

8/21/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 21 Aug

Source mechanic transfer. Leo left, Shawn coming

OBS container loaded on-board and connected.

PC02 system is being mounted in the wet lab. A shout out to Denis and Patrick. A top job! Professional and safe.

Opened the #1 leadin to inspect the length of the fiber optics to see if we can have either Jamie or Mario re-terminate.

OBS personnel arrived.

Misc MOB jobs.

Gun maintenance.

Daily Comment Summaries - Plan for Tomorrow

Mon 21 Aug

Continue mobilization all day.

Timing Diary (Marcus G Langseth, OBS_Deployment)

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, OBS_Deployment)

21-Aug	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, OBS_Deployment)

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:	20 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	112.2 m	Fold Coverage:	0		

MCS 12000m					
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) - Prime: Full Fold, Infill: Unknown

OBS_Deployment, Source Only

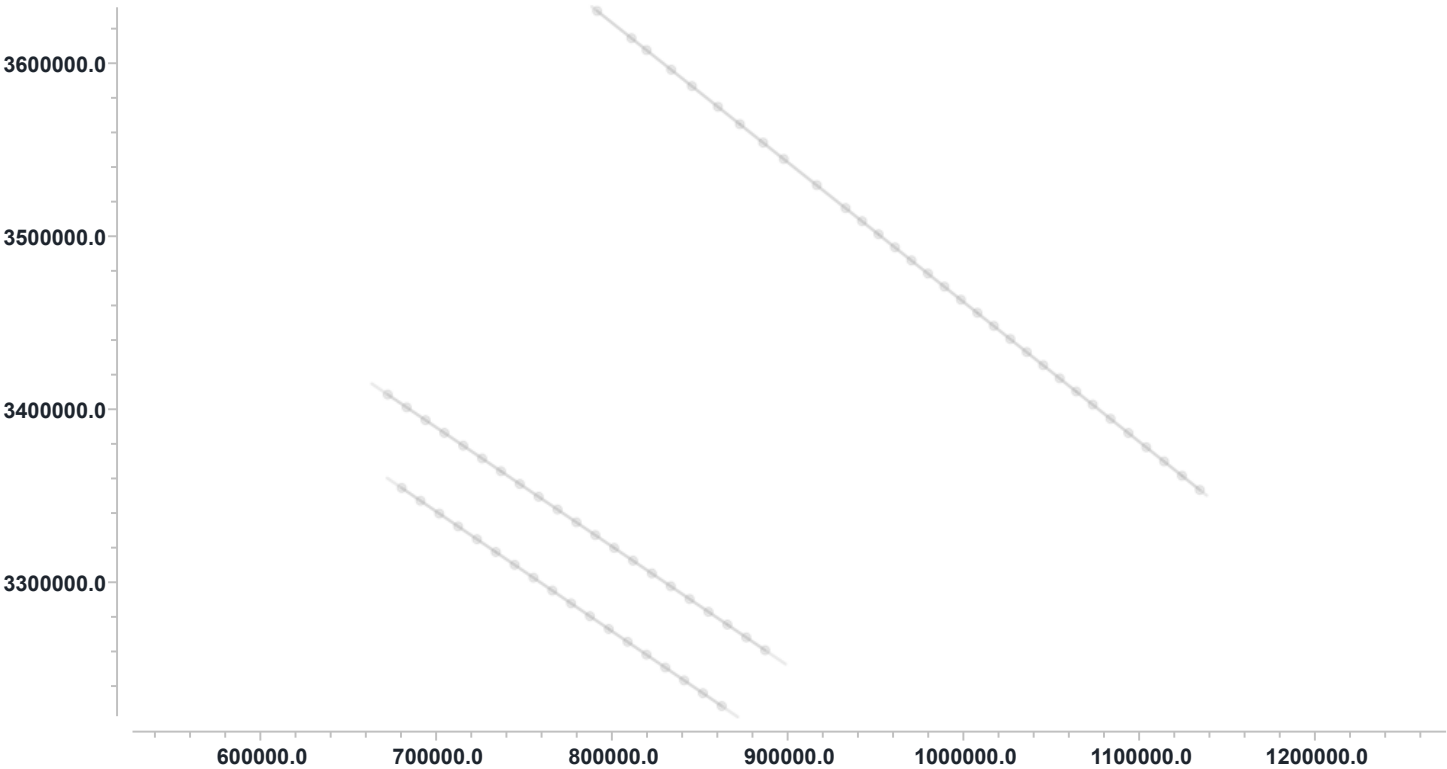
Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

