

7/13/2023

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Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 13 Jul

Mobilizing in Port Canaveral, Florida

Science team arrived today to move some equipment on to the vessel and start to get familiar with the work areas. Shipments arrived that will be needed for this cruise: Navigation pods, Magnetometers
Work ongoing as we get ready to sail, work on the air guns, main lab systems, sonars, and streamers.
Good Progress made by all.

Daily Comment Summaries - Plan for Tomorrow

Thu 13 Jul

Continue mobilizing.
Continue source work, batteries in digibirds, system configurations and prepare the tail buoys.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Mob Ashore	MB_MA	24.000
Mobilizing Ashore.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

13-Jul	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	24.000	100.000
Total	24.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	9.5 ms	Sample rate:	1 ms	Shotpoint interval:	25 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		

MCS 12000m					
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m					
Accepted km		Day	Week	Month	Project
Prime		0.00	0.00	0.00	0.00
Combined		0.00	0.00	0.00	0.00

MGL 2309: Accpt
7/13/2023 - 7/13/2023
MCS 12000m

Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 13 Jul	
Navigation:	No Major Issues to Report
Information Technology (IT):	No Major Issues to Report

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Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Thu 13 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs - Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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7/14/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 14 Jul

Mobilizing in Port Canaveral, Florida

Continue with preparing the gear: Source work, building the Tail Buoy, Finished the Digibirds, continue with main lab configurations. Work on going in the cabins and laundry room. The decision was made today to push back the sail time to July 16th, at 8am local. The vessel safety orientation was done. A few more crew members are arriving tonight and will do the orientation tomorrow.

Daily Comment Summaries - Plan for Tomorrow

Fri 14 Jul

Continue mobilizing.

Finish rigging the Tail Buoy, test gun pods and Tail buoy GPS and AIS.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Mob Ashore	MB_MA	24.000
Mobilizing Ashore.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

14-Jul	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	48.000	100.000
Mob Ashore	48.000	100.000
Total	48.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	9.5 ms	Sample rate:	1 ms	Shotpoint interval:	25 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m

MCS 12000m					
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

MGL 2309: Accpt
7/14/2023 - 7/14/2023
MCS 12000m

Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 14 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):

7/14/2023

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No Major Issues to Report

Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Fri 14 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator



PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
14:10	15:10	 Start-up Meeting	Mtgs_StUp
HSE - Start-up Permit Review			
18:15	19:15	 Start-up Meeting	Mtgs_StUp
HSE - Start-up Orientation			

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Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 15 Jul

Mobilizing in Port Canaveral, Florida

Good progress today on all fronts.
The seismic gear has been tested and we are almost 100% ready to deploy. A few more checks tomorrow while we transit to the deployment area and we will be ready.
Good Progress in the engine room and the laundry room today.
We plan to sail tomorrow at 8am local.

A seismic tour was done with the Science team where we covered the main lab, streamer and gun deck.

A start of cruise operations meeting was held, items covered:

- Meet and Greet
- Cruise Mobilization Status
- Cruise Time Line
- Order of Operations
- Acq parameters and gear configuration
- Sci Team involvement
- Communications
- Cruise Risk Assessment

The PSO's went through the permits and described the mitigation process to the PIs and Langseth technical team.

Daily Comment Summaries - Plan for Tomorrow

Sat 15 Jul

Sail for deployment area at 8am local

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	Mob Ashore	MB_MA	24.000
Mobilising Ashore.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

15-Jul	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	72.000	100.000
Mob Ashore	72.000	100.000
Total	72.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	9.5 ms	Sample rate:	1 ms	Shotpoint interval:	25 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

MGL 2309: Accpt
7/15/2023 - 7/15/2023
MCS 12000m

Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 15 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sat 15 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

7/15/2023

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Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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7/16/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 16 Jul

Mobilizing in Port Canaveral, Florida

At 08:54 local the vessel departed Port Canaveral Florida for our work area.

A drill was held at 12:30 local; Fire and Abandon Ship

Transferred 6 sections from Reel 1 to our storage reel. The Tail Stretch was connected and Reel 1 with the tail buoy is ready to deploy.

A few remaining jobs were performed on the gun arrays.

The main lab configurations are ready to go.

When the Multibeam was started up it was noticed that our serial depth output was not be transmitted to the other systems. The Multibeam itself is working and collecting data, we are just not getting the depth output. We are currently trouble shooting the system and have sent a request to the Multibeam Advisor Group for technical support.

Estimated to be at our deployment area at ~10am on the 17th

Daily Comment Summaries - Plan for Tomorrow

Sun 16 Jul

Continue transiting to the deployment area.

Start to deploy the streamer at ~10am

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	12:54	Mob Ashore	MB_MA	12.900
Mobilizing Ashore.				
12:54	24:00	Transit to Prospect	MB_TT	11.100
In transit to prospect, for mobilizing deployment.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

16-Jul	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	12.900	53.750
Transit to Prospect	11.100	46.250
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	96.000	100.000

Category	Hours	% Percent
Mob Ashore	84.900	88.438
Transit to Prospect	11.100	11.563
Total	96.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	9.5 ms	Sample rate:	1 ms	Shotpoint interval:	25 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

MGL 2309: Accpt
7/16/2023 - 7/16/2023
MCS 12000m

Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 16 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
Multibeam depth output is not working.

Daily Comment Summaries - Personnel Onboard

Sun 16 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator



PSO Staff On-board the Langseth

7/16/2023

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	17:45	 Fire Drill	Drls_Fi
HSE - Fire Drill			
17:50	18:20	 Abandon Ship Drill	Drls_AS
HSE - Abandon Ship Drill			

7/17/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 17 Jul

In Transit to deployment area in the morning.
All Sonars were off while travelling through Bahamas EEZ.
After trouble shooting the Multibeam Serial data output this was fixed and everything is working good.
Started to deploy the streamer at 13:36 UTC.
At end of day we are making good progress on streamer deployment.

Daily Comment Summaries - Plan for Tomorrow

Mon 17 Jul

Acquire line 1001

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	13:36	Transit to Prospect	MB_TT	13.600
In transit to prospect, for mobilizing deployment.				
13:36	24:00	Deployment	MB_DP	10.400
Deploying 12km Streamer				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

17-Jul	Hours	% Percent
Mobilisation	24.000	100.000
Deployment	10.400	43.333
Transit to Prospect	13.600	56.667
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	120.000	100.000
Deployment	10.400	8.667
Mob Ashore	84.900	70.750
Transit to Prospect	24.700	20.583
Total	120.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	9.5 ms	Sample rate:	1 ms	Shotpoint interval:	25 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					

MCS 12000m					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

MGL 2309: Accpt
7/17/2023 - 7/17/2023
MCS 12000m

7/17/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 17 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard


Mon 17 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
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Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
Daily Total Category		Code	Count
	Toolbox Meetings	Mtgs_Tbox	1
Tool Box talk for Streamer Ops			

7/18/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 18 Jul

Deploying streamer and air source.

During ramp up air gun 3-1 and 4-3 were faulty. The decision was made to circle to recover the guns and repair them. During the circle the tail of the streamer went to deep and the SRD's (Streamer Recovery Device) inflated. This caused the tail of the streamer to come to surface and resulted in a full recovery to fix the tail. At end of day the streamer was being recovered with a few km's left in the water.

Daily Comment Summaries - Plan for Tomorrow

Tue 18 Jul

Continue with streamer recovery and then deployment.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	16:00	Deployment	MB_DP	16.000
Mobilizing offshore, deploying outboard equipment.				
16:00	24:00	Streamers	DT_ST	8.000
Downtime due to streamers, recover streamer to fix inflated SRD.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

18-Jul	Hours	% Percent
DownTime	8.000	33.333
Streamers	8.000	33.333
Mobilisation	16.000	66.667
Deployment	16.000	66.667
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	94.444
Deployment	26.400	18.333
Mob Ashore	84.900	58.958
Transit to Prospect	24.700	17.153
DownTime	8.000	5.556
Streamers	8.000	5.556
Total	144.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	9.5 ms	Sample rate:	1 ms	Shotpoint interval:	25 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

MGL 2309: Accpt
7/18/2023 - 7/18/2023
MCS 12000m

Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 18 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
Recovery to fix SRD

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Tue 18 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth
Amanda Dubuque - RPS Lead PSO

7/18/2023

Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
Daily Total Category		Code	Count
	<div>Toolbox Meetings</div>	Mtgs_Tbox	1
Tool box on the streamer deck for recovery			

7/19/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 19 Jul

Completed the streamer work and performed a test line.
Gun 4-3 was showing a bad sensor signal.
The first line of the survey was started, line 1001.
Approximately 50km down line an air leak was seen on the tail of array 4.
Array 4 was recovered while the vessel circled back to come on to line.

Daily Comment Summaries - Plan for Tomorrow

Wed 19 Jul

Continue acquiring line 1001.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	11:42	Streamers	DT_ST	11.700
Downtime due to streamers, recover streamer to fix inflated SRD.				
11:42	13:19	Production Prime	AC_PP	1.617
Seq: 1 Test Line before prime line 1001				
13:19	13:40	Prime Line Change	AC_PLC	0.350
Seq: 1 Line: Test1 Nominal Prime line change.				
13:40	20:40	Production Prime	AC_PP	7.000
Seq: 2 SOL Seq 2 Line:1001 FGSP: 4890 EOL Seq 2 Line:1001 LGSP: 5976				
20:40	21:47	Prime Line Change	AC_PLC	1.117
Seq: 2 Line: 1001 Nominal Prime line change.				
21:47	24:00	Production Prime	AC_PP	2.217
Seq: 3 Test line while the vessel circles due to source maintenance				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

19-Jul	Hours	% Percent
Acquisition	12.300	51.250
Prime Line Change	1.467	6.111
Production Prime	10.833	45.139

19-Jul	Hours	% Percent
DownTime	11.700	48.750
Streamers	11.700	48.750
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	80.952
Deployment	26.400	15.714
Mob Ashore	84.900	50.536
Transit to Prospect	24.700	14.702
Acquisition	12.300	7.321
Prime Line Change	1.467	0.873
Production Prime	10.833	6.448
DownTime	19.700	11.726
Streamers	19.700	11.726
Total	168.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
1	Test1	16.6	1024	1286	Prime	13.15	4.375	Complete	Complete
2	1001	309.0	891	1977	Prime	54.35	4.189	Complete	Complete
3	test2	127.4	1041	1301	Prime	13.05	3.350	Midnight	Part
Total						80.55			

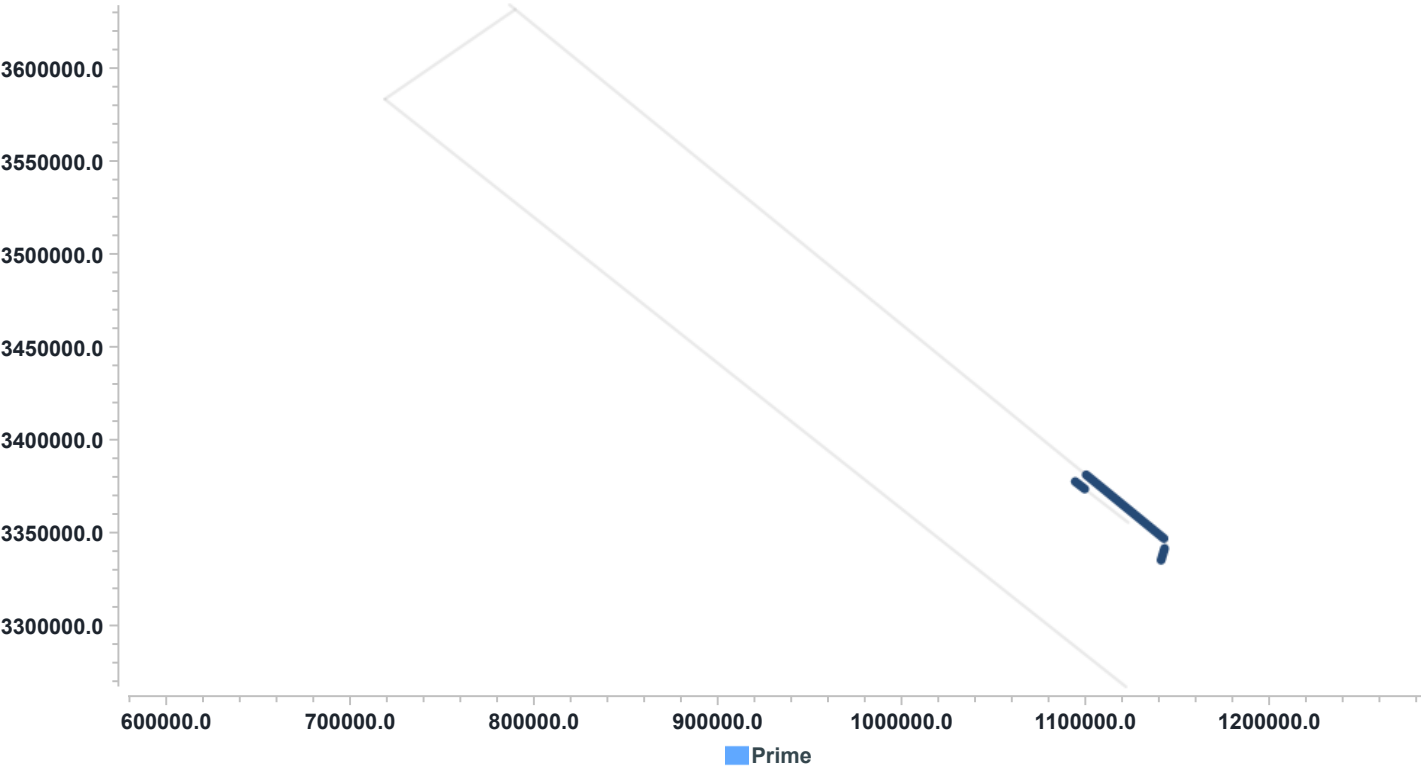
Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	80.55	80.55	80.55	80.55

Accepted km	Day	Week	Month	Project
Combined	80.55	80.55	80.55	80.55

MGL 2309: Accpt
7/19/2023 - 7/19/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 19 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Wed 19 Jul

- Technical Staff On-board the Langseth
- Cody Bahlau L-DEO OMO Chief Science Officer
 - Josh Kasinger L-DEO OMO Chief Source Mechanic
 - Brian Agee L-DEO OMO Senior Source Mechanic
 - Peter Bolt - Contract Source Mech
 - Leonid Ometciskii - Contract Source Mech
 - Gilles Guerin L-DEO OMO Marine Science Technician - Obs
 - Riley Lopez L-DEO OMO Marine Science Technician - Obs
 - Klayton Curtis - MATE Intern Navigator

7/19/2023

Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:05	16:05	<div></div> Chiefs Meeting	Mtgs_Chfs
HSE - Chiefs Meeting			

7/20/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 20 Jul

Started line 1001.
Circle due to array 4; Air leak on Guns 8 and 9 and electrical leakage on gun 3.
A test line was entered as the vessel transited back along line before turning.




Daily Comment Summaries - Plan for Tomorrow

Thu 20 Jul

Continue acquisition on line 1001.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	01:43	 Production Prime	AC_PP	1.717
Seq: 3 Test line while the vessel circles due to source maintenance				
01:43	02:21	 Prime Line Change	AC_PLC	0.633
Seq: 3 Line: test2 Nominal Prime line change.				
02:21	24:00	 Production Prime	AC_PP	21.650
Seq: 4 SOL Seq 4 Line:1001 FGSP: 7508 MSP Seq 4 Line:1001 LGSP: 5204 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

20-Jul	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.633	2.639
Production Prime	23.367	97.361
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	70.833
Deployment	26.400	13.750
Mob Ashore	84.900	44.219
Transit to Prospect	24.700	12.865
Acquisition	36.300	18.906
Prime Line Change	2.100	1.094
Production Prime	34.200	17.813

Category	Hours	% Percent
DownTime	19.700	10.260
Streamers	19.700	10.260
Total	192.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
3	test2	127.4	1302	1529	Prime	11.40	3.350	Complete	Complete
4	1001	309.0	1509	5204	Prime	184.80	4.086	Midnight	Part
Total						196.20			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

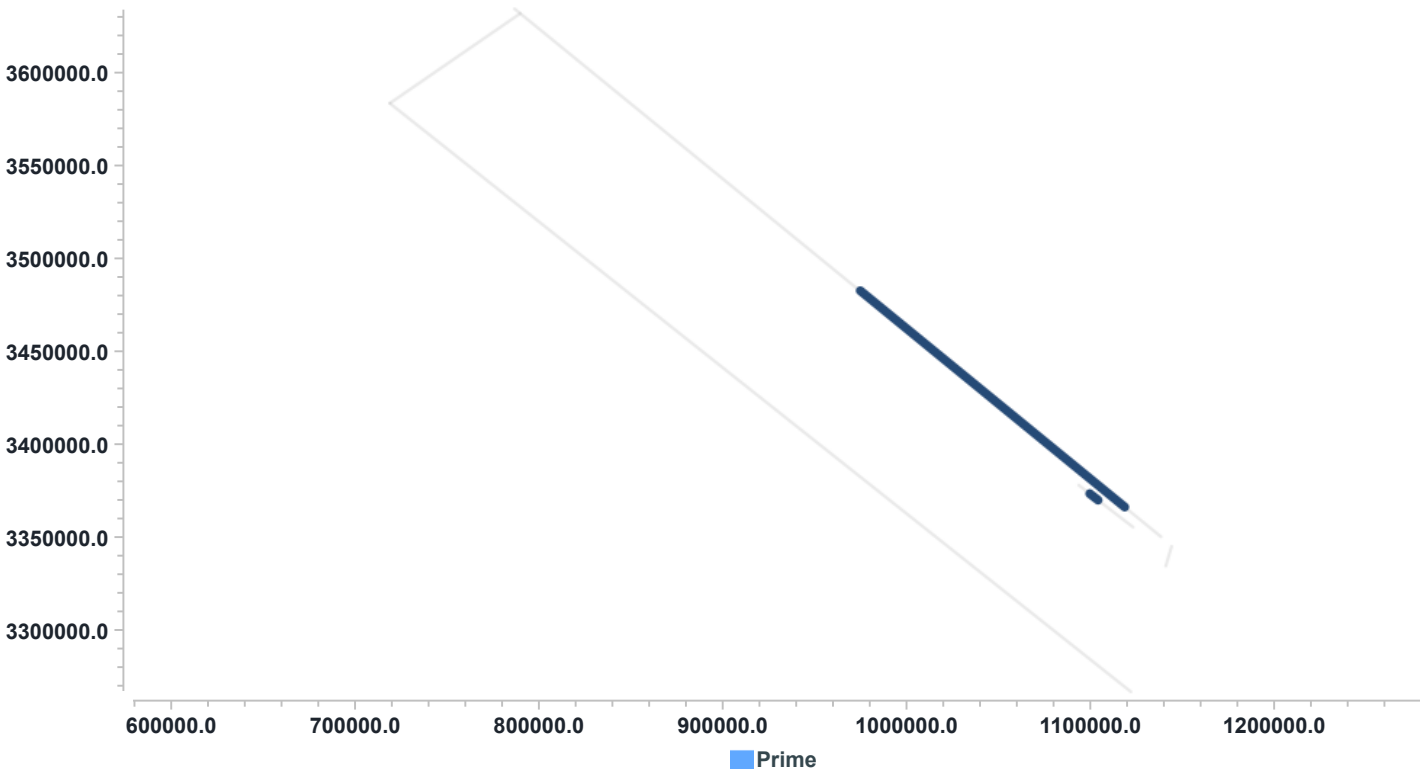
MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	196.20	276.75	276.75	276.75
Combined	196.20	276.75	276.75	276.75

7/20/2023

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MGL 2309: Accpt
7/20/2023 - 7/20/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 20 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Thu 20 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

7/20/2023

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:05	16:05	<div></div> Chiefs Meeting	Mtgs_Chfs
HSE - Chiefs Meeting			

7/21/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 21 Jul

Acquiring data on line 1001.
A MOB drill was held at 10:20 local. The science team reviewed the Marcus Life net.
Electrical leakage was observed on the streamer, 4-5 milliamps
Front end noise observed on the streamer from traces 1 to 140, the technical and science team are investigating.

Daily Comment Summaries - Plan for Tomorrow

Fri 21 Jul

Complete line 1001 and start line 1002.
When on line 1002, which is a low priority turn line, source maintenance will be done.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 4 SOL Seq 4 Line:1001 FGSP: 11204 MSP Seq 4 Line:1001 LGSP: 14476 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

21-Jul	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	62.963
Deployment	26.400	12.222
Mob Ashore	84.900	39.306
Transit to Prospect	24.700	11.435
Acquisition	60.300	27.917
Prime Line Change	2.100	0.972
Production Prime	58.200	26.944
DownTime	19.700	9.120
Streamers	19.700	9.120
Total	216.000	

Basic Project Details

MCS 12000m
General Details

MCS 12000m					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
4	1001	309.0	5205	8477	Prime	163.65	4.086	Midnight	Part
Total						163.65			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

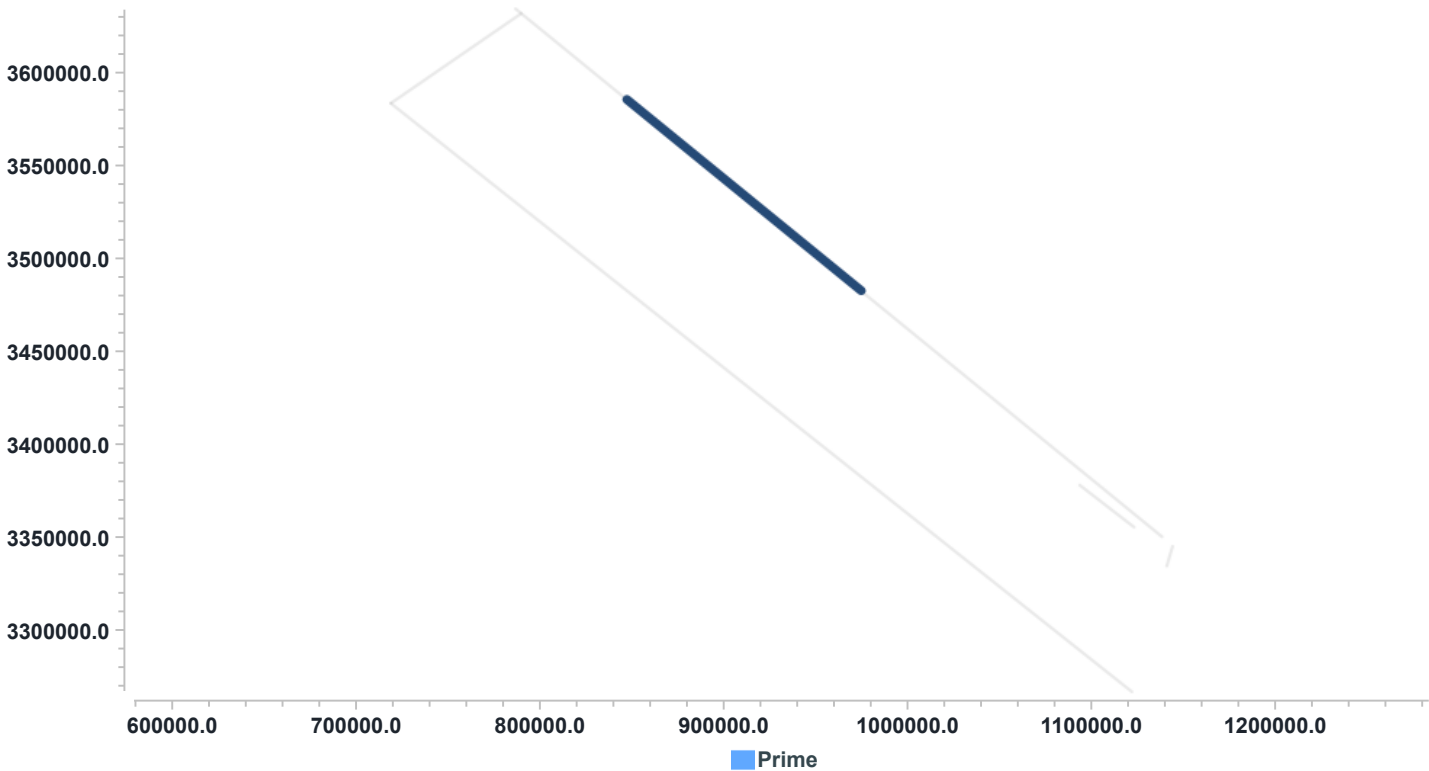
MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	163.65	440.40	440.40	440.40
Combined	163.65	440.40	440.40	440.40

7/21/2023

Page 3

MGL 2309: Accpt
7/21/2023 - 7/21/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 21 Jul

Navigation:

Seapath GPS system intermittent on 1 receiver.

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

Electrical leakage on the streamer.

Towing and Handling (Source):

Small air leak on the front of array 1

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Fri 21 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator



PSO Staff On-board the Langseth

7/21/2023

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
14:15	15:15	 MOB Drill	Drls_MOB
HSE - MOB Drill			
17:05	18:05	 Chiefs Meeting	Mtgs_Chfs
HSE - Chiefs Meeting			

7/22/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 22 Jul






Line 1001 was completed, feather angles in the gulf streamer were 70 degrees plus
Crossfeed was seen on the streamer. The tail buoy current was turned off and the cross feed appeared to have disappeared or reduced to a very visible level.
The Science team is reviewing the data using the Reveal processing software to see if they can still see it.
During line 1002, which is a low priority transit line, arrays 1, 2, 3 and 4 were recovered for repairs and preventive maintenance; Air leaks, GPS, electrical leakage, etc
When arrays 3 and 4 were on deck it was decided to add a bit more weight to the leadin to help it get down under the gun arrays, as a bit of fairing was found on the arrays.
The electrical leakage on the streamer has increased slightly, from 4-5 milliamps to 6-8 milliamps.
Troubleshooting the Seapath GPS unit, receive 2 has been intermittent. This was worked on at 1800 Local and has since been good.

