

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	1	5
SP #	966	2333

Line	MGL1806OB01
Sequence	01
Direction	227

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	390			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	55s
Total recording delay	0ms
Sample Rate	4ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	966	2333
Date MM/DD/YY	09/20/18	9/23/18
Time UTC	17:25:53	21:10:00
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE 14kts	SE 17.9kts
Sea State (m)	2-3m	1.5m
Water Depth (m)	4744m	4347.0m

Cable	Dead 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

General / Line Comments
Missing SP (d/t shut down): 1357-1376;
Files with invalid/no SP in header (d/t ramp up): 39-395,397-402,404-409
File 653 shot by digishot while troubleshooting/rebooting - not valid
Multiple comm issues with String 4 (no apparent effect on source)
VOLUME WAS ALWAYS 6600 in3 (except ramp-up), despite different values in shots log
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
17:25:53	1	966	1	SOL MGL1806OB01 - Full volume 6600 in3 - S1-4G5 spared
18:10:45	16	981	1	Spectra hiccup - coordinates, time and SP edited in shotlog file
00:00:26	131	1096	1	Spectra hiccup - coordinates, time and SP edited in shotlog file
08:27:10	299	1264	2	BOT #2
12:38				PAM crashed
13:04	391	1356	2	LGSP 1356; Source secured for 30 minutes without PAM regulation
13:05				Reduced vessel speed
13:29				PAM back running on spare system
13:50				Begin nighttime visual clearance from Bridge
14:20				Begin soft start
14:22		1377		FSP of softstart; SEAL files affected
14:40	404	1381		LSP of softstart; SEAL files affected
14:41	405	1382	2	FGSP; Full gun volume resumed
00:20:22	597	1569	3	BOT #3
03:40	653			Shot fired while Digishot rebooted itself
04:00:17	659	1630		After moving string 4 to reduce tension at towpoint, comm issue stopped, for a while
18:47	895	1866	4	BOT #4
18:48				Detected a small air leak on gunstring #1
12:31	1193	2164	5	BOT #5
21:10	1362	2333	5	EOL MGL1806OB01 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	6	33
SP #	2911	11436

Line	MGL1806MC01
Sequence	02
Direction	047

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	2911	11436
Date MM/DD/YY	09/24/2018	09/26/2018
Time UTC	02:39	21:39
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE13kts	S 14kts
Sea State (m)	1.5m	1.5m
Water Depth (m)	4400m	4637m

Cable	Dead 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

General / Line Comments
Turn far from complete at start of line
Because of an air leak, S2G1 was replaced by S2G5 after SP 6357, reducing the volume to 6420in3
Volume reduced to 6380in3 after SP8922 - S2G9 failed, replaced by S4G5
Air leak on gun string 2 sometime after SP6000
Air leak on gun string 2 repaired at SP 10876
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
02:39:40	1363	2911	6	SOL MGL1806MC01 - Full volume 6600 in3 - S1-4G5 spared
05:11:28	1678	3226	7	BOT #7
07:42:50	1993	3541	8	BOT #8
10:15:15	2308	3856	9	BOT #9
12:48	2623	4171	10	BOT #10
14:31	2845	4394	10	Gun 201; misfire
14:32	2846	4395	10	Gun 201; misfire
14:33	2850	4398	10	Gun 201; misfire
14:34	2851	4399	10	Gun 201; misfire
15:14	2938	4486	11	BOT #11
16:44	3133	4681	11	Last full volume shot
16:45	3134	4682	11	secured strings 3&4 to replace tow shackle at stern - first shot @3300 in3, 18 guns
16:53	3151	4699	11	Gun 201; misfire
16:54	3154	4702	11	First shot back at full volume 6600in3/36 guns
17:41	3253	4801	12	BOT #12
20:09	3568	5116	13	BOT #13
~22:15	5390-5410	3842-3862	13	Multiple Delta timing errors from S1G10
22:31:56	3883	5431	14	BOT #14
00:54:29	4198	5746	15	BOT #15
~01:31	~4280	~5828	15	Delta timing errors from S2G1
03:19:07	4513	6061	16	BOT #16
05:30:31	4802	6350	16	S2G1 spared after a long battle with illness - last shot at full volume
05:33:39	4809	6357	16	S2G5 on; first good shot with new volume: 6420in3; 36 guns
05:42:22	4828	6376	17	BOT #17
08:05:18	5143	6691	18	BOT #18
09:34		6887-6888	18	Missed shots 6887-6888 because of spectra preplot errors for stupid little turn
10:30	5458	7008	19	BOT #19
12:06	5665	7215	19	S3G1 Delta Error
12:21:05	5697	7247	19	S3G1 not firing, air leak - disabled. Last shot at 6420in3
12:21	5698	7248	19	6060in3, 35 guns
12:39	5728	7278	19	String3 powered off for recovery; Last shot at 6060in3
12:49	5729	7279	19	First SP at 4770 in3
12:56	5773	7323	20	BOT #20

