



Line Name: MGL0908_1		NAVIGATION		DATE: 2009-06-22																			
Line Brg : 90 °		LINE LOGS		JULIAN DAY: 173																			
CLIENT: National Science Foundation			SURVEY: Taiwan4		MGL0908																		
DC SOL : 185.5m		DEPTH SOL : 2899.1m		NAVIGATION SYSTEM USED: C-Nav - Primary																			
DC EOL : 698.5m		DEPTH EOL : 2456.9m		NAVIGATION SYSTEM USED: SeaPath 200																			
SMG SOL: 4.8 knots		FEATHER SOL: na °		NAVIGATION SYSTEM USED: Pos MV																			
SMG EOL: 4.8 knots		FEATHER EOL: na °		GRAVITY METER: BMG-II: used																			
WEATHER		MAX FEATHER: na °		MAGNETOMETER: GeoMetrics: not used																			
WIND SOL: 12 knots				MAG DEC USED : -3.12°																			
WIND EOL: 12 knots																							
SEAS SOL: 1.8m		04:00 - 16:00 utc => Mike Tatro, Michael Zhang																					
SEAS EOL: calm		16:00 - 04:00 utc => Ryan Eaton, Mike Martello																					
SP	EVENT	COMMENTS																					
1007	FSP/FGSP	Start of OBS recording line (no streamer)																					
1015	OBS	crossing T2_27 (offset -240m)																					
1116	OBS	crossing T2_26																					
1216	OBS	crossing T2_25																					
1267	Jday173	midnight position: 21 25.21815N 119 23.0894E																					
1317	OBS	crossing T2_24 (offset -130m)																					
1417	OBS	crossing T2_23																					
1500	OBS	crossing T2_232 (offset -500m)																					
1616	OBS	crossing T2_21 (offset -283m)																					
1718	OBS	crossing T2_20 (offset -319m)																					
1815	OBS	crossing T2_19 (offset -36m)																					
1916	OBS	crossing T2_18 (offset -10m)																					
2018	OBS	crossing T2_17 (offset -10m)																					
2106	24nm	Enter Taiwan 24nm, stop recording Multibeam, Knudsen, Mag, VI																					
2120	OBS	crossing T2_16 (offset -390m)																					
2484	24nm	Exit Taiwan 24nm, start recording Multibeam, Knudsen, Mag, VI																					
2522	LSPL/GSP	End of obs line																					
<table border="1"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1007 21° 24.9065°</td> <td>119° 00.5218°</td> </tr> <tr> <td>LGSP</td> <td>2522 21° 25.5298°</td> <td>121° 12.0372°</td> </tr> </tbody> </table>						VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1007 21° 24.9065°	119° 00.5218°	LGSP	2522 21° 25.5298°	121° 12.0372°						
VESSEL POSITION																							
SP	Latitude (N)	Longitude (E)																					
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LGSP	2522 21° 25.5298°	121° 12.0372°																					
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NAVIGATION OFFSET APPLIED																							
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NRP - CMP (na)		283.20m																					
Note: LMN line parameter set to great circle line.																							
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P1	P2																						
na	na																						
Source only																							
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:																				
Falibouy #1	na	Gun string #1 Gun string #2 Gun string #3 Gun string #4	good good good good	G113 - not working																			
Taiger4_LMN			source_6m_SCN(001)	Langseth_RTCN																			
SP spacing:			150.0m																				
line status:			obs line complete																				


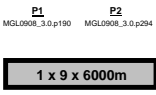
Seq# 002	Line Name: MGL0908_5	NAVIGATION	DATE: 2009-06-24				
	Line Brg : 270 °	LINE LOGS	JULIAN DAY: 175				
CLIENT: National Science Foundation		SURVEY: Taiwan4	MGL0908				
DC SOL : 155.4m DC EOL : -5.9m SMG SOL: 246.2 knots SMG EOL: 5.0 knots	DEPTH SOL : 616.9m DEPTH EOL : 2862.6m FEATHER SOL: na ° FEATHER EOL: na ° MAX FEATHER: na °	NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Pos MV GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°					
WEATHER WIND SOL: 8 knots WIND EOL: 15 knots SEAS SOL: 0.4m SEAS EOL: 2.2m		04:00 - 16:00 utc => Mike Tatro, Michael Zhang 16:00 - 04:00 utc => Ryan Eaton, Mike Martello					
SP	EVENT	COMMENTS					
2264	10:25 FSP/FGSP	Start of OBS recording line (no streamer)					
2606	16:09 OBS	crossed obs N22					
2670	17:12 OBS	crossed obs N21(offset-260m)					
2737	18:17 OBS	crossed obs N20(offset-500m)					
2804	19:23 OBS	crossed obs N19(offset-360m)					
2871	20:28 OBS	crossed obs N18(offset-425m)					
2935	21:29 OBS	crossed obs N17(offset-320m)					
2995	22:27 OBS	crossed obs N16(offset-275m)					
3069	23:39 OBS	crossed obs N15(offset-345m)					
3089	23:59 Jday175	midnight position: 20 34.01642N 120 29.77180					
3131	00:40 OBS	crossed obs N14(offset-45m)					
3202	01:50 OBS	crossed obs N13(offset-300m)					
3269	02:56 OBS	crossed obs N12(offset-85m)					
3336	04:01 OBS	crossed obs N11(offset-0m)					
3395	05:00 OBS	crossed obs N10(offset-0m)					
3466	06:10 OBS	crossed obs N9(offset-0m)					
3529	07:12 OBS	crossed obs N8(offset-0m)					
3606	08:40 OBS	crossed obs N7(offset-0m)					
3736	11:10 OBS	crossed obs N6(offset-0m)					
3869	13:59 OBS	crossed obs N3(offset-100m)					
4002	16:45 OBS	crossed obs N1(offset-0m)					
4121	19:01 LSP/LGSP	End of source only "obs" line.					
VESEL POSITION							
		SP	Latitude (N)				
FGSP	2264	20° 34.0863'	121° 40.9823'				
LGSP	4121	20° 33.9998'	119° 00.6926'				
NAVIGATION OFFSET APPLIET							
NRP - Stern	4.20m						
NRP - COS	193.70m						
NRP - CNG (na)	362.00m						
COS - CNG (na)	179.00m						
NRP - CMP (na)	283.20m						
Note: line parameter set to rhumb line.							
<table style="width:100%; border: none;"> <tr> <td style="width:50%; text-align: center;">P1</td> <td style="width:50%; text-align: center;">P2</td> </tr> <tr> <td style="text-align: center;">na</td> <td style="text-align: center;">na</td> </tr> </table>				P1	P2	na	na
P1	P2						
na	na						
Source only							
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:					
Falibuooy #1	na	Gun string #1 Gun string #2 Gun string #3 Gun string #4	good good good none				
		G114 - Not available after swapping out string 4 umbilical along with gps pod.					
		Taiger4.LMN source_6m.SCN(001) Langseth.RTCN					
		SP spacing: 150.0m					
		line status: obs portion complete					


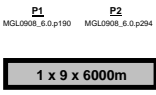
Seq# 003		Line Name: MGL0908_TST		NAVIGATION	DATE: 2009-06-28	
		Line Brg : 063 °		LINE LOGS	JULIAN DAY: 179	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908		
DC SOL : 1.0m DC EOL : -143.6m SMG SOL: 5.1 knots SMG EOL: 4.6 knots WEATHER WIND SOL: 4.4 knots WIND EOL: 9 knots SEAS SOL: 0.5m SEAS EOL: calm		DEPTH SOL : 1911.0m DEPTH EOL : 412.8m FEATHER SOL: -11.4 ° FEATHER EOL: .1 ° MAX FEATHER: -14.3 °		NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Pos MV GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°		
		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello				
		COMMENTS				
SP	EVENT			VESEL POSITION		
2717	12:31	FSP/FGSP	Start recording MCS data	SP	Latitude (N)	Longitude (E)
3113	14:39	depth	Start recording Depths	FGSP	2717	21° 51.5554'
3393	16:07	LSP/LGSP	End line d/t turn noise	LGSP	3393	21° 59.8322'
		Note: Seq number in the P2 and P1 should be changed to :		NAVIGATION OFFSET APPLIET		
				NRP - Stern	4.20m	
				NRP - COS	193.70m	
				NRP - CNG	362.00m	
				COS - CNG	179.00m	
				NRP - CMP	283.20m	
				Note: LMN line parameter set to great circle line.		
				P1 P2 MGL0908_TST.0.p190 MGL0908_TST.0.p294		
				1 x 9 x 6000m		
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN		
Fallbuoy #1	good	Gun string #1	good	SP spacing:	50.0m	recording length: 15sec
		Gun string #2	good	line status: Line complete		
		Gun string #3	good			
		Gun string #4	none			


