

[illegible]

[illegible]


[illegible]

[illegible]

Line Name: MGL0906\_04

NAVIGATION

DATE: 2009-05-09



Seq# 005

Line Brg : 90 °

LINE LOGS

JULIAN DAY: 128

CLIENT: National Science Foundation

SURVEY: Taiwan

MGL0906

DC SOL : -246.6m

DC EOL : -32.9m

SMO SOL : 4.1 knots

SMO EOL : 4.4 knots

WEATHER

WIND SOL : 12.6 knots

WIND EOL : 8.0 knots

SEAS SOL : 1.0m

SEAS EOL : 0.6m

DEPTH SOL : 52.2m

DEPTH EOL : 173.6m

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-4i: (used as allowed)

MAGNETOMETER: GeoMetrics: (used as allowed)

MAG DEC USED : -3.12°

16:00 - 04:00 UTC => Bern Mckernan, Mike Martello

04:00 - 16:00 UTC => David Ng , Della Gallert

SP	TIME(utc)	EVENT	COMMENTS
971	10:13	FSP	Sol early during approach shotpoints - Source only - obs acquisition
971	10:13	FGSP	First good bp.
971	10:13	Nav	POSNet still reports "Bad Adjust" -- See MGL0906_03_seq004
978	10:21	Nav	Shut down and restarted POSNet
982	10:25	Nav	Restarted VIP process on Spectra
1070	12:00	obs	crossed T3_05
1170	13:41	24 mile	Stopped logging hydrographic data
1235	14:44	obs	crossed T4w_05
1335	16:22	obs	crossed T4w_04
1436	18:07	obs	crossed T4W_03
1536	19:47	obs	crossed T4W_02
1636	21:29	obs	crossed T4W_01
1636	21:29	LSPL/GSP	End of line

General remarks:

P1

P2

MGL0906\_04.0.p190

MGL0906\_04.0.p294

source only

Posnet locations & remarks: good - none - intermittent

Acoustic remarks:

Tail buoy #1

na

Gun string #1

good

Gun string #2

none

Gun string #3

good

Gun string #4

none

Langseth: Talger;

source\_6m.SCN(001)

Langseth:RTCN

SP spacing:

150m

line status:

complete

[illegible]

[illegible]

[illegible]



[illegible]

[illegible]

