







Seq# 003		Line Name: MGL1601OBS02R		NAVIGATION		DATE: 2016-01-18		 		
		Line Brg : 175.7 °		LINE LOGS		JULIAN DAY: 18				
CLIENT: Reece Texas A&M / NSF				SURVEY: Santos Basin		AREA: South Atlantic				
DC SOL : -393.6 m		DEPTH SOL : 3477.5 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary						
DC EOL : 22.0 m		DEPTH EOL : 3625.1 m		NAVIGATION SYSTEM USED: SeaPath 200						
BSP SOL: 4.7 kts		FEATHER SOL: N/A		NAVIGATION SYSTEM USED: C-Nav2000						
BSP EOL: 4.4 kts		FEATHER EOL: N/A		NAVIGATION SYSTEM USED: POSMV						
WEATHER		MAX FEATHER: N/A		GRAVITY METER: BMG-II: used, SN210						
WIND SOL: NE 10.5 kts		MAGNETOMETER: GeoMetrics: used								
WIND EOL: N 12.5 kts		shift hours		shift leaders		shift hours		watch personnel		
SEAS SOL: 1.5 m		13:00 – 01:00 utc =>		David Martinson		01:00 – 13:00 utc =>		Graeme Stewart		
SEAS EOL: 1.5 m		13:00 – 01:00 utc =>		Klayton Curtis		01:00 – 13:00 utc =>		Shane Traceski		
SP	UTC	EVENT	COMMENTS							
991	18:14	SOL	FGSP Source Volume 6600ci - 36 guns							
1001	18:25	OBS	OBS201 Crossing							
1008	18:32		Last shot of re-shoot							
1009	18:33		First shot of PRIME							
1068	19:37	OBS	OBS202 Crossing							
1134	20:49	OBS	OBS203 Crossing							
1201	22:03	OBS	OBS204 Crossing							
1268	23:13	OBS	OBS205 Crossing							
1310	0:00	Midnight	Midnight Position							
1334	0:25	OBS	OBS206 Crossing							
1400	01:37	OBS	OBS207 Crossing							
1400	01:37	EOL	End of line							
Posnet locations & remarks: good - none - intermittent			acoustics							
Tailbuoy #1	none	Gun string #1	GOOD	no acoustics in use						
Tailbuoy #2	none	Gun string #2	GOOD							
Tailbuoy #3	none	Gun string #3	GOOD							
Tailbuoy #4	none	Gun string #4	GOOD							
SP spacing:			150.0m							
line status:			Complete							

Seq# 004	Line Name: MGL1601OBS03		NAVIGATION		DATE: 2016-01-21	Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE																																			
	Line Brg : 358 °		LINE LOGS		JULIAN DAY: 21																																				
CLIENT: Reece Texas A&M / NSF		SURVEY: Santos Basin		AREA: South Atlantic																																					
DC SOL : 29.0 m	DEPTH SOL : 4327.1 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																																						
DC EOL : 24.2 m	DEPTH EOL : 4130.1 m		NAVIGATION SYSTEM USED: SeaPath 200																																						
BSP SOL: 4.2 kts	FEATHER SOL: N/A		NAVIGATION SYSTEM USED: C-Nav2000																																						
BSP EOL: 4.5 kts	FEATHER EOL: N/A		NAVIGATION SYSTEM USED: POSMV																																						
WEATHER	MAX FEATHER: N/A		GRAVITY METER: BMG-II: used, SN210																																						
WIND SOL: N10.9 kts			MAGNETOMETER: GeoMetrics: used																																						
WIND EOL: N12.8 kts	shift hours	shift leaders	shift hours	watch personnel	shift hours	watch personnel																																			
SEAS SOL: 1.5 m	13:00 – 01:00 utc =>	David Martinson	01:00 – 13:00 utc =>	Graeme Stewart																																					
SEAS EOL: 1.5 m	13:00 – 01:00 utc =>	Klayton Curtis	01:00 – 13:00 utc =>	Shane Traceski																																					
SP	UTC	EVENT	COMMENTS																																						
908	09:18	SOL	FGSP Source Volume 6600ci - 35 guns																																						
1001	10:59	OBS	Crossed OBS 307																																						
1068	12:12	OBS	Crossed OBS 306																																						
1135	13:25	OBS	Crossed OBS 305																																						
1201	14:37	OBS	Crossed OBS 304																																						
1267	15:49	OBS	Crossed OBS 303																																						
1334	17:01	OBS	Crossed OBS 302																																						
1400	18:13	OBS	Crossed OBS 301																																						
1401	18:14	EOL	LGSP Source Volume 6600ci - 35 guns																																						
<table border="1"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>Shotpoints</th> <th>Latitude (S)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>FSP 908</td> <td>31° 04' 27.510"</td> <td>20° 25' 27.123"</td> </tr> <tr> <td>LSP 1401</td> <td>30° 24' 24.328"</td> <td>20° 26' 28.152"</td> </tr> </tbody> </table>							VESSEL POSITION			Shotpoints	Latitude (S)	Longitude (W)	FSP 908	31° 04' 27.510"	20° 25' 27.123"	LSP 1401	30° 24' 24.328"	20° 26' 28.152"																							
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Posnet locations & remarks: good - none - intermittent				acoustics																																					
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Tailbuoy #3	none	Gun string #3	GOOD																																						
Tailbuoy #4	none	Gun string #4	GOOD																																						
				SP spacing: 150m																																					
line status:				Complete																																					