Seq# 004		Line Name: MGL0908_1A		NAVIGATION	DATE: 2009-06-28	
		Line Brg : 243 °		LINE LOGS	JULIAN DAY: 179	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908		
DC SOL : 431.8m DC EOL : -20.3m SMG SOL: 4.5 knots SMG EOL: 5.6 knots WEATHER WIND SOL: 11 knots WIND EOL: 11.2 knots SEAS SOL: 0.3m SEAS EOL: 1.0m		DEPTH SOL : 548.0m DEPTH EOL : 2913.8m FEATHER SOL: -89.9 ° FEATHER EOL: -5.2 ° MAX FEATHER: -89.9 °		NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°		
		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello				
		COMMENTS				
UTC	SP	EVENT		VESEL POSITION		
17:40	957	F8P/F8SP	Start recording MCS data - Will use Source strings 1, 3, & 4 only - total sol volume 495	SP	Latitude (N)	Longitude (E)
22:49	1855	24mn	Start recording Hydrographical data (gravity, multibeam, knudson, magnetic	F8SP	957	22° 06.3246'
23:02	1900	Raps TB	No signal from tailbuo	LGSP	3402	21° 36.6574'
23:59	2092	J-Jay 179	Midnight position: 21 52.7197N 120 03.1245E	NAVIGATION OFFSET APPLIET		
01:21	2377	Raps TB	working again	NRP - Stern	4.20m	
05:23	3222	Source	Shut down guns d/t compressor switch over causing loss of air pressure	NRP - COS	193.70m	
05:25	3228	Source	Guns back on line.	NRP - CNG	362.00m	
06:16	3482	LSP/LGSP	End of line to begin redeployment of gun string 2	COS - CNG	179.00m	
				NRP - CMP	283.20m	
				Note: LMN line parameter set to great circle line.		
				P1 P2 MGL0908_1A.p190 MGL0908_1A.p204 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">1 x 9 x 6000m</div>		
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN/001 Langseth.RTCN		
Tailbuoy #1	Intermittent	Gun string #1 Gun string #2 Gun string #3 Gun string #4	good none good none	SP spacing: 50.0m recording length: 15sec		
				line status: Line complete		

Seq# 005		Line Name: MGL0908_2		NAVIGATION	DATE: 2009-06-29	
		Line Brg : 270 °		LINE LOGS	JULIAN DAY: 180	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908		
DC SOL : -13.6m DC EOL : -848.6m SMG SOL: 5.2 knots SMG EOL: 5.2 knots WEATHER WIND SOL: 9.9 knots WIND EOL: 7.8 knots SEAS SOL: 1.0m SEAS EOL: 1.0m		DEPTH SOL : 2820.2m DEPTH EOL : 2763.4m FEATHER SOL: -23.0 ° FEATHER EOL: -7.4 ° MAX FEATHER: -23.0 °		NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°		
		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello				
		COMMENTS				
UTC	SP	EVENT				
07:36	1220	FSP/FGSP	Start of line, source at full volume.			
16:02	1677	LSP/LGSP	EOL			
				VESSEL POSITION		
				SP	Latitude (N)	Longitude (E)
				FGSP	1220	21° 36.5970"
				LGSP	1677	21° 36.1407"
				NAVIGATION OFFSET APPLIED		
				NRP - Stern	4.20m	
				NRP - COS	193.70m	
				NRP - CNG	362.00m	
				COS - CNG	179.00m	
				NRP - CMP	283.20m	
				Note: LMN line parameter set to great circle line.		
				P1 P2 MGL0908_2.0.p190 MGL0908_2.0.p294		
				1 x 9 x 6000m		
				Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN		
				SP spacing: 50.0m recording length: 15sec		
				line status: Line complete		
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:				
Fallbuoy #1	intermittent	Gun string #1	good	G114 inoperable		
		Gun string #2	none	G112 inoperable		
		Gun string #3	good			
		Gun string #4	none			

Seq# 006		Line Name: MGL0908_3		NAVIGATION		DATE: 2009-06-29																																										
		Line Brg : 180 °		LINE LOGS		JULIAN DAY: 180																																										
CLIENT: National Science Foundation				SURVEY: Taiger4		MGL0908																																										
DC SOL : -737.4m		DEPTH SOL : 2749.0m		NAVIGATION SYSTEM USED: C-Nav - Primary																																												
DC EOL : -2027.1m		DEPTH EOL : 3016.0m		NAVIGATION SYSTEM USED: SeaPath 200																																												
SMG EOL: 5.2 knots		FEATHER SOL: -96.1 °		NAVIGATION SYSTEM USED: Posnet																																												
WEATHER		FEATHER EOL: 10.9 °		GRAVITY METER: BMG-II: used																																												
WIND SOL: 6.3 knots		MAX FEATHER: -96.1 °		MAGNETOMETER: GeoMetrics: used																																												
WIND EOL: 1.0 knots				MAG DEC USED : -3.12°																																												
SEAS SOL: 1.0m				04:00 - 16:00 utc => Mike Tatro, David Martinson																																												
SEAS EOL: 0.5m				16:00 - 04:00 utc => Ryan Eaton, Mike Martello																																												
				COMMENTS																																												
UTC	SP	EVENT																																														
10:04	1021	F8P/FGSP	Start of line.																																													
19:51	2617	Kgps	KO TB1																																													
20:15	2660	Rgps	TB1 ok now																																													
23:12	3092	estimate	estimate position d/t to nav sum																																													
23:59	3229	J-day180	midnight position: 20 36.23071N 119 09.00398																																													
05:04	4026	Source	Disable string 3 to retrieve for maintenance, KO G1R3 and G1T3																																													
06:35	4305	Source	CIU lockup on Digishot, no data recorded at shot 430																																													
06:40	4322	Source	Digishot back online, Syntrak recording data, FGSP, G1R3 & G1T3 un-KO'x																																													
07:11	4400	LSPLGSP	End of line.																																													
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Falibuooy #1	intermittent	Gun string #1	good	G1T4 inoperable																																												
		Gun string #2	none	G1T2 inoperable																																												
		Gun string #3	good																																													
		Gun string #4	none																																													

Seq# 008		Line Name: MGL0908_5A	NAVIGATION	DATE: 2009-07-01													
		Line Brg : 89.6 °	LINE LOGS	JULIAN DAY: 182													
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908													
DC SOL : -0.1m DC EOL : 521.1m SMG SOL : 4.3 knots SMG EOL : 4.7 knots		DEPTH SOL : 1117.0m DEPTH EOL : 5629.0m FEATHER SOL : 12.8 ° FEATHER EOL : 1.7 ° MAX FEATHER: 12.8 °		NAVIGATION SYSTEM USED: Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°													
WEATHER WIND SOL: 15.0 knots WIND EOL: 10.7 knots SEAS SOL: 1.0m SEAS EOL: 1.0m		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello															
UTC	SP	EVENT	COMMENTS														
13:35	1006	FSP	Spectra online														
13:36	1009	FGSP	Syntrak online and recording_start of line														
22:02	2470	cable noise	Turn noise dt strong currents														
23:59	2805	J day182	midnight position: 21 14.18232N 122 21.47653														
03:31	3408	multibeam	Stop multibeam for maintenance														
03:41	3434	multibeam	Restart multibeam														
10:48	4586	LSP/LGSP	End of line														
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1009 21° 14.0500'</td> <td>121° 29.5717'</td> </tr> <tr> <td>LGSP</td> <td>4586 21° 13.7607'</td> <td>121° 12.9440'</td> </tr> </tbody> </table>			VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1009 21° 14.0500'	121° 29.5717'	LGSP	4586 21° 13.7607'	121° 12.9440'
VESSEL POSITION																	
SP	Latitude (N)	Longitude (E)															
FGSP	1009 21° 14.0500'	121° 29.5717'															
LGSP	4586 21° 13.7607'	121° 12.9440'															
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">NAVIGATION OFFSET APPLIEE</th> </tr> </thead> <tbody> <tr> <td>NRP - Stern</td> <td>4.20m</td> </tr> <tr> <td>NRP - COS</td> <td>193.70m</td> </tr> <tr> <td>NRP - CNG</td> <td>362.00m</td> </tr> <tr> <td>COS - CNG</td> <td>179.00m</td> </tr> <tr> <td>NRP - CMP</td> <td>283.20m</td> </tr> </tbody> </table>			NAVIGATION OFFSET APPLIEE		NRP - Stern	4.20m	NRP - COS	193.70m	NRP - CNG	362.00m	COS - CNG	179.00m	NRP - CMP	283.20m
NAVIGATION OFFSET APPLIEE																	
NRP - Stern	4.20m																
NRP - COS	193.70m																
NRP - CNG	362.00m																
COS - CNG	179.00m																
NRP - CMP	283.20m																
Note: LMN line parameter set to great circle line.																	
																	
