

Seq# 005 Line Name: MGL2411005T45P1 NAVIGATION: LINE LOGS DATE: 2024-12-04 Lamont-Doherty Earth Observatory
 Line Brg : 97° JULIAN DAY: 339 COLUMBIA UNIVERSITY | EARTH INSTITUTE

CLIENT: Dan Lizarralde WHOI SURVEY: MGL2411 AREA: CHAIN TRANSFORM FAULT

DC SOL: -560.7 m DEPTH SOL : 2984.9 m NAVIGATION SYSTEM USED: C-Nav3050 - Primary
 DC EOL: ##### DEPTH EOL : 3556.2 m NAVIGATION SYSTEM USED: SeaPath 330
 BSP SOL: 3.0 kts FEATHER SOL: -23.21° NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted
 BSP EOL: 2.9 kts FEATHER EOL: -1.96°

WEATHER
 WIND SOL: SE 12 kts **GRAVITY METER: BMG-II: used, SN223**
 WIND EOL: SE 12 kts **MAGNETOMETER: Geometrics 882**
 SEAS SOL: 1 m **shift hours** **Nav** **shift hours** **Acq**
 SEAS EOL: 1 m 0:00-12:00 Aaron Martin 0:00-12:00 Riley Lopez
 12:00 - 24:00 Cody Bahlau 12:00 - 24:00 Gilles Guérin

SP	Orca Ref	UTC	EVENT	COMMENTS				
9070	1001	16:31	SOL	MGL2411005T45P1 36 Guns @ 6600cuin	VESSEL POSITION			
9071	1002	16:31	FGSP	No compass data for SP 9070				
						Shotpoints	Latitude (S)	Longitude (W)
					FSP	9071	01°06'25.74"	15°37'07.17"
					LSP	9555	01°07'40.07"	15°24'07.55"
							Latitude (S)	Longitude (W)
9555	1486	21:03	LGSP	no nav headers for SP 9556	FSP	9071	1.107149	15.618659
9556	1487	21:04	EOL	MGL2411005T45P1 - 36 Guns - 6600 in3 36 Guns @ 6600cuin	LSP	9555	1.127798	15.402097

NRP - Stern	29.2m
NRP - COS	276.0m
NRP - CNG	454.2m
COS - CNG	178.2m
NRP - CMP	365.1m

4DX locations & remarks: good - absent - intermittent - partial				Forward	Center
Tailbuoy #1	Good		Gun string #1	GOOD	GOOD
Head Float #1	Good		Gun string #2	GOOD	GOOD
			Gun string #3	GOOD	GOOD
			Gun string #4	GOOD	GOOD

Compasses: D.I.s 14 slightly shallow SP spacing: 50m line status: Complete

Processing Comments: Seispos processed P1

Acronyms key:
 DC SOL: Distance Crossed at Start of Line
 DC EOL: Distance Crossed at End of Line
 BSP: Bottom Speed, aka SOG: Speed Over Ground
 FEATHER: The angle from the boat to the TB (Tail Buoy)
 NRP: Navigation Reference Point
 COS: Center of Source
 CNG: Center Near Group
 CMP: Common Mid-point

Overall Comments: First sequence after retrieving whole streamer, all working sensors

CLIENT: Dan Lizarralde WHOI	SURVEY: MGL2411	AREA: CHAIN TRANSFORM FAULT
DC SOL: 348.3 m DC EOL: -916.5 m BSP SOL: 3.2 kts BSP EOL: 2.8 kts	DEPTH SOL : 3361.1 m DEPTH EOL : 3706.5 m FEATHER SOL: 77.90 ° FEATHER EOL: -25.87 °	NAVIGATION SYSTEM USED: C-Nav3050 - Primary NAVIGATION SYSTEM USED: SeaPath 330 NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted
WEATHER		GRAVITY METER: BMG-II: used, SN223 MAGNETOMETER: Geometrics 882
WIND SOL: SE 17.7 kts WIND EOL: SE 17.7 kts SEAS SOL: 2 m SEAS EOL: 1.5 m	shift hours 0:00-12:00 12:00 - 24:00	Nav Aaron Martin Cody Bahlau
	shift hours 0:00-12:00 12:00 - 24:00	Acq Riley Lopez Gilles Guérin