Seq# 005		Line Name: MGL1601OBS04		NAVIGATION		DATE: 2016-01-23		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE	
		Line Brg : 178 °		LINE LOGS		JULIAN DAY: 23			
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic			
DC SOL : 391.4 m		DEPTH SOL : 4688.8 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL : 17.4 m		DEPTH EOL : 4461.8 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.3 kts		FEATHER SOL: N/A		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.3 kts		FEATHER EOL: N/A		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: N/A		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: NE10 kts		MAGNETOMETER: GeoMetrics: used							
WIND EOL: N 6.5 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		22:00 – 10:00 utc =>		Alan Thompson		22:00 – 10:00 utc =>		Gilles Guerrin	
SEAS EOL: 1.0 m		10:00 – 22:00 utc =>		Klayton Curtis		10:00 – 22:00 utc =>		Shane Traceski	
SP	UTC	EVENT	COMMENTS						
907	19:17	SOL							
1001	21:06	OBS	Crossed OBS 401						
1068	22:19	OBS	Crossed OBS 402						
1134	23:29	OBS	Crossed OBS 403						
		VESSEL POSITION							
		Shotpoints		Latitude (S)		Longitude (W)			
		FSP 907		30° 30' 02.001"		24° 50' 09.210"			
		LSP 1402		31° 10' 05.406"		24° 47' 55.094"			
1163	24:00	MIDNIGHT	Midnight shotpoint, start of JD 24						
1200	00:41	OBS	Crossed OBS 404						
1267	01:53	OBS	Crossed OBS 405						
1333	03:05	OBS	Crossed OBS 406						
1399	04:17	OBS	Crossed OBS 407						
1402	04:20	EOL	End of line						
		NAVIGATION OFFSET APPLIED							
		NRP - Stern		29.5m					
		NRP - COS		205.0m					
		NRP - CNG		n/a					
		COS - CNG		n/a					
		NRP - CMP		n/a					
Posnet locations & remarks: good - none - intermittent		acoustics							
Tailbuoy #1	none	Gun string #1	GOOD	no acoustics in use					
Tailbuoy #2	none	Gun string #2	GOOD						
Tailbuoy #3	none	Gun string #3	GOOD						
Tailbuoy #4	none	Gun string #4	GOOD						
SP spacing:		150.0m							
line status:		Complete							

Seq# 005		Line Name: MGL1601OBS04		NAVIGATION		DATE: 2016-01-23		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE	
		Line Brg : 178 °		LINE LOGS		JULIAN DAY: 23			
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic			
DC SOL : 391.4 m		DEPTH SOL : 4688.8 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL : 17.4 m		DEPTH EOL : 4461.8 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.3 kts		FEATHER SOL: N/A		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.3 kts		FEATHER EOL: N/A		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: N/A		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: NE10 kts		MAGNETOMETER: GeoMetrics: used							
WIND EOL: N 6.5 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		22:00 – 10:00 utc =>		Alan Thompson		22:00 – 10:00 utc =>		Gilles Guerrin	
SEAS EOL: 1.0 m		10:00 – 22:00 utc =>		Klayton Curtis		10:00 – 22:00 utc =>		Shane Traceski	
SP	UTC	EVENT	COMMENTS						
907	19:17	SOL							
1001	21:06	OBS	Crossed OBS 401						
1068	22:19	OBS	Crossed OBS 402						
1134	23:29	OBS	Crossed OBS 403						
		VESSEL POSITION							
		Shotpoints		Latitude (S)		Longitude (W)			
		FSP 907		30° 30' 02.001"		24° 50' 09.210"			
		LSP 1402		31° 10' 05.406"		24° 47' 55.094"			
1163	24:00	MIDNIGHT	Midnight shotpoint, start of JD 24						
1200	00:41	OBS	Crossed OBS 404						
1267	01:53	OBS	Crossed OBS 405						
1333	03:05	OBS	Crossed OBS 406						
1399	04:17	OBS	Crossed OBS 407						
1402	04:20	EOL	End of line						
		NAVIGATION OFFSET APPLIED							
		NRP - Stern		29.5m					
		NRP - COS		205.0m					
		NRP - CNG		n/a					
		COS - CNG		n/a					
		NRP - CMP		n/a					
Posnet locations & remarks: good - none - intermittent		acoustics							
Tailbuoy #1	none	Gun string #1	GOOD	no acoustics in use					
Tailbuoy #2	none	Gun string #2	GOOD						
Tailbuoy #3	none	Gun string #3	GOOD						
Tailbuoy #4	none	Gun string #4	GOOD						
SP spacing:		150.0m							
line status:		Complete							

Seq# 006

Line Name:		MGL1601MCS1A		NAVIGATION		DATE: 2016-01-29		Lamont-Doherty Earth Observatory	
Line Brg :		90 °		LINE LOGS		JULIAN DAY: 29		COLUMBIA UNIVERSITY   EARTH INSTITUTE	
CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic					
DC SOL: 16.5 m		DEPTH SOL : 4230.7 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -4.8 m		DEPTH EOL : 5015.7 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.5 kts		FEATHER SOL: -00.7 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.3 kts		FEATHER EOL: 00.2 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: -03.0 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: SE 10-15 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: E19.5 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
SP		UTC		EVENT		COMMENTS			
722		16:53		SOL		Start of line 6600ci			
2260		00:00		Midnight		Midnight shot point 2260			
4960		12:24		Guns		Gun1 string 2 offline at SP 4960 new volume 6240			
4991		12:32		EOL		End of line			
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1		N/A		Gun string #1		GOOD			
Tailbuoy #2		none		Gun string #2		GOOD			
Tailbuoy #3		none		Gun string #3		GOOD			
Tailbuoy #4		none		Gun string #4		GOOD			
SP spacing:		37.5m		line status:		Complete			