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN													
Tailbuoy #1	intermittent	Gun string #1	good	G1T4 inoperable													
		Gun string #2	none	G1T2 inoperable													
		Gun string #3	good														
		Gun string #4	none														
		SP spacing:	50.0m	recording length:	15sec												
		line status:	Line complete														


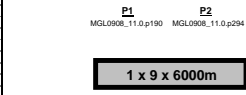
Seq# 009		Line Name: MGL0908_6	NAVIGATION	DATE: 2009-07-02	
		Line Brg : 180 °	LINE LOGS	JULIAN DAY: 183	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908	
DC SOL : 839.0m DC EOL : 683.0m SMG SOL: 4.7 knots SMG EOL: 5.5 knots WEATHER WIND SOL: 10.6 knots WIND EOL: 16.2 knots SEAS SOL: 1.0m SEAS EOL: 1.2m		DEPTH SOL : 5632.7m DEPTH EOL : 5523.7m FEATHER SOL: 90.0 ° FEATHER EOL: 2.5 ° MAX FEATHER: 90.0 °		NAVIGATION SYSTEM USED: Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°	
		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello			
UTC	SP	EVENT	COMMENTS		
10:51	1015	FSP/FGSP	Start of line		
11:09	1063	Source	Retrieve strings 1 & 2 for maintenance, acoustics and GPS KO'c		
13:31	1480	Source	Strings 1 & 2 deployed and firing, string 3 disabled and being retrieved for maintenance		
13:31	1481	Source	Acoustics and GPS re-enabled on strings 1 & 2, KO'd on string		
15:35	1841	Source	String 3 redeployed, acoustic and GPS re-enabled		
18:52	2453	LSPL/GSP	End of line		
			VESEL POSITION		
			SP	Latitude (N)	Longitude (E)
			FGSP	1015	21° 13.6666'
			LGSP	2453	20° 34.6961'
			NAVIGATION OFFSET APPLIEE		
			NRP - Stern	4.20m	
			NRP - COS	193.70m	
			NRP - CNG	362.00m	
			COS - CNG	179.00m	
			NRP - CMP	283.20m	
Note: LMN line parameter set to great circle line.					
					
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN	
Tailbuoy #1	good	Gun string #1	good	SP spacing: 50.0m recording length: 15sec	
		Gun string #2	none	line status: Line complete	
		Gun string #3	good		
		Gun string #4	none		
			G1T4 inoperable		
			G1T2 inoperable		

Seq# 010		Line Name: MGL0908_7		NAVIGATION		DATE: 2009-07-02					
		Line Brg : 270 °		LINE LOGS		JULIAN DAY: 183					
CLIENT: National Science Foundation				SURVEY: Taiger4		MGL0908					
DC SOL : 878.2m		DEPTH SOL : 5522.5m		NAVIGATION SYSTEM USED: C-Nav - Primary							
DC EOL : 162.5m		DEPTH EOL : 3668.7m		NAVIGATION SYSTEM USED: SeaPath 200							
SMG SOL: 5.6 knots		FEATHER SOL: 89.5 °		NAVIGATION SYSTEM USED: Posnet							
SMG EOL: 5.5 knots		FEATHER EOL: 20.2 °		GRAVITY METER: BMG-II: used							
WEATHER		MAX FEATHER: 89.5 °		MAGNETOMETER: GeoMetrics: used							
WIND SOL: 16.4 knots		04:00 – 16:00 utc => Mike Tatro, David Martinson				MAG DEC USED : -3.12°					
WIND EOL: 15 knots											
SEAS SOL: 1.3m		16:00 – 04:00 utc => Ryan Eaton, Mike Martello									
SEAS EOL: 1.5m											
UTC	SP	EVENT	COMMENTS								
18:55	1008	FSP/FGSP	Start of line								
19:08	1021	OBS	Crossing obs N34 (offset-512m)								
20:08	1085	OBS	Crossing obs N33 (offset-180m)								
21:11	1156	OBS	Crossing obs N32 (offset-120m)								
23:05	1284	OBS	Crossing obs N30 (offset-120m)								
23:59	1342	J day183	midnight position: LAT 20 34.0079N LONG 122 44.12577E								
00:07	1351	OBS	Crossing obs N29 (offset-120m)								
01:11	1417	OBS	Crossing obs N28 (offset-60m)								
02:23	1487	OBS	Crossing obs N27 (offset-90m)								
10:40	1916	Source	Retrieve string 3 to repair head float separation, GPS and acoustics KO'd								
12:34	2042	Source	String 3 deployed, GPS and acoustics online								
13:48	2123	G1R3	Lost rgps on string 3								
17:06	2348	speed	Exceed requested speed 5.5 max to shot 2366								
17:40	2388	LSP/LGSP	End of line								
				VESSEL POSITION							
				SP		Latitude (N)		Longitude (E)			
				FGSP 1008		20° 34.4780"		123° 12.9555"			
				LGSP 2388		20° 34.0901"		121° 13.8383"			
				NAVIGATION OFFSET APPLIED							
				NRP - Stern				4.20m			
				NRP - COS				193.70m			
				NRP - CNG				362.00m			
				COS - CNG				179.00m			
				NRP - CMP				283.20m			
				Note: LMN line parameter set to rhumb line.							
				P1		P2					
				MGL0908_7.0.p190		MGL0908_7.0.p294					
				1 x 9 x 6000m							
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN							
Tailbuoy #1	good	Gun string #1	good	G1T4 inoperable							
		Gun string #2	none	G1T2 inoperable							
		Gun string #3	good								
		Gun string #4	none								
				SP spacing: 150.0m		recording length: 18sec					
				line status:		Line complete					

Seq# 012		Line Name: MGL0908_9		NAVIGATION		DATE: 2009-07-04			
		Line Brg : 89.9 °		LINE LOGS		JULIAN DAY: 185			
CLIENT: National Science Foundation			SURVEY: Taiger4			MGL0908			
DC SOL : 1160.9m		DEPTH SOL : 2763.3m		NAVIGATION SYSTEM USED: Nav - Primary					
DG SOL : -508.8885.5		DEPTH EOL : 5384.3m		NAVIGATION SYSTEM USED: SeaPath 200					
SMG SOL : 5.2 knots		FEATHER SOL : 124.0 °		NAVIGATION SYSTEM USED: Posnet					
SMG EOL :		FEATHER EOL : 8.2 °		GRAVITY METER: BMG-II: used					
WEATHER		MAX FEATHER: 124.0 °		MAGNETOMETER: GeoMetrics: used					
WIND SOL: 3.8 knots				MAG DEC USED : -3.12°					
WIND EOL: 14.1 knots									
SEAS SOL: 1.5m		04:00 - 16:00 utc => Mike Tatro, David Martinson							
SEAS EOL: 0.0m		16:00 - 04:00 utc => Ryan Eaton, Mike Martello							
UTC	SP	EVENT	COMMENTS						
12:32	1049	FSP/FGSP	Start of line						
12:42	1057	Streamer	Dive streamer to 15 meters due to ship traffic not responding						
12:58	1075	Streamer	Streamer back at 9 meter depth						
13:21	1099	OBS	Crossed OBS T2 19						
14:54	1201	OBS	Crossed OBS T2 18 (offset-18m)						
16:29	1301	OBS	Crossed OBS T2 17 (offset-85m)						
17:55	1892	24nm	Stop recording hydrographic data						
18:06	1404	OBS	Crossed OBS T2 16 (offset-295m)						
19:13	1468	OBS	Crossed OBS T2 15 (offset-160m)						
20:35	1535	OBS	Crossed OBS T2 14 (offset-195m)						
21:49	1632	OBS	Crossed OBS T2 13 (offset-210m)						
22:55	1669	OBS	Crossed OBS T2 12 (offset-240m)						
22:57	1735	OBS	Crossed OBS T2 11 (offset-245m)						
23:59	1738	J day185	midnight position: 21 25.657N 121 06.1990						
00:31	1773	24nm	Start recording hydrographic data						
00:58	1802	OBS	Crossed OBS T2 10 (offset-255m)						
01:59	1868	OBS	Crossed OBS T2 9 (offset-295m)						
02:37	1910	cable noise	Turn noise caused by strong currents						
03:01	1935	OBS	Crossed OBS T2 8 (offset-290m)						
04:08	2003	OBS	Crossed OBS T2 7 (offset-326m)						
05:38	2103	OBS	Crossed OBS T2 6 (offset-367m)						
07:05	2203	OBS	Crossed OBS T2 5 (offset-398m)						
08:34	2303	OBS	Crossed OBS T2 4 (offset-421m)						
10:07	2403	OBS	Crossed OBS T2 3 (offset-477m)						
11:58	2503	OBS	Crossed OBS T2 2 (offset-438m)						
14:00	2601	OBS	Crossed OBS T2 1 (offset-520m)						
16:03	2699	OBS	Crossed OBS M01 (offset-365m)						
17:29	2765	OBS	Crossed OBS M02 (offset-295m)						
19:59	2835	OBS	Crossed OBS M03 (offset-420m)						
20:18	2899	OBS	Crossed OBS M04 (offset-275m)						
23:58	3064	J day186	midnight position: 21 24.9890N 122 01.30747						
01:08	3117	OBS	Crossed OBS M06 (offset-160m)						
02:29	3180	Bird19	Probably has fishing gear causing it to want to dive - cable noise						
08:09	3504	LSPL/GSP	End of line						
Posnet locations & remarks: good none intermittent			Acoustic remarks:			Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN			
Tailbuoy #1	good	Gun string #1	good	G1T4 inoperable		SP spacing: 150.0m recording length: 18sec.			
		Gun string #2	none	G1T2 inoperable		line status: Line complete			
		Gun string #3	none						
		Gun string #4	none						


