G18
1825	2574	2938	31	Telemetry Error
1825	2574	2938	31	No Fire S1G18
1826	2576	2940	31	No Fire S1G18
1826	2577	2941	31	No Fire S1G18
1830	2587	2951	31	No Fire S1G18
1833	2594	2958	31	No Fire S1G18
1835	2600	2964	31	No Fire S1G18
1838	2609	2973	31	No Fire S1G18
1840	2613	2977	31	No Fire S1G18
1841	2617	2980	31	Telemetry Error
1841	2617	2980	31	No Fire S1G18

1843	2622	2985	31	No Fire S1G18
1843	2623	2986	31	No Fire S1G18
1844	2625	2988	31	No Fire S1G18
1849	2639	3002	31	No Fire S1G18
1851	2647	3010	31	No Fire S1G18
1853	2652	3015	31	No Fire S1G18
1854	2653	3016	31	No Fire S1G18
1854	2655	3018	31	No Fire S1G18
1858	2666	3029	31	No Fire S1G18
1900	2671	3034	31	No Fire S1G18
1900	2672	3035	31	No Fire S1G18
1901	2674	3037	31	No Fire S1G18
1902	2676	3039	31	No Fire S1G18
1903	2679	3042	31	No Fire S1G18
1904	2683	3046	31	No Fire S1G18
1905	2684	3047	31	No Fire S1G18
1905	2685	3048	31	No Fire S1G18
1909	2697	3060	31	No Fire S1G18
1914	2712	3075	31	No Fire S1G18
1922	2732	3097	31	Telemetry Error
1925	2740	3105	31	No Fire S1G18
1928	2750	3115	31	Telemetry Error
1929	2751	3116	31	Telemetry Error
1930	2753-2755	3118-3120	31	Telemetry Error
1932	2760	3125	31	No Fire S1G18
1933	2763	3128	31	No Fire S1G18
1934	2764	3129	31	No Fire S1G18
1935	2769	3134	31	No Fire S1G18
1935	2770	3135	31	No Fire S1G18
1936	2772	3137	31	No Fire S1G18
1936	2773	3138	31	No Fire S1G18
1938	2777	3142	31	No Fire S1G18
1939	2782	3147	31	No Fire S1G18
1943	2891	3156	31	No Fire S1G18
1943	2892	3157	31	No Fire S1G18
1944	2896	3161	31	No Fire S1G18
1945	2898	3163	31	No Fire S1G18
1945	2899	3164	31	No Fire S1G18
1946	2900	3165	31	No Fire S1G18
1947	2903	3167	31	No Fire S1G18
1947	2904	3168	31	No Fire S1G18
1949	2910	3174	31	Timing Error
1949	2912	3176	31	Timing Error
1953	2921	3185	31	No fire S1G18
1955	2927	3191	31	No fire S1G18
1956	2930	3195	31	No fire S1G18
1958	2936	3201	31	No fire S1G18
2000	2943	3201	31	No fire S1G18
2003	2952	3217	31	No fire S1G18
2003	2953	3218	31	No fire S1G18
2005	2959	3224	31	No fire S1G18