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

OBS_Deployment, Source Only

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

MGL2310: Accpt
8/20/2023 - 8/21/2023
OBS_Deployment, Source Only



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 21 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 21 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Leon Da Silva E Souuza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth
Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth
Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/22/2023

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Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 22 Aug

Jeff Babcock arrived and began training on the OBS protocols. Riley and Koray are participating with the OBS team.

Gun parts and bulkhead connectors arrived.

Denis and Patrick finished the installation of the new PC02 system. They did some very basic training before they left and provided some contact info and startup instructions.

All of the science party arrived. Five students and Harm came onboard around 1PM local time. We will do the orientation and safety tour tomorrow morning.

Navigation department and observers are reviewing the soft start procedures and making other preparations for the OBS deployments.

We took on food and provisions this morning. Shout out to the crewman that participated to get this done in the cool South Carolina breeze.

We anticipate sailing at ~3PM local time tomorrow.

We had an operations meeting this afternoon with Harm and all of the department heads and assorted crew to discuss the upcoming mission and expectations.

Much misc.

Daily Comment Summaries - Plan for Tomorrow

Tue 22 Aug

We will have crew orientation and safety tour for all new onsigners.

Sail at ~3pm

Timing Diary (Marcus G Langseth, OBS_Deployment)

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, OBS_Deployment)

22-Aug	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, OBS_Deployment)

Category	Hours	% Percent
Mobilisation	48.000	100.000

8/22/2023

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Category	Hours	% Percent
Mob Ashore	48.000	100.000
Total	48.000	

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:	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) - Prime: Full Fold, Infill: Unknown