<div style="font-size: 24pt; font-weight: bold; margin-bottom: 5px;">Seq# 011</div> <div style="font-size: 18pt; font-weight: bold;">Line Brg : 28 *</div>		<div style="font-size: 12pt; font-weight: bold;">Line Name: MGL0906_07B</div> <div style="font-size: 12pt; font-weight: bold;">SURVEY: Taiwan</div>		<div style="font-size: 12pt; font-weight: bold;">DATE: 2009-05-11</div> <div style="font-size: 12pt; font-weight: bold;">JULIAN DAY: 130</div>																													
		<div style="font-size: 12pt; font-weight: bold;">CLIENT: National Science Foundation</div>		<div style="font-size: 12pt; font-weight: bold;">SURVEY: Taiwan</div>		<div style="font-size: 12pt; font-weight: bold;">MGL0906</div>																											
<div style="font-size: 10pt;">DC SOL : 11.6m</div> <div style="font-size: 10pt;">DC EOL : 479.7m</div> <div style="font-size: 10pt;">DMO SOL 4.5 knots</div> <div style="font-size: 10pt;">DMO EOL 4.5 knots</div> <div style="font-size: 10pt;">WISADIR</div> <div style="font-size: 10pt;">WIND SOL: 13.5 knots</div> <div style="font-size: 10pt;">WIND EOL: 13.1 knots</div> <div style="font-size: 10pt;">SEAS SOL: calm</div> <div style="font-size: 10pt;">SEAS EOL: calm</div>		<div style="font-size: 10pt;">DEPTH SOL : 59.8m</div> <div style="font-size: 10pt;">DEPTH EOL : 94.6m</div> <div style="font-size: 10pt;">FEATHER SOL : na *</div> <div style="font-size: 10pt;">FEATHER EOL : na *</div> <div style="font-size: 10pt;">MAX FEATHER : na *</div>		<div style="font-size: 10pt;">NAVIGATION SYSTEM USED: C-Nav - Primary</div> <div style="font-size: 10pt;">NAVIGATION SYSTEM USED: SeaPath 200</div> <div style="font-size: 10pt;">NAVIGATION SYSTEM USED: Pos MV</div> <div style="font-size: 10pt;">GRAVITY METER: BMG-II (used as allowed)</div> <div style="font-size: 10pt;">MAGNETOMETER: GeoMetrics (used as allowed)</div> <div style="font-size: 10pt;">MAG DEC USED : -3.12"</div>																													
<div style="font-size: 10pt;">16:00 - 04:00 UTC =&gt; Bern Mckernan, Mike Mariello</div> <div style="font-size: 10pt;">04:00 - 16:00 UTC =&gt; David Ng , Della Grallett</div>																																	
<div style="font-size: 10pt; font-weight: bold;">SP</div> <div style="font-size: 10pt; font-weight: bold;">TIME(utc)</div> <div style="font-size: 10pt; font-weight: bold;">EVENT</div>		<div style="font-size: 10pt; font-weight: bold;">COMMENTS</div>																															
<div style="font-size: 10pt;">2232 04:18 FSPFPGSP</div> <div style="font-size: 10pt;">3231 15:35 LSPILGSP</div>		<div style="font-size: 10pt;">Sol - Source only - obs acquisition</div> <div style="font-size: 10pt;">Last shot point / Last good shot point</div>																															
<div style="font-size: 10pt;">2232 04:18 FSPFPGSP</div> <div style="font-size: 10pt;">3231 15:35 LSPILGSP</div>		<div style="font-size: 10pt;">Vessel POSITION</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">SP</td> <td style="width: 40%;">Latitude (N)</td> <td style="width: 40%;">Longitude (E)</td> </tr> <tr> <td rowspan="2" style="vertical-align: middle;">FGSP LSP</td> <td>2232</td> <td>24° 42' 25.021"</td> <td>120° 31' 45.572"</td> </tr> <tr> <td>3231</td> <td>25° 29' 53.807"</td> <td>121° 00' 15.840"</td> </tr> </table> <div style="font-size: 10pt; font-weight: bold; margin-top: 5px;">NAVIGATION OFFSET APPLIED</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">NRP - Stern</td> <td style="width: 40%;"></td> <td style="width: 40%;">4.20m</td> </tr> <tr> <td>NRP - COS</td> <td></td> <td>152.70m</td> </tr> <tr> <td>NRP - CNG</td> <td>na</td> <td>372.70m</td> </tr> <tr> <td>COS - CNG</td> <td>na</td> <td>179.00m</td> </tr> <tr> <td>NRP - CMP</td> <td>na</td> <td>283.20m</td> </tr> </table> <div style="font-size: 10pt; margin-top: 5px;">General remarks:</div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-top: 10px;"> <div style="font-size: 12pt; font-weight: bold;">P1</div> <div style="font-size: 10pt;">MGL0906_07B_0.p190 MGL0906_07B_0.p204</div> <div style="font-size: 12pt; font-weight: bold; margin-top: 5px;">P2</div> <div style="font-size: 10pt; margin-top: 5px;">MGL0906_07B_0.p190 MGL0906_07B_0.p204</div> </div>							SP	Latitude (N)	Longitude (E)	FGSP LSP	2232	24° 42' 25.021"	120° 31' 45.572"	3231	25° 29' 53.807"	121° 00' 15.840"	NRP - Stern		4.20m	NRP - COS		152.70m	NRP - CNG	na	372.70m	COS - CNG	na	179.00m	NRP - CMP	na	283.20m
	SP	Latitude (N)	Longitude (E)																														
FGSP LSP	2232	24° 42' 25.021"	120° 31' 45.572"																														
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NRP - COS		152.70m																															
NRP - CNG	na	372.70m																															
COS - CNG	na	179.00m																															
NRP - CMP	na	283.20m																															
<div style="font-size: 10pt;">Posnet locations &amp; remarks: good - none - intermittent</div>		<div style="font-size: 10pt;">Acoustic remarks:</div>																															
<div style="font-size: 10pt;">Fathson #1 na Gun string #1 good</div> <div style="font-size: 10pt;">Gun string #2 none</div> <div style="font-size: 10pt;">Gun string #3 good</div> <div style="font-size: 10pt;">Gun string #4 good</div>		<div style="font-size: 10pt;">Langsveth: Taiger, source_6m.SCN(001) Langsveth:RTCN</div> <div style="font-size: 10pt; margin-top: 5px;">SP spacing: 100m</div> <div style="font-size: 10pt; font-weight: bold; margin-top: 5px;">line status:</div>																															

[illegible]