SP	Orca Ref	UTC	EVENT	COMMENTS	VESSEL POSITION													
20018	1020	6:26:20	FGSP	SOL MGL2411014D09P1 - 36 Guns - 6600 in3 High SMA TB1 and latency TB1R1 at SOL														
						Shotpoints	Latitude (S)	Longitude (W)										
					FSP	20018	00°54'50.21"	14°27'58.01"										
20826	1828	12:38:01		TB1G1 absent to EOL	LSP	21382	01°30'32.34"	14°18'16.03"										
							Latitude (S)	Longitude (W)										
					FSP	20018	0.913946	14.466115										
21382	2384	16:56:59	LGSP	EOL MGL2411014D09P1 - 36 Guns - 6600 in3	LSP	21382	1.508984	14.304452										
					<table border="1" style="margin: auto;"> <tr><td>NRP - Stern</td><td>29.2m</td></tr> <tr><td>NRP - COS</td><td>276.0m</td></tr> <tr><td>NRP - CNG</td><td>454.2m</td></tr> <tr><td>COS - CNG</td><td>178.2m</td></tr> <tr><td>NRP - CMP</td><td>365.1m</td></tr> </table>				NRP - Stern	29.2m	NRP - COS	276.0m	NRP - CNG	454.2m	COS - CNG	178.2m	NRP - CMP	365.1m
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NRP - CNG	454.2m																	
COS - CNG	178.2m																	
NRP - CMP	365.1m																	
4DX locations & remarks: good - absent - intermittent - partial					Forward	Center												
Tailbuoy #1	Partial		Gun string #1	GOOD	GOOD													
Head Float #1	Good		Gun string #2	GOOD	GOOD													
			Gun string #3	GOOD	GOOD													
			Gun string #4	GOOD	GOOD													
Compasses					SP spacing: 50m													
D.I.s 11,14,23,46,58					line status: complete													

Processing Comments Seispos Produced P1 TB1G1 absent SP 20826 to EOL 1-3 deep SOL d/t low tensions.	Acronyms key DC SOL Distance Crossed at Start of Line DC EOL Distance Crossed at End of Line BSP Bottom Speed, aka SOG: Speed Over Ground FEATHER The angle from the boat to the TB (Tail Buoy) NRP Navigation Reference Point COS Center of Source CNG Center Near Group CMP Common Mid-point
Overall Comments	

CLIENT: Dan Lizarralde WHOI	SURVEY: MGL2411	AREA: CHAIN TRANSFORM FAULT
DC SOL: 247.2 m	DEPTH SOL : 3556.0 m	NAVIGATION SYSTEM USED: C-Nav3050 - Primary
DC EOL: 277.4 m	DEPTH EOL : 3500.1 m	NAVIGATION SYSTEM USED: SeaPath 330
BSP SOL: 3.8 kts	FEATHER SOL: -92.59 °	NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted
BSP EOL: 4.2 kts	FEATHER EOL: 10.35 °	
GRAVITY METER: BMG-II: used, SN223		
MAGNETOMETER: Geometrics 882		
WEATHER		
WIND SOL: SE 11 kts	shift hours	Nav
WIND EOL: SE 14 kts	0:00-12:00	0:00-12:00
SEAS SOL: 1 m	Aaron Martin	Riley Lopez
SEAS EOL: 1 m	12:00 - 24:00	Acq
	Cody Bahlau	Gilles Guérin