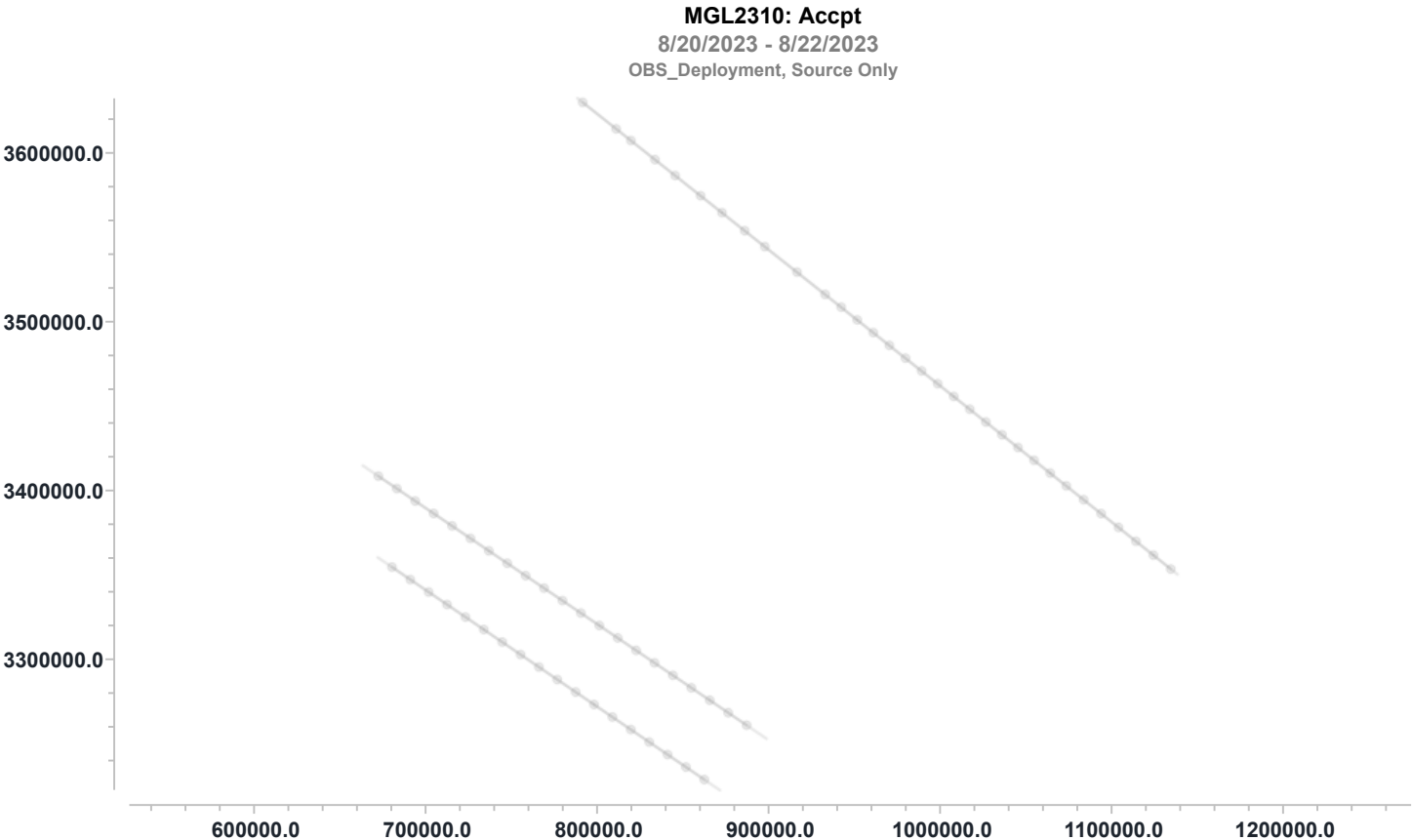
OBS_Deployment, Source Only

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

OBS_Deployment, Source Only

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



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 22 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 22 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

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OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/23/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 23 Aug

We had a positive Covid test for one crewman today. We implemented our covid protocol and put this person in a one-person cabin. We tested the entire crew and will re-test everyone in a couple of days. We will make any adjustments that need to be made operations-wise as we progress.

We conducted our Welcome Aboard orientation along with the Civility at Sea video and safety tour of the vessel for all of the new on signers.

The MGL set sail away from the dock at ~3:15 pm local time. We estimate arrival at the first OBS drop to be between 1-2am local time.

The gps gun pods arrived just before we sailed.

There is a lot of excitement in the air with the new science party and we are looking forward to a fun and interesting mission. Full speed ahead!

Daily Comment Summaries - Plan for Tomorrow

Wed 23 Aug

Deploy OBS instruments all day

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	19:15	Mob Ashore	MB_MA	19.250
Mobilising Ashore.				
19:15	24:00	Transit to Prospect	MB_TT	4.750
In transit to prospect. We estimate the first OBS deployment at 2AM local time.				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

23-Aug	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	19.250	80.208
Transit to Prospect	4.750	19.792
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment)

Category	Hours	% Percent
Mobilisation	72.000	100.000
Transit to Prospect	4.750	6.597
Mob Ashore	67.250	93.403
Total	72.000	

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:	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) - Prime: Full Fold, Infill: Unknown