Daily Comment Summaries - Plan for Tomorrow

Sat 22 Jul

Continue Acquisition on Line 1002 and start Line 1003

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	10:01	 Production Prime	AC_PP	10.017
Seq: 4 SOL Seq 4 Line:1001 Block:FGSP:14477 EOL Seq 4 Line:1001 Block:LGSP:15932 Complete				
10:01	10:47	 Prime Line Change	AC_PLC	0.767
Seq: 4 Line: 1001 Nominal Prime line change.				
10:47	19:47	 Production Prime	AC_PP	9.000
Seq: 5 SOL Seq 5 Line:1002 FGSP:16102 EOL Seq 5 Line:1002 LGSP:17618 Complete				
19:47	20:00	 Prime Line Change	AC_PLC	0.217
Seq: 5 Line: 1002 Nominal Prime line change.				
20:00	24:00	 Production Prime	AC_PP	4.000
Seq: 6 SOL Seq 6 Line:1003 FGSP:18060 MSP Seq 6 Line:1003 LGSP:18738 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

22-Jul	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.983	4.097
Production Prime	23.017	95.903
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	56.667
Deployment	26.400	11.000
Mob Ashore	84.900	35.375
Transit to Prospect	24.700	10.292
Acquisition	84.300	35.125
Prime Line Change	3.083	1.285
Production Prime	81.217	33.840
DownTime	19.700	8.208
Streamers	19.700	8.208
Total	240.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accept Main km by Shotpoint) - Full Fold

MCS 12000m

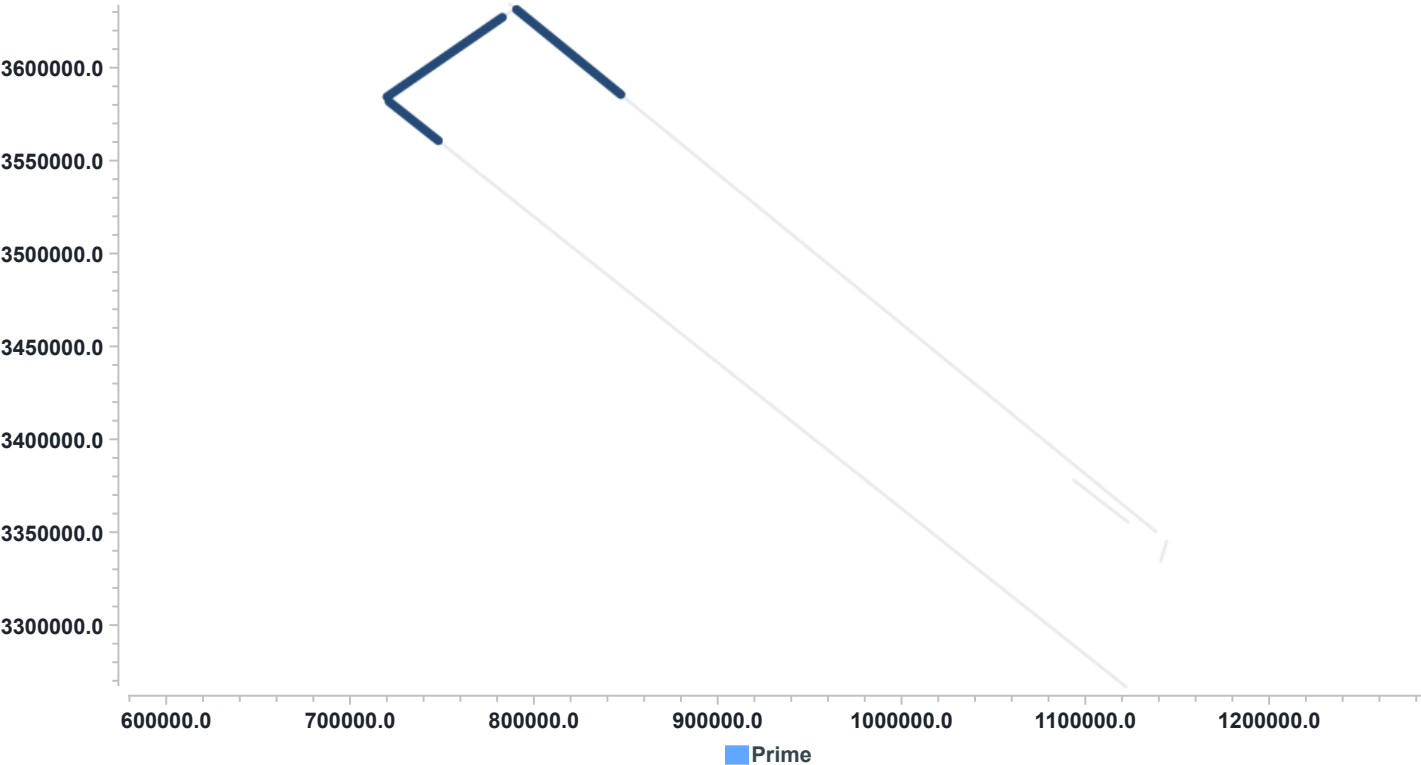
Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
4	1001	309.0	8478	9933	Prime	72.80	4.086	Complete	Complete
5	1002	235.8	1171	2687	Prime	75.85	4.548	Complete	Complete
6	1003	128.0	1061	1739	Prime	33.95	4.576	Midnight	Part
Total						182.60			

Production Totals (Accept Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	182.60	623.00	623.00	623.00
Combined	182.60	623.00	623.00	623.00

MGL 2309: Accpt
7/22/2023 - 7/22/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 22 Jul

- Navigation:**
No Major Issues to Report
- Information Technology (IT):**
No Major Issues to Report
- Acquisition (MCS):**
Electrical leakage on the streamer.
Small amount of crossfeed seen on the data.
- Towing and Handling (Source):**
No Major Issues to Report
- General Purpose Science:**
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sat 22 Jul

- Technical Staff On-board the Langseth**
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs

7/22/2023

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Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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7/23/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 23 Jul

Acquiring data on line 1003.
Strong current observed as the vessel travelled through the gulf stream. The vessel was pushed offline ~1500 meters and there was an extended period of shot overlap.
While acquiring 1003 the cross feed gradually worsened, to the point that trouble shooting was needed. At 1700 the team started to trouble shoot the crossfeed while maintaining online heading and recording. Luck was in our favor as the first change that was tried reduced the streamer leakage to 0 and the crossfeed has disappeared. 7 shot were lost during this process.
The decision was made to continue down line without the need for a circle.

The seapath has now been working for over 24 hours with good operation and no errors.

The ships store was open today, the captain had a good crowd, we expect to see some new Langseth T-shirts and hoodies in the coming days.


Daily Comment Summaries - Plan for Tomorrow

Sun 23 Jul

Continue Acquisition on Line 1003

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 6 Start of Day Seq 6 Line:18739 FGSP:1740 MSP Seq 6 Line:1003 LGSP: 22633 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

23-Jul	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	51.515
Deployment	26.400	10.000
Mob Ashore	84.900	32.159
Transit to Prospect	24.700	9.356
Acquisition	108.300	41.023
Prime Line Change	3.083	1.168
Production Prime	105.217	39.855
DownTime	19.700	7.462
Streamers	19.700	7.462

Category	Hours	% Percent
Total	264.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	3300 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	3300	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	1003	128.0	1740	5634	Prime	194.75	4.409	Midnight	Part
Total						194.75			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

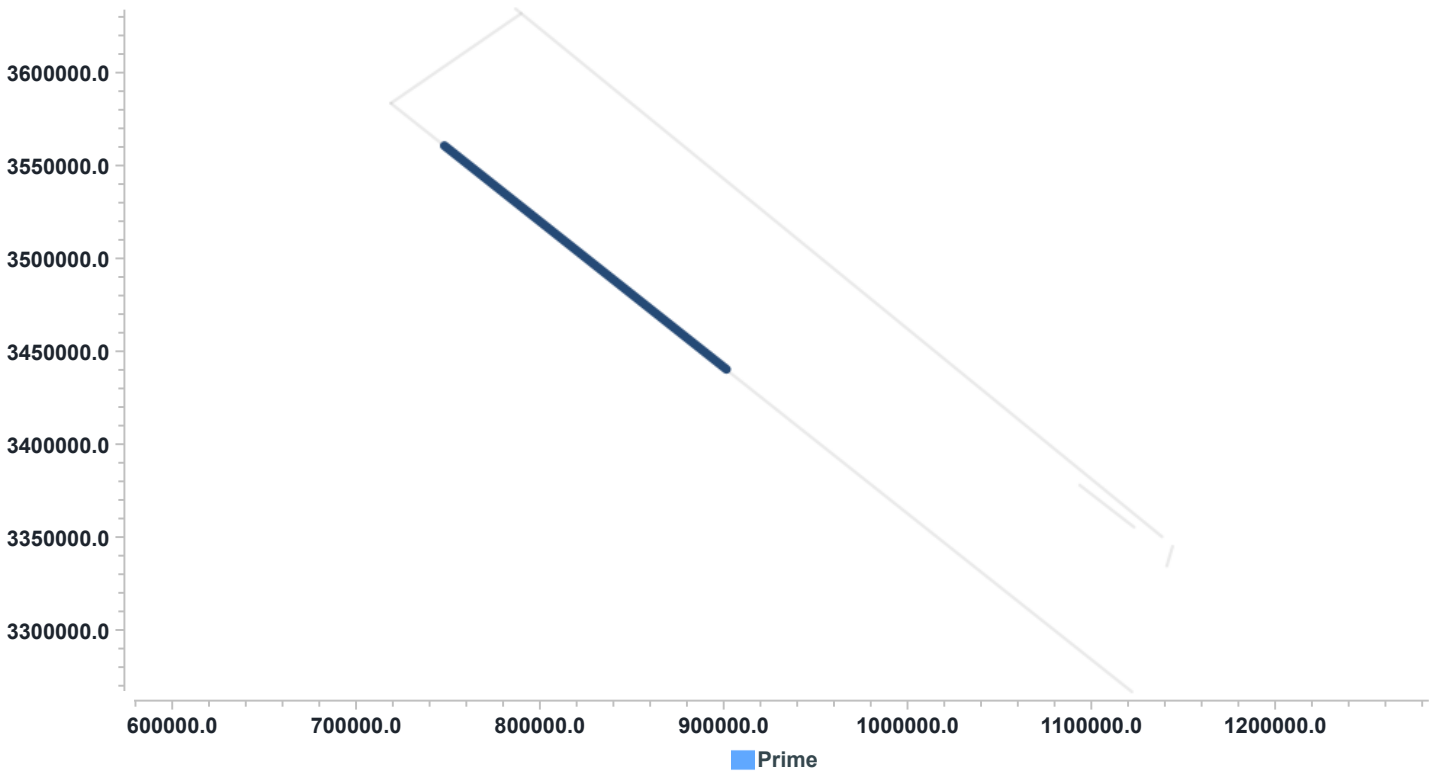
MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	194.75	817.75	817.75	817.75
Combined	194.75	817.75	817.75	817.75

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MGL 2309: Accpt
7/23/2023 - 7/23/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 23 Jul

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sun 23 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

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- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:15	16:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

7/24/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 24 Jul


Acquiring data on line 1003.
The turn at the end of line 1003 was agreed upon, a full run out and run in with a tear drop turn.
A fishing vessel was spotted around ~1500 local. The bridge did a great job of contacting them and diverting them around the gear.
Ground speed has been high today, the weather and currents have weakened and it was a day of good production.

Daily Comment Summaries - Plan for Tomorrow

Mon 24 Jul

Complete Line 1003 and start 1004.
Possible launch of the work boat to film how the gear is towing.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 6 First shot of the Day Seq 6 Line:1003 FGSP: 22634 MSP Seq 6 Line:1003 LGSP: 26042 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

24-Jul	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	47.222
Deployment	26.400	9.167
Mob Ashore	84.900	29.479
Transit to Prospect	24.700	8.576
Acquisition	132.300	45.938
Prime Line Change	3.083	1.071
Production Prime	129.217	44.867
DownTime	19.700	6.840
Streamers	19.700	6.840
Total	288.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	0 m	Fold Coverage:	0		
Cable Details					
No of Cables:	3				
Cable 1					
Chans Per Cable:	960	Front Depth:	12 m	Tail Depth:	12 m
Length:	12000	Group interval:	12.5 m		
Cables 2 - 3					
Chans Per Cable:	0	Front Depth:	0 m	Tail Depth:	0 m
Length:	1	Group interval:	0 m		
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	1003	128.0	5635	9042	Prime	170.40	4.144	Midnight	Part
Total						170.40			

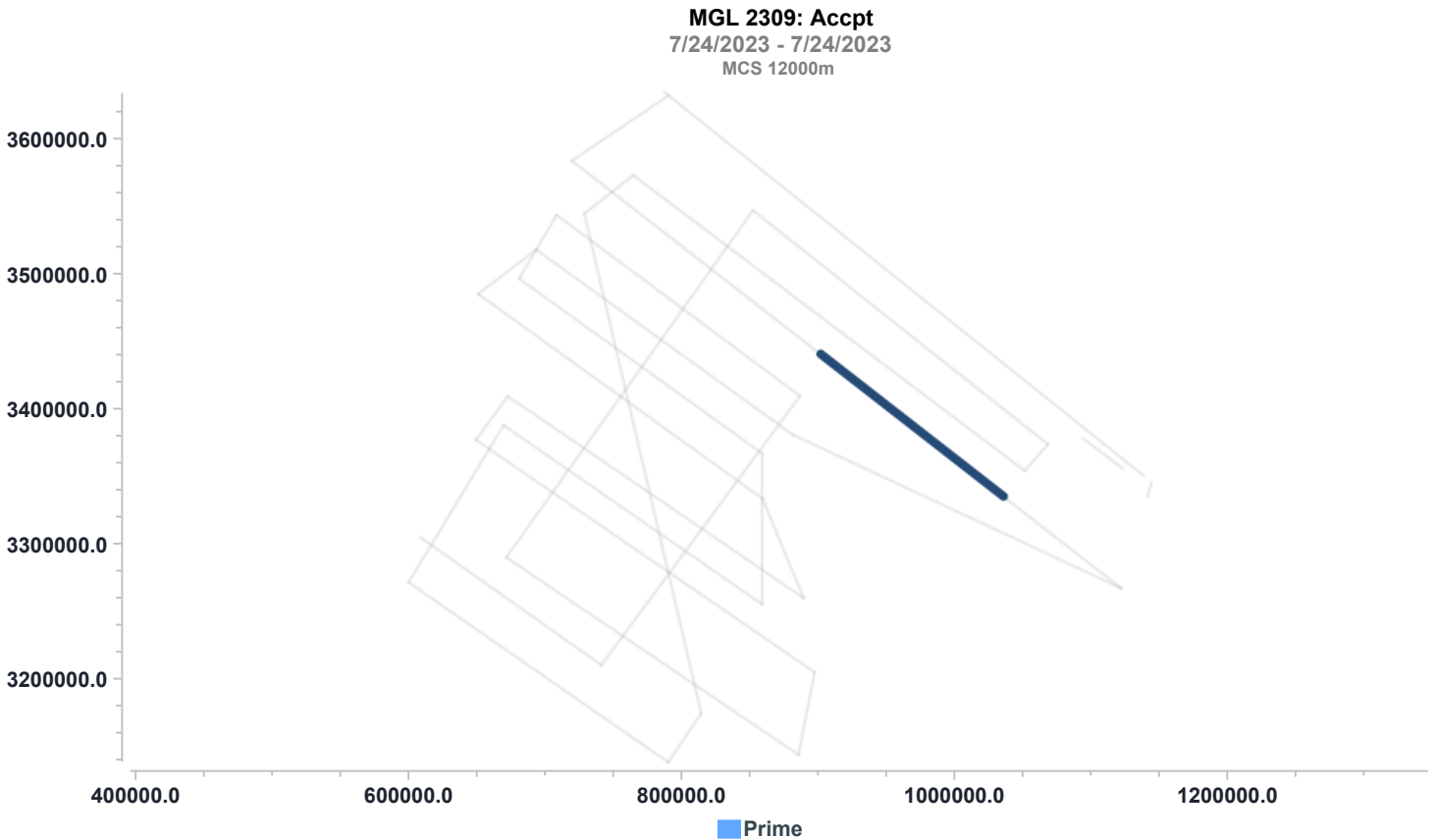
Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	170.40	170.40	988.15	988.15
Combined	170.40	170.40	988.15	988.15

7/24/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 24 Jul

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Mon 24 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer

Josh Kasinger L-DEO OMO Chief Source Mechanic

Brian Agee L-DEO OMO Senior Source Mechanic

Peter Bolt - Contract Source Mech

Leonid Ometciskii - Contract Source Mech

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Riley Lopez L-DEO OMO Marine Science Technician - Obs

Klayton Curtis - Contract Source Obs

Claire Mayorga- MATE Intern Navigator

Sara Pierson - MATE Intern Navigator

7/24/2023

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

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- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
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- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

7/25/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 25 Jul




Finished acquisition on line 1003, Started line 1004.
Line 1003 was finished with good ground speed. The turn planned was followed well by all, the guns were turned off before leaving the permit area.
While on the extended line change the team took the time to perform some preventive maintenance & reboots on the online systems. The work boat was launched to film the guns, leadin and front float. A safety meeting was held by all involved before starting operations.
The entire operation from start to finish was done safely and efficiently. The film footage shows that the leadin is just touching the guns, we will need to fix this in the near future.

Daily Comment Summaries - Plan for Tomorrow

Tue 25 Jul

Continue acquisition on line 1004.
Line 1004 is in close proximity to the Bahamas EEZ line. The teams are well informed that we can not acquire any data inside this area.
The streamer feather will be monitored with the option to move the vessel to stbd if needed.
Also, the multibeam beam angle will be reduced on the port side to ensure we stay clear of this area.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	13:27	 Production Prime	AC_PP	13.450
Seq: 6 SOL Seq 6 Line:1003 FGSP: 26042 EOL Seq 6 Line:1003 LGSP: 28340 Complete				
13:27	17:30	 Prime Line Change	AC_PLC	4.050
Seq: 6 Line: 1003 Nominal Prime line change.				
17:30	24:00	 Production Prime	AC_PP	6.500
Seq: 7 SOL Seq 7 Line:1004 FGSP: 28896 MSP Seq 7 Line:1004 LGSP: 29966 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

25-Jul	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	4.050	16.875
Production Prime	19.950	83.125
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	43.590
Deployment	26.400	8.462
Mob Ashore	84.900	27.212
Transit to Prospect	24.700	7.917
Acquisition	156.300	50.096
Prime Line Change	7.133	2.286
Production Prime	149.167	47.810
DownTime	19.700	6.314
Streamers	19.700	6.314
Total	312.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	1003	128.0	9043	11341	Prime	114.95	4.240	Complete	Complete
7	1004	295.2	897	1968	Prime	53.60	4.448	Midnight	Part
Total						168.55			

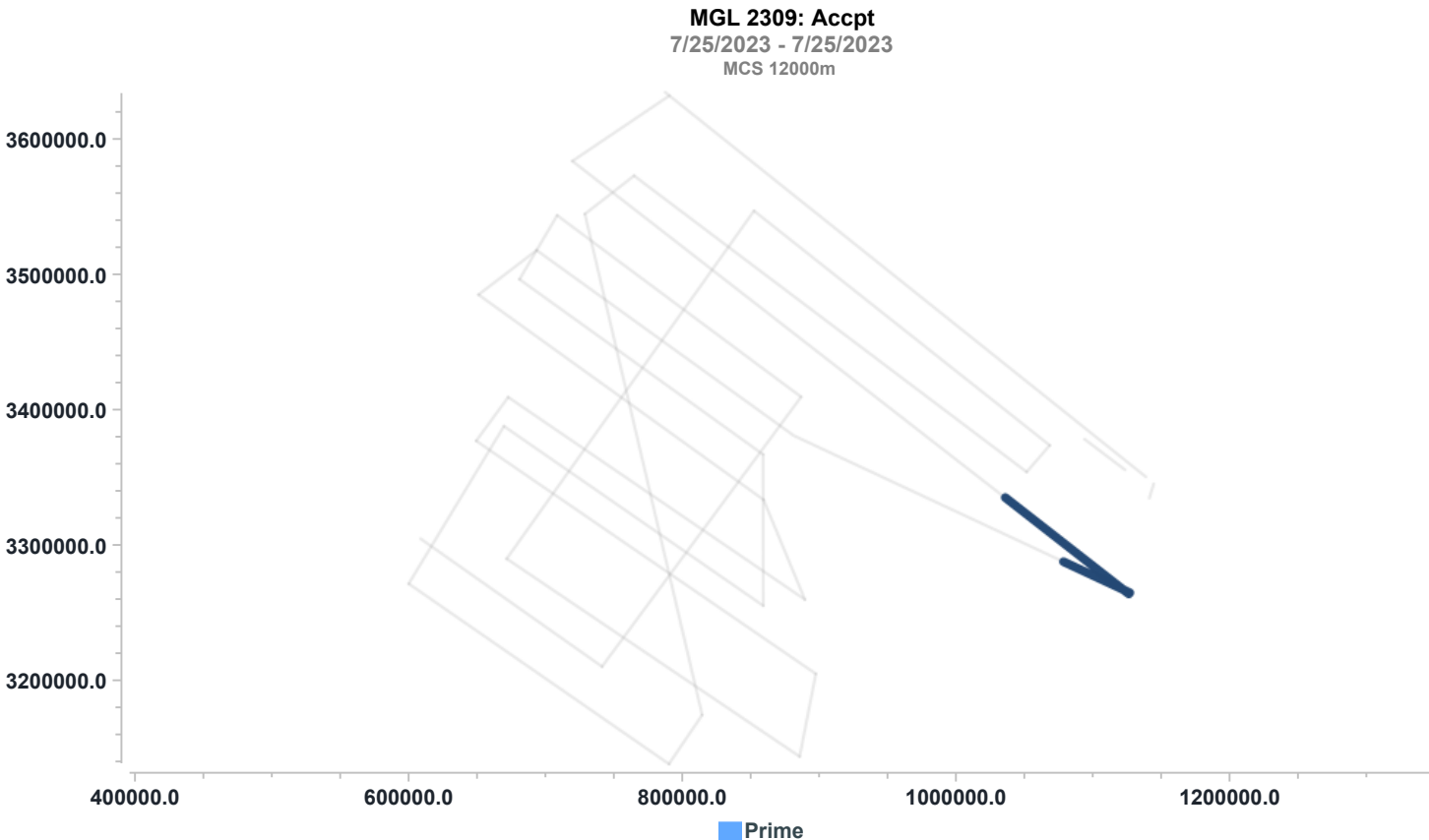
Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	168.55	338.95	1156.70	1156.70
Combined	168.55	338.95	1156.70	1156.70

7/25/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 25 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Tue 25 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

7/25/2023


PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
Daily Total Category		Code	Count
	Toolbox Meetings	Mtgs_Tbox	1
TBT - Launch of workboat safety meeting			

7/26/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 26 Jul

Acquiring data on line 1004.
Good production speed for the last 24 hours, averaged ~4.6 kts.
The Bahamas EEZ was past, the streamer feather was perfect and the EM122 beam angle on the port side was reduced.
Course was altered slightly when the vessel reached the start of original line 1005.


Daily Comment Summaries - Plan for Tomorrow

Wed 26 Jul

Finish line 1004 and start 1006.
The vessel will be entering the Gulf Streamer late on the 27th.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 7 SOL Seq 7 Line:1004 FGSP: 29967 MSP Seq 7 Line:1004 LGSP: 34108				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

26-Jul	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	40.476
Deployment	26.400	7.857
Mob Ashore	84.900	25.268
Transit to Prospect	24.700	7.351
Acquisition	180.300	53.661
Prime Line Change	7.133	2.123
Production Prime	173.167	51.538
DownTime	19.700	5.863
Streamers	19.700	5.863
Total	336.000	

Basic Project Details

MCS 12000m
General Details

MCS 12000m					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

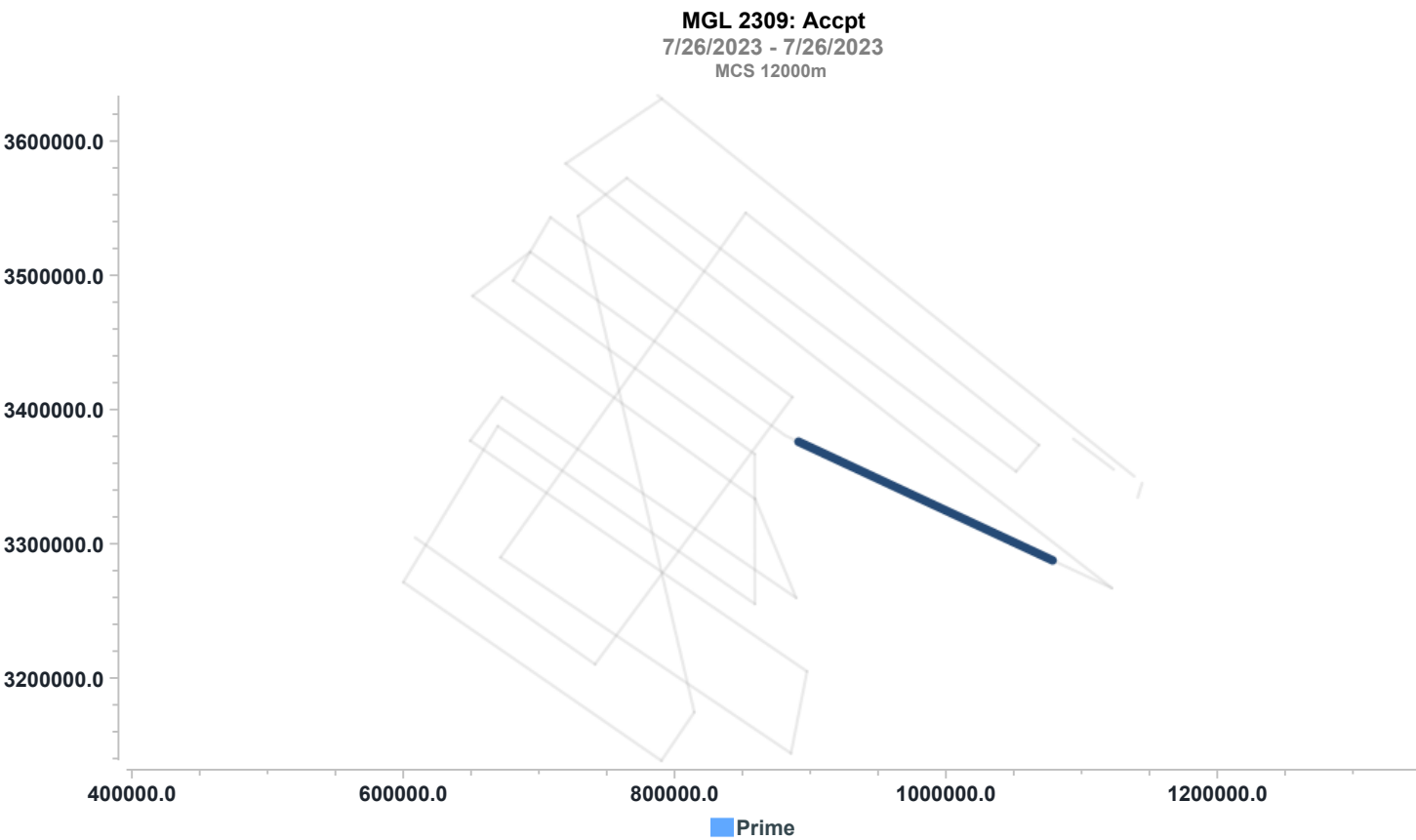
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
7	1004	295.2	1969	6110	Prime	207.10	4.614	Midnight	Part
Total						207.10			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	207.10	546.05	1363.80	1363.80
Combined	207.10	546.05	1363.80	1363.80



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 26 Jul

Navigation:

7/26/2023

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No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Wed 26 Jul

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
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Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

7/27/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 27 Jul


Acquiring data on line 1004.
Good day of production.
Towards the end of day we started to see effects of the gulf stream.