SP	Havian	UTC	EVENT	COMMENTS	VESSEL POSITION												
					Shotpoints	Latitude (S)	Longitude (W)										
33027	1028	19:44:00	FGSP	SOL MGL2411022D12P1 - 36 Guns - 6600 in3													
					FSP	33027	00°43'28.12"	13°42'34.98"									
33639	1640	23:59:49	LSOD	Last Shot of the Day	LSP	34141	01°12'46.04"	13°35'12.60"									
		3:15:00		begin starboard turn to next line													
					FSP	33027	0.724478	13.709717									
34141	2142	3:24:35	LGSP	EOL MGL2411022D12P1 - 36 Guns - 6600 in3	LSP	34141	1.212788	13.586832									
					<table style="width:100%; border-collapse: collapse;"> <tr><td>NRP – Stern</td><td>29.2m</td></tr> <tr><td>NRP – COS</td><td>276.0m</td></tr> <tr><td>NRP – CNG</td><td>454.2m</td></tr> <tr><td>COS – CNG</td><td>178.2m</td></tr> <tr><td>NRP – CMP</td><td>365.1m</td></tr> </table>			NRP – Stern	29.2m	NRP – COS	276.0m	NRP – CNG	454.2m	COS – CNG	178.2m	NRP – CMP	365.1m
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4DX locations & remarks: good - absent - intermittent - partial					Forward	Center											
Tailbuoy #1	Good		Gun string #1	GOOD	GOOD												
Head Float #1	Good		Gun string #2	PARTIAL	GOOD												
			Gun string #3	GOOD	GOOD												
			Gun string #4	GOOD	GOOD												
Compasses	noisy at SOL dt turn					SP spacing:	50m										
D.I.s	9					line status:	complete										

Processing Comments Seispos produced P1 G1R3 intermittent SOL to SP33587, Good rest of line d1-3 deep at SOL dt turn	Acronyms key DC SOL Distance Crossed at Start of Line DC EOL Distance Crossed at End of Line BSP Bottom Speed, aka SOG: Speed Over Ground FEATHER The angle from the boat to the TB (Tail Buoy) NRP Navigation Reference Point COS Center of Source CNG Center Near Group CMP Common Mid-point
Overall Comments	

CLIENT: Dan Lizarralde WHOI DC SOL: -481.1 m DC EOL: 4.6 m BSP SOL: 4.8 kts BSP EOL: 4.1 kts WEATHER WIND SOL: SE 15.4 kts WIND EOL: SE 14 kts SEAS SOL: 1 m SEAS EOL: 1 m	SURVEY: MGL2411 DEPTH SOL : 3993.1 m DEPTH EOL : 5146.2 m FEATHER SOL: -86.47 ° FEATHER EOL: -1.93 °	AREA: CHAIN TRANSFORM FAULT NAVIGATION SYSTEM USED: C-Nav3050 - Primary NAVIGATION SYSTEM USED: SeaPath 330 NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted GRAVITY METER: BMG-II: used, SN223 MAGNETOMETER: Geometrics 882
shift hours Nav shift hours Acq 0:00-12:00 Aaron Martin 0:00-12:00 Riley Lopez 12:00 - 24:00 Cody Bahlau 12:00 - 24:00 Gilles Guérin		

SP	Havian	UTC	EVENT	COMMENTS	VESSEL POSITION																
36445	2446	6:58:20	FGSP	SOL MGL2411023SSEP1 - 36 Guns - 6600 in3 Strong trailing current, low tension, high feather causing buoyancy issues	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Shotpoints</th> <th>Latitude (S)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>FSP 36445</td> <td>01°02'54.12"</td> <td>13°43'37.44"</td> </tr> <tr> <td>LSP 38624</td> <td>01°18'19.90"</td> <td>14°40'19.44"</td> </tr> </tbody> </table>	Shotpoints	Latitude (S)	Longitude (W)	FSP 36445	01°02'54.12"	13°43'37.44"	LSP 38624	01°18'19.90"	14°40'19.44"							
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FSP 36445	01°02'54.12"	13°43'37.44"																			
LSP 38624	01°18'19.90"	14°40'19.44"																			
38624	4625	20:57:06	LGSP	EOL MGL2411023SSEP1 - 36 Guns - 6600 in3	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Shotpoints</th> <th>Latitude (S)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>FSP 36445</td> <td>1.048366</td> <td>13.727067</td> </tr> <tr> <td>LSP 38624</td> <td>1.305529</td> <td>14.672067</td> </tr> </tbody> </table>	Shotpoints	Latitude (S)	Longitude (W)	FSP 36445	1.048366	13.727067	LSP 38624	1.305529	14.672067							
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LSP 38624	1.305529	14.672067																			
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		Gun string #4	GOOD																		
Compasses D.I.s 9				SP spacing: 50m																	
				line status: complete																	