<b>Seq# 008</b>		<b>Line Name:</b> MGL1601MCST0		<b>NAVIGATION</b>		<b>DATE:</b> 2016-01-30																						
		<b>Line Brg :</b> 180 °		<b>LINE LOGS</b>		<b>JULIAN DAY:</b> 30																						
		<b>CLIENT:</b> Reece Texas A&M / NSF		<b>SURVEY:</b>		<b>AREA:</b> South Atlantic																						
DC SOL: -161.3 m		DEPTH SOL : 4711.2 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																								
DC EOL: 2601.3 m		DEPTH EOL : 4777.5 m		NAVIGATION SYSTEM USED: SeaPath 200																								
BSP SOL: 4.3 kts		FEATHER SOL: 86.1 °		NAVIGATION SYSTEM USED: C-Nav2000																								
BSP EOL: 4.3 kts		FEATHER EOL: 04.2 °		NAVIGATION SYSTEM USED: POSMV																								
WEATHER		MAX FEATHER: 86.1 °		GRAVITY METER: BMG-II: used, SN210																								
WIND SOL: SE 20 kts				MAGNETOMETER: GeoMetrics: used																								
WIND EOL: SE 20 kts																												
SEAS SOL: 1.5 m		shift hours 12:00 - 24:00		shift leaders Shane Traceski		shift hours 00:00 - 12:00		watch personnel Klayton Curtis																				
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart																				
<b>SP</b>	<b>UTC</b>	<b>EVENT</b>	<b>COMMENTS</b>																									
1817	12:53	SOL	Start of line																									
1899	13:16	Source	Secure array 2 for retrieval and repairs, source volume = 4950 in3																									
2089	14:06	Source	Array 2 deployed and online, source volume = 6600 in3																									
2931	17:56	EOL	End of line																									
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NAVIGATION OFFSET APPLIED																												
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NRP - CNG	422.70m																											
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Posnet locations & remarks: good - none - intermittent																												
Tailbuoy #1	N/A	Gun string #1	GOOD																									
Tailbuoy #2	none	Gun string #2	GOOD																									
Tailbuoy #3	none	Gun string #3	GOOD																									
Tailbuoy #4	none	Gun string #4	GOOD																									
						SP spacing: 37.5m																						
<b>line status:</b>						Complete																						

Seq# 009		Line Name: MGL1601MCS05		NAVIGATION		DATE: 2016-01-30		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE	
		Line Brg : 0 °		LINE LOGS		JULIAN DAY: 30			
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic			
DC SOL: -46.0 m		DEPTH SOL : 4578.3 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -64.0 m		DEPTH EOL : 5026.3 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.4 kts		FEATHER SOL: 136.1 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.5 kts		FEATHER EOL: -03.9 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: 136.1 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: SE17 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: E12.4 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
SP	UTC	EVENT	COMMENTS						
668	19:04	SOL	Start of line						
1001	20:38	PrePlot	First full fold shotpoint						
1707	24:00	Midnight	Julian day 31 (January 31, 2016)						
2809	05:05	EOL	End of line						
			VESEL POSITION						
			Shotpoints		Latitude (S)		Longitude (W)		
			FSP	668	31° 19' 21.006"		26° 40' 49.668"		
			LSP	2809	30° 35' 55.033"		26° 42' 17.003"		
			NAVIGATION OFFSET APPLIED						
			NRP - Stern		29.5m				
			NRP - COS		205.0m				
			NRP - CNG		422.70m				
			COS - CNG		217.70m				
			NRP - CMP		313.90m				
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1	N/A	Gun string #1	GOOD						
Tailbuoy #2	none	Gun string #2	GOOD						
Tailbuoy #3	none	Gun string #3	GOOD						
Tailbuoy #4	none	Gun string #4	GOOD						
			SP spacing:		37.5m				
			line status:		Complete				

Seq# 010

Seq# 011		Line Name: MGL1601MCS1B		NAVIGATION		DATE: 2016-01-31		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE	
		Line Brg : 88 °		LINE LOGS		JULIAN DAY: 31			
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic			
DC SOL: -110.5 m		DEPTH SOL : 4885.7 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -9.1 m		DEPTH EOL : 4677.7 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.3 kts		FEATHER SOL: -95.6 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.6 kts		FEATHER EOL: -01.9 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: -06.7 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: E9.7 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: NNE12.2 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
SP	UTC	EVENT	COMMENTS						
640	10:32	SOL	Start of line 6600ci						
1001	12:12	FFFS	First full fold shot point						
4197	02:46	Guns	Gun 4 on string 4 missed foired SP 4197 - 4207						
5232	07:32	LGSP	LAUM 5 failure						
5246	07:27	FGSP	LAUM 7 looped back						
5930	10:32	EOL	End of line						
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1	N/A	Gun string #1	GOOD						
Tailbuoy #2	none	Gun string #2	GOOD						
Tailbuoy #3	none	Gun string #3	GOOD						
Tailbuoy #4	none	Gun string #4	GOOD						
SP spacing: 37.5m									
line status: Complete									

[illegible]