Daily Comment Summaries - Plan for Tomorrow

Thu 27 Jul

Complete line 1004 and start line 1006.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 7 SOL Seq 7 Line:1004 FGSP: 34109 MSP Seq 7 Line:1004 LGSP: 37783 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

27-Jul	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Mobilisation	136.000	37.778
Deployment	26.400	7.333
Mob Ashore	84.900	23.583
Transit to Prospect	24.700	6.861
Acquisition	204.300	56.750
Prime Line Change	7.133	1.981
Production Prime	197.167	54.769
DownTime	19.700	5.472
Streamers	19.700	5.472
Total	360.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m

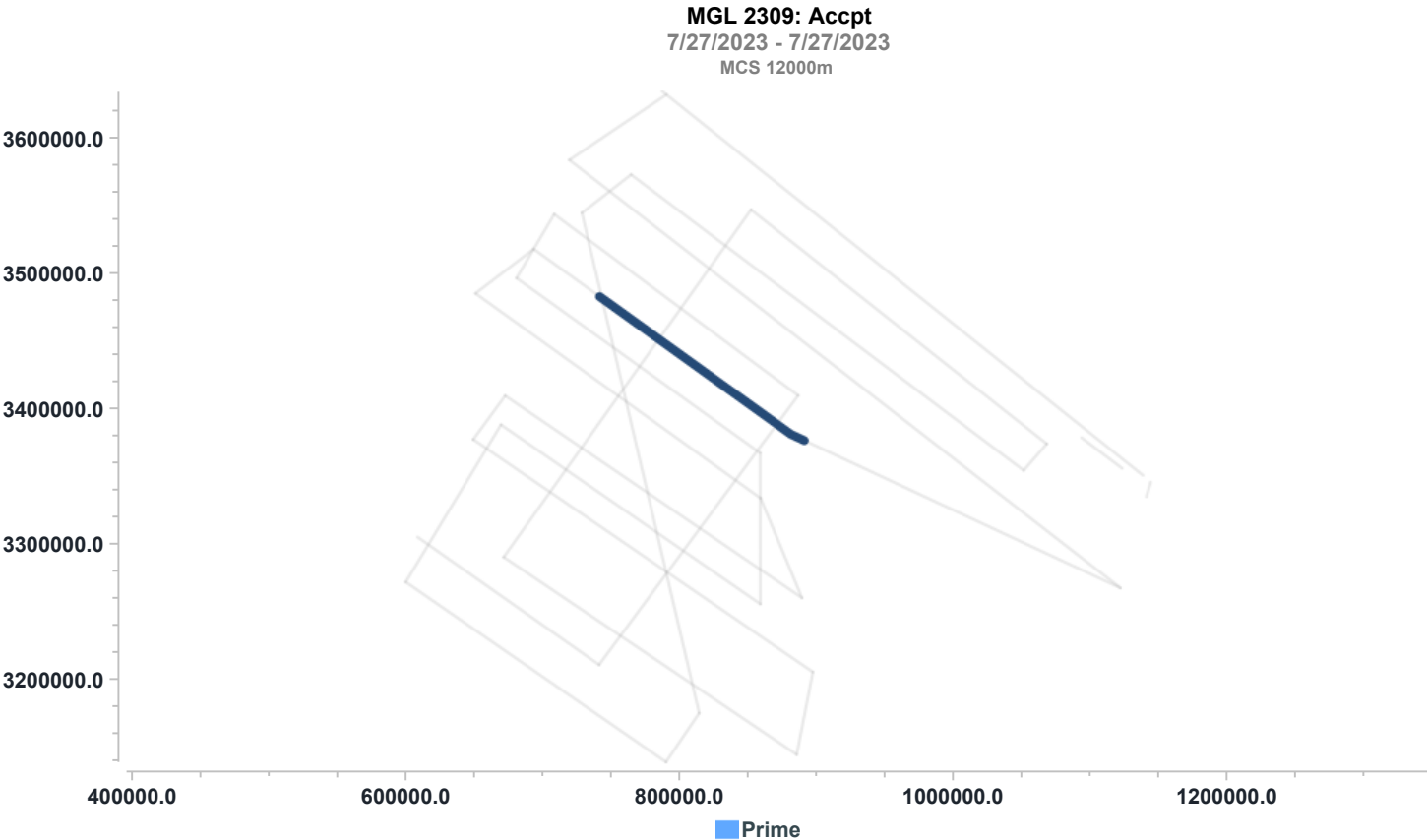
MCS 12000m					
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
7	1004	295.2	6111	9784	Prime	183.70	4.402	Midnight	Part
Total						183.70			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

Accepted km	Day	Week	Month	Project
Prime	183.70	729.75	1547.50	1547.50
Combined	183.70	729.75	1547.50	1547.50



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 27 Jul

Navigation:
No Major Issues to Report

7/27/2023

Page 3

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Thu 27 Jul

Technical Staff On-board the Langseth

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Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Daily Total Category	Code	Count
 Task, Hazard, Control	Re_Con_THC	2
THC - Instructions for AC Units in Rooms		
THC - Clean work area have cabin maintenance		

7/28/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 28 Jul

Complete Line 1004
As the vessel was acquiring data on Line 1004/1005 the ground speed slowly decreased to ~0.5 kts in the gulf stream. The vessel was seeing 4.5-4.8 kts of current.
It was decided to fall back off of line to the north which would slowly take us out of the worst of the currents.
The vessel would then make it's way around to the start of line 1007 outside of the permit area.
The vessel kept acquiring data until the air guns were turned off due to the proximity of the permit boundary.
Upon exiting the gulf stream we saw the tension spike due to the mixture of currents the vessel and tail of streamer were experiencing.
At end of day the Langseth is sailing towards the start of Line 1007, ETA ~7am UTC

During the extended line change the Source and streamer were deployed 41 meters more, the COS-CNG did not change.

New Values:
NRP – Stern 29.2m
NRP – COS 276.6m
NRP – CNG 389.20m
COS – CNG 112.60m
NRP – CMP 332.90m

Daily Comment Summaries - Plan for Tomorrow

Fri 28 Jul

Ramp the air guns up after crossing the Permit Area
Start line 1007

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	16:45	Production Prime	AC_PP	16.750
Seq: 7 SOL Seq 7 Line:1004 FGSP: 37784 EOL Seq 7 Line:1004 LGSP: 38992 Complete				
16:45	24:00	Currents and Tides	SB_TD	7.250
Gulf Streamer Currents				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

28-Jul	Hours	% Percent
Acquisition	16.750	69.792
Production Prime	16.750	69.792
Chargeable Standby	7.250	30.208
Currents and Tides	7.250	30.208
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
Chargeable Standby	7.250	1.888
Currents and Tides	7.250	1.888
Mobilisation	136.000	35.417
Deployment	26.400	6.875
Mob Ashore	84.900	22.109
Transit to Prospect	24.700	6.432
Acquisition	221.050	57.565
Prime Line Change	7.133	1.858
Production Prime	213.917	55.707
DownTime	19.700	5.130
Streamers	19.700	5.130
Total	384.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

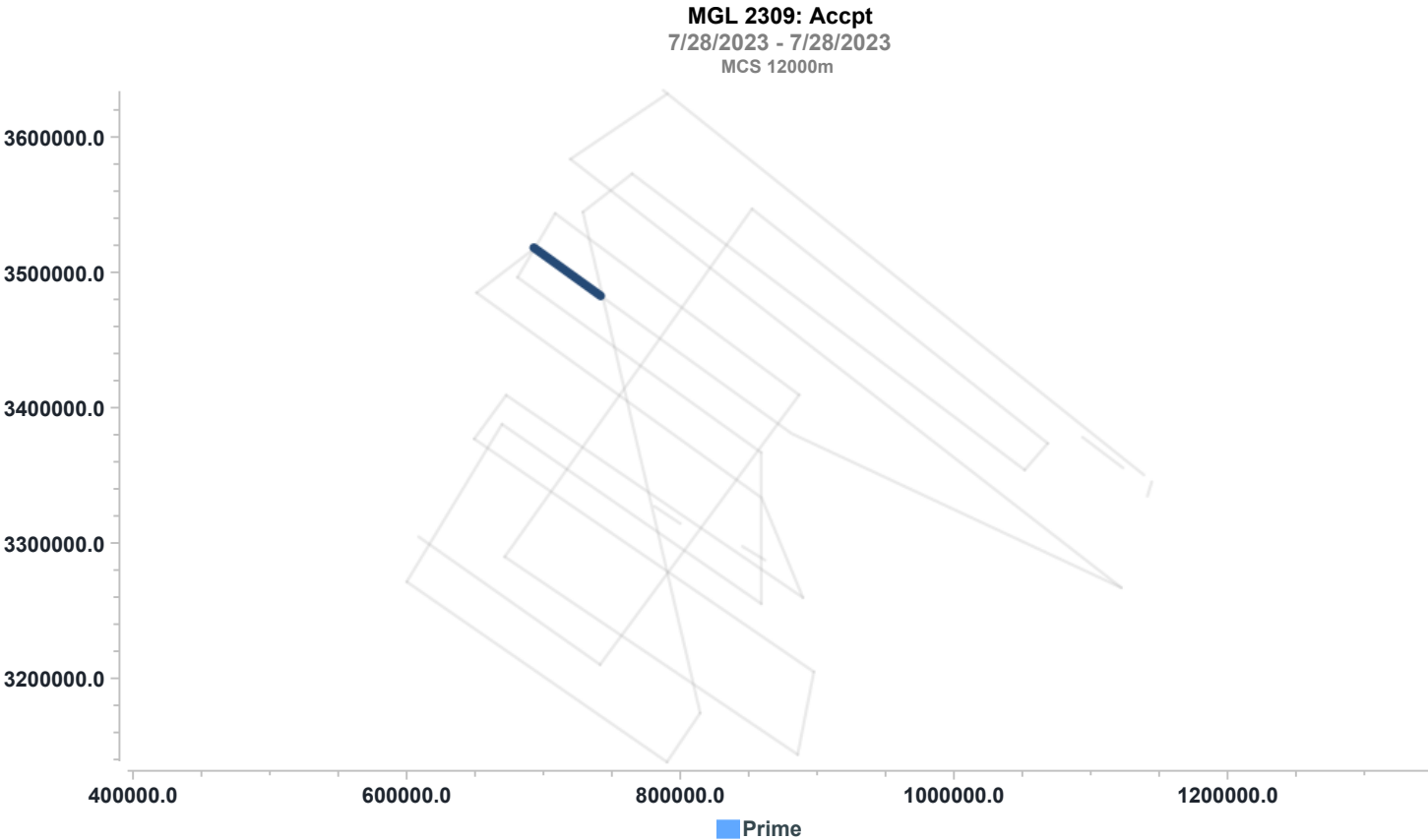
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
7	1004	295.2	9785	10993	Prime	60.45	3.826	Complete	Complete
Total						60.45			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	60.45	790.20	1607.95	1607.95
Combined	60.45	790.20	1607.95	1607.95



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 28 Jul

- Navigation:**
No Major Issues to Report
- Information Technology (IT):**
No Major Issues to Report
- Acquisition (MCS):**
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Fri 28 Jul

- Technical Staff On-board the Langseth**
- Cody Bahlau L-DEO OMO Chief Science Officer
 - Josh Kasinger L-DEO OMO Chief Source Mechanic
 - Brian Agee L-DEO OMO Senior Source Mechanic
 - Peter Bolt - Contract Source Mech
 - Leonid Ometciskii - Contract Source Mech
 - Gilles Guerin L-DEO OMO Marine Science Technician - Obs
 - Riley Lopez L-DEO OMO Marine Science Technician - Obs
 - Klayton Curtis - Contract Source Obs
 - Claire Mayorga- MATE Intern Navigator
 - Sara Pierson - MATE Intern Navigator

7/28/2023

PSO Staff On-board the Langseth


- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:25	18:25	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Daily Total Category	Code	Count
 Task, Hazard, Control	Re_Con_THC	3
THC - Missing bandaids in first aid box		
THC - Positive recognition for work in the Bird Shack		
THC - Sign on Washing Machine directing people not to use "Heavy Soil"		

7/29/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 29 Jul

Completed our turn to the west outside of the project area and turned on to line 1007.

A night time ramp up was done after crossing the project border.

As expected strong currents were experienced as the vessel re-entered the gulf Stream.

Based on windy.com the team thought the vessel would make better speed over ground in a South Easterly direction, this was incorrect. At times the SOG was 0.5 to 0.8 kts.

A decision was made to alter course slightly, 10 degrees to port, so the vessel would head more east. When this was done our ground speed increases to ~2.0 kts.

This slight course change will allow us to leave the gulf streamer quicker and still obtain good data.

The Stbd compressor failed, the team switched to port. Due to the slow speeds and long shot interval 5 shots were missed

At appropriately 15:58 UTC there was a loud bang and intermittent system failures. It appears the vessel was either hit by lighting or the strike was very close.

- The Gun controller system experienced electrical faults and leakage, The last hydrophone on Array 4 has died.

- The magnetometer failed and would not sent data back to the vessel. This was recovered and trouble shot. Both tow fish are working, the problem appears to be in the racks associated with data transfer. This was trouble shot and the magnetometer is now working and deployed.

- Both Vaisalas have failed (weather sensor). During trouble shooting we found 4 fuses had been blown in the power supply in the Winch Booth. Replacing these did not fix the problem, the port vaisala mast was lowered and we checked the surge protector and changed out the sensor with our spare. Once the sensor was changed out the lab started to receive data although in the wrong format. We are still working on this unit to try and communicate with it to change formats, after first light on the 30th we need to go back up to the PSO tower and lower the mast so we can access the configuration port on the sensor as we can not talk to it from the main lab.

Source/Recording system shutdown due to close proximity of a turtle. Shotpoints: 40505 - 40523

At 21:27 the vessel had returned to line after the deviation to the north for the currents



Daily Comment Summaries - Plan for Tomorrow

Sat 29 Jul

Continue acquisition on line 1007

7/29/2023
Continue trouble shooting the Vaisala

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	07:12	Currents and Tides	SB_TD	7.200
Gulf Streamer Currents				
07:12	13:36	Production Prime	AC_PP	6.400
Seq: 8 SOL Seq 8 Line:1007 FGSP: 39987 Seq 8 Line:1007 LGSP: 40187				
13:36	13:43	Vessel	DT_VE	0.117
Downtime due to vessel: Stbd Compressor Failed				
13:43	18:23	Production Prime	AC_PP	4.667
Seq: 8 Seq 8 Line:1007 FGSP: 40192 Seq 8 Line:1007 LGSP: 40504				
18:23	18:39	Cetacean	DT_CT	0.267
Downtime due to close proximity of Cetaceans. Shot Points 40505 - 40523				
18:39	24:00	Production Prime	AC_PP	5.350
Seq: 8 Seq 8 Line:1007 FGSP: 40523 Seq 8 Line:1007 LGSP: 41133 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

29-Jul	Hours	% Percent
Acquisition	16.417	68.403
Production Prime	16.417	68.403
Chargeable Standby	7.200	30.000
Currents and Tides	7.200	30.000
DownTime	0.383	1.597
Cetacean	0.267	1.111
Vessel	0.117	0.486
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	20.083	4.922
Cetacean	0.267	0.065
Streamers	19.700	4.828
Vessel	0.117	0.029
Chargeable Standby	14.450	3.542
Currents and Tides	14.450	3.542
Mobilisation	136.000	33.333
Deployment	26.400	6.471
Mob Ashore	84.900	20.809

Category	Hours	% Percent
Transit to Prospect	24.700	6.054
Acquisition	237.467	58.203
Prime Line Change	7.133	1.748
Production Prime	230.333	56.454
Total	408.000	

Basic Project Details

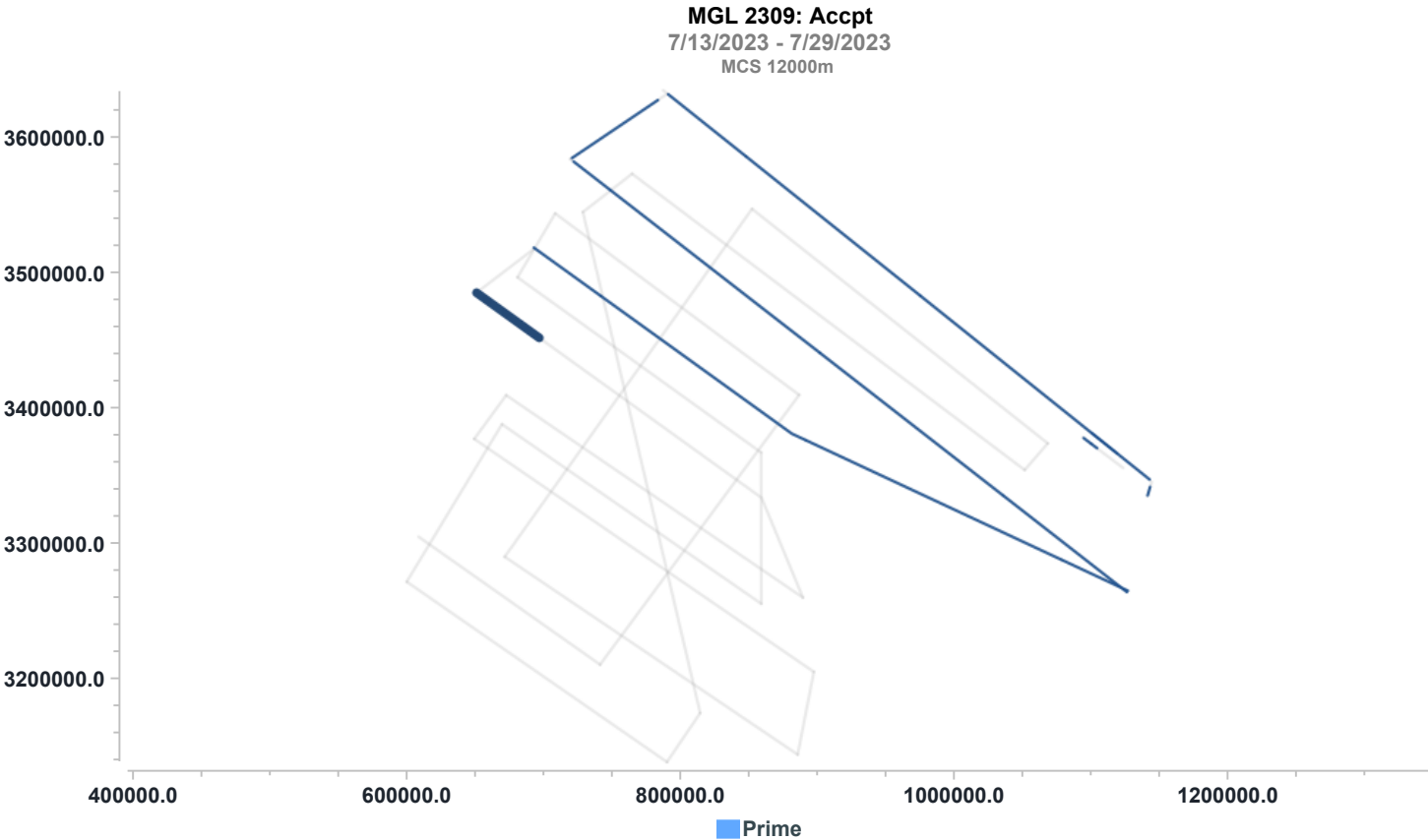
MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accept Main km by Shotpoint) - Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
8	1007	126.0	1001	2134	Prime	55.70	1.827	Midnight	Part
NTBP: 1189 - 1191 (not chgd), NTBP: 1507 - 1523 (not chgd)									
Total						55.70			

Production Totals (Accept Main km by Shotpoint) - Full Fold

Accepted km	Day	Week	Month	Project
Prime	55.70	845.90	1663.65	1663.65
Combined	55.70	845.90	1663.65	1663.65



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 29 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
Vaisala Weather stations not working

Daily Comment Summaries - Personnel Onboard

Sat 29 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

7/29/2023

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

7/30/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 30 Jul

Completed Lines 1007 and started line 1008.
Continued to trouble shoot the vaisala. Vaisala 1 is now working.
The stbd compressor has been repaired and is not back in service.


Daily Comment Summaries - Plan for Tomorrow

Sun 30 Jul

Complete line 1008
Recover arrays 3 and 4 and the front float

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 8 Seq 8 Line:1007 FGSP: 41134 Seq 8 Line:1007 MSP: 45025 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

30-Jul	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	20.083	4.649
Cetacean	0.267	0.062
Streamers	19.700	4.560
Vessel	0.117	0.027
Chargeable Standby	14.450	3.345
Currents and Tides	14.450	3.345
Mobilisation	136.000	31.481
Deployment	26.400	6.111
Mob Ashore	84.900	19.653
Transit to Prospect	24.700	5.718
Acquisition	261.467	60.525
Prime Line Change	7.133	1.651
Production Prime	254.333	58.873
Total	432.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

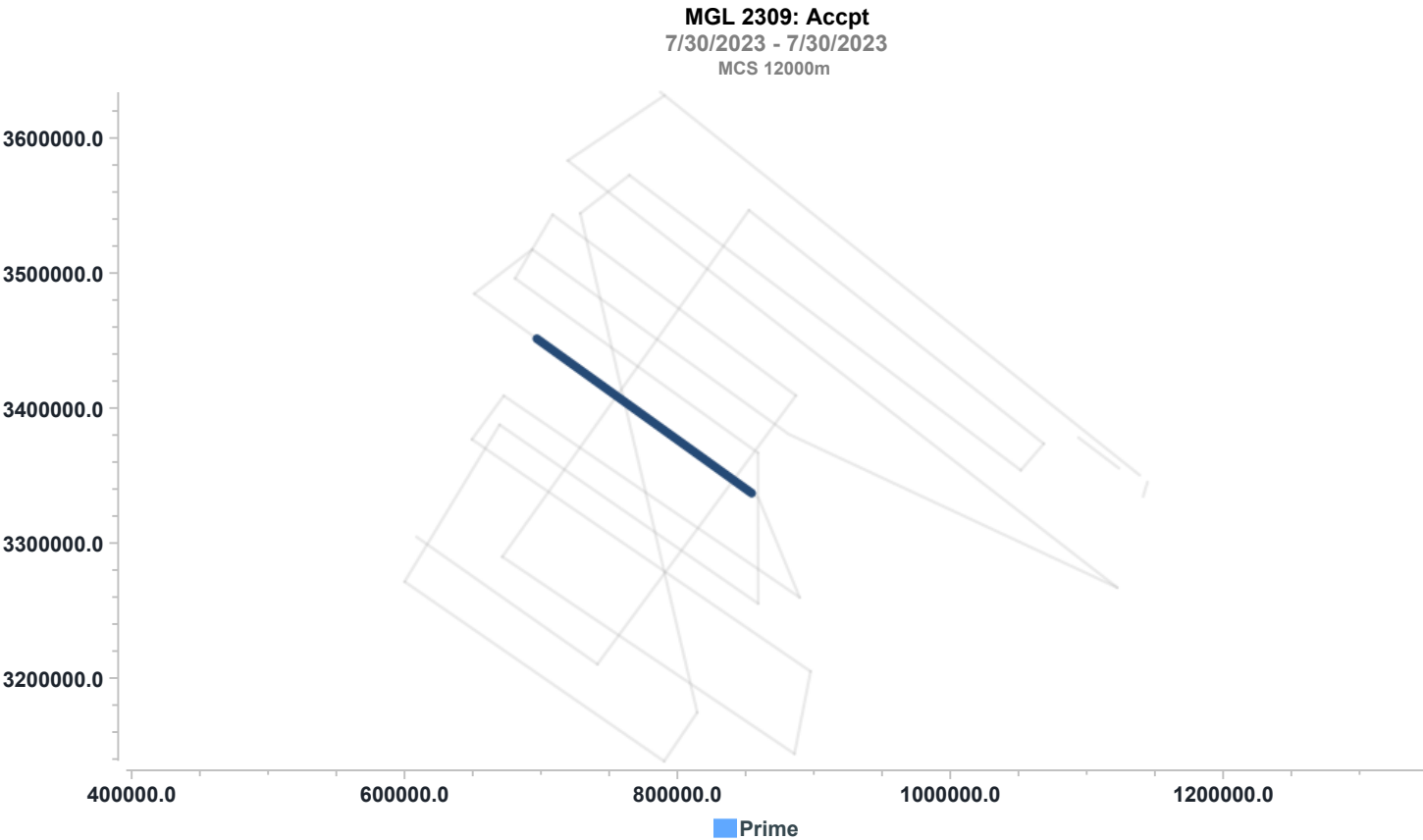
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
8	1007	126.0	2135	6026	Prime	194.60	3.342	Midnight	Part
Total						194.60			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	194.60	1040.50	1858.25	1858.25
Combined	194.60	1040.50	1858.25	1858.25



7/30/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 30 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard


Sun 30 Jul


Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth
Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:05	18:05	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Daily Total Category		Code	Count
 Task, Hazard, Control		Re_Con_THC	5
THC - 2023-HSE-061 - Quick Action by Mechanic Prevents Environmental Spill			
THC - 2023-HSE-062 - Proper prep was not done before descaling/grinding			
THC - 2023-HSE-063 - More Washing Machines & Dryers Needed			
THC - 2023-HSE-064 - Lack Of Prep Before Starting Descaling Task #2			
THC - 2023-HSE-065 - Ladder Gates/A Serious Trip Hazard			

7/31/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 31 Jul




Completed lines 1007 and 1008.
An extended line change was planned so the vessel would have a 12km run-in for line 1009. This is a high priority OBS line.
During the line change arrays 3 and 4 were recovered for an air leak on array 4.
The vessel also took the opportunity to add 2 meters to the depth rope from the front float down to the leadin.
This will adjust the front end during higher speeds so it is not shallow and will also create more distance between the guns and leadin.
During the extended line change the vessel briefly went in to the Bahamas EEZ. This was monitored extremely closely and all sonars were turned off before leaving US waters. No seismic data was being recorded as well.
After deployment array 3 had to be recovered during the 12km runin due to the front steering rope moving.
At the start of line 1009, the guns and front end depth looked good.