VESSEL POSITION		
SP	Latitude (N)	Longitude (E)
FGSP	1049 21° 24.8493°	120° 06.3906°
LGSP	3504 21° 24.8093°	123° 39.5035°
NAVIGATION OFFSET APPLIEE		
NRP - Stern	4.20m	
NRP - COS	193.70m	
NRP - CNG	362.00m	
COS - CNG	179.00m	
NRP - CMP	283.20m	
Note: LMN line parameter set to great circle line.		
<p>P1 P2</p> <p>MGL0908_9.0.p190 MGL0908_9.0.p294</p>		
<div style="border: 1px solid black; padding: 5px; display: inline-block;">1 x 9 x 6000m</div>		

Seq# 013		Line Name: MGL0908_10		NAVIGATION		DATE: 2009-07-06														
		Line Brg : 31.1 °		LINE LOGS		JULIAN DAY: 187														
CLIENT: National Science Foundation				SURVEY: Taiger4		MGL0908														
DC SOL : -125.5m		DEPTH SOL : 5353.5m		NAVIGATION SYSTEM USED: C-Nav - Primary																
DC EOL : -126.4m		DEPTH EOL : 5614.7m		NAVIGATION SYSTEM USED: SeaPath 200																
SMG SOL : 5.5 knots		FEATHER SOL : -49.6 °		NAVIGATION SYSTEM USED: Posnet																
SMG EOL : 4.7 knots		FEATHER EOL : -0.4 °		GRAVITY METER: BMG-II: used																
WEATHER				MAX FEATHER: -49.6 °		MAGNETOMETER: GeoMetrics: used														
WIND SOL: 13.1 knots				MAG DEC USED : -3.12°																
WIND EOL: 1020 knots																				
SEAS SOL: 0.9m				04:00 - 16:00 utc => Mike Tatro, David Martinson																
SEAS EOL: 0.6m				16:00 - 04:00 utc => Ryan Eaton, Mike Martello																
UTL				COMMENTS																
08:12	1020	FSP/FGSP	Start of line, source at half volume, strings 3 & 4 being retrieved for maintenance																	
10:25	1448	Source	Strings 3 & 4 redployed																	
23:59	3653	J day 187	midnight position: 22 30.54890 N 124 22.43379																	
01:41	4154	LSPL/GSP	End of line																	
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1020</td> <td>21° 24.9561'</td> </tr> <tr> <td>LGSP</td> <td>4154</td> <td>22° 37.5459'</td> </tr> </tbody> </table>						VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1020	21° 24.9561'	LGSP	4154	22° 37.5459'
VESSEL POSITION																				
SP	Latitude (N)	Longitude (E)																		
FGSP	1020	21° 24.9561'																		
LGSP	4154	22° 37.5459'																		
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">NAVIGATION OFFSET APPLIEE</th> </tr> </thead> <tbody> <tr> <td>NRP - Stern</td> <td>4.20m</td> </tr> <tr> <td>NRP - COS</td> <td>193.70m</td> </tr> <tr> <td>NRP - CNG</td> <td>362.00m</td> </tr> <tr> <td>COS - CNG</td> <td>179.00m</td> </tr> <tr> <td>NRP - CMP</td> <td>283.20m</td> </tr> </tbody> </table>						NAVIGATION OFFSET APPLIEE		NRP - Stern	4.20m	NRP - COS	193.70m	NRP - CNG	362.00m	COS - CNG	179.00m	NRP - CMP	283.20m
NAVIGATION OFFSET APPLIEE																				
NRP - Stern	4.20m																			
NRP - COS	193.70m																			
NRP - CNG	362.00m																			
COS - CNG	179.00m																			
NRP - CMP	283.20m																			
Note: LMN line parameter set to great circle line.																				
<div style="display: flex; justify-content: space-around;"> P1 P2 </div> <div style="display: flex; justify-content: space-around; font-size: small;"> MGL0908_10.i.p190 MGL0908_10.i.p294 </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">1 x 9 x 6000m</div>																				
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:			Taiger4.LMN			2D_1x6.SCN(001)	Langseth.RTCN										
Tailbuoy #1	good	Gun string #1	good	G114 inoperable																
		Gun string #2	none	G112 inoperable																
		Gun string #3	none																	
		Gun string #4	none																	
				SP spacing: 50.0m		recording length: 15sec.														
				line status:		Line complete														


Seq# 014		Line Name: MGL0908_11	NAVIGATION	DATE: 2009-07-07													
		Line Brg : 000 °	LINE LOGS	JULIAN DAY: 188													
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908													
DC SOL : -7.7m	DEPTH SOL : 5885.7m	NAVIGATION SYSTEM USED: C-Nav - Primary															
DC EOL : 418.2m	DEPTH EOL : 2302.8m	NAVIGATION SYSTEM USED: SeaPath 200															
SMG SOL : 4.7 knots	FEATHER SOL : -23.3 °	NAVIGATION SYSTEM USED: Posnet															
SMG EOL : 5.0 knots	FEATHER EOL : 17.4 °	GRAVITY METER: BMG-II: used															
WEATHER	MAX FEATHER: -23.3 °	MAGNETOMETER: GeoMetrics: used															
WIND SOL: 11 knots		MAG DEC USED : -3.12°															
WIND EOL: 9.9 knots																	
SEAS SOL: 0.5m	04:00 - 16:00 utc => Mike Tatro, David Martinson																
SEAS EOL: 0.3m	16:00 - 04:00 utc => Ryan Eaton, Mike Martello																
UTC		SP	EVENT	COMMENTS													
01:54	1041	FSP/FGSP	Start of line														
19:35	4040	LSP/LGSP	End of line														
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1041 22° 38.5837'</td> <td>124° 26.9955'</td> </tr> <tr> <td>LGSP</td> <td>4040 23° 59.8216'</td> <td>124° 27.2466'</td> </tr> </tbody> </table>			VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1041 22° 38.5837'	124° 26.9955'	LGSP	4040 23° 59.8216'	124° 27.2466'
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Note: LMN line parameter set to great circle line.																	
																	
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN													
Tailbuoy #1	good	Gun string #1	good	G1T4 inoperable													
		Gun string #2	none	G1T2 inoperable													
		Gun string #3	none														
		Gun string #4	none														
		SP spacing:	50.0m	recording length:	15sec.												
		line status: Line complete															