Seq# 013

Line Name: MGL0906\_09

NAVIGATION

DATE: 2009-05-12

NCS  
SubSea

Line Brg : 334 °

LINE LOGS

JULIAN DAY: 131

CLIENT: National Science Foundation

SURVEY: Taiwan

MGL0906

DC SOL : 34.8m

DC EOL : -38.7m

SMO SOL: 5.3 knots

SMO EOL: 4.3 knots

WEATHER

WIND SOL: 5.9 knots

WIND EOL: 4.0 knots

SEAS SOL: calm

SEAS EOL: calm

DEPTH SOL : 765.8m

DEPTH EOL : 103.7m

FEATHER SOL: na "

FEATHER EOL: na "

MAX FEATHER: na "

NAVIGATION SYSTEM USED: C-Nav - Primary

NAVIGATION SYSTEM USED: SeaPath 200

NAVIGATION SYSTEM USED: Posi MV

GRAVITY METER: BMG-4: (used as allowed)

MAGNETOMETER: GeoMetrics: (used as allowed)

MAG DEC USED : -3.12"

16:00 - 04:00 UTC => Bern Mckernan, Mike Martello

04:00 - 16:00 UTC => David Ng , Della Gallert

SP	TIME(utc)	EVENT	COMMENTS
1001	14:22	FSWFGSP	Sol - Source only - obs acquisition
1343	18:29	Offline	Moving offline port to avoid fishing vessel
1358	1847	max off	895.6m left of line
1397	19:23	online	return to line
1575	21:35	bsp/gsp	

VESSEL POSITION		
SP	Latitude (N)	Longitude (E)
FGSP	1001 25° 30' 00.496"	122° 39' 01.119"
LGSP	1575 25° 58' 03.124"	122° 24' 12.397"

NAVIGATION OFFSET APPLIED		
NRP - Stern		4.20m
NRP - COS		192.70m
NRP - CNG	na	372.70m
COS - CNG	na	179.00m
NRP - CMP	na	283.20m

General remarks:

P1 P2

MGL0906\_09.0.p190 MGL0906\_09.0.p294

source only

Posnet locations & remarks: good - none - intermittent				Acoustic remarks:	
Tailbuoy #1	na	Gun string #1	good		
		Gun string #2	none		
		Gun string #3	none		
		Gun string #4	none		

Langseth: Talger: source\_6m.SCN(001) Langseth:RTCN

SP spacing: 100m

line status: complete

[illegible]

Line Name: MGL0906\_11

NAVIGATION

DATE: 2009-05-13

NCS  
SubSea

Seq# 015

Line Brg : 99 °

LINE LOGS

JULIAN DAY: 132

CLIENT: National Science Foundation

SURVEY: Taiwan

MGL0906

DC SOL : -1377.7m  
DC EOL : -115.5m  
SMO SOL: 5.0 knots  
SMO EOL: 4.4 knots  
WEATHER  
WIND SOL: 17.7 knots  
WIND EOL: 5.2 knots  
SEAS SOL: calm  
SEAS EOL: calm

DEPTH SOL : 159.3m  
DEPTH EOL : 1483.1m  
FEATHER SOL: na  
MAX FEATHER: na

NAVIGATION SYSTEM USED: C-Nav - Primary  
NAVIGATION SYSTEM USED: SeaPath 200  
NAVIGATION SYSTEM USED: Pos MV  
GRAVITY METER: BMG-4: (used as allowed)  
MAGNETOMETER: GeoMetrics: (used as allowed)  
MAG DEC USED : -3.12°

16:00 - 04:00 UTC => Bern Mckernan, Mike Martello  
04:00 - 16:00 UTC => David Ng , Della Grallert

SP	TIME(utc)	EVENT	COMMENTS
1018	11:03	FSPFSGP	Sol - Source only - obs acquisition
1071	11:48	estimate	position main network
1084	11:57	acoustics	SIPs turned off
1094	12:05	acoustics	SIPs turned on
1570	19:51	24mile	Recording Hydrographics - maggie not ready
1594	20:16	maggie	deployed and operational
1810	23:59	J day 133	Midnight position: 25 10 25.386N 122 41 03.514E
1899	01:21	LSPILGSP	End of line

VESSEL POSITION			
	SP	Latitude (N)	Longitude (E)
FGSP	1018	25° 18' 06.590"	121° 54' 39.627"
LGSP	1899	25° 09' 40.242"	122° 46' 17.444"

NAVIGATION OFFSET APPLIED		
NRP - Stern		4.20m
NRP - COS		192.70m
NRP - CNG	na	372.70m
COS - CNG	na	179.00m
NRP - CMP	na	283.20m