Line Name:		MGL1601MCS04		NAVIGATION		DATE: 2016-02-01		Lamont-Doherty Earth Observatory	
Line Brg :		0 °		LINE LOGS		JULIAN DAY: 32		COLUMBIA UNIVERSITY   EARTH INSTITUTE	
CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic					
DC SOL: 11.6 m		DEPTH SOL : 4529.2 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -4.3 m		DEPTH EOL : 4549.9 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.7 kts		FEATHER SOL: 134.2 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.4 kts		FEATHER EOL: 01.8 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: 134.2 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: N 8 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: N6 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
SP		UTC		EVENT		COMMENTS			
643		16:57		SOL		Start of line			
1494		20:46		Source		S2G1 disabled d/t sync and possible autofire, source volume = 6420 in3.			
1655		21:29		Source		Array 2 offline, begin retrieval for repair, Source volume = 4950 in3.			
2070		23:20		Source		Array 2 online, source volume = 6600 in3.			
2214		24:00		Midnight		Start of Julian day 33 (2nd February 2016)			
2763		02:30		EOL		End of line			
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1		N/A		Gun string #1		GOOD			
Tailbuoy #2		none		Gun string #2		GOOD			
Tailbuoy #3		none		Gun string #3		GOOD			
Tailbuoy #4		none		Gun string #4		GOOD			
VESSEL POSITION		Shotpoints		Latitude (S)		Longitude (W)			
FSP		643		31° 17' 04.220"		24° 48' 43.676"			
LSP		2763		30° 34' 03.715"		24° 49' 48.715"			
NAVIGATION OFFSET APPLIED		NRP - Stern		29.5m					
		NRP - COS		205.0m					
		NRP - CNG		422.70m					
		COS - CNG		217.70m					
		NRP - CMP		313.90m					
SP spacing:		37.5m		line status:		Complete			

[illegible]

[illegible]



[illegible]

Seq# 017	Line Name: MGL1601MCS03		NAVIGATION		DATE: 2016-02-04		Lamont-Doherty Earth Observatory	
	Line Brg : 358 °		LINE LOGS		JULIAN DAY: 35		COLUMBIA UNIVERSITY   EARTH INSTITUTE	
<div> <div>CLIENT: Reece Texas A&amp;M / NSF</div> <div>SURVEY:</div> <div>AREA: South Atlantic</div> </div>								
<div> <div> DC SOL: 9.3 m  DC EOL: 0.8 m  BSP SOL: 4.6 kts  BSP EOL: 4.4 kts  WEATHER  WIND SOL: SW 23 kts  WIND EOL: S9.6 kts  SEAS SOL: 1.5 m  SEAS EOL: 2.0 m </div> <div> DEPTH SOL : 4328.2 m  DEPTH EOL : 4116.2 m  FEATHER SOL: 129.1 °  FEATHER EOL: -00.2 °  MAX FEATHER: 129.1 ° </div> <div> NAVIGATION SYSTEM USED: C-Nav3050 - Primary  NAVIGATION SYSTEM USED: SeaPath 200  NAVIGATION SYSTEM USED: C-Nav2000  NAVIGATION SYSTEM USED: POSMV  GRAVITY METER: BMG-II: used, SN210  MAGNETOMETER: GeoMetrics: used </div> </div>								
<div> <div> shift hours 12:00 - 24:00 12:00 - 24:00 </div> <div> shift leaders Shane Traceski David Martinson </div> <div> shift hours 00:00 - 12:00 00:00 - 12:00 </div> <div> watch personnel Klayton Curtis Graeme Stewart </div> <div> shift hours watch personnel </div> </div>								
SP	UTC	EVENT	COMMENTS					
667	20:16	SOL	Start of line					
1486	24:00	Midnight	Start of Julian Day 36 (5 February 2016)					
2763	05:50	EOL	End of line					
<div> <div> NAVIGATION OFFSET APPLIED  NRP - Stern 29.5m  NRP - COS 205.0m  NRP - CNG 422.70m  COS - CNG 217.70m  NRP - CMP 313.90m </div> </div>								
Posnet locations & remarks: good - none - intermittent								
Tailbuoy #1	N/A	Gun string #1	GOOD					
Tailbuoy #2	none	Gun string #2	GOOD					
Tailbuoy #3	none	Gun string #3	GOOD					
Tailbuoy #4	none	Gun string #4	GOOD					
<div> <div>SP spacing: 37.5m</div> <div>line status: Complete</div> </div>								

[illegible]