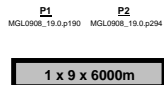
Line Name: MGL0908_13		NAVIGATION		DATE: 2009-07-08																															
Line Brg : 180 °		LINE LOGS		JULIAN DAY: 189																															
Seq# 016		SURVEY: Taiger4		MGL0908																															
CLIENT: National Science Foundation																																			
DC SOL : 737.9m		DEPTH SOL : 1196.6m		NAVIGATION SYSTEM USED: Nav - Primary																															
DC EOL : 116.3m		DEPTH EOL : 4998.3m		NAVIGATION SYSTEM USED: SeaPath 200																															
SMG SOL: 4.9 knots		FEATHER SOL: 99.0 °		NAVIGATION SYSTEM USED: Posnet																															
SMG EOL: 4.7 knots		FEATHER EOL: -5.5 °		GRAVITY METER: BMG-II: used																															
WEATHER		MAX FEATHER: 99.0 °		MAGNETOMETER: GeoMetrics: used																															
WIND SOL: 16.4 knots				MAG DEC USED : -3.12°																															
WIND EOL: 2692 knots																																			
SEAS SOL: 1.0m		04:00 - 16:00 utc => Mike Tatro, David Martinson																																	
SEAS EOL: 39874.0m		16:00 - 04:00 utc => Ryan Eaton, Mike Martello																																	
UTC		SP		EVENT																															
				COMMENTS																															
07:51	1051	FSP/FGSP	Start of line																																
19:17	2662	estimate	Do estimate position on the main network resulting in 35m jump to line																																
19:25	2617	estimate	Do estimate position on the ncc network resulting in 25m jump to line																																
21:27	2854	estimate	Do estimate position on the ncc network resulting in 60m jump to line																																
23:59	3162	J day189	midnight position: 23 28.46684N 125 29.85302																																
02:44	3491	estimate	Do estimate position on the main network resulting in 50m jump to line																																
03:43	3612	estimate	Do estimate position on the main network resulting in 25m jump to line																																
03:46	3619	auto-gps	turn on then off																																
03:48	3624	estimate	Do estimate position on the main network resulting in 30m jump to line																																
05:02	3762	estimate	Do estimate position on the main network resulting in 54m jump to line																																
05:20	3823	estimate	Do estimate position on the main network resulting in 48m jump to line																																
07:18	4114	estimate	Do estimate position on the main network resulting in 38m jump to line																																
09:24	4435	estimate	Do estimate position on the main network resulting in 46m jump to line																																
10:16	4561	estimate	Do estimate position on the main network resulting in 28m jump to line																																
10:17	4565	Tailbuoy	Tailbuoy stopped working, KO'																																
11:19	4710	estimate	Do estimate position on the main network resulting in 20m jump to line																																
14:33	5157	estimate	Do estimate position on the main network resulting in 25m jump to line																																
15:09	5191	estimate	Do estimate position on the main network resulting in 16m jump to line																																
15:48	5269	estimate	Do estimate position on the main network resulting in 12m jump to line																																
16:22	5342	estimate	Do estimate position on the ncc dft bad adjust on V1G3 lon did not help																																
17:33	5495	estimate	Do estimate position on the main network resulting in 16m jump to line																																
18:24	5606	estimate	Do estimate position on the main network resulting in 50m jump to line																																
19:42	5779	estimate	Do estimate position on the main network resulting in 25m jump to line																																
20:05	5831	estimate	Do estimate position on the main network resulting in 13m jump to line																																
21:55	6092	estimate	Do estimate position on the main network resulting in 45m jump to line																																
22:07	6125	LSPLGSP	end of line																																
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">VESSEL POSITION</td> </tr> <tr> <td style="text-align: center;">SP</td> <td style="text-align: center;">Latitude (N)</td> <td style="text-align: center;">Longitude (E)</td> </tr> <tr> <td style="text-align: center;">FGSP</td> <td style="text-align: center;">1051 24° 25.6450'</td> <td style="text-align: center;">125° 29.3110'</td> </tr> <tr> <td style="text-align: center;">LGSP</td> <td style="text-align: center;">6125 22° 08.1991'</td> <td style="text-align: center;">125° 29.9394'</td> </tr> <tr> <td colspan="3" style="text-align: center;">NAVIGATION OFFSET APPLIEE</td> </tr> <tr> <td style="text-align: center;">NRP - Stern</td> <td colspan="2" style="text-align: right;">4.20m</td> </tr> <tr> <td style="text-align: center;">NRP - COS</td> <td colspan="2" style="text-align: right;">193.70m</td> </tr> <tr> <td style="text-align: center;">NRP - CNG</td> <td colspan="2" style="text-align: right;">362.00m</td> </tr> <tr> <td style="text-align: center;">COS - CNG</td> <td colspan="2" style="text-align: right;">179.00m</td> </tr> <tr> <td style="text-align: center;">NRP - CMP</td> <td colspan="2" style="text-align: right;">283.20m</td> </tr> </table>						VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1051 24° 25.6450'	125° 29.3110'	LGSP	6125 22° 08.1991'	125° 29.9394'	NAVIGATION OFFSET APPLIEE			NRP - Stern	4.20m		NRP - COS	193.70m		NRP - CNG	362.00m		COS - CNG	179.00m		NRP - CMP	283.20m	
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MGL0908_13.0.p190	MGL0908_13.0.p294																																		
1 x 9 x 6000m																																			
Posnet locations & remarks: good none intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN																															
Tailbuoy #1	good	Gun string #1	good	G1T4 inoperable																															
		Gun string #2	none	G1T2 inoperable																															
		Gun string #3	none																																
		Gun string #4	none																																
line status:		Line complete																																	

Seq# 017		Line Name: MGL0908_14		NAVIGATION		DATE: 2009-07-09																
		Line Brg : 210 °		LINE LOGS		JULIAN DAY: 190																
CLIENT: National Science Foundation				SURVEY: Taiger4		MGL0908																
DC SOL : 18.4m		DEPTH SOL : 5004.8m		NAVIGATION SYSTEM USED:C-Nav - Primary																		
DC EOL : 290.7m		DEPTH EOL : 5761.6m		NAVIGATION SYSTEM USED:SeaPath 200																		
SMG SOL : 4.1 knots		FEATHER SOL : *		NAVIGATION SYSTEM USED:Posnet																		
SMG EOL : 4.0 knots		FEATHER EOL: 0.6 *		GRAVITY METER: BMG-II: used																		
WEATHER		MAX FEATHER:		MAGNETOMETER: GeoMetrics: used																		
WIND SOL: 25 knots				MAG DEC USED : -3.12°																		
WIND EOL: 15 knots																						
SEAS SOL: 2.5m		04:00 - 16:00 utc => Mike Tatro, David Martinson																				
SEAS EOL: 25.0m		16:00 - 04:00 utc => Ryan Eaton, Mike Martello																				
UTC	SP	EVENT	COMMENTS																			
22:28	1060	FSP/FGSP	Start of line using source stings 1, 3, 4 total volume 5310 cu li																			
23:01	1146	estimate	Do estimate position on the main network resulting in 105m jump to line																			
23:59	1303	J day190	midnight position: 22 01.14516N 125 25.56883																			
00:18	1353	source	String 3 Gun 5 now responding, new volume 5490 ci																			
00:54	1457	G1T2	String 2 umbilical has leak, KO'ed acoustic pod																			
21:39	4955	LSPLGSP	End of line																			
			<table border="1"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th></th> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1060</td> <td>22° 06.8316'</td> <td>125° 29.1291'</td> </tr> <tr> <td>LGSP</td> <td>4955</td> <td>20° 35.7324'</td> <td>124° 32.2542'</td> </tr> </tbody> </table>					VESSEL POSITION				SP	Latitude (N)	Longitude (E)	FGSP	1060	22° 06.8316'	125° 29.1291'	LGSP	4955	20° 35.7324'	124° 32.2542'
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NRP - CMP	283.20m																					
							Note: LMN line parameter set to great circle line.															
							<p>P1 P2</p> <p>MGL0908_14.o.p190 MGL0908_14.o.p294</p> <p>1 x 9 x 6000m</p>															
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:				Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN															
Tailbuoy #1	none	Gun string #1	good	G1T4 inoperable		SP spacing: 50.0m	recording length: 15sec.															
		Gun string #2	none	G1T2 inoperable		line status: Line complete																
		Gun string #3	none																			
		Gun string #4	none																			

Seq# 018		Line Name: MGL0908_15	NAVIGATION	DATE: 2009-07-10													
		Line Brg : 270 °	LINE LOGS	JULIAN DAY: 191													
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908													
DC SOL : 350.8m DC EOL : 407.1m SMG SOL : 4.2 knots SMG EOL : 5.0 knots WEATHER WIND SOL : 14.1 knots WIND EOL : 19.4 knots SEAS SOL : 2.3m SEAS EOL : 2.5m		DEPTH SOL : 5764.7m DEPTH EOL : 5579.5m FEATHER SOL : 59.9 ° FEATHER EOL : 1.0 ° MAX FEATHER: 59.9 °		NAVIGATION SYSTEM USED: Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°													
		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello															
		COMMENTS															
UTC	SP	EVENT															
21:42	1006	FSP	Start of line using source stings 3; 4 total ovolume 3660 cu ir														
21:42	1007	FGSP	First good shotpoint														
22:01	1054	G1R1	KO'ed - string on board for maintenance - Not worked since														
22:02	1056	G1T1	KO'ed - string on board for maintenance														
23:10	1216	G1R1 / G1T1	Back in position/in solution														
23:27	1253	source	string 1 back in solution total volume now 4950cu ir														
23:59	1329	J day191	midnight position: 20 35.47173N, 124 22.84112														
00:21	1380	G1R1	KO'ed -not working														
04:26	2039	LSP/LGSP	End of line														
			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <td></td> <td>SP</td> <td>Latitude (N) Longitude (E)</td> </tr> <tr> <td>FGSP</td> <td>1007</td> <td>20° 35.6504' 124° 32.1079'</td> </tr> <tr> <td>LGSP</td> <td>2039</td> <td>20° 35.6838' 124° 02.4098'</td> </tr> </table>			VESSEL POSITION				SP	Latitude (N) Longitude (E)	FGSP	1007	20° 35.6504' 124° 32.1079'	LGSP	2039	20° 35.6838' 124° 02.4098'
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P1	P2																
MGL0908_15.0.p190	MGL0908_15.0.p294																
			<div style="border: 1px solid black; padding: 5px; display: inline-block;">1 x 9 x 6000m</div>														
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001, Langseth.RTCN													
Tailbuoy #1	none	Gun string #1	good	SP spacing: 50.0m recording length: 15sec.													
		Gun string #2	none	line status: Line complete													
		Gun string #3	none														
		Gun string #4	none														
			G1T4 inoperable														
			G1T2 inoperable														