Processing Comments d1-3 deep whole line dt low tension dt shot interval requirement d4-40,57,58 SOL to SP36680 gaining depth control coming out of turn into trailing current, 36681-EOL depths in spec	Acronyms key DC SOL Distance Crossed at Start of Line DC EOL Distance Crossed at End of Line BSP Bottom Speed, aka SOG: Speed Over Ground FEATHER The angle from the boat to the TB (Tail Buoy) NRP Navigation Reference Point COS Center of Source CNG Center Near Group CMP Common Mid-point
Overall Comments Seispos produced P1	

Seq# 028 Line Name: MGL2411028T56BP1 NAVIGATION: DATE: 2024-12-12 Lamont-Doherty Earth Observatory
 Line Brg : 75.8 ° LINE LOGS JULIAN DAY: 347 COLUMBIA UNIVERSITY | EARTH INSTITUTE

CLIENT: Dan Lizarralde WHOI SURVEY: MGL2411 AREA: CHAIN TRANSFORM FAULT

DC SOL: 353.4 m DEPTH SOL : 3370.2 m NAVIGATION SYSTEM USED: C-Nav3050 - Primary
 DC EOL: 741.2 m DEPTH EOL : 3521.0 m NAVIGATION SYSTEM USED: SeaPath 330
 BSP SOL: 3.1 kts FEATHER SOL: 76.25 ° NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted
 BSP EOL: 3.4 kts FEATHER EOL: 5.45 °

GRAVITY METER: BMG-II: used, SN223
MAGNETOMETER: Geometrics 882

WEATHER

WIND SOL: SE 12 kts
 WIND EOL: SE 13 kts
 SEAS SOL: 1 m
 SEAS EOL: 1 m

shift hours Nav shift hours Acq
 0:00-12:00 Aaron Martin 0:00-12:00 Riley Lopez
 12:00 - 24:00 Cody Bahlau 12:00 - 24:00 Gilles Guérin

SP	Havian	UTC	EVENT	COMMENTS	VESSEL POSITION												
					Shotpoints	Latitude (S)	Longitude (W)										
45019	1020	20:11:04	FGSP	SOL MGL2411028T56BP1 - 36 Guns - 6600 in3	FSP	45019	01°08'25.71"	15°23'10.46"									
45507	1508	23:59:55	LSOD	Last Shot of the Day	LSP	45520	01°05'17.77"	15°10'01.91"									
45520	1521	0:07:29	LGSP	EOL MGL2411028T56BP1 - 36 Guns - 6600 in3	FSP	45019	1.140476	15.386238									
					LSP	45520	1.088269	15.167196									
					<table border="1"> <tr> <td>NRP - Stern</td> <td>29.2m</td> </tr> <tr> <td>NRP - COS</td> <td>276.0m</td> </tr> <tr> <td>NRP - CNG</td> <td>454.2m</td> </tr> <tr> <td>COS - CNG</td> <td>178.2m</td> </tr> <tr> <td>NRP - CMP</td> <td>365.1m</td> </tr> </table>			NRP - Stern	29.2m	NRP - COS	276.0m	NRP - CNG	454.2m	COS - CNG	178.2m	NRP - CMP	365.1m
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4DX locations & remarks: good - absent - intermittent - partial				Forward	Center												
Tailbuoy #1	Good		Gun string #1	GOOD	GOOD												
Head Float #1	Good		Gun string #2	GOOD	GOOD												
			Gun string #3	GOOD	GOOD												
			Gun string #4	GOOD	GOOD												
Compasses	23	SP spacing: 50m															
D.I.s	9,23	line status: complete															