<b>Seq#</b>	<b>019</b>	<b>Line Name:</b>	MGL1601MCS1D	<b>NAVIGATION</b>	<b>DATE:</b>	2016-02-05	Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE
<b>Line Brg :</b>	85 °	<b>LINE LOGS</b>	JULIAN DAY:	36			
<b>CLIENT:</b> Reece Texas A&M / NSF		<b>SURVEY:</b>		<b>AREA:</b> South Atlantic			
DC SOL:	-13.9 m	DEPTH SOL :	4345.5 m	NAVIGATION SYSTEM USED: C-Nav3050 - Primary			
DC EOL:	-21.6 m	DEPTH EOL :	3815.6 m	NAVIGATION SYSTEM USED: SeaPath 200			
BSP SOL:	4.7 kts	FEATHER SOL:	-41.6 °	NAVIGATION SYSTEM USED: C-Nav2000			
BSP EOL:	4.4 kts	FEATHER EOL:	01.3 °	NAVIGATION SYSTEM USED: POSMV			
<b>WEATHER</b>		<b>MAX FEATHER:</b>		<b>GRAVITY METER:</b> BMG-II: used, SN210			
WIND SOL:	SSE11.7 kts			<b>MAGNETOMETER:</b> GeoMetrics: used			
WIND EOL:	W7.1 kts	<u>shift hours</u>	<u>shift leaders</u>	<u>shift hours</u>	<u>watch personnel</u>	<u>shift hours</u>	<u>watch personnel</u>
SEAS SOL:	1.0 m	12:00 - 24:00	Shane Traceski	00:00 - 12:00	Klayton Curtis		
SEAS EOL:	1.0 m	12:00 - 24:00	David Martinson	00:00 - 12:00	Graeme Stewart		
SP	UTC	EVENT	COMMENTS				VESSEL POSITION
859	12:34	SOL	Start of line				Shotpoints Latitude (S) Longitude (W))
1001	13:12	FGSP	FGSP				FSP 859 30° 41' 00.024" 20° 29' 16.368"
3354	00:00	Midnight	Midnight Shot Point				LSP 10191 30° 23' 34.635" 16° 51' 23.042"
5496	09:52	XBT	XBT-T5 Seq 14				<b>NAVIGATION OFFSET APPLIED</b> NRP - Stern 29.5m NRP - COS 205.0m NRP - CNG 422.70m COS - CNG 217.70m NRP - CMP 313.90m
6844	16:06	PSO	Power Down to 40ci for turtle				
6861	16:10	PSO	Full Volume Shot 6600ci				
7261	17:59	Streamer	Streamer to 12m				
7900	20:53	Streamer	Streamer to 11m				
8234	22:26	Streamer	Streamer to 9.5m				
8581	00:00	Midnight	Midnight Shot Point				
10191	07:21	EOL	End of line				
Posnet locations & remarks: good - none - intermittent							
Tailbuoy #1	N/A	Gun string #1	GOOD				SP spacing: 37.5m  <b>line status:</b> Complete
Tailbuoy #2	none	Gun string #2	GOOD				
Tailbuoy #3	none	Gun string #3	GOOD				
Tailbuoy #4	none	Gun string #4	GOOD				



Seq# 020	Line Name: MGL1601MCST6		NAVIGATION		DATE: 2016-02-07	Lamont-Doherty Earth Observatory	
	Line Brg : 180 °		LINE LOGS		JULIAN DAY: 38	COLUMBIA UNIVERSITY   EARTH INSTITUTE	
CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic			
DC SOL: -219.5 m	DEPTH SOL : 3875.8 m	NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: 2501.5 m	DEPTH EOL : 3621.1 m	NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.3 kts	FEATHER SOL: 56.5 °	NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.4 kts	FEATHER EOL: -02.4 °	NAVIGATION SYSTEM USED: POSMV					
WEATHER	MAX FEATHER: 56.5 °	GRAVITY METER: BMG-II: used, SN210					
WIND SOL: W7.5 kts		MAGNETOMETER: GeoMetrics: used					
WIND EOL: NE 5 kts	shift hours shift leaders shift hours watch personnel shift hours watch personnel						
SEAS SOL: 1.5 m	12:00 - 24:00 Shane Traceski 00:00 - 12:00 Klayton Curtis						
SEAS EOL: calm	12:00 - 24:00 David Martinson 00:00 - 12:00 Graeme Stewart						
SP 1980	UTC 08:25	EVENT SOL	COMMENTS				VESSEL POSITION
			Start of line source volume = 3300ci				Shotpoints Latitude (S) Longitude (W)
							FSP 1980 30° 27' 13.015" 16° 49' 30.524"
							LSP 2930 30° 46' 33.172" 16° 49' 32.168"
							NAVIGATION OFFSET APPLIED
							NRP - Stern 29.5m
							NRP - COS 205.0m
							NRP - CNG 422.70m
							COS - CNG 217.70m
							NRP - CMP 313.90m
2930	12:47	EOL	End of line source volume = 6600 in3				
Posnet locations & remarks: good - none - intermittent							
Tailbuoy #1	N/A	Gun string #1	GOOD				SP spacing: 37.5m
Tailbuoy #2	none	Gun string #2	GOOD				
Tailbuoy #3	none	Gun string #3	GOOD				
Tailbuoy #4	none	Gun string #4	GOOD				
line status:							Complete