Line Name: MGL0908_16		NAVIGATION		DATE: 2009-07-11	
Line Brg : 031 °		LINE LOGS		JULIAN DAY: 192	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908	
DC SOL : -7.6m DC EOL : 451.6m SMG SOL : 4.4 knots SMG EOL : 5.0 knots WEATHER WIND SOL : 20.7 knots WIND EOL : 30.0 knots SEAS SOL : 2.5m SEAS EOL : 4.5m		DEPTH SOL : 5605.9m DEPTH EOL : 6257.7m FEATHER SOL : 82.9 ° FEATHER EOL : -15.9 ° MAX FEATHER : 82.9 °		NAVIGATION SYSTEM USED: Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°	
		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello			
		COMMENTS			
UTC	SP	EVENT	COMMENTS	VESSEL POSITION	
04:53	1097	FSP/FGSP	Start of line using source stings 1, 3, 4 total volume 5310 cu li	SP	Latitude (N)
09:39	1906	Source	String 2 redeployed, volume 6380, RGPS1 and RGPS2 active	1097	20° 37.674'
23:59	4414	J day 192	midnight position: 21 54.05195N 124 52.22670	8110	23° 18.6932'
00:31	4494	nav drift	Nav position drift to sp 4502	NAVIGATION OFFSET APPLIEE	
00:48	4535	estimate	Do estimate position on the main network resulting in 40m jump to line	NRP - Stern	4.20m
00:53	4548	estimate	Do estimate position on the main network resulting in 25m jump to line	NRP - COS	193.70m
00:57	4558	estimate	Do estimate position on the all network resulting in 20m jump to line	NRP - CNG	362.00m
01:17	4604	estimate	Do estimate position on the main network resulting in 30m jump to line	COS - CNG	179.00m
01:46	4670	estimate	Do estimate position on the main network resulting in 90m jump to line	NRP - CMP	283.20m
02:05	4715	estimate	Do estimate position on the all network resulting in 20m jump to line	Note: LMN line parameter set to great circle line.	
02:17	4742	estimate	Do estimate position on the all network resulting in 20m jump to line		
02:40	4797	estimate	Do estimate position on the all network resulting in 20m jump to line		
02:47	4814	estimate	Do estimate position on the all network resulting in 25m jump to line		
02:50	4822	estimate	Do estimate position on the all network resulting in 10m jump to line		
02:54	4829	estimate	Do estimate position on the all network resulting in 15m jump to line		
02:56	4834	estimate	Do estimate position on the all network resulting in 15m jump to line		
03:09	4866	estimate	Do estimate position on the all network resulting in 50m jump to line		
07:14	5447	TB	Tailbuoy operational		
21:49	8110	LSPLGSP	end of line		
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:	P1 P2 MGL0908_16.0.p190 MGL0908_16.0.p294	
Tailbuoy #1	none	Gun string #1	good	<div style="border: 1px solid black; padding: 5px; display: inline-block;">1 x 9 x 6000m</div>	
		Gun string #2	good	Taiger4 LMN 2D_1X6:SCN(001) Langseth:RTCN SP spacing: 50.0m recording length: 15sec.	
		Gun string #3	none		
		Gun string #4	none		
				line status: Line complete	

Line Name: MGL0908_17		NAVIGATION		DATE: 2009-07-12																															
Seq# 020		LINE LOGS		JULIAN DAY: 193																															
Line Brg : 111 °																																			
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908																															
DC SOL : 778.5m DC EOL : 469.4m SMG SOL: 4.6 knots SMG EOL: 4.7 knots WEATHER WIND SOL: 30 knots WIND EOL: 17.3 knots SEAS SOL: 4.0m SEAS EOL: 3.0m		DEPTH SOL : 6291.8m DEPTH EOL : 5803.1m FEATHER SOL: 61.1 ° FEATHER EOL: 9.7 ° MAX FEATHER: 61.1 °		NAVIGATION SYSTEM USED: Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°																															
		04:00 - 16:00 utc => Mike Tatro, David Martinson																																	
		16:00 - 04:00 utc => Ryan Eaton, Mike Martello																																	
		COMMENTS																																	
UTC	SP	EVENT																																	
21:51	1010	FSP/FGSP	Start of line																																
22:09	1046	source	Using string 3 & 4 only, doing maintenance on 2 and possibly																																
22:20	1070	Strings 1&2	KO' rpgs & acoustics while in recovery																																
22:38	1110	strm depth	set streamer to 15m																																
22:42	1118	Strings 1&2	on board for maintenance																																
23:59	1275	J day 193	Midnight position: 23 16.57403N 125 57.39891W																																
00:02	1280	Strings 1&2	Back in position, Rpgs/acoustics back in solution																																
05:12	1945	SeaPath200	SeaPath200 lost GPS1 and caused a 5km position jump in Spectra, shotpoints incremented by 44 sho																																
05:14	1950	Spectra	Spectra RTNu1 reset, SeaPath disabled, shotpoints now normal, shot predict on target																																
05:51	2041	source	Retrieve string 2 for comms problem, new volume 4910, GPS and acoustics disable																																
08:20	2430	source	String 4 deployed and operational, new volume 6380, GPS and acoustics enable																																
08:28	2452	source	String 3 & 4 being retrieved for maintenance, new volume 3300																																
11:29	2939	LSPL/GSP	End of line																																
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Posnet locations & remarks: good - none - intermittent Tailbuoy #1 good		Gun string #1 good Gun string #2 good Gun string #3 none Gun string #4 none		Acoustic remarks: G114 inoperable																															
		Taiger4.LMN		2D_1X6.SCN(001) Langseth.RTCN																															
		SP spacing: 50.0m		recording length: 15sec.																															
		line status:		Line complete																															


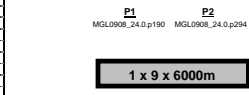
Seq# 022		Line Name: MGL0908_19	NAVIGATION	DATE: 2009-07-14													
		Line Brg : 200 °	LINE LOGS	JULIAN DAY: 195													
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908													
DC SOL : -289.3m DC EOL : 20.7m SMG SOL : 4.4 SMG EOL : 4.2 knots		DEPTH SOL : 1408.3m DEPTH EOL : 3980.8m FEATHER SOL : -89.6 ° FEATHER EOL : -5.3 ° MAX FEATHER : -89.6 °		NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: used MAG DEC USED : -3.12°													
WEATHER WIND SOL: 10 knots WIND EOL: 13.3 knots SEAS SOL: 2.8m SEAS EOL: 1.2m		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello															
UTC	SP	EVENT	COMMENTS														
11:44	1102	FSP/FGSP	Start of line - start volume with strings 1 & 2 - 3120cu in														
14:14	1512	source	strings 3 & 4 enabled - total volume 6420 cu in														
23:59	3031	J day195	midnight position: 23 37.87904N 125 30.52321E														
00:12	3064	LSP/LGSP	End of line														
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1102 24° 27.0702'</td> <td>125° 49.4991'</td> </tr> <tr> <td>LGSP</td> <td>3064 23° 37.0389'</td> <td>125° 29.9912'</td> </tr> </tbody> </table>			VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1102 24° 27.0702'	125° 49.4991'	LGSP	3064 23° 37.0389'	125° 29.9912'
VESSEL POSITION																	
SP	Latitude (N)	Longitude (E)															
FGSP	1102 24° 27.0702'	125° 49.4991'															
LGSP	3064 23° 37.0389'	125° 29.9912'															
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">NAVIGATION OFFSET APPLIEE</th> </tr> </thead> <tbody> <tr> <td>NRP - Stern</td> <td>4.20m</td> </tr> <tr> <td>NRP - COS</td> <td>193.70m</td> </tr> <tr> <td>NRP - CNG</td> <td>362.00m</td> </tr> <tr> <td>COS - CNG</td> <td>179.00m</td> </tr> <tr> <td>NRP - CMP</td> <td>283.20m</td> </tr> </tbody> </table>			NAVIGATION OFFSET APPLIEE		NRP - Stern	4.20m	NRP - COS	193.70m	NRP - CNG	362.00m	COS - CNG	179.00m	NRP - CMP	283.20m
NAVIGATION OFFSET APPLIEE																	
NRP - Stern	4.20m																
NRP - COS	193.70m																
NRP - CNG	362.00m																
COS - CNG	179.00m																
NRP - CMP	283.20m																
			Note: LMN line parameter set to great circle line.														
																	