General remarks:

P1 P2  
MGL0906\_11.0.p190 MGL0906\_11.0.p294

source only

Posnet locations & remarks: good - none - intermittent			Acoustic remarks:	
Tailbuoy #1	na	Gun string #1 Gun string #2 Gun string #3 Gun string #4	good none none none	

Langseth: Talger: source\_6m.SCN(001) Langseth:RTCN

SP spacing: 100m

line status: complete

[illegible]




[illegible]

Line Name: MGL0906\_12B

NAVIGATION

DATE: 2009-05-15



Seq# 018

Line Brg : 199 °

LINE LOGS

JULIAN DAY: 134

CLIENT: National Science Foundation

SURVEY: Taiwan

MGL0906

DC SOL: 2.4m

DC EOL: 659.6m

BMG SOL: 2.5 knots

BMG EOL: 3.4 knots

WEATHER

WIND SOL: 12 knots

WIND EOL: 15.0 knots

SEAS SOL: 1.0m

SEAS EOL: 1.0m

DEPTH SOL: 1482.0m

DEPTH EOL: 4440.5m

FEATHER SOL: -8.7 °

FEATHER EOL: -26.4 °

MAX FEATHER: -26.4 °

NAVIGATION SYSTEM USED: C-Navy - Primary

NAVIGATION SYSTEM USED: SeaPath 200

NAVIGATION SYSTEM USED: Pos MV

GRAVITY METER: BMG-4: (used as allowed)

MAGNETOMETER: GeoMetrics: (used as allowed)

MAG DEC USED: -3.12°

16:00 - 04:00 UTC => Bern Mckernan, Mike Martello

04:00 - 16:00 UTC => David Ng, Della Gallert

SP	TIME(UTC)	EVENT	COMMENTS
998	22:59	FGSP	Start of line - swap runs - working on spectra.
1026	23:44	FGSP	First good sp.
1036	23:59	J day 134	Midnight position: 25 07.81556N 122 45.59542E
1124	02:03	obs	Yvesed to IFR1 820m SE
1275	04:54	obs	OBS crossing IFR2
1424	07:12	obs	OBS crossing IFR3
1569	09:35	obs	OBS crossing IFR4
1703	12:00	obs	OBS crossing IFR5
1873	15:14	obs	OBS crossing IFR6
1946	16:37	obs	OBS crossing IFR7
1956	16:49	depth	recording data now
1980	17:17	Slips	Acoustics changed to run12 - set to periodic sample rate.
2021	18:02	obs	OBS crossing IFR8
2059	18:40	run12	reset dlt periodic updates compasses
2060	18:41	missed sp's	missed after reboot to sp 2063 - reboot run1
2064	18:45	run11	start firing normal after reset
2082	19:03	Slips	disable acoustics
2096	19:16	obs	OBS crossing IFR9
2096	19:16	Slips	running from run1
2173	20:26	obs	OBS crossing IFR10
2232	21:17	obs	OBS crossing NTOUT1
2312	22:27	Slips	set to 20s internal cycle
2320	22:35	obs	OBS crossing NTOUT2
2396	23:45	obs	OBS crossing NTOUT3
2411	23:59	J day 135	Midnight position: 23 57.20127N 122 19.69823E
2470	00:51	obs	OBS crossing NTOUT4
2546	01:55	obs	OBS crossing NTOUT5
2620	02:55	obs	OBS crossing IFR16
2686	03:57	obs	OBS crossing IFR17
2769	04:59	obs	OBS crossing IFR18
2919	07:03	obs	OBS crossing IFR19
2955	07:33	obs	OBS crossing T4e. 06 (offset -1 km)
3068	09:05	obs	OBS crossing IFR20
3320	11:14	obs	OBS crossing IFR21
3371	13:27	obs	OBS crossing IFR22
3514	15:28	obs	OBS crossing IFR23
3666	17:45	obs	OBS crossing IFR24
3750	18:53	24mile	Hydrographic recordings stopped
3759	19:02	maggie	(recovered below for recovery)
3844	20:13	obs	OBS crossing T4e. 09 (offset 2.4km)
3876	20:40	obs	OBS crossing BBOBS26 (offset 2.4km)
3968	21:58	LSPILGSP	End of line

General remarks:

P1

P2

MGL0906\_12B.0.p190 MGL0906\_12B.0.p294

1 x 9m x 6000m

Tailbuoy #1	good	Gun string #1	good	Acoustic remarks:	Langseth: Tailger:	2D_146.SCN(001)	Langseth: RTCN
		Gun string #2	none	G1T4 not operational	SP spacing:	100m	
		Gun string #3	good		line status:		
		Gun string #4	none				

		Line Name : <b>MGL0906_13</b>		<b>NAVIGATION</b>		DATE: 2009-05-17		 <b>NCS</b> SubSea	
<b>Seq# 019</b>		Line Brg : <b>314 °</b>		<b>LINE LOGS</b>		JULIAN DAY: <b>136</b>			
<b>CLIENT: National Science Foundation</b>				<b>SURVEY: Taiwan</b>		<b>MGL0906</b>			
DC SOL : 106.4m DC EOL : 896.4m SMO SOL : 3.7 knots SMO EOL : 5.2 knots <b>WEATHER</b> WIND SOL : 10.0 knots WIND EOL : 0.2 knots SEAS SOL : 0.5m SEAS EOL : 0m		DEPTH SOL : 4392.3m DEPTH EOL : 1392.3m FEATHER SOL : 63.1° FEATHER EOL : 0.5° MAX FEATHER : 63.1°		NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Pos MV GRAVITY METER: BMG-ii (used as allowed) MAGNETOMETER: GeoMetrics (used as allowed) MAG DEC USED : -3.12°					
16:00 - 04:00 UTC => Bern Mckernan, Mike Martello 04:00 - 16:00 UTC => David Ng, Della Grallert									
<b>SP</b>	<b>TIME(utc)</b>	<b>EVENT</b>	<b>COMMENTS</b>						
1969	22:24	FSPIFGSP	Start of line						
1295	23:59	J day 136	Midnight position: 22 41.53642N 121 44.39551E						
1807	02:47	obs	Crossed BBOBS25 (offset ~2800m)						
2020	03:49	turn	Start line change - turning starboard						
2079	04:07	LSPILGSP	Last shot point / last good shot point						
				<b>VESEL POSITION</b>					
				SP		Latitude (N)		Longitude (E)	
				FGSP	1969	22° 37.2891"	121° 49.1465"		
				LGSP	2079	22° 56.7273"	121° 28.3768"		
				<b>NAVIGATION OFFSET APPLIED</b>					
				NRP - Stern		_____		4.20m	
				NRP - COS		_____		193.70m	
				NRP - CNG		_____		372.70m	
				COS - CNG		_____		179.00m	
				NRP - CMP		_____		263.30m	
General remarks:									
<div style="display: flex; justify-content: space-around;"> <div> <b>P1</b>            MGL0906_13.0 p180         </div> <div> <b>P2</b>            MGL0906_13.0 p294         </div> </div>									
<div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>1 x 9 m x 6000m</b> </div>									
<b>Posnet locations &amp; remarks:</b> Tailbuoy #1 : good      Gun string #1 : good Gun string #2 : none Gun string #3 : good Gun string #4 : none				<b>Acoustic remarks:</b> G114 not operational					
Langseth: Tailger,      2D_1x6.SCN(001)      Langseth: RTCN									
SP Spacing:      50m				<b>line status:</b> Complete					

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



Seq# 026

Line Name: MGL0906\_20

NAVIGATION

DATE: 2009-05-20

NCS  
SubSea

Line Brg : 108 °

LINE LOGS

JULIAN DAY: 139

CLIENT: National Science Foundation

SURVEY: Taiwan

MGL0906

DC SOL : 2292.4m

DC EOL : 978.9m

SMO SOL : 4.3 knots

SMO EOL : 4.2 knots

WEATHER

WIND SOL : 0.0 knots

WIND EOL : 15.0 knots

SEAS SOL : calm

SEAS EOL : 1-1.5m

DEPTH SOL : 536.4m

DEPTH EOL : 6312.5m

FEATHER SOL : <111.4°

FEATHER EOL : <5.9°

MAX FEATHER: <111.4°

NAVIGATION SYSTEM USED: C-Nav v-Primary

NAVIGATION SYSTEM USED: SeaPath 200

NAVIGATION SYSTEM USED: Pos W

GRAVITY METER: BMG-4: (used as allowed)

MAGNETOMETER: GeoMetrics: (used as allowed)