Seq# 021		Line Name: MGL1601MCS02		NAVIGATION		DATE: 2016-02-07		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE													
		Line Brg : 358 °		LINE LOGS		JULIAN DAY: 38															
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic															
DC SOL: 2.8 m		DEPTH SOL : 3765.5 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																	
DC EOL: 9.5 m		DEPTH EOL : 3559.2 m		NAVIGATION SYSTEM USED: SeaPath 200																	
BSP SOL: 4.7 kts		FEATHER SOL: 133.8 °		NAVIGATION SYSTEM USED: C-Nav2000																	
BSP EOL: 4.2 kts		FEATHER EOL: 05.5 °		NAVIGATION SYSTEM USED: POSMV																	
WEATHER		MAX FEATHER: 133.8 °		GRAVITY METER: BMG-II: used, SN210																	
WIND SOL: NE 5 kts				MAGNETOMETER: GeoMetrics: used																	
WIND EOL: N 15 kts		shift hours		shift leaders		shift hours		watch personnel													
SEAS SOL: calm		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis													
SEAS EOL: 1.0 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart													
SP	UTC	EVENT	COMMENTS																		
667	13:59	SOL	Start of line																		
2375	24:00	Midnight	Start of Julian Day 39																		
2763	00:07	EOL	End of line																		
			<table border="1"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>Shotpoints</th> <th>Latitude (S)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>FSP 667</td> <td>30° 46' 45.472"</td> <td>16° 53' 25.908"</td> </tr> <tr> <td>LSP 2763</td> <td>30° 04' 20.116"</td> <td>16° 57' 03.921"</td> </tr> </tbody> </table>							VESSEL POSITION			Shotpoints	Latitude (S)	Longitude (W)	FSP 667	30° 46' 45.472"	16° 53' 25.908"	LSP 2763	30° 04' 20.116"	16° 57' 03.921"
VESSEL POSITION																					
Shotpoints	Latitude (S)	Longitude (W)																			
FSP 667	30° 46' 45.472"	16° 53' 25.908"																			
LSP 2763	30° 04' 20.116"	16° 57' 03.921"																			
			<table border="1"> <thead> <tr> <th colspan="2">NAVIGATION OFFSET APPLIED</th> </tr> </thead> <tbody> <tr> <td>NRP - Stern</td> <td>29.5m</td> </tr> <tr> <td>NRP - COS</td> <td>205.0m</td> </tr> <tr> <td>NRP - CNG</td> <td>422.70m</td> </tr> <tr> <td>COS - CNG</td> <td>217.70m</td> </tr> <tr> <td>NRP - CMP</td> <td>313.90m</td> </tr> </tbody> </table>							NAVIGATION OFFSET APPLIED		NRP - Stern	29.5m	NRP - COS	205.0m	NRP - CNG	422.70m	COS - CNG	217.70m	NRP - CMP	313.90m
NAVIGATION OFFSET APPLIED																					
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NRP - CNG	422.70m																				
COS - CNG	217.70m																				
NRP - CMP	313.90m																				
Posnet locations & remarks: good - none - intermittent																					
Tailbuoy #1	N/A	Gun string #1	GOOD																		
Tailbuoy #2	none	Gun string #2	GOOD																		
Tailbuoy #3	none	Gun string #3	GOOD																		
Tailbuoy #4	none	Gun string #4	GOOD																		
			SP spacing: 37.5m																		
			line status:		Complete																

Seq# 022

Seq# 023		Line Name: MGL1601MCS1E		NAVIGATION		DATE: 2016-02-08		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE	
		Line Brg : 83.836 °		LINE LOGS		JULIAN DAY: 39			
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic			
DC SOL: -10.7 m		DEPTH SOL : 3794.0 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -18.2 m		DEPTH EOL : 3335.5 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.3 kts		FEATHER SOL: -02.5 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.3 kts		FEATHER EOL: -00.1 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: -97.7 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: NW 20 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: S16 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
SEAS EOL: 1.0 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
SP	UTC	EVENT	COMMENTS						
667	06:00	SOL	Start of line						
1001	07:31	FFFSP	First full fold SP						
4636	00:00	Midnight	Start of Julian Day 40						
6034	06:25	EOL	End of line						
			VESEL POSITION						
			Shotpoints		Latitude (S)		Longitude (W)		
			FSP	667	30° 24' 40.299"		17° 03' 02.437"		
			LSP	6034	30° 12' 06.079"		14° 58' 20.138"		
			NAVIGATION OFFSET APPLIED						
			NRP - Stern		29.5m				
			NRP - COS		205.0m				
			NRP - CNG		422.70m				
			COS - CNG		217.70m				
			NRP - CMP		313.90m				
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1	N/A	Gun string #1	GOOD						
Tailbuoy #2	none	Gun string #2	GOOD						
Tailbuoy #3	none	Gun string #3	GOOD						
Tailbuoy #4	none	Gun string #4	GOOD						
			SP spacing:		37.5m				
			line status:		Complete				



<b>Seq# 024</b>		<b>Line Name:</b> MGL1601MCS1E		<b>NAVIGATION</b>		<b>DATE:</b> 2016-02-09		 																				
		<b>Line Brg :</b> 180 °		<b>LINE LOGS</b>		<b>JULIAN DAY:</b> 40																						
		<b>CLIENT:</b> Reece Texas A&M / NSF		<b>SURVEY:</b>		<b>AREA:</b> South Atlantic																						
DC SOL: 580.3 m		DEPTH SOL : 3283.7 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																								
DC EOL: 2904.8 m		DEPTH EOL : 3309.7 m		NAVIGATION SYSTEM USED: SeaPath 200																								
BSP SOL: 4.6 kts		FEATHER SOL: 86.0 °		NAVIGATION SYSTEM USED: C-Nav2000																								
BSP EOL: 4.2 kts		FEATHER EOL: -04.3 °		NAVIGATION SYSTEM USED: POSMV																								
WEATHER		MAX FEATHER: 86.0 °		GRAVITY METER: BMG-II: used, SN210																								
WIND SOL: S12 kts				MAGNETOMETER: GeoMetrics: used																								
WIND EOL: SSW15 kts		shift hours		shift leaders		shift hours		watch personnel																				
SEAS SOL: 1.0 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis																				
SEAS EOL: 1.0 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart																				
SP	UTC	EVENT	COMMENTS																									
1862	06:57	SOL	Start of line																									
<div style="float: right; border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>VESSEL POSITION</b>  <table border="1"> <thead> <tr> <th>Shotpoints</th> <th>Latitude (S)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>FSP 1862</td> <td>30° 13' 19.200"</td> <td>14° 56' 28.600"</td> </tr> <tr> <td>LSP 2930</td> <td>30° 35' 04.643"</td> <td>14° 56' 46.420"</td> </tr> </tbody> </table>   <b>NAVIGATION OFFSET APPLIED</b>  <table border="1"> <tbody> <tr> <td>NRP - Stern</td> <td>29.5m</td> </tr> <tr> <td>NRP - COS</td> <td>205.0m</td> </tr> <tr> <td>NRP - CNG</td> <td>422.70m</td> </tr> <tr> <td>COS - CNG</td> <td>217.70m</td> </tr> <tr> <td>NRP - CMP</td> <td>313.90m</td> </tr> </tbody> </table> </div>										Shotpoints	Latitude (S)	Longitude (W)	FSP 1862	30° 13' 19.200"	14° 56' 28.600"	LSP 2930	30° 35' 04.643"	14° 56' 46.420"	NRP - Stern	29.5m	NRP - COS	205.0m	NRP - CNG	422.70m	COS - CNG	217.70m	NRP - CMP	313.90m
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FSP 1862	30° 13' 19.200"	14° 56' 28.600"																										
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NRP - Stern	29.5m																											
NRP - COS	205.0m																											
NRP - CNG	422.70m																											
COS - CNG	217.70m																											
NRP - CMP	313.90m																											
2930	11:51	EOL	End of line																									
Posnet locations & remarks: good - none - intermittent																												
Tailbuoy #1	N/A	Gun string #1	GOOD																									
Tailbuoy #2	none	Gun string #2	GOOD																									
Tailbuoy #3	none	Gun string #3	GOOD																									
Tailbuoy #4	none	Gun string #4	GOOD																									
SP spacing:						37.5m																						
<b>line status:</b>						Complete																						