13:35	5858	7408	20	String 3 back online; 6420cubic inches, 36 guns
14:36	5991	7541	20	Digishot Crash
	5992	7542-45	20	Missed sps 7542-7545 d/t reboot
14:39	5993	7546	20	Back on line; 6420cubic inches, 36 guns
15:11	6061	7614	20	Digishot Crash
		7615-7617		Missed sps 7615-7617 d/t reboot
15:13	6062	7618	20	Back on line; 6420cubic inches, 36 guns
15:26	6088	77644	21	BOT #21
17:57	6403	7959	22	BOT #22
19:57	6661	8217	22	Digishot Crash
		8218-8220	22	Missed sps 8218-8220 d/t reboot
19:59	6662	8221	22	Back on line; 6420cubic inches, 36 guns
20:25	6718	8277	23	BOT #23
22:52:01	7033	8592	24	BOT #24
01:10:44	7332	8891	24	S2G9 failed - last shot at 6420in3 - new temporary volume 6200in3 (until failure was noticed)
01:18:18	7348	8907	25	BOT #25
01:25:25	7363	8922	25	S4G5 online - new volume 6380in3
02:41		9087	25	SP 9087, 9091, 9092 missed when Fisher valve failed and shooting was interrupted
02:44		9091-9092	25	
02:46:47	7535	9097	25	First shot back at 6380in3
03:45:52	7663	9225	26	BOT #26
06:11:45	7978	9540	27	BOT #27
08:39:26	8293	9855	28	BOT #28
11:05	8608	10170	29	BOT #29
13:35	8923	10485	30	BOT #30
15:47	9178	10740	30	S2G10 Failed, disabled - first shot at new temporary volume 6160in3 35 guns
15:52	9186	10748	30	Secured string 2 for recovery d/t large air leak, first shot at new volume 5130 in3 28 guns
16:24	9238	10800	31	BOT #31
17:12	9314	10876	31	String 2 back online; First shot at 6600in3 36 guns
19:10	9553	11115	32	BOT #32
21:36:15	9868	11430	33	BOT #33
21:39	9874	11436	33	EOL MGL1806MC01 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	34	39
SP #	11985	13611

Line	MGL1806MC03
Sequence	03
Direction	178

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	11985	13611
Date MM/DD/YY	09/26/2018	9/27/2018
Time UTC	22:47:17	11:36
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE15kts	SE 17kts
Sea State (m)	1.5m	1.5m
Water Depth (m)	4710m	5410m

Cable	Dead 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

General / Line Comments
Turn far from complete at start of line. Turn noise until -SP
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
22:47:17	9875	11985	34	SOL MGL1806MC03 - Full volume 6600 in3 - S1-4G5 spared
01:12:33	10190	12300	35	BOT #35
03:37:59	10505	12615	36	BOT #36
06:05:23	10820	12930	37	BOT #37
08:34:26	11135	13245	38	BOT #38
11:11	11450	13560	39	BOT #39
11:30		13600		Start turn towards next line.
11:36	11501	13611	39	EOL MGL1806MC03 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	40	44
SP #	14082	15456

Line	MGL1806MC04
Sequence	04
Direction	224

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	14082	15456
Date MM/DD/YY	09/27/2018	09/27/2018
Time UTC	12:21	23:43:32
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE 17kts	SE 12kts
Sea State (m)	1.5m	1.5m
Water Depth (m)	5037m	5500m