Processing Comments
 front end buoyancy issues SOL to SP 45073 dt turn

Overall Comments Seispos produced P1

Acronyms key
 DC SOL Distance Crossed at Start of Line
 DC EOL Distance Crossed at End of Line
 BSP Bottom Speed, aka SOG: Speed Over Ground
 FEATHER The angle from the boat to the TB (Tail Buoy)
 NRP Navigation Reference Point
 COS Center of Source
 CNG Center Near Group
 CMP Common Mid-point

Seq# 029		Line Name: MGL2411029D06P3		NAVIGATION LINE LOGS		DATE: 2024-12-13		Lamont-Doherty Earth Observatory	
		Line Brg : 165.8 °				JULIAN DAY: 347		COLUMBIA UNIVERSITY EARTH INSTITUTE	
CLIENT: Dan Lizarralde WHOI		SURVEY: MGL2411		AREA: CHAIN TRANSFORM FAULT					
DC SOL: 452.2 m		DEPTH SOL : 3488.1 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: 95.5 m		DEPTH EOL : 3548.7 m		NAVIGATION SYSTEM USED: SeaPath 330					
BSP SOL: 3.7 kts		FEATHER SOL: 94.25 °		NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted					
BSP EOL: 4.2 kts		FEATHER EOL: 10.72 °		GRAVITY METER: BMG-II: used, SN223					
WEATHER				MAGNETOMETER: Geometrics 882					
WIND SOL: SE 11 kts		shift hours		Nav		shift hours		Acq	
WIND EOL: SE 13 kts		0:00-12:00		Aaron Martin		0:00-12:00		Riley Lopez	
SEAS SOL: 1 m		12:00 - 24:00		Cody Bahlau		12:00 - 24:00		Gilles Guérin	
SEAS EOL: 1 m									
SP		Havian		UTC		EVENT		COMMENTS	
46016		1017		0:11:20		FGSP		SOL MGL2411029D06P3 - 36 Guns - 6600 in3	
								VESSEL POSITION	
								Shotpoints	
								Latitude (S)	
								Longitude (W)	
						FSP		46016	
						LSP		47107	
								01°05'26.23"	
								15°09'50.67"	
								01°34'04.94"	
								15°02'26.17"	
								Latitude (S)	
								Longitude (W)	
47107		2108		7:33:41		LGSP		EOL MGL2411029D06P3 - 36 Guns - 6600 in3	
								FSP	
								46016	
								1.09062	
								15.164075	
								LSP	
								47107	
								1.568039	
								15.040604	
								NRP - Stern	
								29.2m	
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4DX locations & remarks: good - absent - intermittent - partial		Forward		Center					
Tailbuoy #1		Good		GOOD		Gun string #1		GOOD	
Head Float #1		Good		GOOD		Gun string #2		GOOD	
						Gun string #3		GOOD	
						Gun string #4		GOOD	
Compasses		23						SP spacing: 50m	
D.I.s		9,23						line status: complete	
Processing Comments								Acronyms key	
d1-3,57,58 deep at @SOL dt turn								DC SOL	
compasses noisy dt turn filter applied								Distance Crossed at Start of Line	
								DC EOL	
								Distance Crossed at End of Line	
								BSP	
								Bottom Speed, aka SOG: Speed Over Ground	
								FEATHER	
								The angle from the boat to the TB (Tail Buoy)	
								NRP	
								Navigation Reference Point	
								COS	
								Center of Source	
								CNG	
								Center Near Group	
								CMP	
								Common Mid-point	
Overall Comments		Seispos produced P1							