MAG DEC USED : -3.12°

16:00 - 04:00 UTC => Bern Mckernan, Mike Martello

04:00 - 16:00 UTC => David Ng , Della Gallert

SP	TIME(utc)	EVENT	COMMENTS
998	23:29	FSPFGSP	Start of line
1011	23:42	speed	slow vessel to shooting speed
1026	23:59	Obs	Crossed T5e_10
1026	23:59	J day139	Midnight position: 23.38.18741N 121.39.37750E
1033	07:53	cable depth	Bring streamer back to 9m nominal depth.
1059	09:39	fishing boat	move port of line to avoid fishing gearboat.
1080	01:02	DC	Distance offline -350m
1103	01:29	FRC	In water
1105	01:31	Obs	Crossed T5e_09
1109	01:36	DC	vessel on line
1110	01:37	trim	Raise sections of cable to remove fishing gear.
1225	03:44	Obs	Crossed T5e_08
1231	03:50	FRC	on board
1281	04:37	24 nmi	Started logging hydrographic data
1343	05:33	FRC	In water
1345	05:35	Obs	Crossed T5e_07
1412	06:37	Bird	un-knock out B3, B4
1335	06:58	cable depth	Bring streamer back to 9m nominal depth.
1449	07:10	FRC	on board
1466	07:26	Obs	Crossed T5e_06
1586	09:15	Obs	Crossed T5e_05
1655	10:17	Obs	Passed by BBOBS11 (-9km)
1706	11:03	Obs	Crossed T5e_04
1826	15:54	Obs	Crossed T5e_03
1895	13:59	Obs	Passed by BBOBS12 (-8km)
1934	14:34	LGVSF	Last good volumed shot before loss in compressor
1947	14:47	Obs	Crossed T5e_02
1949	14:49	source	Ramping up air guns; compressor back
1978	15:18	source	Return to full volume
2066	16:49	Obs	Crossed T5e_01
2179	18:44	Obs	Crossed T5e_K1 (offset -350m)
2299	20:43	Obs	Crossed T5e_K2 (offset -300m)
2443	22:59	Obs	Crossed T5e_K3 (offset -200m)
2508	23:59	J day140	Midnight position: 23.07.2981N 123.22.82192E
2509	00:00	trim	Bird 13 & 14 (probably fishing gear)
2543	00:31	Obs	Crossed T5e_K4
2659	02:16	Obs	Crossed T5e_K5
2783	04:09	Obs	Crossed T5e_K6
2826	04:50	LSPILGSP	Last shot point / last good shot point

VESEL POSITION

	SP	Latitude (N)	Longitude (E)
FGSP	998	23° 37.5955"	121° 37.0148"
LGSP	2826	23° 00.2107"	123° 44.0014"

NAVIGATION OFFSET APPLIED

NRP - Stern	4.20m
NRP - COS	192.70m
NRP - CNG	372.70m
COS - CNG	179.00m
NRP - CMP	283.20m

General remarks:

P1

P2

MGL0906\_20.p190

MGL0906\_20.p294

1 x 9m x 6000m

Posnet locations & remarks: good - none - intermittent

Acoustic remarks:

Tailbuoy #1	good	gun string #1	good
		gun string #2	none
		gun string #3	good
		gun string #4	none

01T4 not operational

Langseth: Talger: 20\_146.SCN(001)

Langseth: RTCN

SP spacing: 125m

line status:


[illegible]

Seq# 028

Line Name: MGL0906\_16  
Line Brg : 271 °

NAVIGATION  
LINE LOGS

DATE: 2009-05-22  
JULIAN DAY: 141



CLIENT: National Science Foundation  
SURVEY: Taiwan  
MGL0906

DC SOL : -3.6m  
DC EOL : -1554.8m  
SMO SOL : 4.0 knots  
SMO EOL : 3.6 knots  
WEATHER  
WIND SOL : 4.6 knots  
WIND EOL : 5.5 knots  
SEAS SOL : 0-1m  
SEAS EOL : 0-1m

DEPTH SOL : 5998.7m  
DEPTH EOL : 1044.4m  
FEATHER SOL : 7.6 °  
FEATHER EOL : 36.0 °  
MAX FEATHER : 36.0 °

NAVIGATION SYSTEM USED: C-Nav v-Primary  
NAVIGATION SYSTEM USED: SeaPath 200  
NAVIGATION SYSTEM USED: Pos WY  
GRAVITY METER: BMG-4: (used as allowed)  
MAGNETOMETER: GeoMetrics: (used as allowed)  
MAG DEC USED : -3.12°

16:00 - 04:00 UTC => Bern Mckernan, Mike Martello  
04:00 - 16:00 UTC => David Ng , Della Gallert