Daily Comment Summaries - Plan for Tomorrow

Mon 31 Jul

Continue on line 1009.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	09:47	 Production Prime	AC_PP	9.783
Seq: 8 Seq 8 Line:1007 FGSP: 45026 EOL Seq 8 Line:1007 LGSP: 46738 Complete				
09:47	15:37	 Prime Line Change	AC_PLC	5.833
Seq: 8 Line: 1007 Extended line change due to an outside turn and source/streamer maintenance.				
15:37	24:00	 Production Prime	AC_PP	8.383
Seq: 9 SOL Seq 9 Line:1009 FGSP:49756 Seq 9 Line:1009 MSP:50929 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

31-Jul	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	5.833	24.306
Production Prime	18.167	75.694
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	20.083	4.404

Category	Hours	% Percent
Cetacean	0.267	0.058
Streamers	19.700	4.320
Vessel	0.117	0.026
Chargeable Standby	14.450	3.169
Currents and Tides	14.450	3.169
Mobilisation	136.000	29.825
Deployment	26.400	5.789
Mob Ashore	84.900	18.618
Transit to Prospect	24.700	5.417
Acquisition	285.467	62.602
Prime Line Change	12.967	2.844
Production Prime	272.500	59.759
Total	456.000	

Basic Project Details

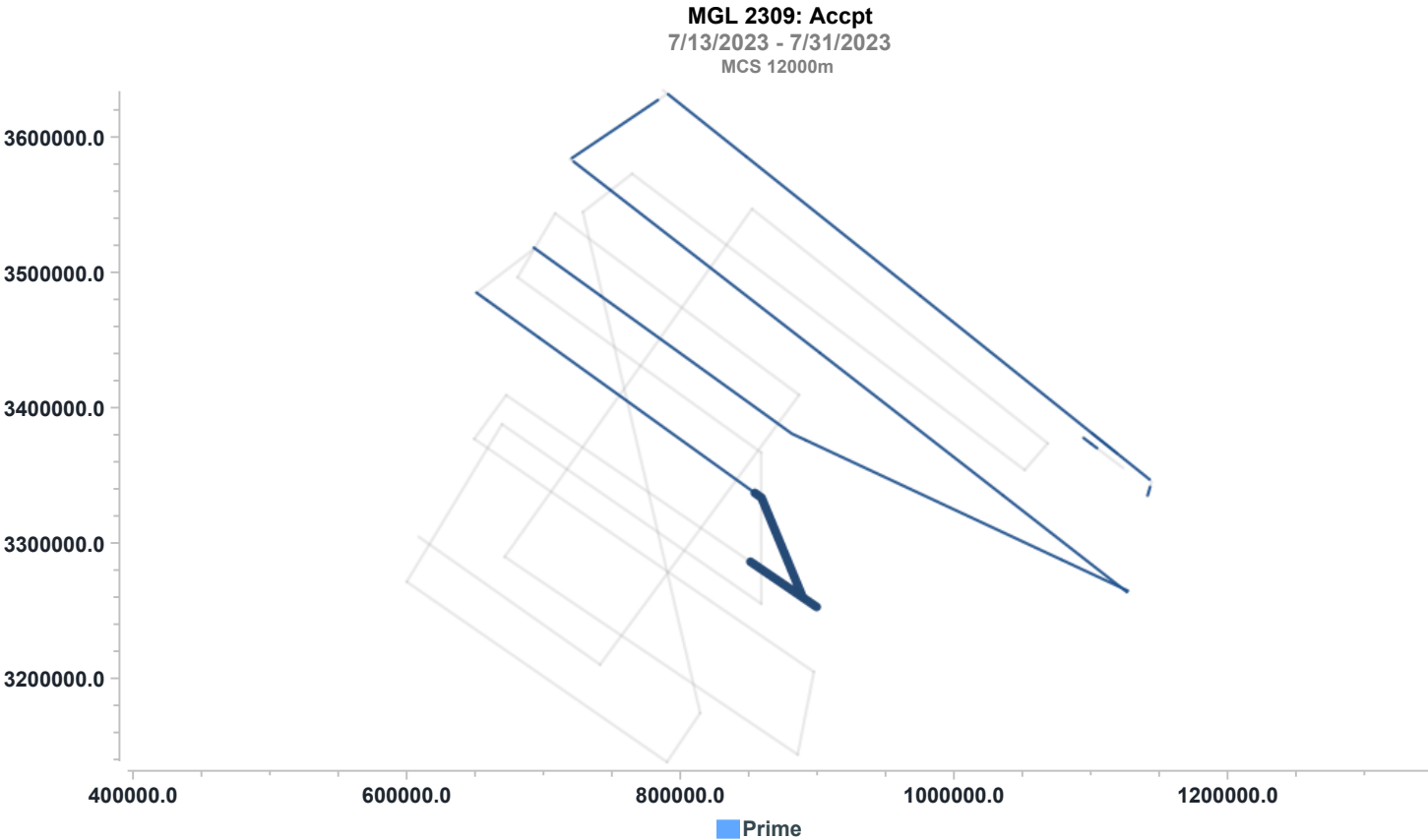
MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
8	1007	126.0	6027	7739	Prime	85.65	3.612	Complete	Complete
9	1009	304.5	757	1930	Prime	58.70	3.778	Midnight	Part
Total						144.35			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m					Accepted km	Day	Week	Month	Project
					Prime	144.35	144.35	2002.60	2002.60
					Combined	144.35	144.35	2002.60	2002.60



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 31 Jul

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Mon 31 Jul

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

7/31/2023

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

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- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/1/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

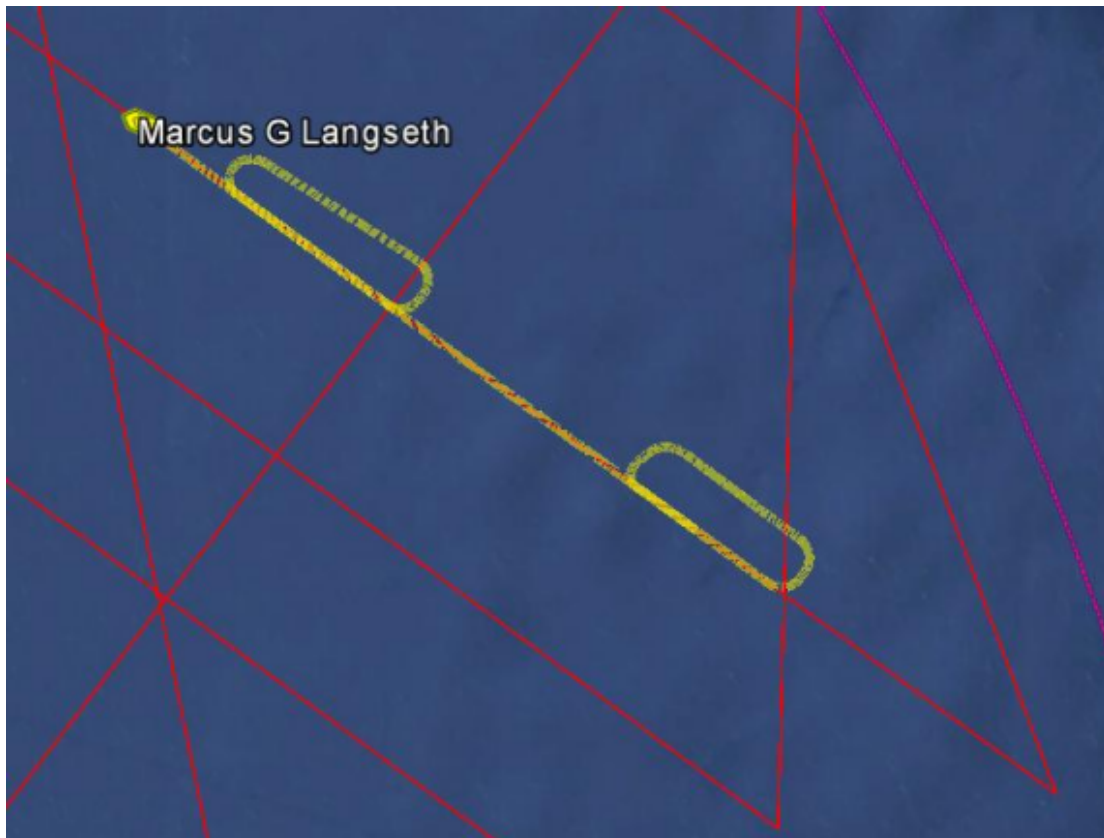
Tue 01 Aug

Acquiring Data on 1009

Air leak on array 3 (Gun 3-6) resulted in a circle. A test line, TST3 was acquired on the circle back to line.

An air leak on array 3 (Gun 3-1) resulted in a circle.

An air leak at end of day on array 1 has the vessel currently recovering arrays 1 and 2. The vessel will circle after array 2 is on deck.

**Daily Comment Summaries - Plan for Tomorrow**

Tue 01 Aug

Fix the air leak on array 1.

Continue data acquisition on line 1009

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	02:00	 Production Prime	AC_PP	2.000
Seq: 9 Seq 9 Line:1009 FGSP: 50930 Seq 9 Line:1009 LGSP: 51162				

Start	End	Category	Code	Duration (hrs)
02:00	02:50	<div></div> Source	DT_SC	0.833
Downtime due to source. Line Change to Test Line				
02:50	04:41	<div></div> Production Prime	AC_PP	1.850
Seq: 10 SOL Seq 10 Line:TST3 FGSP:51536 EOL Seq 10 Line:TST3 LGSP:51885 Complete Test Line				
04:41	05:31	<div></div> Source	DT_SC	0.833
Downtime due to source. Line Change to Test Line				
05:31	15:48	<div></div> Production Prime	AC_PP	10.283
Seq: 11 SOL Seq 11 Line:1009 FGSP: 52478 EOL Seq 11 Line:1009 LGSP: 54205 Complete				
15:48	20:03	<div></div> Source	DT_SC	4.250
Downtime due to source.				
20:03	24:00	<div></div> Production Prime	AC_PP	3.950
Seq: 12 SOL Seq 12 Line:1009 FGSP: 54780 MSP Seq 12 Line:1009 LGSP: 55445 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

1-Aug	Hours	% Percent
Acquisition	18.083	75.347
Production Prime	18.083	75.347
DownTime	5.917	24.653
Source	5.917	24.653
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	26.000	5.417
Cetacean	0.267	0.056
Source	5.917	1.233
Streamers	19.700	4.104
Vessel	0.117	0.024
Chargeable Standby	14.450	3.010
Currents and Tides	14.450	3.010
Mobilisation	136.000	28.333
Deployment	26.400	5.500
Mob Ashore	84.900	17.688
Transit to Prospect	24.700	5.146
Acquisition	303.550	63.240
Prime Line Change	12.967	2.701
Production Prime	290.583	60.538
Total	480.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

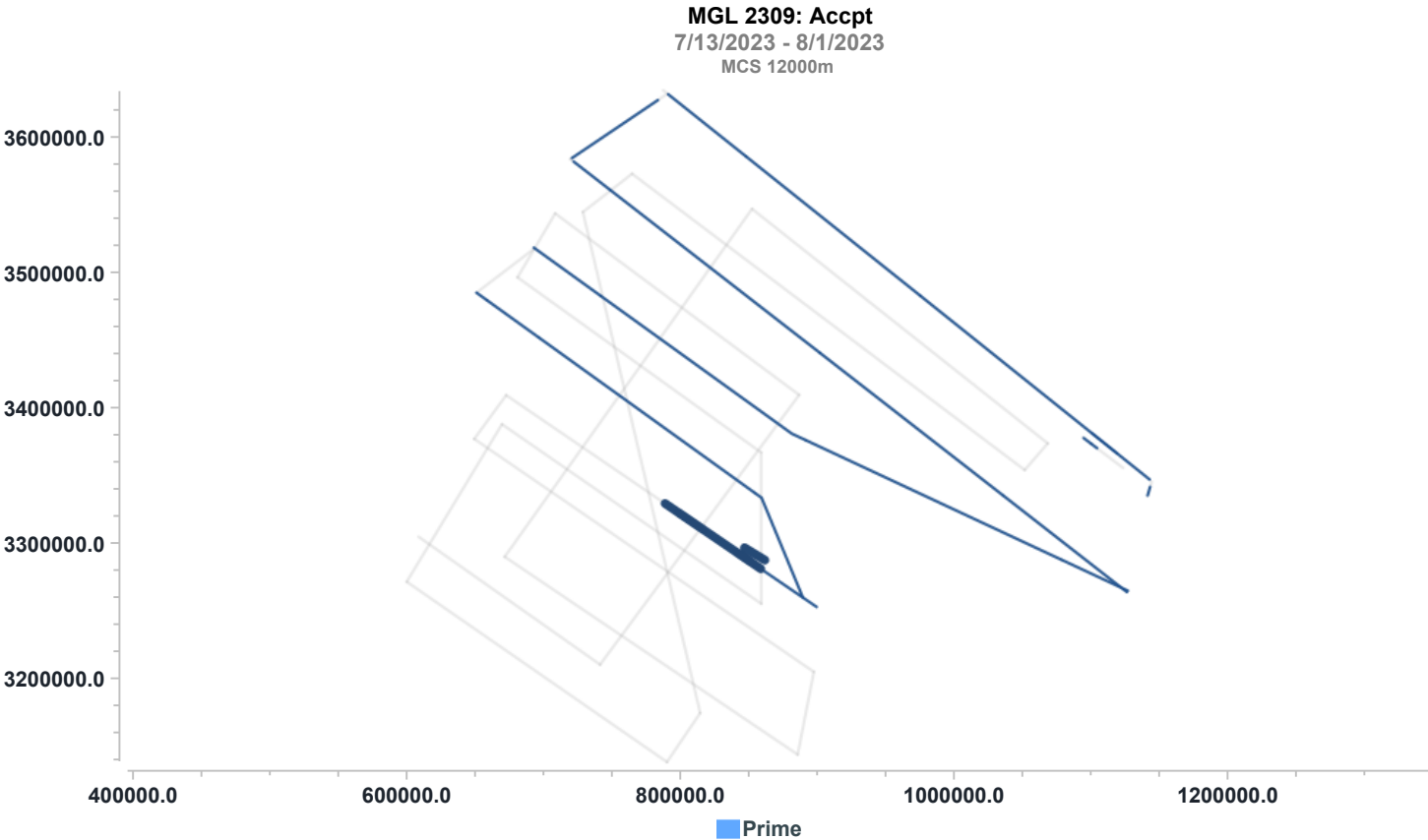
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
9	1009	304.5	1931	2163	Prime	11.65	3.656	Complete	Complete
10	TST3	121.5	1037	1386	Prime	17.50	5.093	Complete	Complete
11	1009	304.5	1749	3206	Prime	72.90	3.825	Complete	Complete
12	1009	304.5	2781	3446	Prime	33.30	4.545	Midnight	Part
Total						135.35			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	135.35	279.70	135.35	2137.95
Combined	135.35	279.70	135.35	2137.95



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 01 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Tue 01 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

8/1/2023

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2309
Vessel:	Marcus G Langseth
Supervisor:	
Party Chiefs:	Cody Bahlau
Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne BeceI

Wed 02 Aug

Wed 02 Aug

[illegible]

2-Aug	Hours	% Percent
Acquisition	16.333	68.056
Production Prime	16.333	68.056

2-Aug	Hours	% Percent
DownTime	7.667	31.944
Source	7.667	31.944
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	33.667	6.680
Cetacean	0.267	0.053
Source	13.583	2.695
Streamers	19.700	3.909
Vessel	0.117	0.023
Chargeable Standby	14.450	2.867
Currents and Tides	14.450	2.867
Mobilisation	136.000	26.984
Deployment	26.400	5.238
Mob Ashore	84.900	16.845
Transit to Prospect	24.700	4.901
Acquisition	319.883	63.469
Prime Line Change	12.967	2.573
Production Prime	306.917	60.896
Total	504.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

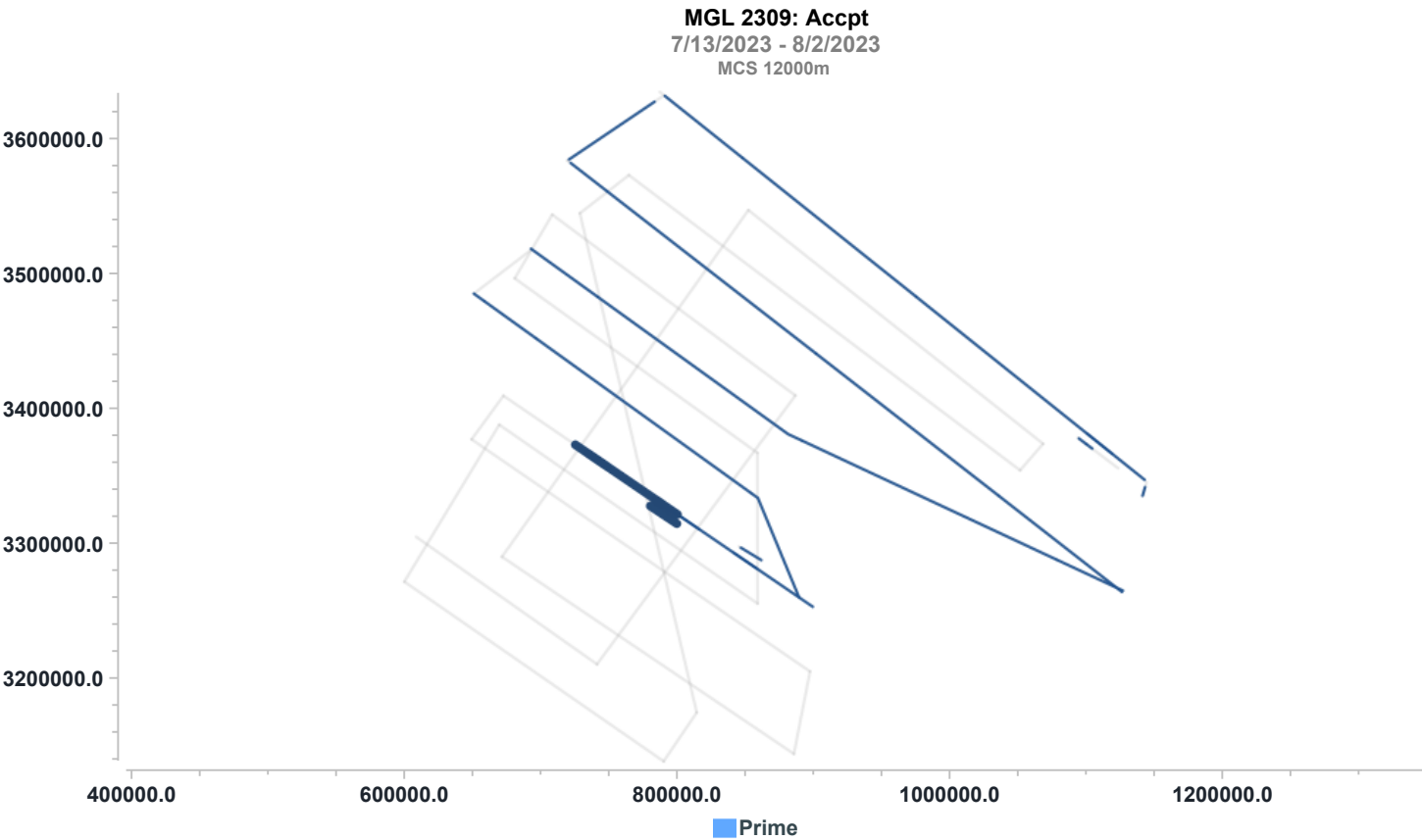
Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m									
Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
12	1009	304.5	3447	3539	Prime	4.65	4.417	Complete	Complete
13	TST4	123.8	984	1454	Prime	23.55	4.401	Complete	Complete
14	1009	304.5	3167	4758	Prime	79.60	4.521	Complete	Complete
15	1009	304.5	4427	4985	Prime	27.95	4.612	Midnight	Part
Total						135.75			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	135.75	415.45	271.10	2273.70
Combined	135.75	415.45	271.10	2273.70



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 02 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Wed 02 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs

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Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/3/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 03 Aug

Completed Line 1009
Completed Line 1010 - Air leak on array 2 at the end of line. The array was recovered, fixed and deployed right at end of line.
Started line 1011, this is the last high priority OBS line.

