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Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

Line Name:		MGL1115002	NAVIGATION		DATE: 2011-12-09	
Line Brg :		259 °	LINE LOGS		JULIAN DAY: 343	
CLIENT: National Science Foundation - James Gaherty SURVEY: noMELT Location: Line Islands (70,000,000 years old)						
DC SOL : 45.3m DC EOL : SMG SOL: 4.7 knots SMG EOL: <u>WEATHER</u> WIND SOL: variable knots WIND EOL: SEAS SOL: 1.0m SEAS EOL:		DEPTH SOL : 4997.2m DEPTH EOL : FEATHER SOL: -6.1 ° FEATHER EOL: na ° MAX FEATHER: na °		NAVIGATION SYSTEM USED: C-Nav3050 - Primary NAVIGATION SYSTEM USED: SeaPath 200 NAVIGATION SYSTEM USED: Pos MV v3 GRAVITY METER: BMG-II: used, SN210 MAGNETOMETER: GeoMetrics: used MAG DEC USED : 9.2167°		
SP	TIME(UTC)	EVENT	COMMENTS			
984	14:01	SOL	START OF LINE			
989		Digicourse	Start of receiving compass and depth indicator			
	14:31	spectra	Stop / restart spectra d/t digicourse trouble shooting.			
	15:10	spectra	Stop / restart spectra d/t digicourse trouble shooting			
	15:24	spectra	Stop / restart line – LMN			
	15:27	spectra	reset digicourse to periodic – troubleshooting			
	15:33	spectra	Start turn – Do Not Process this line			
			VESSEL POSITION			
			FSP	Shotpoints	Latitude (N / +) Longitude (W / -)	
			LSP	984	09° 50' 43.744" -142° 33' 10.272"	
			NAVIGATION OFFSET APPLIED			
			NRP - Stern	29.5m		
			NRP - COS	232.0m		
			NRP - CNG			
			COS - CNG			
			NRP - CMP			
			Note: LMN line parameter set to great circle line			
			P1	P2		
			MGL1115002	MGL1115002		
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:			
Tailbuoy #1	good	Gun string #1	none	G1T2 - none		
		Gun string #2	good	G1T3 - none		
		Gun string #3	good			
		Gun string #4	none			
			MGL1115_V2.LMN Source.SCN(001) mgl2010.RTCN			
			SP spacing: 600.0m			
			line status: DO NOT PROCESS			


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	Line Name:	MGL1115004	NAVIGATION	DATE: 2011-12-14	Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY EARTH INSTITUTE
Seq# 009	Line Brg :	ARC °	LINE LOGS	JULIAN DAY: 348	
CLIENT: National Science Foundation - James Gaherty SURVEY: noMELT Location: Line Islands (70,000,000 years old)					
DC SOL : -177.0m		DEPTH SOL : 5015.1m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary	
DC EOL : -6.0m		DEPTH EOL : 5150.4m		NAVIGATION SYSTEM USED: SeaPath 200	
SMG SOL: 4.5 knots		FEATHER SOL: -67.4 °		NAVIGATION SYSTEM USED: Pos MV v3	
SMG EOL: 3.2 knots		FEATHER EOL: 5.6 °		GRAVITY METER: BMG-II: used, SN210	
<u>WEATHER</u>		MAX FEATHER: na °		MAGNETOMETER: GeoMetrics: used	
WIND SOL: NE12 knots		MAG DEC USED : 9.2167°			
WIND EOL: E19 knots					
SEAS SOL: 2.0m		10:00 – 16:00 utc => Martello, Skinner		22:00 – 04:00 utc => Eaton, Margoliuss	
SEAS EOL: 2.0m		16:00 – 22:00 utc => Martello, Feng		04:00 – 10:00 utc => Eaton, Ball	
SP	TIME(UTC)	EVENT	COMMENTS		
1003	14:04	SOL	Streamer still in Turn		
1004	14:09	End Turn	Streamer still in Turn		
	14:11	Multibeam	EM122 increased coverage to 70/70		
1140	23:59	midnight	Last sp of day		
1172	02:19	source	volume decreased to mitigation gun due to sperm whale sightings		
1176	02:40	EOL	stop line d/t sightings		
			VESSEL POSITION		
FSP			Shotpoints	Latitude (N / +)	Longitude (W / -)
LSP			1003	09° 10' 34.005"	-145° 59' 55.070"
			1176	09° 55' 44.695"	-147° 34' 07.065"
			NAVIGATION OFFSET APPLIED		
NRP - Stern			29.5m _____		
NRP - COS			232.0m _____		
NRP - CNG			399.1m _____		
COS - CNG			181.0m _____		
NRP - CMP			308.6m _____		
Note: LMN line parameter set to great circle line					
			P ₁	P ₂	
			MGL1115004.p190	MGL1115004.p294	
Posnet locations & remarks: good - none - intermittent			Acoustic remarks:		
Tailbuoy #1	good	Gun string #1	none	G1T3 none	
		Gun string #2	good	S1T2 none	
		Gun string #3	good		
		Gun string #4	none		
SP spacing: 600m			line status: Incomplete		