Cable	Dead 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

General / Line Comments
Turn far from complete at start of line. Turn noise.
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
12:21	11502	14082	40	SOL MGL1806MC04 - Full volume 6600 in3 - S1-4G5 spared
15:02	11817	14397	41	BOT #41
17:37	12132	14712	42	BOT #42
20:21	12447	15027	43	BOT #43
22:48:51	12762	15342	44	BOT #44
23:43:32	12876	15456	44	EOL MGL1806MC04 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	45	68
SP #	16034	23471

Line	MGL1806MC05
Sequence	05
Direction	298

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	16034	23471
Date MM/DD/YY	09/27/2018	09/30/2018
Time UTC	23:58:57	11:00:19
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE10kts	NE14kts
Sea State (m)	1.5m	1m
Water Depth (m)	5530m	4920m

Cable	Dead 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

General / Line Comments
Turn noise at start of line
Gun 1 on String 4 had a poor signal for most of the line.- effective volume was 6240in3
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
23:58:57	12877	16034	45	SOL MGL1806MC05 - Full volume 6600 in3 - S1-4G5 spared
02:47:31	13192	16349	46	BOT #46
05:28:59	13507	16664	47	BOT #47
07:55:40	13822	16979	48	BOT #48
10:21:30	14137	17294	49	BOT #49
12:44	14452	17609	50	BOT #50
15:07	14767	17924	51	BOT #51
16:57	15012	18169-72	51	Digishot crash. Missed sps 18169-72 during reboot.
17:30	15082	18242	52	BOT #52
19:55	15397	18557	53	BOT #53
22:22:28	15712	18872	54	BOT #54
01:00:19	16027	19187	55	BOT #55
03:39:54	16342	19502	56	BOT #56
06:15:58	16657	19817	57	BOT #57
08:46:32	16972	20132	58	BOT #58
11:13	17287	20447	59	BOT #59
13:41	17602	20762	60	BOT #60
16:08	17917	21007	61	BOT #61
18:40	18232	21392	62	BOT #62
21:13	18547	21707	63	BOT #63
23:52:32	18862	22022	64	BOT #64
02:15:17	19177	22337	65	BOT #65
04:41:01	19492	22652	66	BOT #66
07:06:29	19807	22967	67	BOT #67
09:33:00	20122	23282	68	BOT #68
11:00:19	20311	23471	68	EOL MGL1806MC05 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	69	71
SP #	24527	25341

Line	MGL1806OB2S
Sequence	06
Direction	195

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	390			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	55s
Total recording delay	0ms
Sample Rate	4ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	24527	25341
Date MM/DD/YY	09/30/18	10/02/18
Time UTC	22:18:06	15:56:22
Volume (cu in.)	6600in3	6600in3
Wind (kts)	E16kts	SE 12kts
Sea State (m)	1.5m	1.5m
Water Depth (m)	3711m	4571m

Cable	Dead 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

General / Line Comments
Still finishing turn at start - significant feathering (48)
VOLUME WAS ALWAYS 6600 in3 (except ramp-up), despite different values in shots log
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
22:18:06	20312	24527	69	SOL MGL1806OB2S - Full volume 6600 in3 - S1-4G5 spared
23:57:18	20343	24558	69	Pre-Midnight shotpoint 24558
00:00:28	20344	24559	69	Post Midnight shotpoint 24559
14:09	20610	24825	70	BOT #70
23:58:18	20797	25012	70	Pre-Midnight shotpoint 25012
00:01:31	20798	25013	70	Post Midnight shotpoint 25013
05:25:43	20908	25123	71	BOT #71
15:56	21126	25341	71	EOL MGL1806OB2S - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	72	99
SP #	25955	34484

Line	MGL1806MC02
Sequence	07
Direction	015

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	25955	34484
Date MM/DD/YY	10/02/18	10/05/18
Time UTC	20:34	16:18
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE 16kts	SE 18kts
Sea State (m)	1.5m	2.5m
Water Depth (m)	4613m	4388m