Daily Comment Summaries - Plan for Tomorrow

Thu 03 Aug

Complete Line 1011

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	07:53	Production Prime	AC_PP	7.883
Seq: 15 Seq 15 Line:1009 FGSP: 60985 EOL Seq 15 Line:1009 LGSP: 62290 Complete				
07:53	08:22	Prime Line Change	AC_PLC	0.483
Seq: 15 Line: 1009 Nominal Prime line change.				
08:22	15:35	Production Prime	AC_PP	7.217
Seq: 16 SOL Seq 16 Line:1010 FGSP: 63058 EOL Seq 16 Line:1010 LGSP: 63777 Complete				
15:35	15:46	Prime Line Change	AC_PLC	0.183
Seq: 16 Line: 1010 Nominal Prime line change.				
15:46	24:00	Production Prime	AC_PP	8.233
Seq: 17 SOL Seq 17 Line:1011 FGSP: 64023 MSP Seq 17 Line:1011 LGSP: 65386 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

3-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.667	2.778
Production Prime	23.333	97.222
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	33.667	6.376
Cetacean	0.267	0.051
Source	13.583	2.573
Streamers	19.700	3.731
Vessel	0.117	0.022
Chargeable Standby	14.450	2.737
Currents and Tides	14.450	2.737
Mobilisation	136.000	25.758
Deployment	26.400	5.000
Mob Ashore	84.900	16.080
Transit to Prospect	24.700	4.678
Acquisition	343.883	65.129
Prime Line Change	13.633	2.582
Production Prime	330.250	62.547
Total	528.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
15	1009	304.5	4986	6291	Prime	65.30	4.513	Complete	Complete
16	1010	215.9	1059	1778	Prime	36.00	2.690	Complete	Complete
17	1011	124.6	1024	2387	Prime	68.20	4.469	Midnight	Part
Total						169.50			

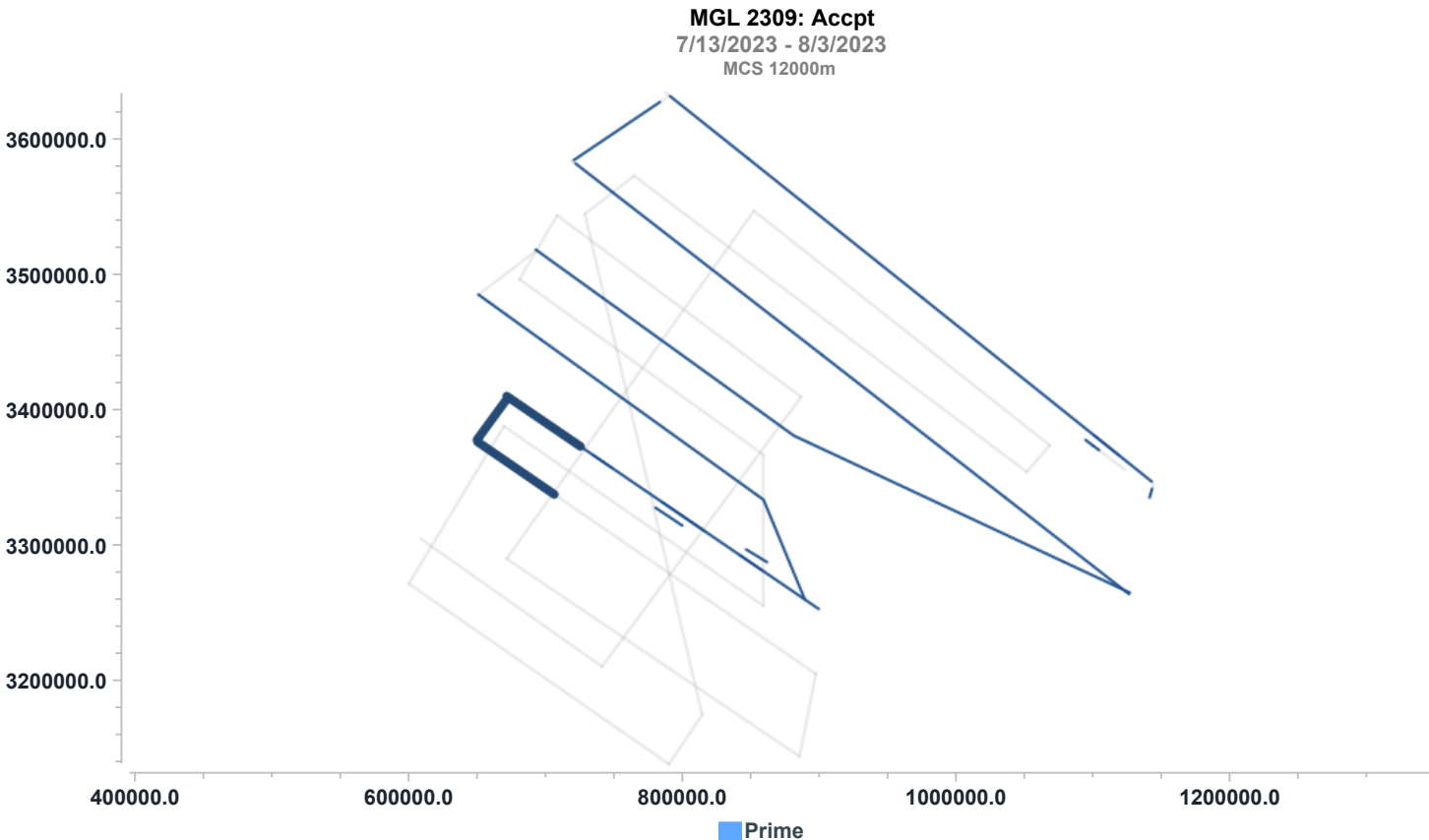
Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	169.50	584.95	440.60	2443.20
Combined	169.50	584.95	440.60	2443.20

8/3/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 03 Aug

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Thu 03 Aug

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer

Josh Kasinger L-DEO OMO Chief Source Mechanic

Brian Agee L-DEO OMO Senior Source Mechanic

Peter Bolt - Contract Source Mech

Leonid Ometciskii - Contract Source Mech

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Riley Lopez L-DEO OMO Marine Science Technician - Obs

Klayton Curtis - Contract Source Obs

Claire Mayorga- MATE Intern Navigator

Sara Pierson - MATE Intern Navigator

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/4/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 04 Aug

Continue Acquisition on Line 1011
Seq 017 ended early due to a circle for an air leak on Array 1.
The array was recovered, air gun 1-4 was leaking, this was changed out.
At end of day continue acquisition on line 1011.

Daily Comment Summaries - Plan for Tomorrow

Fri 04 Aug

Complete line 1011 and start 1012

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	10:36	Production Prime	AC_PP	10.600
Seq: 17 Seq 17 Line:1011 FGSP: 65387 Seq 17 Line:1011 LGSP: 67180				
10:36	15:26	Source	DT_SC	4.833
Downtime due to source. Circle due to air leak on Array 1.				
15:26	24:00	Production Prime	AC_PP	8.567
Seq: 18 Seq 18 Line:1011 FGSP: 70780 Seq 18 Line:1011 LGSP: 72214				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

4-Aug	Hours	% Percent
Acquisition	19.167	79.861
Production Prime	19.167	79.861
DownTime	4.833	20.139
Source	4.833	20.139
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	38.500	6.975
Cetacean	0.267	0.048
Source	18.417	3.336
Streamers	19.700	3.569
Vessel	0.117	0.021
Chargeable Standby	14.450	2.618
Currents and Tides	14.450	2.618

Category	Hours	% Percent
Mobilisation	136.000	24.638
Deployment	26.400	4.783
Mob Ashore	84.900	15.380
Transit to Prospect	24.700	4.475
Acquisition	363.050	65.770
Prime Line Change	13.633	2.470
Production Prime	349.417	63.300
Total	552.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

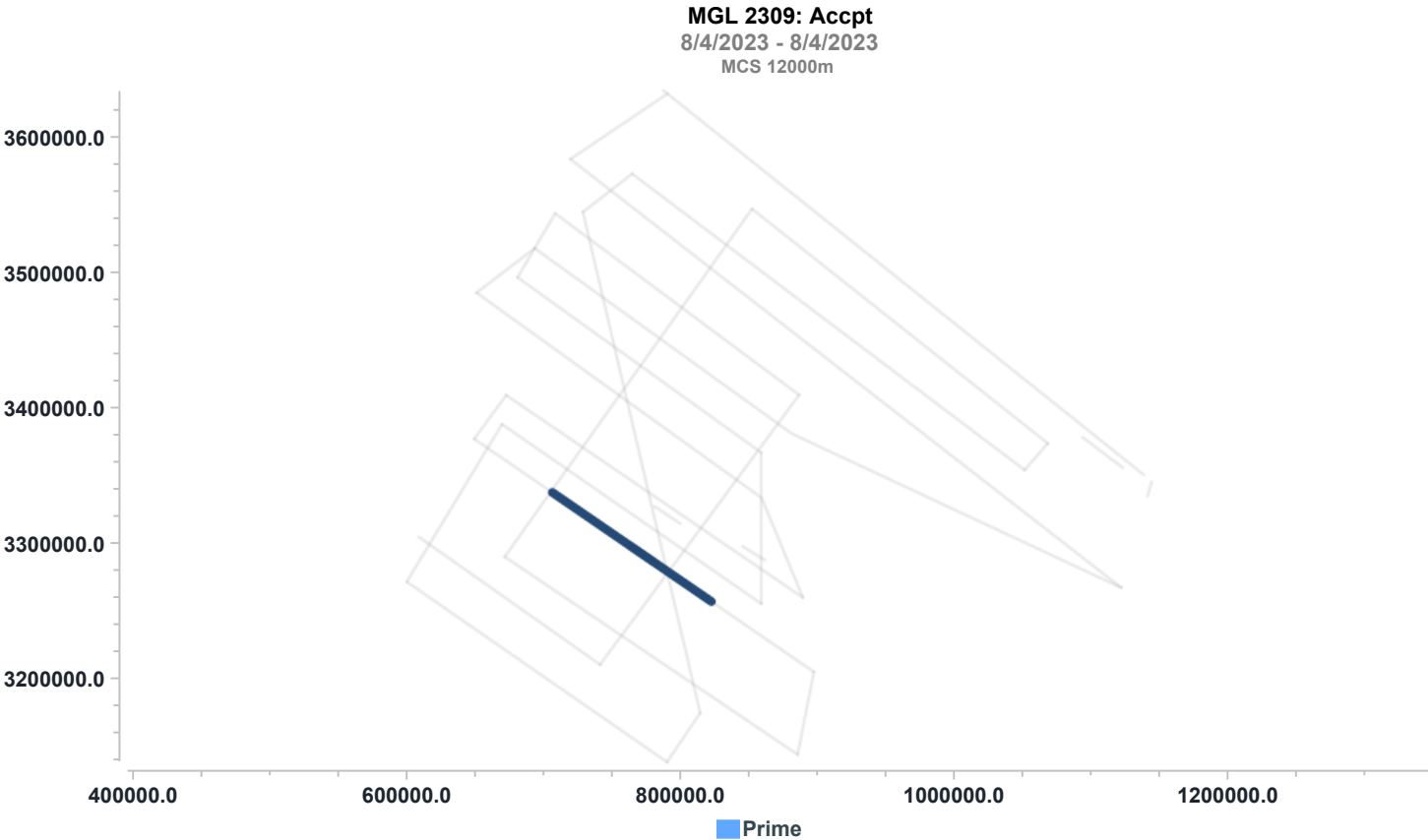
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
17	1011	124.6	2388	4181	Prime	89.70	4.526	Complete	Complete
18	1011	124.6	3781	5215	Prime	71.75	4.519	Midnight	Part
Total						161.45			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	161.45	746.40	602.05	2604.65
Combined	161.45	746.40	602.05	2604.65



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 04 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Fri 04 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

8/4/2023

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

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- Harm Van Avendonk - Research scientist PI
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- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/5/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 05 Aug

Acquiring data on line 1011.
Towards the end of line 1011, 7:12 UTC, the vessel deviated 15 degrees to stbd to avoid long line fishing gear.
The captain of the fishing vessel informed the Langseth bridge that there were other fishing boats to the south.
String 3, gun 9 started to no fire and an air leak was visible. The decision was made to finish line 1011 and the array would be recovered on the transit line.
As the langseth completed line 1011, and turned to stbd to head for line 1012 it was soon evident there were more fishing vessels and long line ahead.
The Captain and PI's met and decided the best course of action was to turn more to stbd, west, and avoid all the gear and then gently come back to port to the start of line 1013.
Array 3 was recovered towards the end of line 1012. There was quite a bit of work to do on this array while on deck. The array was deployed after the start of line 1013.
On line 1013, gun 3 (40 cuin) on array 4 was disabled due to electrical leakage.

Daily Comment Summaries - Plan for Tomorrow

Sat 05 Aug

Continue on line 1013

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	10:37	Production Prime	AC_PP	10.617
Seq: 18 Seq 18 Line:1011 FGSP: 72215 EOL Seq 18 Line:1011 LGSP: 73984 Complete				
10:37	11:05	Prime Line Change	AC_PLC	0.467
Seq: 18 Line: 1011 Nominal Prime line change.				
11:05	17:46	Production Prime	AC_PP	6.683
Seq: 19 SOL Seq 19 Line:1012 FGSP: 75062 EOL Seq 19 Line:1012 LGSP: 76005 Complete				
17:46	18:04	Prime Line Change	AC_PLC	0.300
Seq: 19 Line: 1012 Nominal Prime line change.				
18:04	24:00	Production Prime	AC_PP	5.933
Seq: 20 SOL Seq 20 Line:1013 FGSP: 77288 MSP Seq 20 Line:1013 LGSP: 77595 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

5-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.767	3.194
Production Prime	23.233	96.806
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	38.500	6.684
Cetacean	0.267	0.046
Source	18.417	3.197
Streamers	19.700	3.420
Vessel	0.117	0.020
Chargeable Standby	14.450	2.509
Currents and Tides	14.450	2.509
Mobilisation	136.000	23.611
Deployment	26.400	4.583
Mob Ashore	84.900	14.740
Transit to Prospect	24.700	4.288
Acquisition	387.050	67.196
Prime Line Change	14.400	2.500
Production Prime	372.650	64.696
Total	576.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

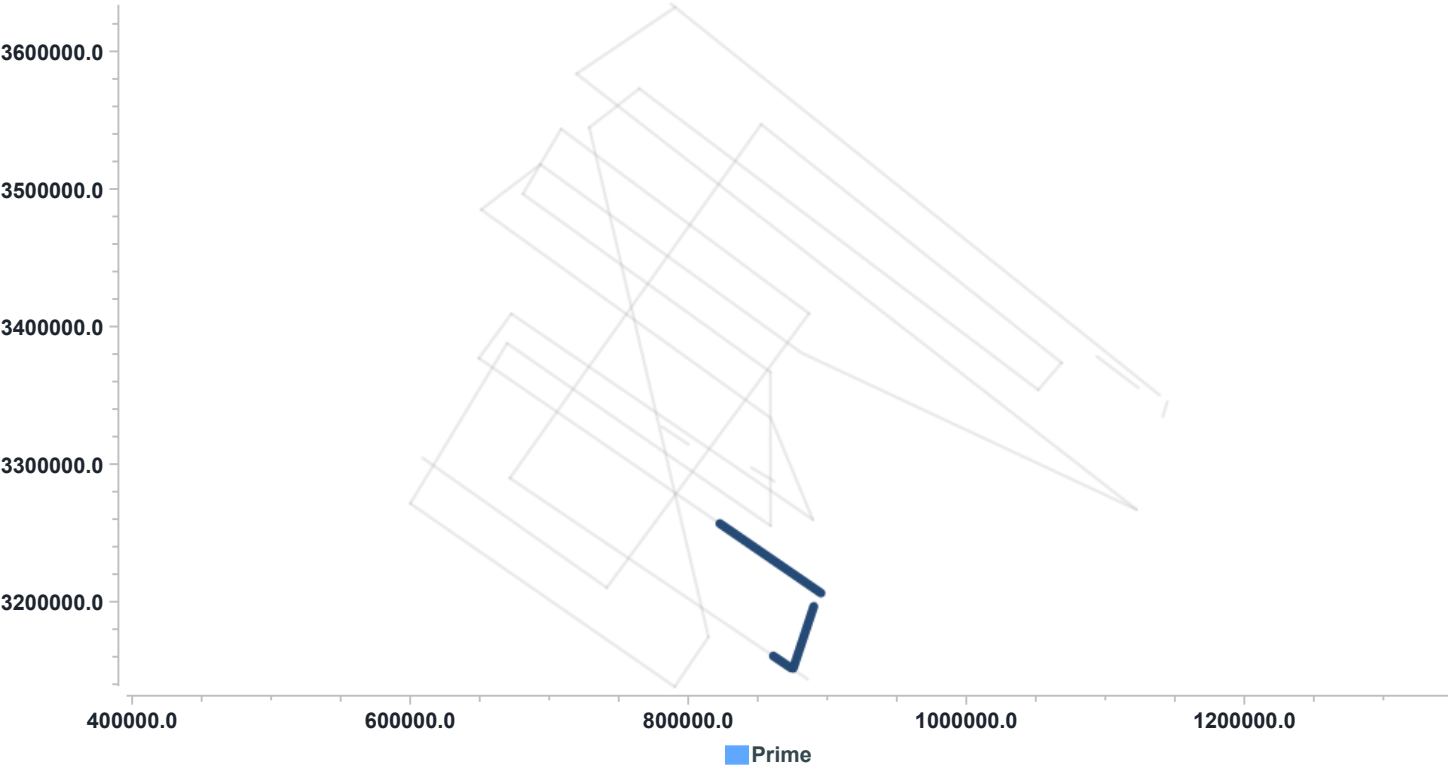
Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
18	1011	124.6	5216	6985	Prime	88.50	4.509	Complete	Complete
19	1012	198.2	1063	2006	Prime	47.20	3.809	Complete	Complete
20	1013	304.3	1289	1596	Prime	15.40	1.397	Midnight	Part
Total						151.10			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	151.10	897.50	753.15	2755.75
Combined	151.10	897.50	753.15	2755.75

MGL 2309: Accpt
8/5/2023 - 8/5/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 05 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sat 05 Aug

- Technical Staff On-board the Langseth
- Cody Bahlau L-DEO OMO Chief Science Officer
 - Josh Kasinger L-DEO OMO Chief Source Mechanic
 - Brian Agee L-DEO OMO Senior Source Mechanic
 - Peter Bolt - Contract Source Mech
 - Leonid Ometciskii - Contract Source Mech
 - Gilles Guerin L-DEO OMO Marine Science Technician - Obs
 - Riley Lopez L-DEO OMO Marine Science Technician - Obs

8/5/2023

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Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/6/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 06 Aug

Acquiring data on line 1013.
At 20:01 GCU (Gun Control Unit) 4 failed. This resulted in array 4 to stop firing. The GCU was changed out and powered up, array 4 was then back on line.
At 20:55 Array 3 had an air leak.
The decision was made to recover array 3 for the air leak and circle back to cover both holes in coverage, Air leak and GCU 4.
At end of day the vessel was acquiring data on the test line running back to circle back on line.

Daily Comment Summaries - Plan for Tomorrow

Sun 06 Aug

Continue on line 1013

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	21:37	Production Prime	AC_PP	21.617
Seq: 20 Seq 20 Line:1013 FGSP: 77596 EOL Seq 20 Line:1013 LGSP: 81208 Complete				
21:37	23:46	Source	DT_SC	2.150
Downtime due to source. Circle due to Air leak on array 3 and GCU 4 failure.				
23:46	24:00	Production Prime	AC_PP	0.233
Seq: 21 SOL Seq 21 Line:TST5 FGSP: 82086 MSP Seq 21 Line:TST5 LGSP: 82123 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

6-Aug	Hours	% Percent
Acquisition	21.850	91.042
Production Prime	21.850	91.042
DownTime	2.150	8.958
Source	2.150	8.958
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	40.650	6.775
Cetacean	0.267	0.044
Source	20.567	3.428
Streamers	19.700	3.283
Vessel	0.117	0.019

Category	Hours	% Percent
Chargeable Standby	14.450	2.408
Currents and Tides	14.450	2.408
Mobilisation	136.000	22.667
Deployment	26.400	4.400
Mob Ashore	84.900	14.150
Transit to Prospect	24.700	4.117
Acquisition	408.900	68.150
Prime Line Change	14.400	2.400
Production Prime	394.500	65.750
Total	600.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

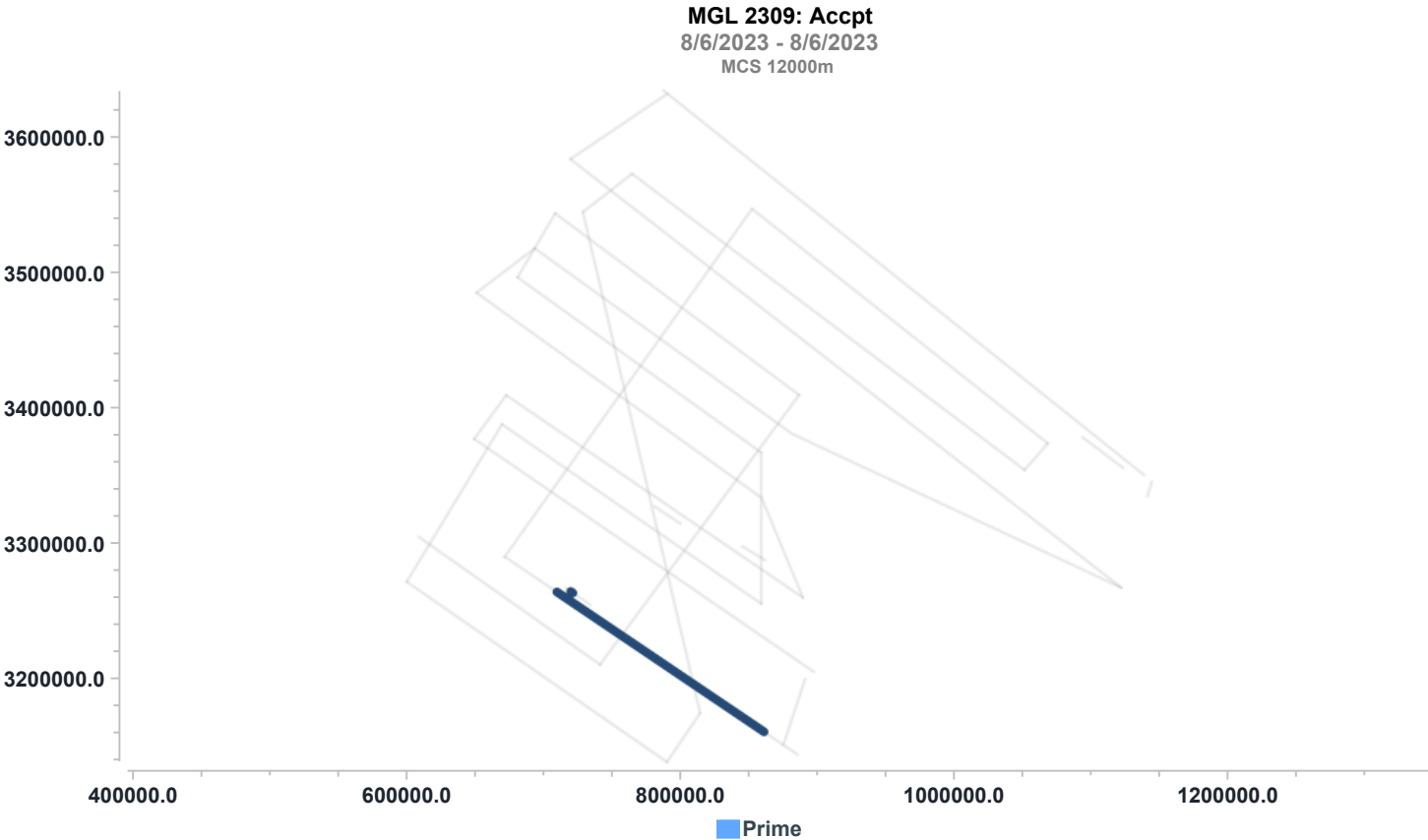
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
20	1013	304.3	1597	5259	Prime	183.15	3.890	Complete	Complete
21	TST5	124.1	1087	1124	Prime	1.90	4.281	Midnight	Part
Total						185.05			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	185.05	1082.55	938.20	2940.80
Combined	185.05	1082.55	938.20	2940.80



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 06 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sun 06 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

8/6/2023

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/7/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 07 Aug

Acquiring data on line 1013.
After the circle and test line TST5, the vessel started to acquire data on 1013.
Shortly after rejoining the line there was an air leak on array 2. This decision was made to circle.
When the vessel rejoined the line again both the GCU4 and the air leak on array 2 and 3 were covered.
At 16:30 it was decided that at the end of Seq 24 the vessel would recover the gear and sail to Jacksonville for a crew transfer.
At end of day the vessel was recovering the streamer, with ~3kms left in the water.

Daily Comment Summaries - Plan for Tomorrow

Mon 07 Aug

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	01:53	Production Prime	AC_PP	1.883
Seq: 21 SOL Seq 21 Line:TST5 FGSP: 82086 EOL Seq 21 Line:TST5 LGSP: 82427 Complete				
01:53	02:26	Source	DT_SC	0.550
Downtime due to source. Circle for air leak.				
02:26	04:49	Production Prime	AC_PP	2.383
Seq: 22 SOL Seq 22 Line:1013 FGSP: 82771 EOL Seq 22 Line:1013 LGSP: 83120 Complete				
04:49	06:07	Source	DT_SC	1.300
Downtime due to source. Circle for Air leak on array 2.				
06:07	07:54	Production Prime	AC_PP	1.783
Seq: 23 SOL Seq 23 Line:TST6 FGSP: 84125 EOL Seq 23 Line:TST6 LGSP: 84360 Complete				
07:54	09:25	Source	DT_SC	1.517
Downtime due to source. Circle for Air leak on array 2.				
09:25	17:19	Production Prime	AC_PP	7.900
Seq: 24 SOL Seq 24 Line:1013 FGSP: 84928 EOL Seq 24 Line:1013 LGSP: 86135 Complete				
17:19	24:00	Recovery	DM_RC	6.683
Recovering Streamer to transit to Jacksonville.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

7-Aug	Hours	% Percent
Acquisition	13.950	58.125
Production Prime	13.950	58.125
Demobilisation	6.683	27.847
Recovery	6.683	27.847
DownTime	3.367	14.028
Source	3.367	14.028
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	7.054
Cetacean	0.267	0.043
Source	23.933	3.835
Streamers	19.700	3.157
Vessel	0.117	0.019
Chargeable Standby	14.450	2.316
Currents and Tides	14.450	2.316
Mobilisation	136.000	21.795
Deployment	26.400	4.231
Mob Ashore	84.900	13.606
Transit to Prospect	24.700	3.958
Acquisition	422.850	67.764
Prime Line Change	14.400	2.308
Production Prime	408.450	65.457
Demobilisation	6.683	1.071
Recovery	6.683	1.071
Total	624.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

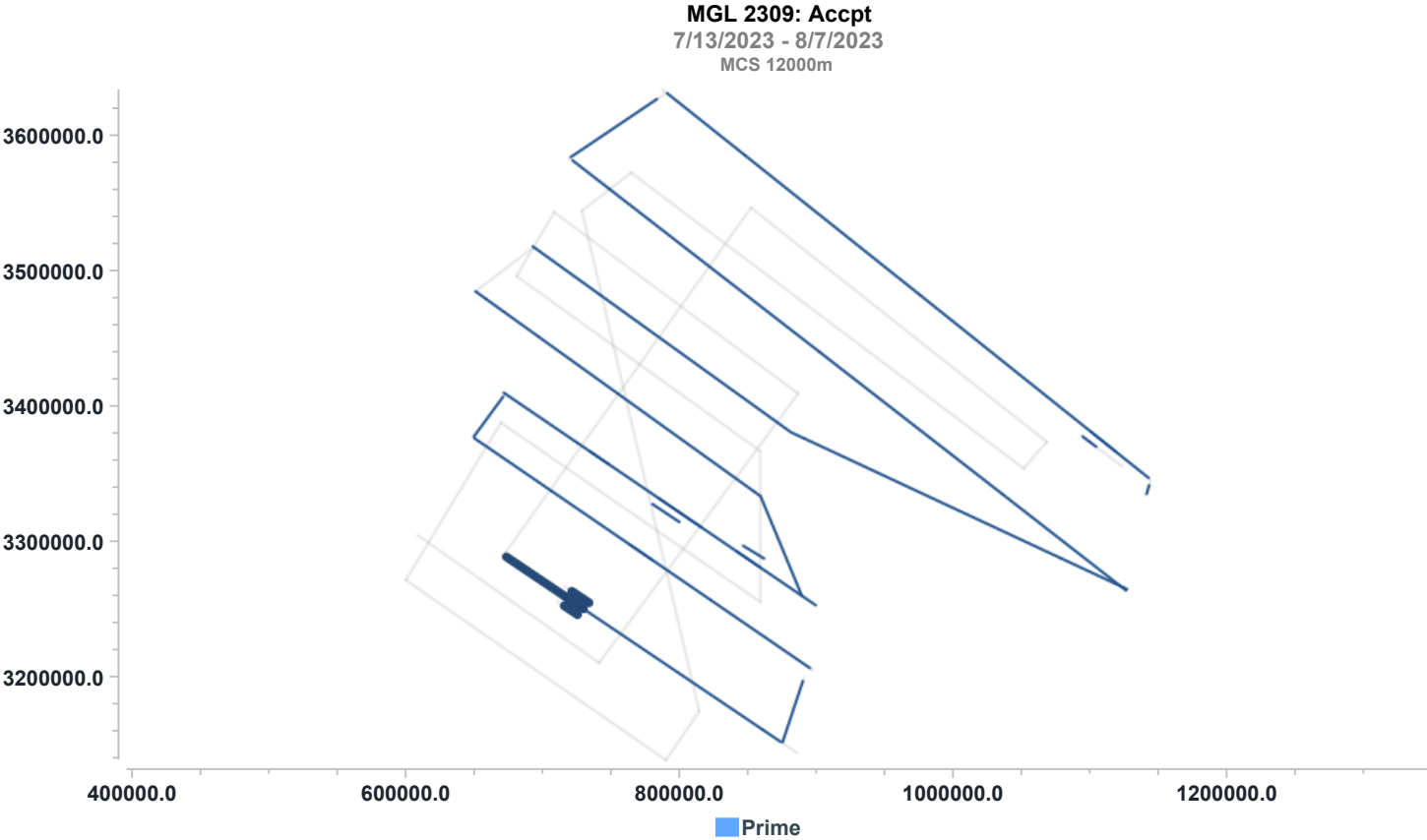
Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
21	TST5	124.1	1125	1428	Prime	15.20	4.349	Complete	Complete
22	1013	304.3	4772	5121	Prime	17.50	3.953	Complete	Complete

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
23	TST6	124.1	1126	1361	Prime	11.80	3.558	Complete	Complete
24	1013	304.3	4929	6136	Prime	60.40	4.125	Complete	Complete
Total						104.90			

Production Totals (Accept Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	104.90	104.90	1043.10	3045.70
Combined	104.90	104.90	1043.10	3045.70



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 07 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Mon 07 Aug

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Josh Kasinger L-DEO OMO Chief Source Mechanic
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
16:15	17:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	1
TBT - Tool box talk before source and streamer recovery.		