2006	2961	3226	31	No fire S1G18
2006	2962	3227	31	No fire S1G18
2007	2964	3229	31	No fire S1G18
2009	2970	3235	31	No fire S1G18
2010	2974	3239	31	No fire S1G18
2011	2977	3242	31	No fire S1G18
2012	2978	3243	31	No fire S1G18
2014	2986	3251	31	No fire S1G35
2020	2002	3267	32	No fire S1G18
2020	3003	3268	32	No fire S1G18
2020	3004	3269	32	No fire S1G18
2021	3005	3270	32	No fire S1G18
2021	3007	3272	32	No fire S1G18
2022	3010	3275	32	No fire S1G18
2023	3013	3278	32	No fire S1G18
2026	3021	3286	32	No fire S1G35
2028	3026	3291	32	No fire S1G35
2028	3028	3293	32	No fire S1G35
2031	3035-3036	3300-3301	32	Telemetry error - some missing data
2034	3044	3309	32	No fire S1G35
2045	3079	3344	32	No fire S1G35
2055	3014	3375	32	No fire SIG35 and SIG05
2066	3017	3378	32	No fire SIG35
2059	3025	3388	32	No fire SIG35
2108	3053	3414	32	No fire S1G35
2109	3057	3419	32	No fire S1G35
2111	3061	3423	32	No fire S1G05
2127	3112	3474	32	No fire S1G35
2137	3142	3504	32	No fire S1G16
2140	3154	3516	32	No fire S1G35
2222		3641	32	MMO power down
2224		3552	32	Gun Shutdown
2227		3669	32	Full volume
2232		3678	32	Nofire S1G18
2232		3678	32	No fire S1G18
2234		3685	32	No fire S1G18
2235		3688	32	No fire S1G18
2236	3326	3689	32	Nof fire S1G18
2236	3327	3691	32	No fire S1G18
2237	3330	3693	32	No fire S1G18
2238			32	Turn off S1G18
2241	3343	3706	32	No fire S1G35
2242	3346	3708	32	No fire S1G35
2244	3351	3713	32	No fire S1G35
2244	3353	3715	32	No fire S1G35
2247	3361	3723	32	No fire S1G35
2248	3363	3725	32	No fire S1G35
2250	3371	3733	32	No fire S1G35
2252	3377	3739	32	No fire S1G35
2254	3381	3743	32	No fire S1G35
2254	3383	3745	32	No fire S1G35

2255	3387	3749	32	No fire S1G35
2256	3389	3751	32	No fire S1G35
2256	3389	3751	32	No fire S1G16
2257	3396	3755	32	No fire S1G16
2259	3397	3759	32	No fire S1G35
2301	3403	3765	32	No fire S1G35
2301	3405	3767	32	No fire S1G35
2302	3407	3769	32	No fire S1G35
2303	3409	3771	32	No fire S1G35
2307	3421	3783	32	No fire S1G35
2307	3423	3785	32	No fire S1G35
2308	3425	3787	32	No fire S1G35
2312	3438	3800	32	No fire S1G16
2313	3440	3802	32	No fire S1G35
2313	3442	3804	32	No fire S1G35
2317	3452	3814	32	No fire S1G35
2317	3454	3816	32	No fire S1G35
2318	3456	3818	32	No fire S1G35
2319	3458	3820	32	No fire S1G35
2319	3459	3824	32	No fire S1G22
2324	3475	3837	32	No fire S1G35
2325	3479	3841	32	No fire S1G35
2326	3481	3843	32	No fire S1G35
2327	3483	3845	32	No fire S1G35
2327	3484	3846	32	No fire S1G16
2327	3485	3847	32	No fire S1G35
2328	3487	3849	32	No fire S1G35
2332	3500	3862	32	No fire S1G35
2333	3502	3864	32	No fire S1G35
2334	3504	3866	32	No fire S1G35
2335	3508	3870	32	No fire S1G35
2336	3512	3874	32	No fire S1G35
2337	3515	3877	32	No fire S1G35
2338	3517	3877	32	No fire S1G35
2338	3521	3881	32	No fire S1G35
2340	3525	3885	32	No fire S1G35
2342	3533	3893	32	No fire S1G35
2343	3536	3896	32	No fire S1G35
2344	3539	3899	32	No fire S1G35
2346	3546	3906	32	No fire S1G35
2349	3555	3915	32	No fire S1G35
2349	3556	3916	32	No fire S1G22
2350	3557	3917	32	No fire S1G35
2350	3559	3919	32	No fire S1G35
2351	3562	3922	32	No fire S1G35
2327	3483	3845	32	Telemetry error - some missing data
2356	3575	3935	32	No fire S1G16, S1G35
2356	3577	3937	32	No fire S1G35
2357	3578	3939	32	No fire S1G35
0001	3590	3952	32	No fire S1G35
0002	3592	3954	32	No fire S1G35