[illegible]

[illegible]

Line Name:		MGL1601MCS1F		NAVIGATION		DATE: 2016-02-10		Lamont-Doherty Earth Observatory	
Line Brg :		82.8 °		LINE LOGS		JULIAN DAY: 41		COLUMBIA UNIVERSITY   EARTH INSTITUTE	
CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic					
DC SOL: -277.8 m		DEPTH SOL : 3305.5 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: 88.5 m		DEPTH EOL : 3159.1 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.2 kts		FEATHER SOL: -97.3 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.2 kts		FEATHER EOL: 01.8 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: -97.3 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: ESE 12.5 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: NNE 26 kts		shift hours		shift leaders		shift hours		watch personnel	
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
SP		UTC		EVENT		COMMENTS			
631		05:03		SOL		Start of line			
4622		24:00		Midnight		Start of Julian Day 42			
7956		15:27		EOL		End of line			
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1		N/A		Gun string #1		GOOD			
Tailbuoy #2		none		Gun string #2		GOOD			
Tailbuoy #3		none		Gun string #3		GOOD			
Tailbuoy #4		none		Gun string #4		GOOD			
VESSEL POSITION		Shotpoints		Latitude (S)		Longitude (W)			
FSP		631		30° 13' 18.556"		15° 16' 49.046"			
LSP		7956		29° 53' 26.969"		12° 21' 26.004"			
NAVIGATION OFFSET APPLIED		NRP - Stern		29.5m					
		NRP - COS		205.0m					
		NRP - CNG		42.70m					
		COS - CNG		217.70m					
		NRP - CMP		313.90m					
SP spacing:		37.5m		line status:		Complete			

Seq# 028		Line Name: MGL1601MCS06		NAVIGATION		DATE: 2016-02-11		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE													
		Line Brg : 262 °		LINE LOGS		JULIAN DAY: 42															
		CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic															
DC SOL: 325.7 m		DEPTH SOL : 3112.5 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary																	
DC EOL: -608.0 m		DEPTH EOL : 2632.3 m		NAVIGATION SYSTEM USED: SeaPath 200																	
BSP SOL: 4.2 kts		FEATHER SOL: 120.9 °		NAVIGATION SYSTEM USED: C-Nav2000																	
BSP EOL: 4.3 kts		FEATHER EOL: -02.8 °		NAVIGATION SYSTEM USED: POSMV																	
WEATHER		MAX FEATHER: 120.9 °		GRAVITY METER: BMG-II: used, SN210																	
WIND SOL: NNE18 kts				MAGNETOMETER: GeoMetrics: used																	
WIND EOL: NW15 kts		shift hours		shift leaders		shift hours		watch personnel													
SEAS SOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis													
SEAS EOL: 1.5 m		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart													
SP	UTC	EVENT	COMMENTS																		
950	16:54	SOL	Start of line																		
2406	00:00	Midnight	Midnight Shot Point start of JD43																		
4814	11:13	EEOL	Early End of line. Line ended to make a change to the record length																		
			<table border="1"> <thead> <tr> <th colspan="3">VESSEL POSITION</th> </tr> <tr> <th>Shotpoints</th> <th>Latitude (S)</th> <th>Longitude (W)</th> </tr> </thead> <tbody> <tr> <td>FSP 950</td> <td>29° 58' 02.053"</td> <td>12° 19' 19.530"</td> </tr> <tr> <td>LSP 4814</td> <td>30° 09' 27.974"</td> <td>13° 48' 31.475"</td> </tr> </tbody> </table>							VESSEL POSITION			Shotpoints	Latitude (S)	Longitude (W)	FSP 950	29° 58' 02.053"	12° 19' 19.530"	LSP 4814	30° 09' 27.974"	13° 48' 31.475"
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NRP - COS	205.0m																				
NRP - CNG	422.70m																				
COS - CNG	217.70m																				
NRP - CMP	313.90m																				
Posnet locations & remarks: good - none - intermittent																					
Tailbuoy #1	N/A	Gun string #1	GOOD																		
Tailbuoy #2	none	Gun string #2	GOOD																		
Tailbuoy #3	none	Gun string #3	GOOD																		
Tailbuoy #4	none	Gun string #4	GOOD																		
			SP spacing: 37.5m																		
			line status:		InComplete																