8/8/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 08 Aug

At the start of day the vessel was recovering streamer, before transiting to Jacksonville.
At ~1400 utc the vessel was at our designated transfer point, soon after the crew boat arrived to transfer crew.
By 1414 utc the vessel was headed back out to the survey area to start deployment.

Daily Comment Summaries - Plan for Tomorrow

Tue 08 Aug

Continue transiting to the survey area and deploy gear.
Acquisition will start on line 1013 to test the guns before we turn on to line 1014.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	00:43	Recovery	DM_RC	0.717
Recovering Streamer to transit to Jacksonville.				
00:43	14:02	Transit From Prospect	DM_TF	13.317
Transiting from the survey area to Jacksonville.				
14:02	14:14	Crew Change	SB_SU_CX	0.200
Chargeable standby due to crew change.				
14:14	24:00	Transit to Prospect	MB_TT	9.767
In transit to prospect, for deployment.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

8-Aug	Hours	% Percent
Chargeable Standby	0.200	0.833
Support	0.200	0.833
Crew Change	0.200	0.833
Demobilisation	14.033	58.472
Recovery	0.717	2.986
Transit From Prospect	13.317	55.486
Mobilisation	9.767	40.694
Transit to Prospect	9.767	40.694
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	6.793
Cetacean	0.267	0.041
Source	23.933	3.693

Category	Hours	% Percent
Streamers	19.700	3.040
Vessel	0.117	0.018
Chargeable Standby	14.650	2.261
Currents and Tides	14.450	2.230
Support	0.200	0.031
Crew Change	0.200	0.031
Mobilisation	145.767	22.495
Deployment	26.400	4.074
Mob Ashore	84.900	13.102
Transit to Prospect	34.467	5.319
Acquisition	422.850	65.255
Prime Line Change	14.400	2.222
Production Prime	408.450	63.032
Demobilisation	20.717	3.197
Recovery	7.400	1.142
Transit From Prospect	13.317	2.055
Total	648.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

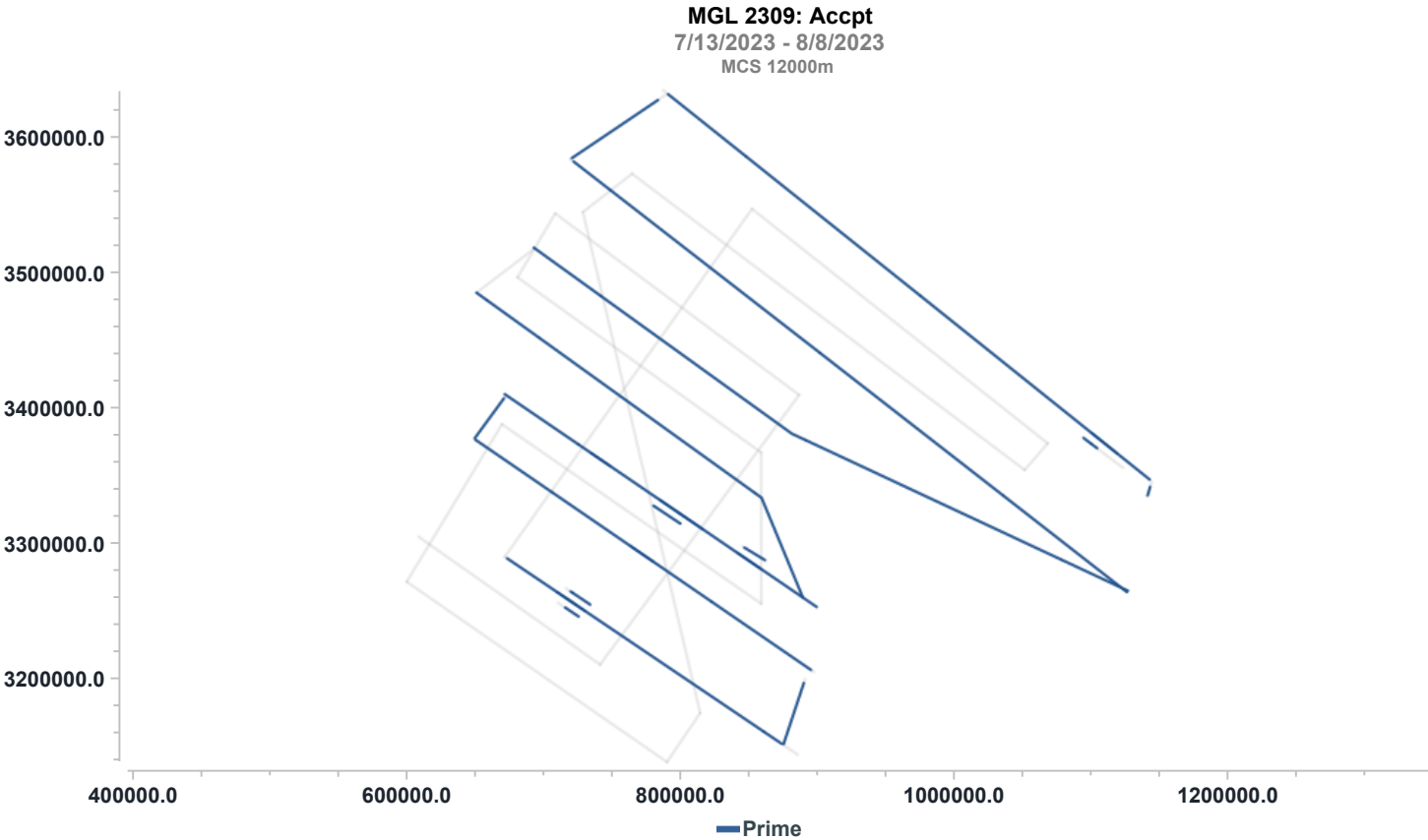
MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	104.90	1043.10	3045.70
Combined	0.00	104.90	1043.10	3045.70



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 08 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Tue 08 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech / Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

8/8/2023

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/9/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 09 Aug

At start of the day the vessel was in transit to the deployment point.
2:42 UTC the tailbuoy was deployed and streamer ops started.
2 sections were changed:

- Section 53 for to many bad traces
- Section 21 for electrical leakage

13:24 UTC the guns were started
Array 3 had some problems on deck when performing the pre-deployment checks. This was fixed and deployed.
After deployment the source was ramped up and line 1013 was started as the vessel sailed towards our next line 1014.
Array 3 front cluster has electrical problems, both guns are not working. This will be recovered when operationally convenient.
At end of day the vessel is acquiring data on line 1014.






Daily Comment Summaries - Plan for Tomorrow

Wed 09 Aug

Continue on line 1014

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	02:42	 Transit to Prospect	MB_TT	2.700
In transit to prospect, for mobilizing deployment.				
02:42	17:43	 Deployment	MB_DP	15.017
Mobilizing offshore, deploying streamer and guns.				
17:43	21:04	 Production Prime	AC_PP	3.350
Seq: 25 SOL Seq 25 Line:1013 FGSP: 91754 EOL Seq 25 Line:1013 LGSP: 92156 Complete				
21:04	21:11	 Prime Line Change	AC_PLC	0.117
Seq: 25 Line: 1013 Nominal Prime line change.				
21:11	24:00	 Production Prime	AC_PP	2.817
Seq: 26 SOL Seq 26 MGL 2309 FGSP: 93018 MSP Seq 26 MGL 2309 LGSP: 93393				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

9-Aug	Hours	% Percent
Acquisition	6.283	26.181
Prime Line Change	0.117	0.486
Production Prime	6.167	25.694

9-Aug	Hours	% Percent
Mobilisation	17.717	73.819
Deployment	15.017	62.569
Transit to Prospect	2.700	11.250
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	6.550
Cetacean	0.267	0.040
Source	23.933	3.562
Streamers	19.700	2.932
Vessel	0.117	0.017
Chargeable Standby	14.650	2.180
Currents and Tides	14.450	2.150
Support	0.200	0.030
Crew Change	0.200	0.030
Mobilisation	163.483	24.328
Deployment	41.417	6.163
Mob Ashore	84.900	12.634
Transit to Prospect	37.167	5.531
Acquisition	429.133	63.859
Prime Line Change	14.517	2.160
Production Prime	414.617	61.699
Demobilisation	20.717	3.083
Recovery	7.400	1.101
Transit From Prospect	13.317	1.982
Total	672.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
25	1013	304.3	5755	6157	Prime	20.15	3.240	Complete	Complete
26	1014	35.2	1019	1394	Prime	18.80	3.594	Midnight	Part

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total						38.95			

Production Totals (Acpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	38.95	143.85	1082.05	3084.65
Combined	38.95	143.85	1082.05	3084.65



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 09 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Wed 09 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer

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Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
Daily Total Category		Code	Count
	Toolbox Meetings	Mtgs_Tbox	1
TBT - Streamer and Gun Deployment			

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Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 10 Aug

Acquiring Data on Line 1014
A good day of production.
At 12:30 there was a fire and an abandon ship drill.
The Science team went down to the main deck to practice boundary cooling with the fire hose, everybody had a good time and a few pics were taken for the blog!
At end of day the vessel was acquiring data on 1014.


Daily Comment Summaries - Plan for Tomorrow

Thu 10 Aug

Complete line 1014 and start line 1015

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 26 Seq 26 Line:1014 FGSP: 93394 Seq 26 Line:1014 MSP: 96903 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

10-Aug	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	6.324
Cetacean	0.267	0.038
Source	23.933	3.439
Streamers	19.700	2.830
Vessel	0.117	0.017
Chargeable Standby	14.650	2.105
Currents and Tides	14.450	2.076
Support	0.200	0.029
Crew Change	0.200	0.029
Mobilisation	163.483	23.489
Deployment	41.417	5.951
Mob Ashore	84.900	12.198
Transit to Prospect	37.167	5.340

Category	Hours	% Percent
Acquisition	453.133	65.105
Prime Line Change	14.517	2.086
Production Prime	438.617	63.020
Demobilisation	20.717	2.977
Recovery	7.400	1.063
Transit From Prospect	13.317	1.913
Total	696.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

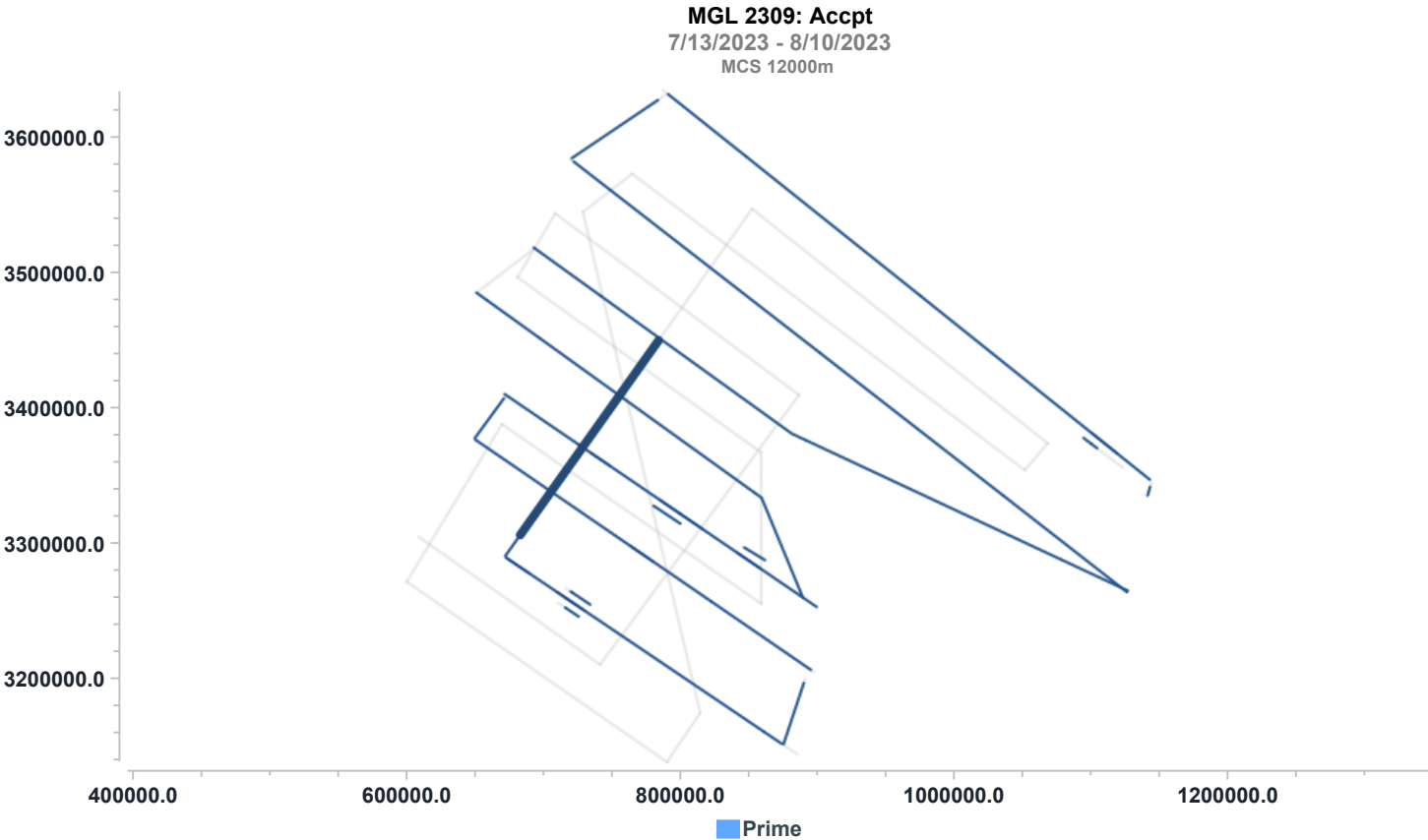
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
26	1014	35.2	1395	4904	Prime	175.50	3.911	Midnight	Part
Total						175.50			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	175.50	319.35	1257.55	3260.15
Combined	175.50	319.35	1257.55	3260.15



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 10 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Thu 10 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
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Aaron Martin - Contract Source Mech/Nav
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Sara Pierson - MATE Intern Navigator

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
16:20	16:35	 Fire Drill	Drls_Fi
HSE - Fire Drill			
16:35	17:00	 Abandon Ship Drill	Drls_AS
HSE - Abandon Ship Drill			

8/11/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 11 Aug

Acquiring Data on Line 1014
A good day of production.
The tailbuoy was intermittent towards the end of day.
The streamer tail power was turned back on to try and charge the battery. When doing this the noise on the last section appeared again.
After 3 hours of charging the tailbuoy there was no noticeable difference.
Ended line 1014 and started line 1015.

Daily Comment Summaries - Plan for Tomorrow

Fri 11 Aug

End line 1015.
During line 1016 array 3 will be recovered for maintenance on the first cluster.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	18:34	Production Prime	AC_PP	18.567
Seq: 26 Seq 26 Line:1014 FGSP: 96903 EOL Seq 26 Line:1014 LGSP: 99247 Complete				
18:34	18:47	Prime Line Change	AC_PLC	0.217
Seq: 26 Line: 1014 Nominal Prime line change.				
18:47	24:00	Production Prime	AC_PP	5.217
Seq: 27 SOL Seq 27 Line:1015 FGSP: 100031 MSP Seq 27 Line:1015 LGSP: 100761 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

11-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.217	0.903
Production Prime	23.783	99.097
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	6.113
Cetacean	0.267	0.037
Source	23.933	3.324

Category	Hours	% Percent
Streamers	19.700	2.736
Vessel	0.117	0.016
Chargeable Standby	14.650	2.035
Currents and Tides	14.450	2.007
Support	0.200	0.028
Crew Change	0.200	0.028
Mobilisation	163.483	22.706
Deployment	41.417	5.752
Mob Ashore	84.900	11.792
Transit to Prospect	37.167	5.162
Acquisition	477.133	66.269
Prime Line Change	14.733	2.046
Production Prime	462.400	64.222
Demobilisation	20.717	2.877
Recovery	7.400	1.028
Transit From Prospect	13.317	1.850
Total	720.000	

Basic Project Details

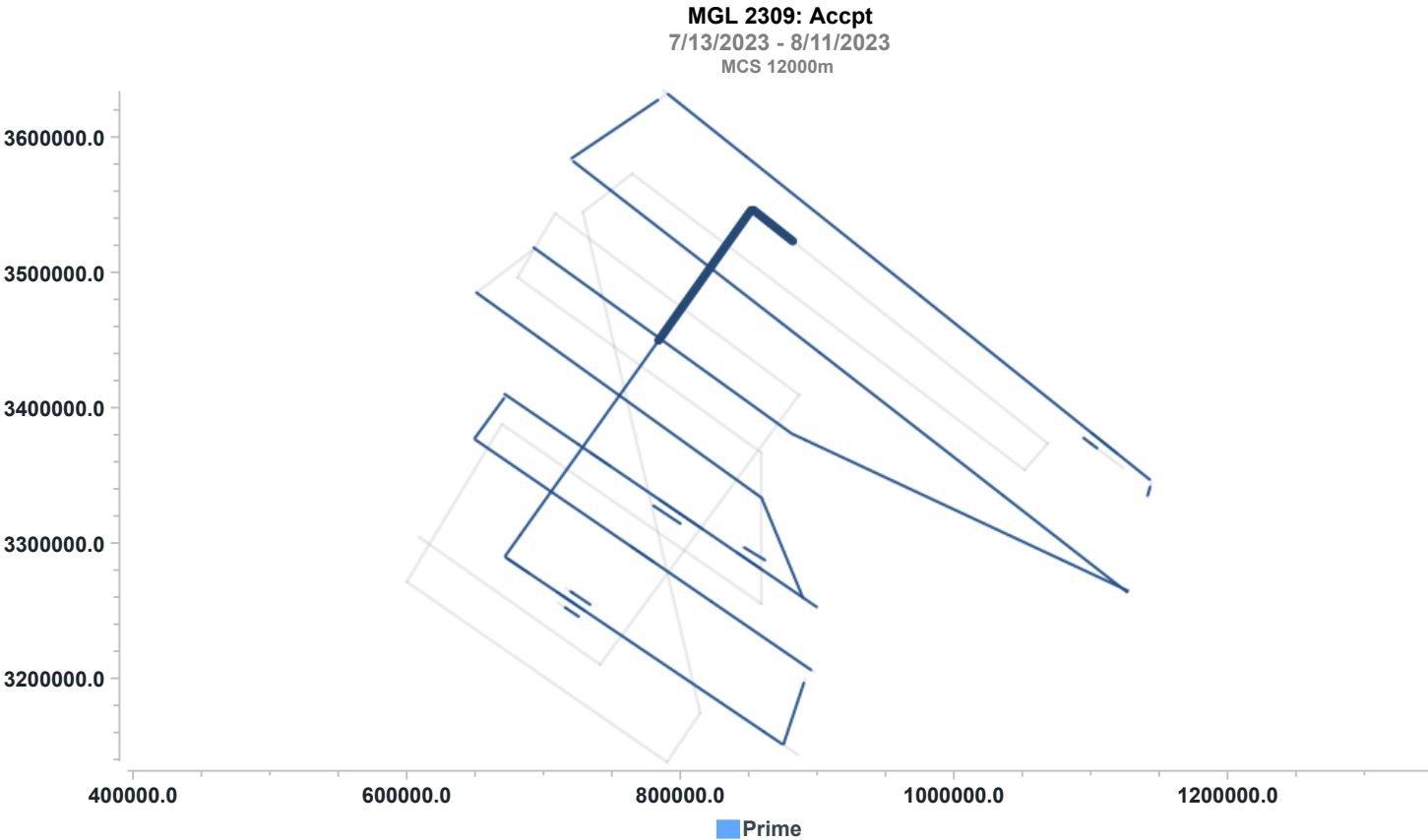
MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
26	1014	35.2	4905	7248	Prime	117.20	3.706	Complete	Complete
27	1015	128.6	1032	1762	Prime	36.55	3.778	Midnight	Part
Total						153.75			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m				
Accepted km	Day	Week	Month	Project
Prime	153.75	473.10	1411.30	3413.90
Combined	153.75	473.10	1411.30	3413.90



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 11 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Fri 11 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
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Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

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Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Daily Total Category	Code	Count
<div></div> Task, Hazard, Control	Re_Con_THC	10
2023-HSE-068_Dehumidifier not that good		
2023-HSE-069_Bridge calls for TB Position		
2023-HSE-070_Bandaids missing from First Aid		
2023-HSE-071_Bird Shack looks Great		
2023-HSE-072_Mess Left After Cabin Work		
2023-HSE-073_Washing Machine Settings		
2023-HSE-074_AC Labels		
2023-HSE-075_Strm Deck Loose Light - Reel 1		
2023-HSE-076_Strm Deck Loose Light - Reel 3		
2023-HSE-077_Loose Core Deck		

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Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 12 Aug

Acquiring data on line 1015, 1016 and started line 1017.
On line 1016 array 3 was recovered for the front cluster.






- The guns, DT and PT were worked on.
- When deployed, Gun 1, the DT and PT were working.
- Gun 2 did not have a sensor signal.
- The decision was made to continue down line.