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN													
Tailbuoy #1	good	Gun string #1	good	SP spacing: 50.0m recording length: 15sec.													
		Gun string #2	good	line status: Line complete													
		Gun string #3	none														
		Gun string #4	none														


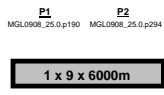
Seq# 026		Line Name: MGL0908_32	NAVIGATION	DATE: 2009-07-16	
		Line Brg : 174.1 °	LINE LOGS	JULIAN DAY: 197	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908	
DC SOL : -22.5m	DEPTH SOL : 5854.0m	NAVIGATION SYSTEM USED: Nav - Primary			
DC EOL : -945.1m	DEPTH EOL : 5674.2m	NAVIGATION SYSTEM USED: SeaPath 200			
SMG SOL : 4.1 knots	FEATHER SOL : 26.4 °	NAVIGATION SYSTEM USED: Posnet			
SMG EOL : 3.3 knots	FEATHER EOL : 4.2 °	GRAVITY METER: BMG-II: used			
WEATHER	MAX FEATHER: 26.4 °	MAGNETOMETER: GeoMetrics: N/A			
WIND SOL: 13.9 knots		MAG DEC USED : -3.12°			
WIND EOL: 34.1 knots					
SEAS SOL: 2.0m	04:00 - 16:00 utc => Mike Tatro, David Martinson				
SEAS EOL: 3 - 4m	16:00 - 04:00 utc => Ryan Eaton, Mike Martello				
UTC	SP	EVENT	COMMENTS		
09:21	1010	FSP/FGSP	Start of line		
11:22	1348	Streamer	Streamer at 10m		
11:55	1428	Streamer	Streamer at 12m		
14:46	1821	Streamer	Streamer at 15m		
18:01	2250	LSP/LGSP	End of line		
			VESSEL POSITION		
			SP	Latitude (N)	Longitude (E)
			FGSP	1010	22° 48.2970"
			LGSP	2250	22° 16.0804"
			NAVIGATION OFFSET APPLIEE		
			NRP - Stern	4.20m	
			NRP - COS	193.70m	
			NRP - CNG	362.00m	
			COS - CNG	179.00m	
			NRP - CMP	283.20m	
Note: LMN line parameter set to great circle line.					
<div style="display: flex; justify-content: space-around;"> P1 P2 </div> <div style="display: flex; justify-content: space-around; font-size: small;"> MGL0908_32.p190 MGL0908_32.p294 </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> 1 x 9 x 6000m </div>					
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:		
Tailbuoy #1	good	Gun string #1	good	G114 inoperable	
		Gun string #2	good		
		Gun string #3	none		
		Gun string #4	none		
			Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN		
			SP spacing:	50.0m	recording length: 15sec.
line status:			Line complete		

Line Name: MGL0908_20A		NAVIGATION		DATE: 2009-07-16	
Seq# 027		Line Brg : 211.6 °		JULIAN DAY: 197	
CLIENT: National Science Foundation		SURVEY: Taiger4		MGL0908	
DC SOL : -568.7m		DEPTH SOL : 5669.1m		NAVIGATION SYSTEM USED: Nav - Primary	
DC EOL : 11.0m		DEPTH EOL : 5723.5m		NAVIGATION SYSTEM USED: SeaPath 200	
SMG SOL : 3.4 knots		FEATHER SOL : 41.3 °		NAVIGATION SYSTEM USED: Posnet	
SMG EOL : 2.9 knots		MAX FEATHER : 41.3 °		GRAVITY METER: BMG-II: used	
WEATHER				MAGNETOMETER: GeoMetrics: N/A	
WIND SOL : 21.1 knots				MAG DEC USED : -3.12°	
WIND EOL : 40 knots					
SEAS SOL : 3 - 4m		04:00 - 16:00 utc => Mike Tatro, David Martinson			
SEAS EOL : 3 - 5m		16:00 - 04:00 utc => Ryan Eaton, Mike Martello			
		COMMENTS			
UTC	SP	EVENT			
18:03	2751	FSP/FGSP	Start of line - Offset 800m different from bridge dT incorrect coordinates.		
18:10	2759	OBS	Crossed obs5 - 800m offset		
19:12	2833	cable trim	change from 15m to 12m		
20:18	2912	OBS	Crossed obs6 - 103m offset		
20:26	2921	cable trim	change from 12m to 10m		
22:39	3062	OBS	Crossed obs7 - 163m offset		
23:51	3129	rgps	less signal from string.		
23:59	3136	J bday197	midnight position: 21 58.2798N 124 25.0194O		
01:17	3209	OBS	Crossed obs8 - 145m offset		
03:27	3331	source	strings 3 & 4 shut down		
03:35	3338	source	strings 3 & 4 back in solution		
03:54	3355	OBS	crossed obs 9 - 70m offset		
06:42	3506	OBS	Crossed obs10 - 156m offset		
06:47	3511	LSP/LGSP	End of line due to weather		
			VESEL POSITION		
			SP	Latitude (N)	Longitude (E)
			FGSP	2751	22° 15.9573'
			LGSP	3511	21° 40.8861'
			NAVIGATION OFFSET APPLIEE		
			NRP - Stern	4.20m	
			NRP - COS	193.70m	
			NRP - CNG	362.00m	
			COS - CNG	179.00m	
			NRP - CMP	283.20m	
Note: LMN line parameter set to great circle line.					
<div style="display: flex; justify-content: space-around;"> P1 P2 </div> <div style="display: flex; justify-content: space-around; font-size: small;"> MGL0908_20A.0.p190 MGL0908_20A.0.p204 </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">1 x 9 x 6000m</div>					
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:		
Tailbuoy #1	good	Gun string #1	good	G114 inoperable	
		Gun string #2	good		
		Gun string #3	none		
		Gun string #4	none		
			Taiger4.LMN 2D_1X6.SCN(001) Langseth.RTCN		
			SP spacing:	100.0m	recording length: 15sec.
			line status:	Line Incomplete	

Line Name: MGL0908_20B		NAVIGATION		DATE: 2009-07-18											
Seq# 028		LINE LOGS		JULIAN DAY: 199											
Line Brg : 211.6 °		SURVEY: Taiger4		MGL0908											
CLIENT: National Science Foundation															
DC SOL : 1.2m		DEPTH SOL : 5734.9m		NAVIGATION SYSTEM USED: Nav - Primary											
DC EOL : 506.2m		DEPTH EOL : 4370.2m		NAVIGATION SYSTEM USED: SeaPath 200											
SMG SOL : 3.5 knots		FEATHER SOL : -0.8 °		NAVIGATION SYSTEM USED: Posnet											
SMG EOL : 3.9 knots		FEATHER EOL : -16.1 °		GRAVITY METER: BMG-II: used											
WEATHER		MAX FEATHER: 21.2 °		MAGNETOMETER: GeoMetrics: N/A											
WIND SOL: 28.4 knots				MAG DEC USED : -3.12°											
WIND EOL: 7.6 knots															
SEAS SOL: 2 ~ 3m		04:00 - 16:00 utc => Mike Tatro, David Martinson													
SEAS EOL: 1.0m		16:00 - 04:00 utc => Ryan Eaton, Mike Martello													
COMMENTS															
UTC	SP	EVENT													
14:48	3336	FSP/FGSP	Start of line, streamer at 12m, only strings 1, 2, & 4 operational, volume = 41C												
15:05	3356	OBS	Crossing OBS9, offset - 68m												
17:18	3596	OBS	Crossing OBS10, offset - 168m												
19:21	3655	OBS	Crossing OBS11, offset - 3m												
21:22	3809	OBS	Crossing OBS12, offset - 290m												
22:20	3882	cable trim	Raise streamer to 10m												
23:22	3956	OBS	Crossing OBS13, offset - 130m												
23:59	3998	J day199	midnight position: 21 18.27984N 123 59.21997W												
01:23	4103	OBS	Crossing OBS14, offset - 7m												
03:27	4254	OBS	Crossing OBS15, offset - 37m												
05:31	4400	OBS	Crossing OBS16, offset - 20m												
07:42	4554	OBS	Crossing OBS17, offset - 87m												
09:47	4704	OBS	Crossing OBS18, offset - 240m												
11:49	4853	OBS	Crossing OBS19, offset - 23m												
13:41	5001	OBS	Crossing OBS20, offset - 140m												
15:28	5148	OBS	Crossing OBS21, offset - 50m												
17:15	5301	OBS	Crossing OBS22, offset - 107m												
17:02	5450	OBS	Crossing OBS23, offset - 40m												
20:52	5600	OBS	Crossing OBS24, offset - 102m												
22:41	5750	OBS	Crossing OBS25, offset - 11m												
23:59	5858	J day200	midnight position: 19 51.74670N, 123 04.31363W												
00:31	5902	OBS	Crossing OBS26, offset - 179m												
02:27	6052	OBS	Crossing OBS27, offset - 114m												
04:32	6200	OBS	Crossing OBS28, offset - 82 m												
06:38	6486	LSP/LGSP	End of line												
NAVIGATION OFFSET APPLIEE															
VESSEL POSITION															
	SP	Latitude (N)	Longitude (E)												
FGSP	3336	21° 49.0010"	124° 19.0188"												
LGSP	6486	19° 22.5965"	122° 45.7655"												
<table style="width:100%; border-collapse: collapse;"> <tr> <td>NRP - Stern</td> <td>4.20m</td> </tr> <tr> <td>NRP - COS</td> <td>193.70m</td> </tr> <tr> <td>NRP - CNG</td> <td>362.00m</td> </tr> <tr> <td>COS - CNG</td> <td>179.00m</td> </tr> <tr> <td>NRP - CMP</td> <td>283.20m</td> </tr> </table>						NRP - Stern	4.20m	NRP - COS	193.70m	NRP - CNG	362.00m	COS - CNG	179.00m	NRP - CMP	283.20m
NRP - Stern	4.20m														
NRP - COS	193.70m														
NRP - CNG	362.00m														
COS - CNG	179.00m														
NRP - CMP	283.20m														
Note: LMN line parameter set to great circle line.															
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1 x 9 x 6000m </div>															
Posnet locations & remarks: good, none, intermittent		Acoustic remarks:		Taiger4.LMN 2D_1X6.SCN(001, Langseth.RTCN											
Tailbuoy #1	good	Gun string #1	good	SP spacing:	100.0m recording length: 15sec.										
		Gun string #2	n/a	line status: Line complete											
		Gun string #3	n/a												
		Gun string #4	good												
				G1T3 inoperative											