SP	TIME(utc)	EVENT	COMMENTS
986	12:15	FSP	First shot point
990	12:19	FGSP	First good shot point
1530	23:59	J day 141	Midnight position: 22 43.34928N 123 06.38108E
1546	00:20	off line	To avoid fishing buoys - Port side
1552	00:26	trim	raising birds 12-14 for removal of fishing gear
1557	00:35	FRC	Launched over the side
1562	00:41	Obs	Crossed T4e_01 (-100m offset)
1565	00:46	on line	return to line
1584	01:14	trim	Return streamer to 9m depth
1682	03:34	Obs	Crossed T4e_02
1758	05:33	current	Current pushing us off course
1763	05:41	current	Back on course
1770	05:54	Streamer	Streamer is below 11m at birds 6-11; increasing STW to 5.25kt
1772	05:58	Streamer	Streamer is below 11m at birds 6-11; increasing STW to 5.25kt
1790	06:18	Streamer	All of streamer is back -9m
1802	06:34	Obs	Crossed T4e_03
1922	08:56	Obs	Crossed T4e_04
2042	11:03	Obs	Crossed T4e_05
2162	13:10	Obs	Crossed T4e_06
2282	15:22	Obs	Crossed T4e_07
2311	16:00	Rdges	Posnet lockup to sp 2317
2403	18:00	Obs	Crossed T4e_08
2508	19:47	24mile	Stop all hydrographical recordings
2523	20:21	Obs	Crossed T4e_09
2559	20:33	Obs	Crossed BB0BS26 (OFFSET -2km.)
2643	21:59	Obs	Crossed T4e_10
2647	21:53	string2	Digishot crash - after reboot this string not firing consistently.
2736	23:20	string2	Source normal 1" good sp after troubleshooting.
2763	23:47	Obs	Crossed T4e_11
2776	23:59	J day 142	Midnight position: 22 43.34778N 121 35.41522E
2818	00:37	off line	MMO monitor boat on line - strong currents around island south of vessel
2841	00:59	position	apparent glitch in position
2853	01:12	off line	return to line (max distance off line -600m)
2884	01:50	Obs	Crossed T4e_14
2964	03:45	Obs	Crossed T4e_13
3035	04:59	turn	start turn to port
3044	05:07	Obs	Crossed T4e_12
3054	05:23	LSPL/GSP	Last shot point / last good shot point

VESEL POSITION

	SP	Latitude (N)	Longitude (E)
FGSP	990	22° 43.0723"	123° 45.8033"
LGSP	3054	22° 42.3785"	121° 15.1263"

NAVIGATION OFFSET APPLIED

NRP - Stern	4.20m
NRP - COS	192.70m
NRP - CNG	362.00m
COS - CNG	179.00m
NRP - CMP	283.20m

General remarks:

P1

P2

MGL0906\_16.p190

MGL0906\_16.p204

1 x 9m x 6000m

Posnet locations & remarks

Posnet #1	remarks	good - none - intermittent	Acoustic remarks
	good	gun string #1	good
		gun string #2	none
		gun string #3	good
		gun string #4	none

Langseth: Talger,

20\_146.SCN(002)

Langseth: RTCN

SP spacing: 125m

line status:

[illegible]

[illegible]

NCS  
SULCOM

Line Name: MGL0906\_18A

NAVIGATION

DATE: 2009-05-25

Seq# 031

Line Brg : 123 °

LINE LOGS

JULIAN DAY: 144

CLIENT: National Science Foundation

SURVEY: Taiwan

MGL0906

DC SOL : -6.2m  
DC EOL : 238.8m  
DMO SOL: 4.1 knots  
SMO EOL: 4.5 knots  
  
WSADIR  
WIND SOL: 18.2 knots  
WIND EOL: 16.0 knots  
SEAS SOL: 1.6m  
SEAS EOL: 1.6m

DEPTH SOL : 3300.1m  
DEPTH EOL : 4218.8m  
FEATHER SOL: 54.7°  
FEATHER EOL: 2.7°  
MAX FEATHER: 54.7°

NAVIGATION SYSTEM USED: C-Nav - Primary  
NAVIGATION SYSTEM USED: SeaPath 200  
NAVIGATION SYSTEM USED: Pos MV  
GRAVITY METER: BMG-II; (used as allowed)  
MAGNETOMETER: GeoMetrics; (used as allowed)  
MAG DEC USED: -3.12"

16:00 - 04:00 UTC => Bern McKernan, Mike Martello  
04:00 - 16:00 UTC => David Ng , Della Grallert