Seq# 029

Line Name:		MGL1601MCS08		NAVIGATION		DATE: 2016-02-13		Lamont-Doherty Earth Observatory	
Line Brg :		82.733 °		LINE LOGS		JULIAN DAY: 44		COLUMBIA UNIVERSITY   EARTH INSTITUTE	
CLIENT: Reece Texas A&M / NSF		SURVEY:		AREA: South Atlantic					
DC SOL: -12.7 m		DEPTH SOL : 3422.4 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -9.4 m		DEPTH EOL : 3219.5 m		NAVIGATION SYSTEM USED: SeaPath 200					
BSP SOL: 4.8 kts		FEATHER SOL: 92.8 °		NAVIGATION SYSTEM USED: C-Nav2000					
BSP EOL: 4.1 kts		FEATHER EOL: -04.2 °		NAVIGATION SYSTEM USED: POSMV					
WEATHER		MAX FEATHER: 92.8 °		GRAVITY METER: BMG-II: used, SN210					
WIND SOL: SW12.1 kts				MAGNETOMETER: GeoMetrics: used					
WIND EOL: SE16 kts									
SEAS SOL: 1.5 m		shift hours		shift leaders		shift hours		watch personnel	
SEAS EOL: 1.5 m		12:00 - 24:00		Shane Traceski		00:00 - 12:00		Klayton Curtis	
		12:00 - 24:00		David Martinson		00:00 - 12:00		Graeme Stewart	
COMMENTS									
667	05:32	EVENT SOL	Start of line						
4709	00:00	Midnight	Midnight Shot Point , start of JD 45						
6040	05:59	EOL	End of Line						
VESEL POSITION									
Shotpoints		Latitude (S)		Longitude (W)					
FSP	667	30° 07' 59.888"		15° 10' 24.826"					
LSP	6040	29° 53' 20.835"		13° 06' 14.325"					
NAVIGATION OFFSET APPLIED									
NRP - Stern		29.5m							
NRP - COS		205.0m							
NRP - CNG		422.70m							
COS - CNG		217.70m							
NRP - CMP		313.90m							
Posnet locations & remarks: good - none - intermittent									
Tailbuoy #1	N/A	Gun string #1	GOOD						
Tailbuoy #2	none	Gun string #2	GOOD						
Tailbuoy #3	none	Gun string #3	GOOD						
Tailbuoy #4	none	Gun string #4	GOOD						
SP spacing: 37.5m									
line status: Complete									

[illegible]



<b>Seq#</b> 002		<b>Line Name:</b>	MGL1601OBS02	<b>NAVIGATION</b>		<b>DATE:</b>	2016-01-18	Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY   EARTH INSTITUTE
		<b>Line Brg :</b>	194.2 °	<b>LINE LOGS</b>		<b>JULIAN DAY:</b>	18	
		<b>CLIENT:</b> Reece Texas A&M / NSF		<b>SURVEY:</b>		<b>AREA:</b> South Atlantic		
DC SOL : -462.2 m		DEPTH SOL : 3679.3 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary				
DC EOL : 1.1 m		DEPTH EOL : 3493.4 m		NAVIGATION SYSTEM USED: SeaPath 200				
BSP SOL: 4.4 kts		FEATHER SOL: N/A		NAVIGATION SYSTEM USED: C-Nav2000				
BSP EOL: 4.4 kts		FEATHER EOL: N/A		NAVIGATION SYSTEM USED: POSMV				
WEATHER		MAX FEATHER: N/A		GRAVITY METER: BMG-II: used, SN210				
WIND SOL: 17 kts				MAGNETOMETER: GeoMetrics: used				
WIND EOL: 17 kts								
SEAS SOL: 1.5 m		shift hours	shift leaders	shift hours	watch personnel	shift hours	watch personnel	
SEAS EOL: 1.5 m		22:00 – 10:00 utc =>	Alan Thompson	22:00 – 10:00 utc =>	Gilles Guerrin			
		10:00 – 22:00 utc =>	Klayton Curtis	10:00 – 22:00 utc =>	Shane Traceski			
SP	UTC	EVENT	COMMENTS					
901	14:14	SOL						
1008	16:36	EOL	end of line					
			VESSEL POSITION					
			Shotpoints		Latitude (N / +)		Longitude (E / +)	
			FSP	901	29 59 48.964 S		16 57 10.047 W	
			LSP	1008	30 08 29.885 S		16 56 43.037 W	
			NAVIGATION OFFSET APPLIED					
			NRP - Stern		29.5m			
			NRP – COS		205m			
			NRP – CNG		n/a			
			COS – CNG		n/a			
			NRP – CMP		n/a			
Posnet locations & remarks: good - none - intermittent			acoustics					
Tailbuoy #1	none	Gun string #1	GOOD	no acoustics in use				
Tailbuoy #2	none	Gun string #2	GOOD					
Tailbuoy #3	none	Gun string #3	GOOD					
Tailbuoy #4	none	Gun string #4	GOOD					
			SP spacing:		165.0m			
			line status:					

Seq# 001