Cable	Dead 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

General / Line Comments
Still finishing turn at start
Noise in shots near buoy. SP
VOLUME WAS ALWAYS 6600 in3 (except ramp-up), despite different values in shots log
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
20:34:09	21127	25955	72	SOL MGL1806MC02 - Full volume 6600 in3 - S1-4G5 spared
22:59:15	21442	26270	73	BOT #73
00:00:19	21574	26402	73	Midnight shotpoint 25012
01:24:37	21757	26585	74	BOT #74
02:15-02:18		26698-26702	74	Digishot rebooted itself - lost SP 26698-26702
	21870		74	File 21870 invalid - no spectra header
02:48-02:50			74	Digishot rebooted itself - lost SP 26770-26773
03:01-03:05			74	Digishot rebooted itself - lost SP 26798-26804
03:04	21962		74	File 21962 invalid - no spectra header
03:12:31	21979	26821	74	File 21979 invalid - guns not firing while swaping digishot power supply
03:12-03:13		26821-26823	74	Changed source of power for DigiShot PC - lost SP 26822-26823
03:55:37	22072	26916	75	BOT #75
06:21:57	22387	27231	76	BOT #76
08:49:24	22702	27546	77	BOT #77
11:16	23017	27861	78	BOT #78
13:41	23332	28176	79	BOT #79
16:08	23647	28491	80	BOT #80
18:34	23962	28806	81	BOT #81
21:01	24277	29121	82	BOT #82
23:27:03	24592	29436	83	BOT #83
00:00:01	24664	29508	83	Midnight shotpoint 29508
01:51:14	24907	29751	84	BOT #84
04:17:01	25222	30066	85	BOT #85
06:44:36	25537	30381	86	BOT #86
09:12:49	25852	30696	87	BOT #87
11:38	26167	31011	88	BOT #88
14:03	26482	31326	89	BOT #89
16:30	26797	31641	90	BOT #90
18:58	27112	31956	91	BOT #91
21:27	27427	32271	92	BOT #92
23:54:32	27742	32586	93	BOT #93
00:00:12	27754	32598	93	Midnight shotpoint 32598
02:20:51	28057	32901	94	BOT #94
04:50:38	28372	33216	95	BOT #95
07:32:30	28687	33531	96	BOT #96
10:30	29002	33846	97	BOT #97
13:29	29316	34161	98	BOT #98
16:14	29632	34476	99	BOT #99
16:18	29640	34484	99	EOL MGL1806MC02 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	100	101
SP #	34993	35558

Line	MGL1806OB2N
Sequence	08
Direction	195

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	390			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	55s
Total recording delay	0ms
Sample Rate	4
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	34993	35558
Date MM/DD/YY	10/05/18	10/07/18
Time UTC	20:22	01:23
Volume (cu in.)	6600in3	6600in3
Wind (kts)	SE 19kts	E10kts
Sea State (m)	2.5m	1.5m
Water Depth (m)	4424m	2580m

Cable	Dead 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

General / Line Comments
Still finishing turn at start
VOLUME WAS ALWAYS 6600 in3 (except ramp-up), despite different values in shots log
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
20:22:24	29641	34993	100	SOL MGL1806OB2N - Full volume 6600 in3 - S1-4G5 spared
23:58:50	29711	35063	100	Pre-Midnight shot
00:01:53	29712	35064	100	Post-Midnight shot
11:43	29939	35291	101	BOT #101
01:23:54	30206	35558	101	EOL MGL1806OB2N - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	102	105
SP #	36056	37221

Line	MGL1806MC06
Sequence	09
Direction	015

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	36056	37221
Date MM/DD/YY	10/07/2018	10/07/18
Time UTC	01:45	11:07
Volume (cu in.)	6600in3	6600in3
Wind (kts)	E10kts	E11kts
Sea State (m)	1.5m	1.5m
Water Depth (m)	2410m	4286m

Cable	Dead 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

General / Line Comments
Noise turn at start of line
VOLUME WAS ALWAYS 6600 in3 (except ramp-up), despite different values in shots log
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
01:45:58	30207	36056	102	SOL MGL1806MC06 - Full volume 6600 in3 - S1-4G5 spared
04:27:27	30522	36371	103	BOT #103
06:58:11	30837	36686	104	BOT #104
09:26:01	31152	37001	105	BOT #105
11:07:39	31372	37221	105	EOL MGL1806MC06 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	106	122
SP #	38074	43200