SP	TIME(utc)	EVENT	COMMENTS
1111	23:29	FSP/FGPS	Spring 3 on board for maintenance total volume at sol 4410 cu in.
1154	23:29	J day 144	Midnight position: 23 51.29111N 123 14.51428E
1365	01:09	LSP/LGPS	Strings 3 & 4 disabled for maintenance volume now at 3300cu in. end of line
1400	01:23	LSP/LGPS	

	VESSEL POSITION		
	Latitude (N)	Longitude (E)	
FGSP	1111	23° 52.3761"	123° 12.7166"
LGPS	1400	23° 47.9866"	123° 19.7651"

NAVIGATION OFFSET APPLIED

NRP - Stern	_____	4.20m
NRP - COS	_____	153.70m
NRP - CNG	_____	362.00m
COS - CNG	_____	179.00m
NRP - CMP	_____	283.20m

General remarks:

P1 P2  
MGL0906\_18A.p180 MGL0906\_18A.p204

1 x 9m x 6000mm

Posnet locations & remarks: good - none - intermittent Acoustic remarks:

Footway #1	good	Gun string #1	good	GTA not operational
		Gun string #2	none	
		Gun string #3	good	
		Gun string #4	good	

Langseth: Taiger, ZD\_1x6.SCN(002) Langseth.RTCN

SP Spacing: 50.0m

line status: complete

[illegible]

[illegible]



[illegible]

[illegible]

<b>Line Name:</b>		<b>MGL0906_25</b>	<b>N A V I G A T O R</b>	<b>DATE:</b> 2009-05-29	
<b>Seq# Q36</b>		<b>Line Brg :</b> 297 °	<b>L I N E L O G S</b>	<b>JULIAN DAY:</b> 148	
<b>CLIENT:</b> National Science Foundation			<b>SURVEY:</b> Taiwan	<b>MGL0906</b>	
DC SOL : -19.6m DC EOL : 551.4m DMO SOL: 4.8 knots SMO SOL: 6.0 knots <b>WEATHER</b> WIND SOL: 13.5 knots WIND EOL: 18.3 knots SEAS SOL: 1.2m SEAS EOL: 1.2m		DEPTH SOL :      5393.7m DEPTH EOL :      4985.5m FEATHER SOL :    62.9° FEATHER EOL :    13.4°  MAX FEATHER:    62.9°	NAVIGATION SYSTEM USED: C-Nav - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Pos MV  GRAVITY METER: BMG-II; (used as allowed) MAGNETOMETER: GeoMetrics; (used as allowed) MAG DEC USED:    -3.12°		
<p align="right">16:00 – 04:00 UTC &lt;- Bern McKernan, Mike Martello</p> <p align="right">04:00 – 16:00 UTC &lt;- David Ng , Della Grallert</p>					
SP	TIME(utc)	EVENT	COMMENTS		
1102	11:30	FSPF/GSP	Start of Line		
1734	15:20	Digshot	Digislot to Internal cycle		
1739	15:22	Diplocourse	Changed Interval to 15s on diplocourse		
3133	23:59	J day 148	Midnight position: 21 46.37140N 121 50.06207E		
3520	02:10	EEZ12	Cross out of Philippine eez		
4641	08:22	cbs	Passed by BBORISS (-19 km)		
5065	10:37	LSPI/LGSP	Last shot point / last good shot point		
			VESSEL POSITION	Latitude (N)	Longitude (E)
			SP	1102	21° 21.2467'    123° 42.3985'
			LGSP	5065	22° 10.2717'    122° 00.1344'
			NAVIGATION OFFSET APPLIED		
			NRP - Stern		4.20m
			NRP - COS		153.78m
			NRP - CNG		362.00m
			COS - CNG		179.00m
			NRP - CMP		283.20m
			General remarks:		
			P1	P2	
			MGL0906_25.p190	MGL0906_25.p294	
			<div style="background-color: black; color: white; padding: 10px; width: fit-content; margin: auto;">1 x 9m x 6000m</div>		
<b>Posnet locations &amp; remarks:</b> good = none - intermittent		<b>Acoustic remarks:</b>		Langseth: Taiger,	
Footway #1	good	Gun string #1	good	G1T4 not operational	2D_1x6.SON(00z) Langseth.RTCN
		Gun string #2	none		
		Gun string #3	good		
				SP Spacing:	50.0m
				<b>line status:</b>	Complete

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



[illegible]

[illegible]

[illegible]

[illegible]

[illegible]