Seq# 010		Line Name: MGL1115004A		NAVIGATION		DATE: 2011-12-15															
		Line Brg : ARC °		LINE LOGS		JULIAN DAY: 349															
CLIENT: National Science Foundation - James Gaherty SURVEY: noMELT Location: Line Islands (70,000,000 years old)																					
DC SOL : -287.3m		DEPTH SOL : 5175.4m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																	
DC EOL : 58.7m		DEPTH EOL : 5179.7m		NAVIGATION SYSTEM USED: SeaPath 200																	
SMG SOL: 4.7 knots		FEATHER SOL: -69.1 °		NAVIGATION SYSTEM USED: Pos MV v3																	
SMG EOL: 4.7 knots		FEATHER EOL: -0.7 °		GRAVITY METER: BMG-II: used, SN210																	
<u>WEATHER</u>		MAX FEATHER: na °		MAGNETOMETER: GeoMetrics: used																	
WIND SOL: 20 knots				MAG DEC USED : 9.2167°																	
WIND EOL: 10-15 knots																					
SEAS SOL: 2.0m		10:00 – 16:00 utc => Martello, Skinner		22:00 – 04:00 utc => Eaton, Margolius																	
SEAS EOL: 1.0m		16:00 – 22:00 utc => Martello, Feng		04:00 – 10:00 utc => Eaton, Ball																	
SP	TIME(UTC)	EVENT	COMMENTS																		
1168	05:19	SOL	Start of line																		
1168-1176	05:19-05:53	Alpha sp's	Shots that were reshot after circle																		
1177	05:58	new acquisition	start of 'new' acquisition																		
1297	14:45	source	Manual fire source																		
	21:01	multibeam	offline for bist																		
	21:09	multibeam	Operational – passed bist																		
1389	21:23	EOL	End of line																		
			VESEL POSITION																		
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Tailbuoy #1	good	Gun string #1	none	G1T3 none																	
		Gun string #2	good	S1T2 none																	
		Gun string #3	good																		
		Gun string #4	none																		
				MGL1115.LMN		2D_1x6.SCN(001)		mgl2010.RTCN													
				SP spacing:		600m															
				line status:		COMPLETE															

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Seq# 013		Line Name: MGL1115OBS07		NAVIGATION		DATE: 2011-12-16		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY EARTH INSTITUTE																	
		Line Brg : 348 °		LINE LOGS		JULIAN DAY: 351																			
CLIENT: National Science Foundation - James Gaherty				SURVEY: noMELT		Location: Line Islands (70,000,000 years old)																			
DC SOL : -4.5m		DEPTH SOL : 5070.5m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																					
DC EOL : 2.1m		DEPTH EOL : 5192.3m		NAVIGATION SYSTEM USED: SeaPath 200																					
SMG SOL: 3.9 knots		FEATHER SOL: na °		NAVIGATION SYSTEM USED: Pos MV v3																					
SMG EOL: 4.2 knots		FEATHER EOL: na °		GRAVITY METER: BMG-II: used, SN210																					
<u>WEATHER</u>		MAX FEATHER: na °		MAGNETOMETER: GeoMetrics: used																					
WIND SOL: ENE10 knots				MAG DEC USED : 9.2167°																					
WIND EOL: E8kts knots																									
SEAS SOL: 2.0m		10:00 – 16:00 utc => Martello, Skinner		22:00 – 04:00 utc => Eaton, Margolius																					
SEAS EOL: 1m		16:00 – 22:00 utc => Martello, Feng		04:00 – 10:00 utc => Eaton, Ball																					
SP	TIME(UTC)	EVENT	COMMENTS																						
1355	16:32	SOL	SOL MGL1115OBS07 FGSP 1355																						
	18:48	C-Nav	C-Nav alarm – not going to "Logger"																						
	18:50	MicroSV	Sound Velocity alarm. Might be dead.																						
	18:53	C-Nav	C-Nav back.																						
	18:55	C-Nav	C-Nav alarm – not going to "Logger"																						
	20:28	MicroSV	Sound Velocity back online.																						
1251	23:59	Midnight Positio	7 58°64.4" -145 02°55.38"																						
1230	1:30	EOL	EOL MGL1115OBS07																						
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