Line	MGL1806MC07
Sequence	010
Direction	122

Streamer Parameters				
	1	2	3	4
Length (m)	15000			
Auxiliaries	n/a			
Shotpoint Interval: (m)	62.5			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	1200			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	26s
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	38074	43200
Date MM/DD/YY	10/07/2018	10/09/2018
Time UTC	16:31	10:30
Volume (cu in.)	6600in3	6600in3
Wind (kts)	E12kts	S8kts
Sea State (m)	1m	1m
Water Depth (m)	4730m	4600m

Cable	Dead 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

General / Line Comments
Noise turn at start of line
VOLUME WAS ALWAYS 6600 in3 despite different values in shots log
DEAD CHANNELS: 93, 565, 577, 585, 609, 657, 673, 681
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

Time UTC	FILE	SP	Tape	Description
16:31	31373	38074	106	SOL MGL1806MC07 - Full volume 6600 in3 - S1-4G5 spared
18:58	31688	38389	107	BOT #107
21:23	32003	38704	108	BOT #108
23:50:47	32318	39019	109	BOT #109
00:00:03	32338	39039	109	Midnight shot: SP 39039
02:14:06	32633	39334	110	BOT #110
04:38:57	32948	39649	111	BOT #111
06:46:35	33226	39927	111	One shot with only 1560 in3, with no apparent reason
07:03:40	33263	39964	112	BOT #112
09:31:16	33578	40279	113	BOT #113
12:08:46	33893	40594	114	BOT #114
14:59:13	34208	40909	115	BOT #115
17:53:25	34523	41224	116	BOT #116
20:35:27	34838	41539	117	BOT #117
23:32:41	35153	41854	118	BOT #118
00:00:26	35204	41905	118	Midnight shot: SP 41905
02:10:22	35468	42169	119	BOT #119
04:57:57	35783	42484	120	BOT #120
07:25:50	36098	42799	121	BOT #121
09:49:31	36413	43114	122	BOT #122
10:30:29	36499	43200	122	EOL MGL1806MC07 - Full volume 6600 in3 - S1-4G5 spared

Observers Log

Vessel	Marcus G. Langseth
Client	NSF - Shillington
Area	Hawaii
Job Number	MGL1806

Shift	12:00-24:00	00:00-12:00	
Science Officer	Dave Martinson	Todd Jensvold	
Acquisition Leader	Gilles Guerin	Todd Jensvold	
Navigation Leader	Dave Martinson	Alan Thompson	

	SOL	EOL
Tape #	123	127
SP #	43998	48438

Line	MGL1806MC08
Sequence	011
Direction	212

Streamer Parameters				
	1	2	3	4
Length (m)	6300			
Auxiliaries	n/a			
Shotpoint Interval: (m)	50			
Offset CS - CNG (m)	218			
Group Interval: (m)	12.5			
Number of channels	504			
Streamer Depth (m)	12.0			
SOL Cable Noise, µB				
EOL Cable Noise, µB				

Source Parameters	
Total Volume	6600 in3
Work Pressure	1950psi +/- 100psi
Dual Source	No
Depth	12
Sub-array Separation	6 m
COS to COS	Single Source

Recording Parameters	
Record Length	20
Total recording delay	0ms
Sample Rate	2ms
Polarity	SEGD standard
Low-Cut	3Hz digital, 4.5Hz total
Hi-Cut	200Hz, 370dB/octave
File Format	SEGD

Description	SOL/FGSP	EOL/LGSP
SP	43998	48438
Date MM/DD/YY	10/19/18	10/20/18
Time UTC	11:24	14:15
Volume (cu in.)	6600in3	6600in3
Wind (kts)	NE 11kts	ENE 13.4kts
Sea State (m)	1.5m	1.5m
Water Depth (m)	4180m	5290m

Cable	Dead Channels
1	
2	1, 13, 21, 45, 93, 109, 117, 118
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

General / Line Comments
Noise turn at start of line
DEAD CHANNELS: 1, 13, 21, 45, 93, 109, 117, 118
SOL NOISY CHANNELS:
EOL NOISY CHANNELS

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