Seq# 031		Line Name: MGL0908_23		NAVIGATION		DATE: 2009-07-22	
		Line Brg : 110 °		LINE LOGS		JULIAN DAY: 123	
CLIENT: National Science Foundation		SURVEY: Talger4		MGL0908			
DC SOL : -1276.1m	DEPTH SOL : 3449.6m	NAVIGATION SYSTEM USED: C-Nav - Primary					
DC EOL : 284.4m	DEPTH EOL : 1426.3m	NAVIGATION SYSTEM USED: SeaPath 200					
SMG SOL: 4.6 knots	FEATHER SOL: -98.3 °	NAVIGATION SYSTEM USED: Posnet					
SMG EOL: 4.8 knots	FEATHER EOL: 1.6 °	GRAVITY METER: BMG-II: used					
WEATHER	MAX FEATHER: -98.3 °	MAGNETOMETER: GeoMetrics: N/A					
WIND SOL: 13.4 knots		MAG DEC USED : -3.12°					
WIND EOL: 17.7 knots							
SEAS SOL: 1.2m		04:00 - 16:00 utc => Mike Tatro, David Martinson					
SEAS EOL: 1.5m		16:00 - 04:00 utc => Ryan Eaton, Mike Martello					
UTC		SP		EVENT		COMMENTS	
00:06	1340	FSP		Start of line, streamer at 9m, only strings 1, 2 & 4 operational, volume = 549			
00:07	1342	FGSP		First good sp			
10:35	3161	rGPS		String 2 GPS back online			
17:38	4515	LSP/LGSP		End of line			
						VESEL POSITION	
						Latitude (N)	
						Longitude (E)	
		FGSP		1342		19° 47.2342'	
		LGSP		4515		19° 16.7039'	
						121° 04.1981'	
						NAVIGATION OFFSET APPLIIE	
		NRP - Stern				4.20m	
		NRP - COS				193.70m	
		NRP - CNG				362.00m	
		COS - CNG				179.00m	
		NRP - CMP				283.20m	
						Note: LMN line parameter set to great circle line.	
						P1 P2	
						MGL0908_23.p190 MGL0908_23.p294	
						1 x 9 x 6000m	
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Talger4.LMN		2D_1X6.SCN 001 Langseth.RTCN	
Faibuooy #1	good	Gun string #1	good	SP spacing: 50.0m		recording length: 15sec	
		Gun string #2	n/a	line status: Line complete			
		Gun string #3	n/a				
		Gun string #4	good				
		G1T3 inoperative					

Seq# 032		Line Name: MGL0908_24	NAVIGATION	DATE: 2009-07-22	
		Line Brg : 178 °	LINE LOGS	JULIAN DAY: 203	
CLIENT: National Science Foundation		SURVEY: Talger4		MGL0908	
DC SOL : 441.0m DC EOL : 1265.4m SMG SOL: 4.7 knots SMG EOL: 2.7 knots		DEPTH SOL : 1333.9m DEPTH EOL : 1902.7m FEATHER SOL: 67.1 ° FEATHER EOL: 11.5 ° MAX FEATHER: 67.1 °		NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: N/A MAG DEC USED : -3.12°	
WEATHER WIND SOL: 19.0 knots WIND EOL: 6.1 knots SEAS SOL: 1.5m SEAS EOL: 100% 0m		04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello			
UTC	SP	EVENT	COMMENTS		
17:40	1006	FSP	Start of line, streamer at 9m, only strings 1, 2 & 4 operational, volume = 513		
17:40	1007	FGSP	First good sp		
20:31	1577	currents	Strong push to right of line, cross velocity up to 4.2kts		
20:59	1628	d-off	Max distance off 1948.7m - start return to line		
21:22	1658	EOL	Stop line d/t loss of cable trim -- srd's deployer		
			VESEL POSITION		
			SP	Latitude (N)	Longitude (E)
			FGSP	1007	19° 16.5690"
			LGSP	1658	18° 58.9214"
			NAVIGATION OFFSET APPLIEE		
			NRP - Stern	4.20m	
			NRP - COS	193.70m	
			NRP - CNG	362.00m	
			COS - CNG	179.00m	
			NRP - CMP	283.20m	
Note: LMN line parameter set to great circle line.					
					
Posnet locations & remarks: good - none - intermittent		Acoustic remarks:		Talger4.LMN 2D_1X6.SCN(001) Langseth.RTCN	
Fallbuoy #1	good	Gun string #1	good	SP spacing:	50.0m recording length: 15sec
		Gun string #2	n/a	line status: Incomplete	
		Gun string #3	n/a		
		Gun string #4	good		
			GIT3 inoperative		

Seq# 033 CLIENT: National Science Foundation		Line Name: MGL0908_25 Line Brg : 263.3 °	NAVIGATION LINE LOGS	DATE: 2009-07-22 JULIAN DAY: 203													
DC SOL : 45.3m DC EOL : 9.9m SMG SOL: 4.7 knots SMG EOL: 3.6 knots WEATHER WIND SOL: 20 knots WIND EOL: 22 knots SEAS SOL: 1.5m SEAS EOL: 1.5m		DEPTH SOL : 1512.1m DEPTH EOL : 3379.4m FEATHER SOL: 71.0 ° FEATHER EOL: 8.4 ° MAX FEATHER: 71.0 °	SURVEY: Talger4 MGL0908 NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Posnet GRAVITY METER: BMG-II: used MAGNETOMETER: GeoMetrics: N/A MAG DEC USED : -3.12°														
04:00 - 16:00 utc => Mike Tatro, David Martinson 16:00 - 04:00 utc => Ryan Eaton, Mike Martello																	
UTC	SP	EVENT	COMMENTS														
22:47	1043	FSP	Start of line, streamer at 9m, only strings 1, 2 & 4 operational, volume = 513														
23:20	1132	FGSP	First good sp dt "header xfer" problems.														
23:59	1245	J day 203	midnight position: 18 53.23194N 120 58.49957														
06:05	2282	LSP/LGSP	End of line														
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>SP</th> <th>Latitude (N)</th> <th>Longitude (E)</th> </tr> </thead> <tbody> <tr> <td>FGSP</td> <td>1132</td> <td>18° 53.5893'</td> </tr> <tr> <td>LGSP</td> <td>2282</td> <td>18° 50.0226' 120° 30.0304'</td> </tr> </tbody> </table>			VESSEL POSITION			SP	Latitude (N)	Longitude (E)	FGSP	1132	18° 53.5893'	LGSP	2282	18° 50.0226' 120° 30.0304'
VESSEL POSITION																	
SP	Latitude (N)	Longitude (E)															
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Note: LMN line parameter set to great circle line.																	
 <p>P1 P2 MGL0908_25.p190 MGL0908_25.p294 1 x 9 x 6000m</p>																	
Posnet locations & remarks: good - none - intermittent Falibouy #1 good Gun string #1 good Gun string #2 n/a Gun string #3 n/a Gun string #4 good			Acoustic remarks: G1T3 inoperative														
			Talger4.LMN 2D_1X6.SCN\001 Langseth.RTCN SP spacing: 50.0m recording length: 15sec														
			line status: Line complete														