Daily Comment Summaries - Plan for Tomorrow

Sat 12 Aug

Finish line 1017 and start 1018
If the currents are good array 3 will be recovered on line 1018.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	12:02	 Production Prime	AC_PP	12.033
Seq: 27 Seq 27 Line:1015 FGSP: 100762 EOL Seq 27 Line:1015 LGSP: 102461 Complete				
12:02	13:01	 Prime Line Change	AC_PLC	0.983
Seq: 27 Line: 1015 Nominal Prime line change.				
13:01	15:44	 Production Prime	AC_PP	2.717
Seq: 28 SOL Seq 28 Line:1016 FGSP: 103120 EOL Seq 28 Line:1016 LGSP: 103575 Complete				
15:44	16:12	 Prime Line Change	AC_PLC	0.467
Seq: 28 Line: 1016 Nominal Prime line change.				
16:12	24:00	 Production Prime	AC_PP	7.800
Seq: 29 SOL Seq 29 Line:1017 FGSP: 104085 MSP Seq 29 Line:1017 LGSP: 105424 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

12-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	1.450	6.042

12-Aug	Hours	% Percent
Production Prime	22.550	93.958
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	5.916
Cetacean	0.267	0.036
Source	23.933	3.217
Streamers	19.700	2.648
Vessel	0.117	0.016
Chargeable Standby	14.650	1.969
Currents and Tides	14.450	1.942
Support	0.200	0.027
Crew Change	0.200	0.027
Mobilisation	163.483	21.974
Deployment	41.417	5.567
Mob Ashore	84.900	11.411
Transit to Prospect	37.167	4.996
Acquisition	501.133	67.357
Prime Line Change	16.183	2.175
Production Prime	484.950	65.181
Demobilisation	20.717	2.784
Recovery	7.400	0.995
Transit From Prospect	13.317	1.790
Total	744.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m									
Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
27	1015	128.6	1763	3462	Prime	85.00	3.803	Complete	Complete
28	1016	218.0	1121	1576	Prime	22.80	4.522	Complete	Complete
29	1017	307.3	4174	5513	Prime	67.00	4.635	Midnight	Part
Total						174.80			

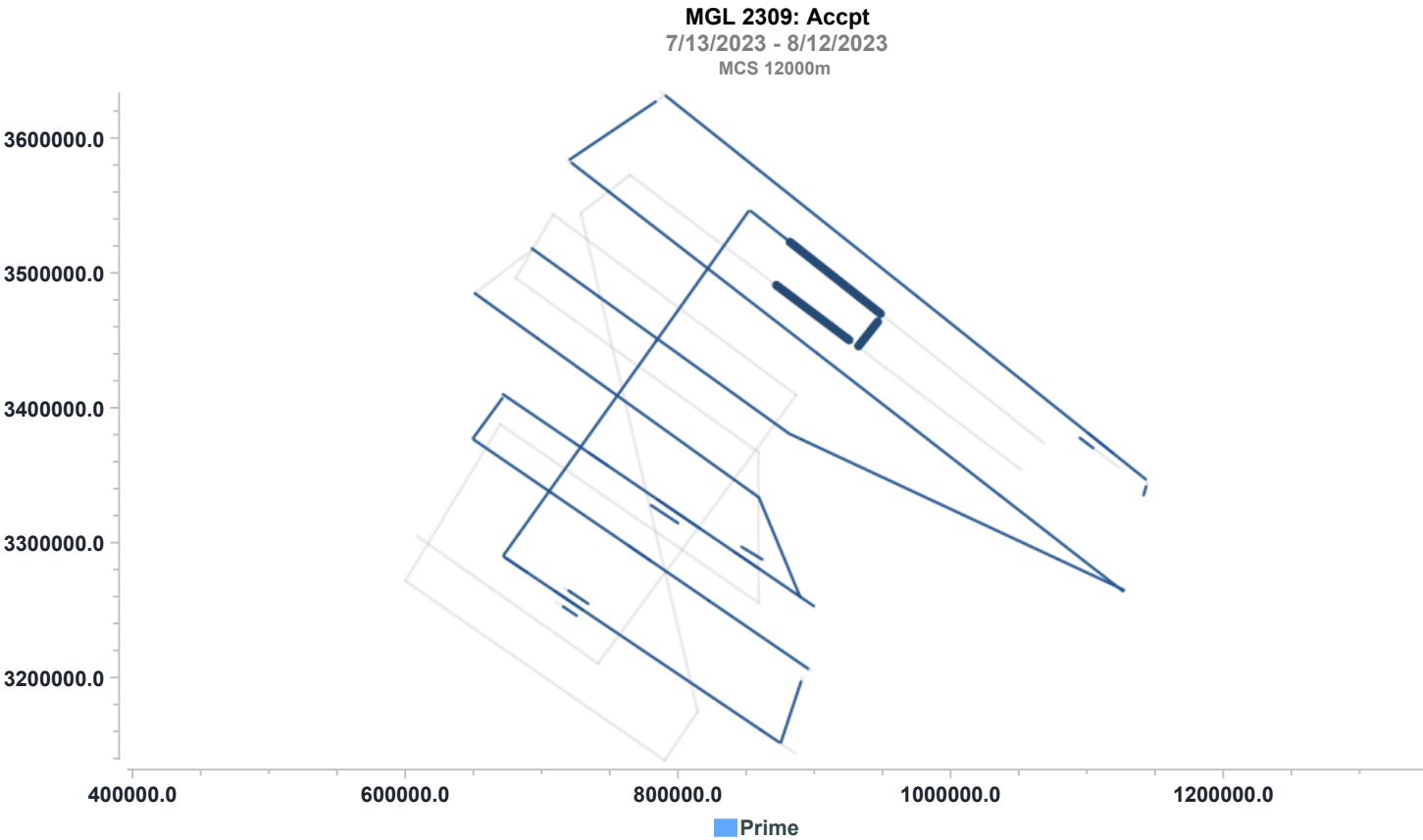
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Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	174.80	647.90	1586.10	3588.70
Combined	174.80	647.90	1586.10	3588.70



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 12 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sat 12 Aug

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech

8/12/2023

Page 4

Gilles Guerin L-DEO OMO Marine Science Technician - Obs
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Sara Pierson - MATE Intern Navigator

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Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/13/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 13 Aug

Acquiring data on line 1017
At end of day the vessel started to deviate from line due to strong currents and low speed over ground.
Array 3 was disabled and the array was recovered to work on the front cluster.


Daily Comment Summaries - Plan for Tomorrow

Sun 13 Aug

Continue on line 1013.
Deploy array 3.
As the vessel falls off of line to north a decision will be made once the currents decrease to start heading South West to the start of line 1003.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Production Prime	AC_PP	24.000
Seq: 29 Seq 29 Line:1017 FGSP: 105425 MSP Seq 29 Line:1017 LGSP: 107946 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

13-Aug	Hours	% Percent
Acquisition	24.000	100.000
Production Prime	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	5.731
Cetacean	0.267	0.035
Source	23.933	3.116
Streamers	19.700	2.565
Vessel	0.117	0.015
Chargeable Standby	14.650	1.908
Currents and Tides	14.450	1.882
Support	0.200	0.026
Crew Change	0.200	0.026
Mobilisation	163.483	21.287
Deployment	41.417	5.393
Mob Ashore	84.900	11.055
Transit to Prospect	37.167	4.839

Category	Hours	% Percent
Acquisition	525.133	68.377
Prime Line Change	16.183	2.107
Production Prime	508.950	66.270
Demobilisation	20.717	2.697
Recovery	7.400	0.964
Transit From Prospect	13.317	1.734
Total	768.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

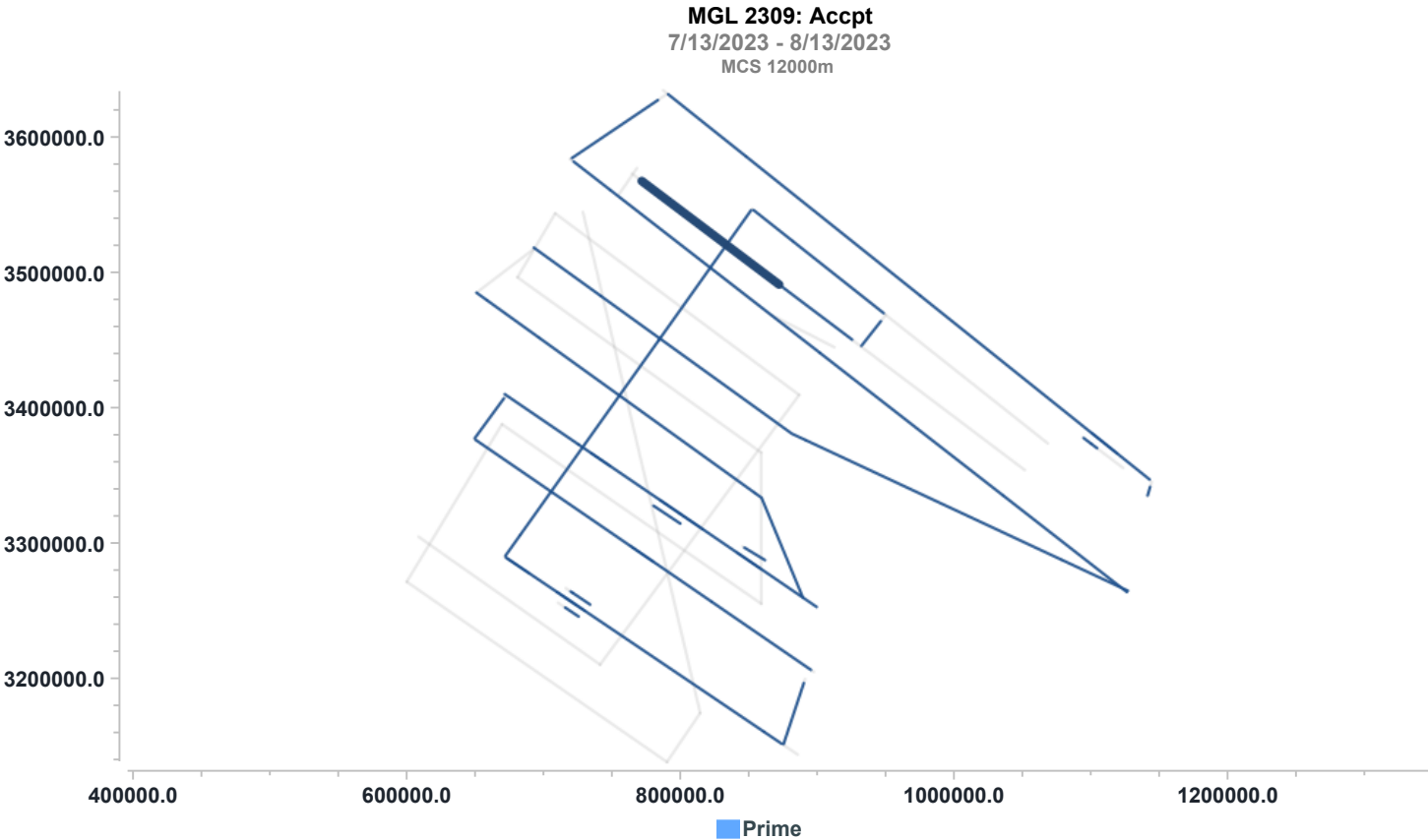
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
29	1017	307.3	5514	8035	Prime	126.10	3.278	Midnight	Part
Total						126.10			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	126.10	774.00	1712.20	3714.80
Combined	126.10	774.00	1712.20	3714.80



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 13 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sun 13 Aug

Technical Staff On-board the Langseth
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8/13/2023

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- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
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- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/14/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 14 Aug

Finished Lines 1017, 1018 and started the reshoot on 1003.
During line 1018 array 3 was recovered for gun 3-2 this was a planned recovery on a non-priority line.
During line 1018 the vessel deviated farther to the North West to move out of the high current area.
Line 1003 was started at the beginning of the reshoot area. The reshoot was due to crossfeed.






Daily Comment Summaries - Plan for Tomorrow

Mon 14 Aug

Finish line 1003 and start 1028.

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	02:31	 Production Prime	AC_PP	2.517
Seq: 29 Seq 29 Line:1017 FGSP: 107947 EOL Seq 29 Line:1017 LGSP: 108187 Complete				
02:31	02:48	 Prime Line Change	AC_PLC	0.283
Seq: 29 Line: 1017 Nominal Prime line change.				
02:48	10:27	 Production Prime	AC_PP	7.650
Seq: 30 SOL Seq 30 Line:1018 FGSP: 109017 EOL Seq 30 Line:1018 LGSP: 109470 Complete				
10:27	11:51	 Prime Line Change	AC_PLC	1.400
Seq: 30 Line: 1018 Nominal Prime line change.				
11:51	24:00	 Production Prime	AC_PP	12.150
Seq: 31 SOL Seq 31 Line:1003_Reshoot FGSP: 111234 MSP Seq 31 Line:1003_Reshoot LGSP: 113311 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

14-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	1.683	7.014
Production Prime	22.317	92.986
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	5.558
Cetacean	0.267	0.034
Source	23.933	3.022
Streamers	19.700	2.487
Vessel	0.117	0.015
Chargeable Standby	14.650	1.850
Currents and Tides	14.450	1.824
Support	0.200	0.025
Crew Change	0.200	0.025
Mobilisation	163.483	20.642
Deployment	41.417	5.229
Mob Ashore	84.900	10.720
Transit to Prospect	37.167	4.693
Acquisition	549.133	69.335
Prime Line Change	17.867	2.256
Production Prime	531.267	67.079
Demobilisation	20.717	2.616
Recovery	7.400	0.934
Transit From Prospect	13.317	1.681
Total	792.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

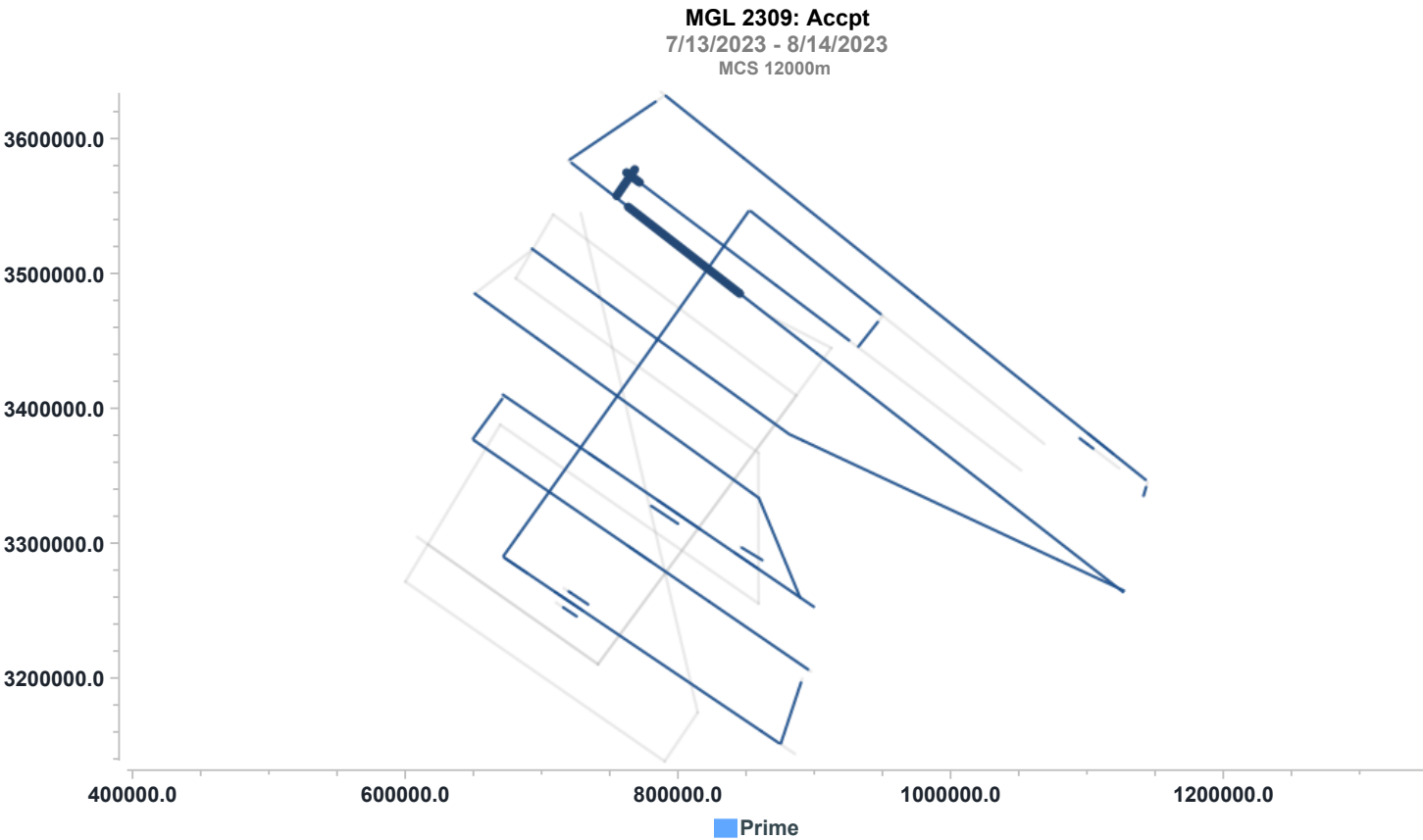
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
29	1017	307.3	8036	8276	Prime	12.05	3.227	Complete	Complete
30	1018	214.3	1001	1471	Prime	23.55	1.659	Complete	Complete
31	1003_Re	128.1	1235	3312	Prime	103.90	4.615	Midnight	Part
Total						139.50			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	139.50	139.50	1851.70	3854.30
Combined	139.50	139.50	1851.70	3854.30



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 14 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Mon 14 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs

8/14/2023

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Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:05	18:05	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Page 1

Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2309
Vessel:	Marcus G Langseth
Supervisor:	
Party Chiefs:	Cody Bahlau
Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne BeceI

Tue 15 Aug

Finished the reshoot on line 1003 and started 1028.
Good ground speed throughout the day.

Tue 15 Aug

Finish line 1028 and start 1029

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Start	End	Category	Code	Duration (hrs)
00:00	09:10	<div></div> Production Prime	AC_PP	9.167
Seq: 31 Seq 31 Line:1003_Reshoot FGSP: 113312 EOL Seq 31 Line:1003_Reshoot LGSP: 114846 Complete				
09:10	09:32	<div></div> Prime Line Change	AC_PLC	0.367
Seq: 31 Line: 1003_Re Nominal Prime line change.				
09:32	24:00	<div></div> Production Prime	AC_PP	14.467
Seq: 32 SQL Seq 32 Line:1028 FGSP: 115069 MSP Seq 32 Line:1028 LGSP: 117543 Midnight				

15-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.367	1.528
Production Prime	23.633	98.472
Day's Total	24.000	100.000

Category	Hours	% Percent
DownTime	44.017	5.394
Cetacean	0.267	0.033
Source	23.933	2.933
Streamers	19.700	2.414
Vessel	0.117	0.014
Chargeable Standby	14.650	1.795
Currents and Tides	14.450	1.771
Support	0.200	0.025

Category	Hours	% Percent
Crew Change	0.200	0.025
Mobilisation	163.483	20.035
Deployment	41.417	5.076
Mob Ashore	84.900	10.404
Transit to Prospect	37.167	4.555
Acquisition	573.133	70.237
Prime Line Change	18.233	2.234
Production Prime	554.900	68.002
Demobilisation	20.717	2.539
Recovery	7.400	0.907
Transit From Prospect	13.317	1.632
Total	816.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

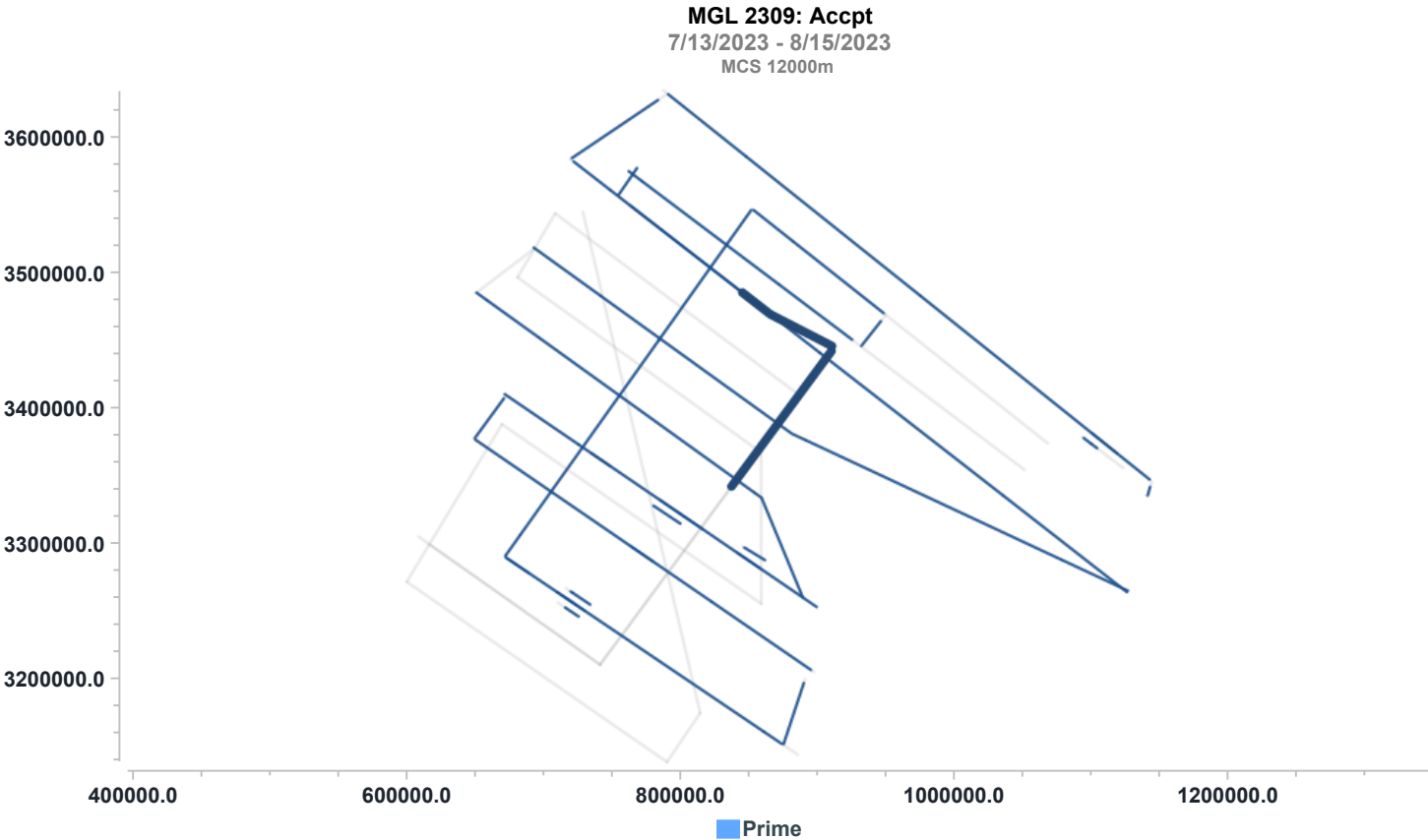
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
31	1003_Re	128.1	3313	4847	Prime, Reshoot	76.75	4.575	Complete	Complete
32	1028	216.2	1070	3544	Prime	123.75	4.617	Midnight	Part
Total						200.50			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	123.75	159.35	1871.55	3874.15
Prime, Reshoot	76.75	180.65	180.65	180.65
Combined	200.50	340.00	2052.20	4054.80



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 15 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Tue 15 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:15	18:15	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/16/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 16 Aug

Finished line 1028 and started line 1029.

At 01:23 UTC the stdb compressor failed, resulting in 82 shots with no volume or reduced volume.

- The engineers switched to the port compressor.
- The source was ramped up.

At ~0900-1000 UTC both the Multibeam and Maggie failed.

- The multibeam PC and TRU were restarted and this seemed to have fixed the issue.
- The Maggie was reading incorrect data, letters and numbers.
- The Maggie was recovered, the connection cleaned and deployed. This did not fix the problem.
- The Maggie was recovered and a new tow fish was installed and deployed, the problem is now fixed.

End of day the vessel is acquiring data on line 1029.




Daily Comment Summaries - Plan for Tomorrow

Wed 16 Aug

Finish line 1029 and start 1033.

At midnight utc (20:00 local) the vessel will end acquisition and start to recover gear

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	18:53	 Production Prime	AC_PP	18.883
Seq: 32 Seq 32 Line:1028 FGSP: 117544 EOL Seq 32 Line:1028 LGSP: 120770 Complete				
18:53	19:04	 Prime Line Change	AC_PLC	0.183
Seq: 32 Line: 1028 Nominal Prime line change.				
19:04	24:00	 Production Prime	AC_PP	4.933
Seq: 33 SOL Seq 33 Line:1029 FGSP: 121026 MSP Seq 33 Line:1029 LGSP: 121726 Midnight				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

16-Aug	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.183	0.764
Production Prime	23.817	99.236

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16-Aug	Hours	% Percent
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	5.240
Cetacean	0.267	0.032
Source	23.933	2.849
Streamers	19.700	2.345
Vessel	0.117	0.014
Chargeable Standby	14.650	1.744
Currents and Tides	14.450	1.720
Support	0.200	0.024
Crew Change	0.200	0.024
Mobilisation	163.483	19.462
Deployment	41.417	4.931
Mob Ashore	84.900	10.107
Transit to Prospect	37.167	4.425
Acquisition	597.133	71.087
Prime Line Change	18.417	2.192
Production Prime	578.717	68.895
Demobilisation	20.717	2.466
Recovery	7.400	0.881
Transit From Prospect	13.317	1.585
Total	840.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
32	1028	216.2	3545	6771	Prime	161.35	4.615	Complete	Complete
33	1029	305.4	1027	1727	Prime	35.05	3.831	Midnight	Part
Total						196.40			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

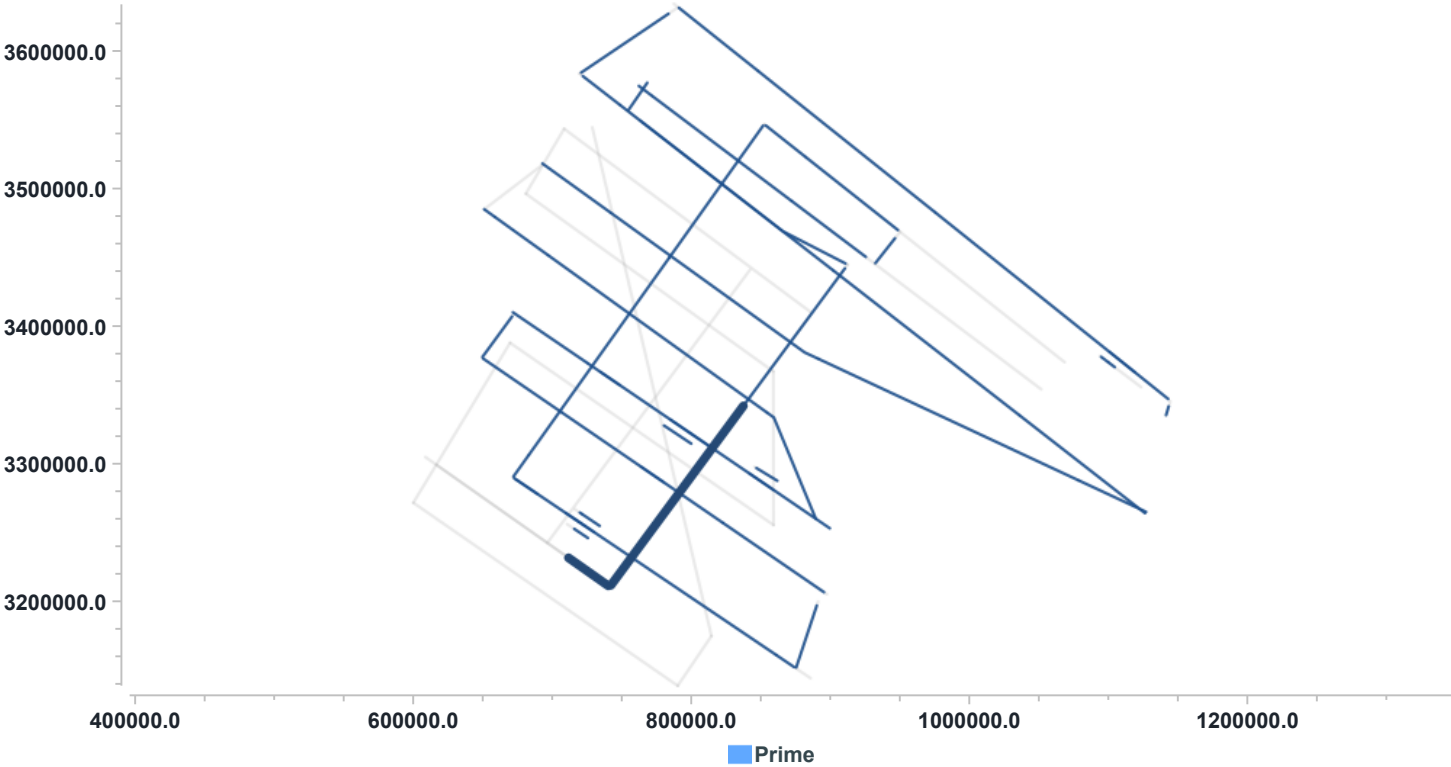
MCS 12000m

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Accepted km	Day	Week	Month	Project
Prime	196.40	355.75	2067.95	4070.55
Prime, Reshoot	0.00	180.65	180.65	180.65
Combined	196.40	536.40	2248.60	4251.20

MGL 2309: Accpt
7/13/2023 - 8/16/2023
MCS 12000m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 16 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Wed 16 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs

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Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Nathan Bangs -Research scientist Co-PI
Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

8/17/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 17 Aug

Acquiring data on Line 1029 and 1033.
MCS Acquisition was completed on MGL 2309 at 23:57 UTC.
Gear Recovery started after the last shot point.