0007	3608	3970	32	No fire S1G35
0007	3610	3972	32	No fire S1G25
0008	3612	3974	32	No fire S1G35
0009	3614	3976	32	No fire S1G35
0010	3618	3980	32	No fire S1G35
0011	3620	3982	32	No fire S1G35
0011	3622	3984	32	No fire S1G35
0014	3631	3993	32	No fire S1G35
0015	3634	3996	32	No fire S1G35
0015	3634	3996	32	No fire S1G22
0019	3645	4007	32	No fire S1G35
0020	3648	4010	32	No fire S1G35
0020	3650	4012	32	No fire S1G35
0021	3653	4015	32	No fire S1G35
0021	3660	4022	32	No fire S1G35
0025	3664	4026	32	No fire S1G35
0027	3670	4032	32	No fire S1G35
0029	3675	4037	32	No fire S1G35
0030	3674	4041	32	No fire S1G35
0031	3681	4043	32	No fire S1G35
0031	3683	4045	32	No fire S1G35
0032	3685	4047	32	No fire S1G35
0033	3688	4050	32	No fire S1G35
0036	3698	4060	32	No fire S1G35
0038	3704	4066	32	No fire S1G35
0039	3707	4069	32	No fire S1G35
0040	3711	4073	32	No fire S1G35
0043	3720	4082	32	No fire S1G35
0046	3729	4091	32	No fire S1G35
0047	3731	4093	32	No fire S1G35
0047	3733	4095	32	No fire S1G35
0048	3736	4098	32	No fire S1G35
0049	3740	4102	32	No fire S1G35
0050	3742	4104	32	No fire S1G35
0053	3752	4114	32	No fire S1G35
0054	3754	4116	32	No fire S1G35
0056	3761	4123	32	No fire S1G35
0057	3764	4126	32	No fire S1G35
0058	3766	4128	32	No fire S1G35
0059	3769	4131	32	No fire S1G35
0059	3769	4131	32	No fire S1G25
0102	3778	4140	32	No fire S1G35
0103	3782	4144	32	No fire S1G35
0103	3782	4144	32	No fire S1G16
0104	3784	4146	32	No fire S1G35
0107	3795	4157	32	No fire S1G35
0108	3797	4159	32	No fire S1G35
0109	3799	4161	32	No fire S1G35
0109	3801	4163	32	No fire S1G35
0109	3803	4165	32	No fire S1G35
0111	3805	4167	32	No fire S1G35

0111	3807	4169	32	No fire S1G35
0114	3815	4177	32	No fire S1G35
0115	3817	4179	32	No fire S1G35
0115	3819	4181	32	No fire S1G35
0116	3821	4183	32	No fire S1G35
0117	3823	4185	32	No fire S1G35
0117	3825	4187	32	No fire S1G35
0119	3831	4193	32	No fire S1G35
0120	3835	4197	32	No fire S1G35
0122	3840	4207	32	No fire S1G35
0125	3848	4210	32	No fire S1G35
0125	3850	4212	32	No fire S1G35
0126	3854	4216	32	No fire S1G35
0128	3858	4220	32	No fire S1G35
0128	3860	4222	32	No fire S1G35
0131	3868	4230	32	No fire S1G16
0132	3870	4232	32	No fire S1G35
0132	3872	4234	32	No fire S1G35
0134	3876	4238	32	No fire S1G35 and S1G16
0134	3876	4240	32	No fire S1G35
0135	3880	4242	32	No fire S1G35
0136	3882	4244	32	No fire S1G35
0138	3891	4253	32	No fire S1G35
0139	3893	4255	32	No fire S1G35
0140	3897	4259	32	No fire S1G35
0141	3899	4261	32	No fire S1G35
0141	3901	4263	32	No fire S1G35
0143	3907	4269	32	No fire S1G35
0145	3913	4275	32	No fire S1G35
0146	3915	4277	32	No fire S1G35
0147	3920	4282	32	No fire S1G35
0149	3926	4288	32	No fire S1G35
0150	3928	4290	32	No fire S1G35
0151	3932	4294	32	No fire S1G35
0152	3937	4298	32	No fire S1G35
0154	3941	4303	32	No fire S1G35