Daily Comment Summaries - Plan for Tomorrow

Thu 17 Aug

Recover Streamer and Source

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	02:05	 Production Prime	AC_PP	2.083
Seq: 33 SOL Seq 33 Line:1029 FGSP: 121727 EOL Seq 33 Line:1029 LGSP: 122078 Complete				
02:05	02:12	 Prime Line Change	AC_PLC	0.117
Seq: 33 Line: 1029 Nominal Prime line change.				
02:12	23:57	 Production Prime	AC_PP	21.750
Seq: 34 SOL Seq 34 Line: 1033 FGSP: 121026 EOL Seq 34 Line: 1033 LGSP: 122078 Complete				
23:57	24:00	 Recovery	DM_RC	0.050
Demobilizing offshore, recovering outboard equipment.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

17-Aug	Hours	% Percent
Acquisition	23.950	99.792
Prime Line Change	0.117	0.486
Production Prime	23.833	99.306
Demobilisation	0.050	0.208
Recovery	0.050	0.208
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	5.095
Cetacean	0.267	0.031

Category	Hours	% Percent
Source	23.933	2.770
Streamers	19.700	2.280
Vessel	0.117	0.014
Chargeable Standby	14.650	1.696
Currents and Tides	14.450	1.672
Support	0.200	0.023
Crew Change	0.200	0.023
Mobilisation	163.483	18.922
Deployment	41.417	4.794
Mob Ashore	84.900	9.826
Transit to Prospect	37.167	4.302
Acquisition	621.083	71.885
Prime Line Change	18.533	2.145
Production Prime	602.550	69.740
Demobilisation	20.767	2.404
Recovery	7.450	0.862
Transit From Prospect	13.317	1.541
Total	864.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accept Main km by Shotpoint) - Full Fold

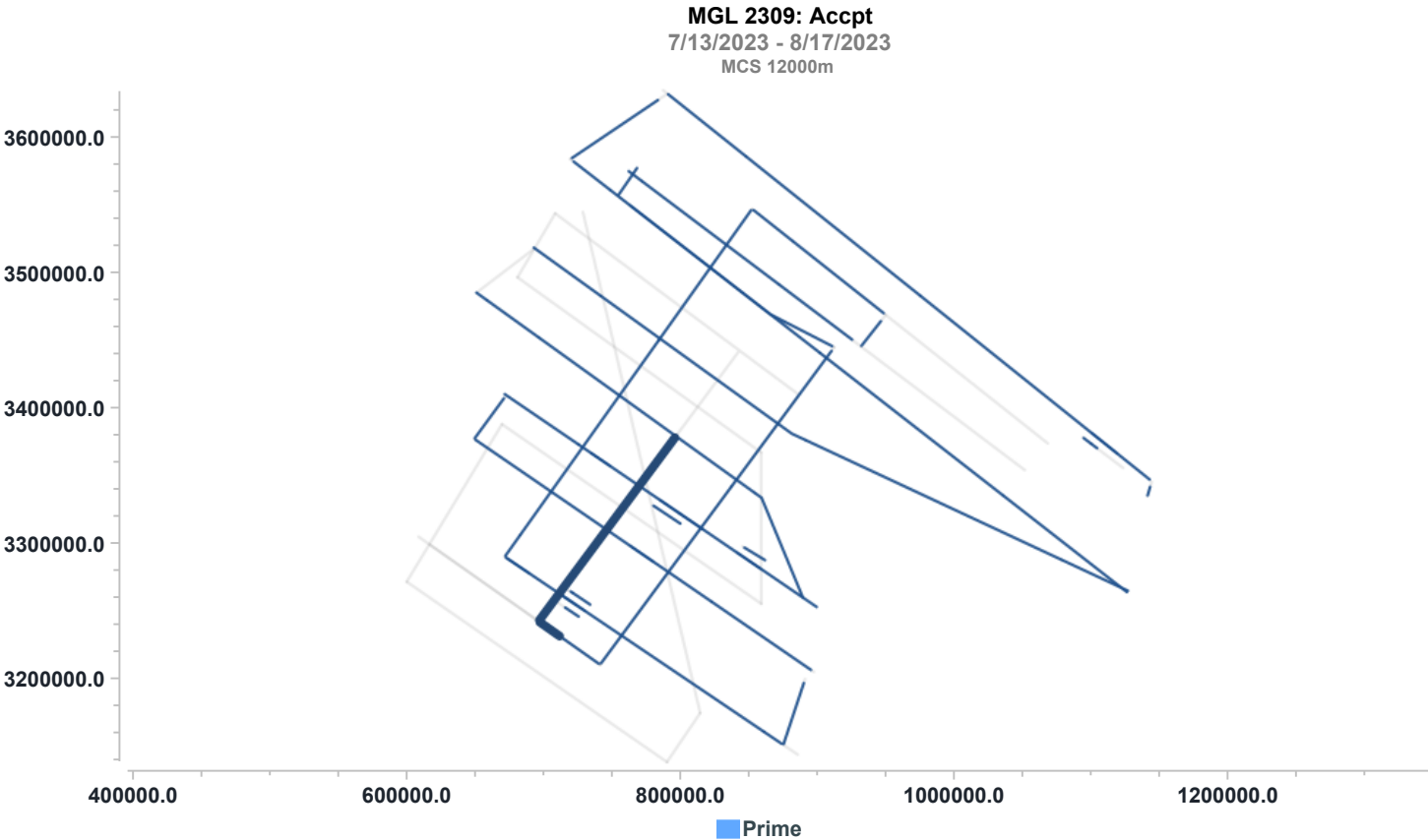
MCS 12000m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
33	1029	305.4	1728	2079	Prime	17.60	4.048	Complete	Complete
34	Line_33	36.4	1020	4362	Prime	167.15	4.148	Complete	Complete
Total						184.75			

Production Totals (Accept Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	184.75	540.50	2252.70	4255.30
Prime, Reshoot	0.00	180.65	180.65	180.65
Combined	184.75	721.15	2433.35	4435.95



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 17 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Thu 17 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

8/17/2023

PSO Staff On-board the Langseth

Amanda Dubuque - RPS Lead PSO
Beatriz Cotrim - RPS PSO
Pablo Curiel - RPS PSO
Gloria Ponce - RPS PSO
Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

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Anne Bécel - Research scientist Co-PI
Chiara Amadori - Research scientist
Savas Gurcay - Research scientist
Susie Adams - Junior scientist
Jue-Ying Chen - Junior scientist
Adriana Paez - Junior scientist
Bright Osuagwu - Junior scientist
Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:10	18:10	<div></div> Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	1
TBT - Streamer and Source Recovery		

8/18/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL 2309
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2309
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 18 Aug

Completed gear recovery, in transit to Port.
ETA at pilot station 1100 UTC on the 19th

Daily Comment Summaries - Plan for Tomorrow

Fri 18 Aug

Transit to port

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	10:19	Recovery	DM_RC	10.317
Demobilizing offshore, recovering outboard equipment.				
10:19	24:00	Transit From Prospect	DM_TF	13.683
Demobilizing, In Transit from survey area to Charleston, Sc.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

18-Aug	Hours	% Percent
Demobilisation	24.000	100.000
Recovery	10.317	42.986
Transit From Prospect	13.683	57.014
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	4.957
Cetacean	0.267	0.030
Source	23.933	2.695
Streamers	19.700	2.218
Vessel	0.117	0.013
Chargeable Standby	14.650	1.650
Currents and Tides	14.450	1.627
Support	0.200	0.023
Crew Change	0.200	0.023
Mobilisation	163.483	18.410
Deployment	41.417	4.664
Mob Ashore	84.900	9.561
Transit to Prospect	37.167	4.185
Acquisition	621.083	69.942

Category	Hours	% Percent
Prime Line Change	18.533	2.087
Production Prime	602.550	67.855
Demobilisation	44.767	5.041
Recovery	17.767	2.001
Transit From Prospect	27.000	3.041
Total	888.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

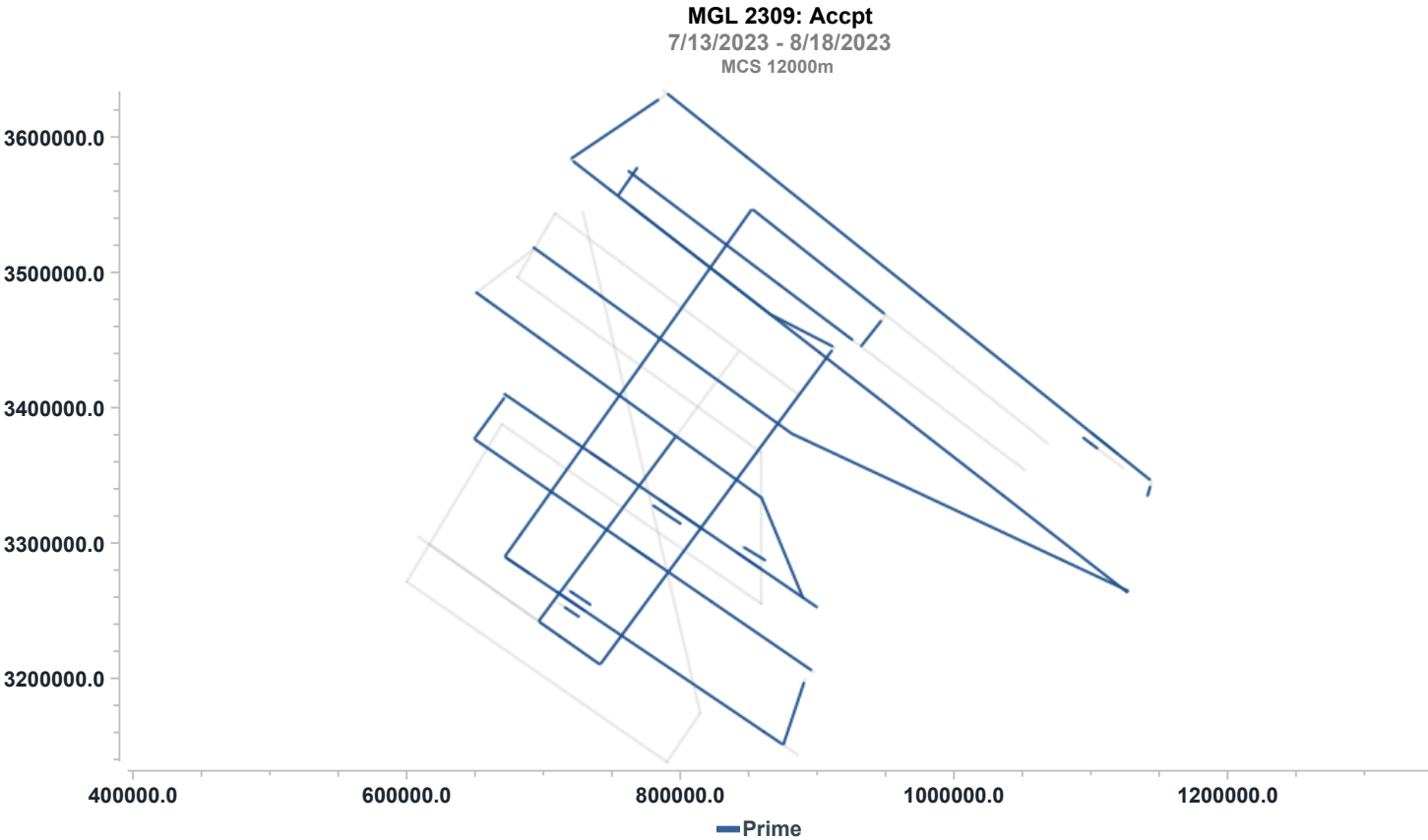
MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	540.50	2252.70	4255.30
Prime, Reshoot	0.00	180.65	180.65	180.65
Combined	0.00	721.15	2433.35	4435.95



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 18 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Fri 18 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/19/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 19 Aug


The vessel arrived at the pilot station at 0700 local and transited to port.
The gangway was down at ~1000 local.
The crew started to depart shortly after the gangway was down.

Daily Comment Summaries - Plan for Tomorrow

Sat 19 Aug

Continue with MGL 2309 Demobilization.

Timing Diary (Marcus G Langseth, MCS 12000m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Demob Ashore	DM_DA	24.000
Demobilizing ashore.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

19-Aug	Hours	% Percent
Demobilisation	24.000	100.000
Demob Ashore	24.000	100.000
Transit From Prospect	0.000	0.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	4.826
Cetacean	0.267	0.029
Source	23.933	2.624
Streamers	19.700	2.160
Vessel	0.117	0.013
Chargeable Standby	14.650	1.606
Currents and Tides	14.450	1.584
Support	0.200	0.022
Crew Change	0.200	0.022
Demobilisation	68.767	7.540
Demob Ashore	24.000	2.632
Recovery	17.767	1.948
Transit From Prospect	27.000	2.961
Mobilisation	163.483	17.926

Category	Hours	% Percent
Deployment	41.417	4.541
Mob Ashore	84.900	9.309
Transit to Prospect	37.167	4.075
Acquisition	621.083	68.101
Prime Line Change	18.533	2.032
Production Prime	602.550	66.069
Total	912.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

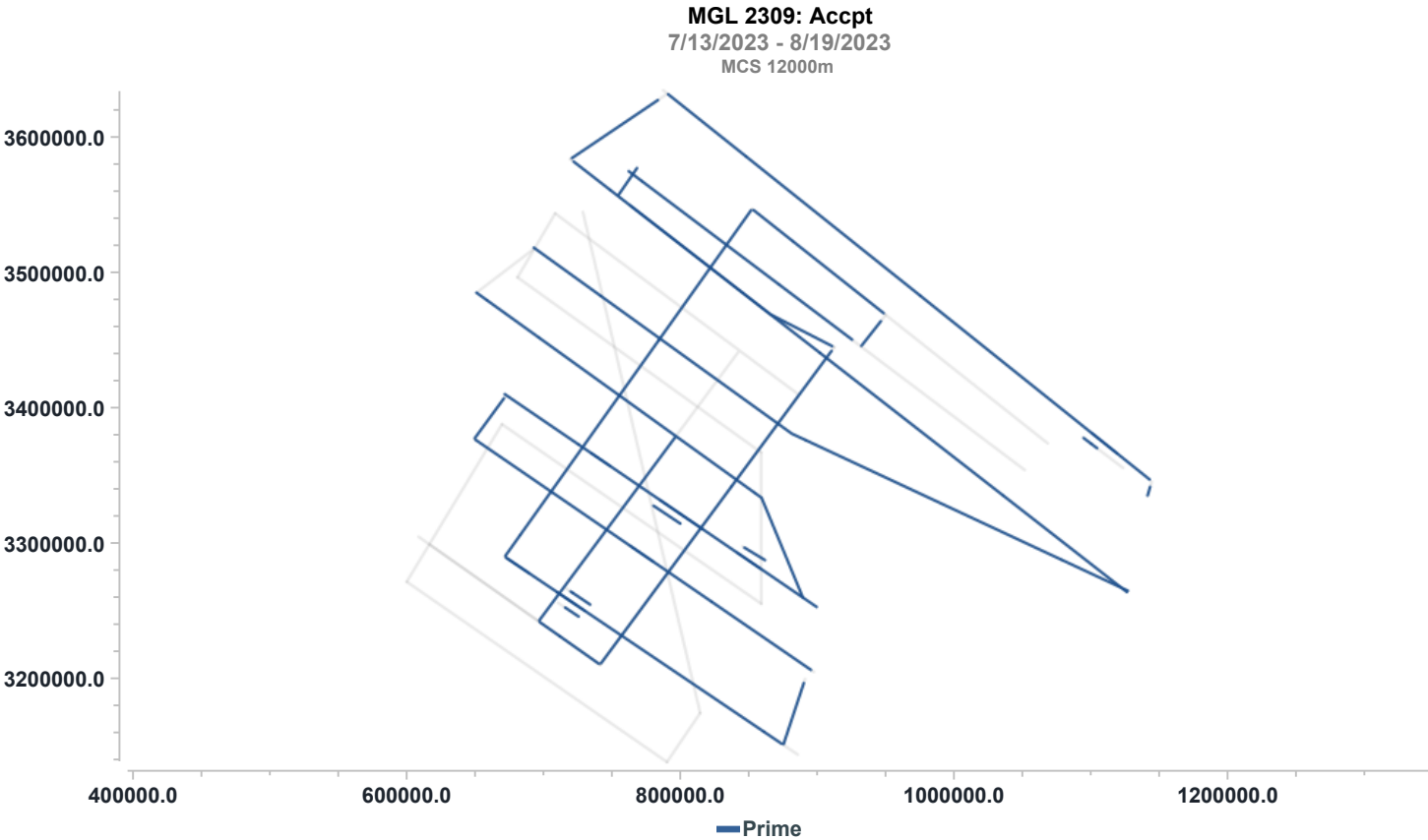
MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	540.50	2252.70	4255.30
Prime, Reshoot	0.00	180.65	180.65	180.65
Combined	0.00	721.15	2433.35	4435.95



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 19 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Sat 19 Aug

Technical Staff On-board the Langseth
Cody Bahlau L-DEO OMO Chief Science Officer
Brian Agee L-DEO OMO Senior Source Mechanic
Peter Bolt - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Gilles Guerin L-DEO OMO Marine Science Technician - Obs
Riley Lopez L-DEO OMO Marine Science Technician - Obs
Klayton Curtis - Contract Source Obs
Aaron Martin - Contract Source Mech/Nav
Claire Mayorga- MATE Intern Navigator
Sara Pierson - MATE Intern Navigator

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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Beatriz Cotrim - RPS PSO
- Pablo Curiel - RPS PSO
- Gloria Ponce - RPS PSO
- Avinash Maharajh - RPS PSO

Science Party On-board the Langseth

- Harm Van Avendonk - Research scientist PI
- Nathan Bangs -Research scientist Co-PI
- Anne Bécel - Research scientist Co-PI
- Chiara Amadori - Research scientist
- Savas Gurcay - Research scientist
- Susie Adams - Junior scientist
- Jue-Ying Chen - Junior scientist
- Adriana Paez - Junior scientist
- Bright Osuagwu - Junior scientist
- Anastasiia Krysova - Junior scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/20/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2309
Block:	MGL 2309	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 20 Aug


Demobilization of MGL 2309
Last day of the project.
A great cruise, the Langseth thanks Harm, Nathan, Anne and Team.

Daily Comment Summaries - Plan for Tomorrow

Sun 20 Aug

Timing Diary (Marcus G Langseth, MCS 12000m)



Start	End	Category	Code	Duration (hrs)
00:00	24:00	 Demob Ashore	DM_DA	24.000
Demobilising ashore.				

Timing Day By Day (Marcus G Langseth, MCS 12000m)

20-Aug	Hours	% Percent
Demobilisation	24.000	100.000
Demob Ashore	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 12000m)

Category	Hours	% Percent
DownTime	44.017	4.703
Cetacean	0.267	0.028
Source	23.933	2.557
Streamers	19.700	2.105
Vessel	0.117	0.012
Chargeable Standby	14.650	1.565
Currents and Tides	14.450	1.544
Support	0.200	0.021
Crew Change	0.200	0.021
Demobilisation	92.767	9.911
Demob Ashore	48.000	5.128
Recovery	17.767	1.898
Transit From Prospect	27.000	2.885
Mobilisation	163.483	17.466
Deployment	41.417	4.425
Mob Ashore	84.900	9.071
Transit to Prospect	37.167	3.971

Category	Hours	% Percent
Acquisition	621.083	66.355
Prime Line Change	18.533	1.980
Production Prime	602.550	64.375
Total	936.000	

Basic Project Details

MCS 12000m					
General Details					
Record length:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	960	Front Depth:	12 m
Tail Depth:	12 m	Length:	12000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	16 m		

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 12000m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

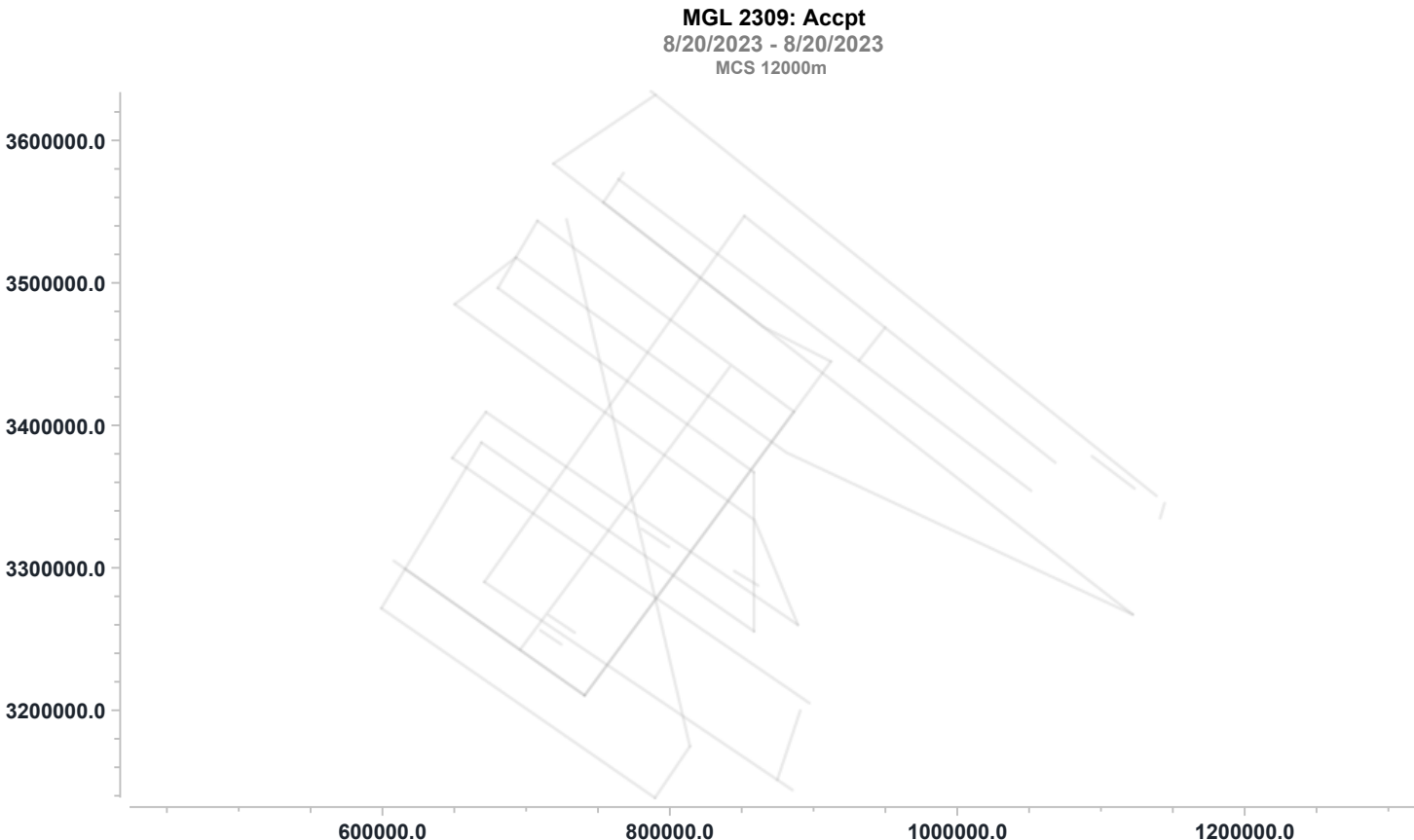
Production Totals (Accpt Main km by Shotpoint) - Full Fold

MCS 12000m

Accepted km	Day	Week	Month	Project
Prime	0.00	540.50	2252.70	4255.30
Prime, Reshoot	0.00	180.65	180.65	180.65
Combined	0.00	721.15	2433.35	4435.95

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Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 20 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (MCS):
No Major Issues to Report

Towing and Handling (Source):
No Major Issues to Report

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No Major issues to Report.

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Sun 20 Aug

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HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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