OBS_Deployment, Source Only

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

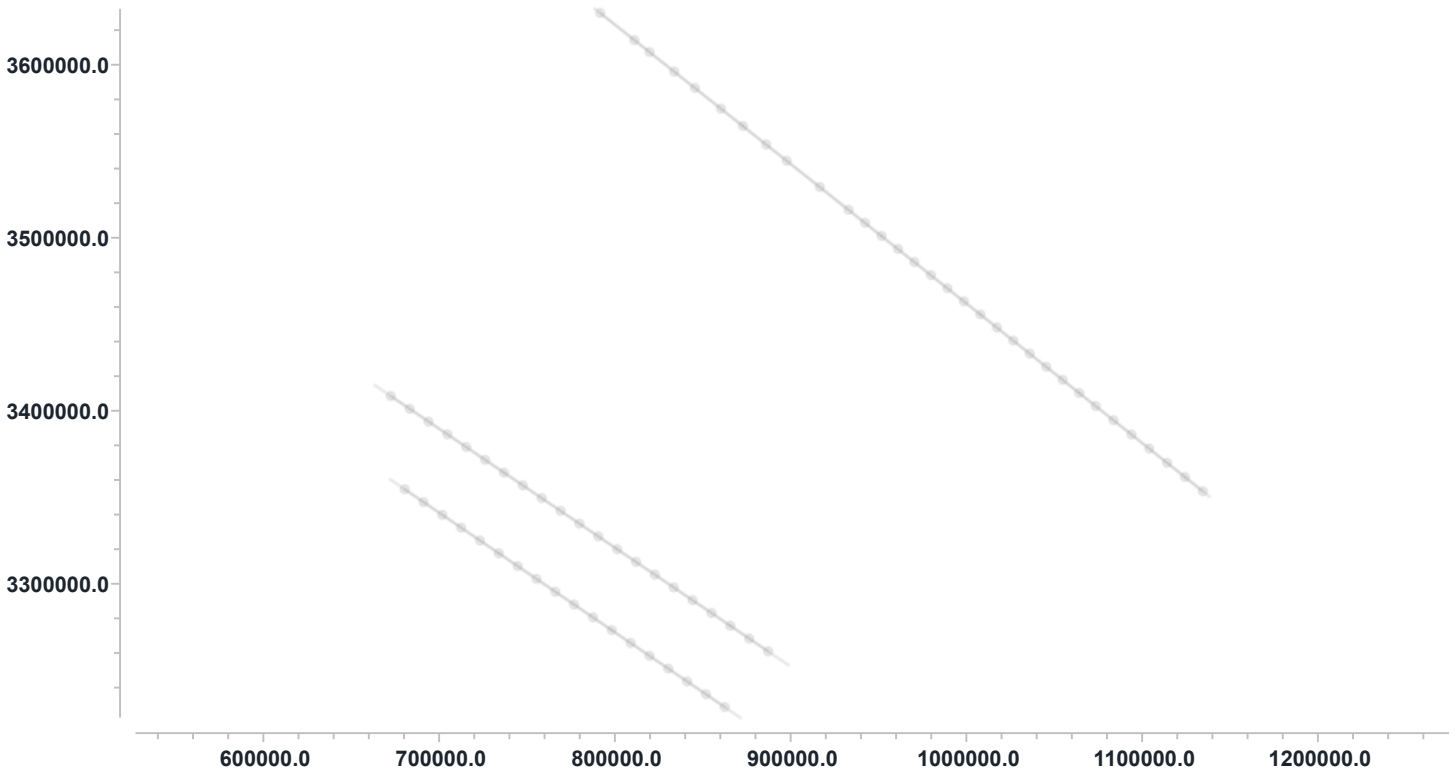
OBS_Deployment, Source Only

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

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MGL2310: Accpt
8/20/2023 - 8/23/2023
OBS_Deployment, Source Only



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 23 Aug

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 23 Aug

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
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Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

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OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/24/2023

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Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 24 Aug

We safely deployed 14 OBS's today.

The weather was a little choppy and caused some sea-sickness in the science party, especially earlier in the day.

We conducted four toolbox meetings so that each shift could review the deployment procedures for each style of OBS instrument.

The crew has done a terrific job supporting the OBSIC crew. Riley, Ko, Aaron and Klay have been fully engaged helping Alan and Dan remain in full production preparing the units for deployment even with one guy down with Covid. Top job.

We had our Weekly Tech Meeting this afternoon.

We held our Daily Operation Meeting and reviewed our progress, weather, safety and other items.

We had a mitigation meeting with Cassie to make sure everyone is on the same page with the PSO mitigation requirements.

The gun department has been busy preparing the guns for the initial deployment while assisting the deployment of the OBS's and operating the A-frame.

We fired up the compressor and checked the guns for leaks while confirming that the compressor was ready to roll.

Riley has been working on getting the PC02 and the STG all day and has been ironing out some small hiccups and faults. Still not working at the end of the day.

It was a very busy day.

Daily Comment Summaries - Plan for Tomorrow

Thu 24 Aug

Deploy OBS's all day and prepare to start the first production line.

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	07:23	Mob Offshore	MB_MO	7.383
Mobilising Offshore				
07:23	24:00	Deploy	AC_SM_De	16.617
Node operation Block:MGL2310 1 Line:OBS_01 St 101 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 102 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 103 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 104 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 105 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 106 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 107 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 108 Deployment Node operation Block:MGL2310 1 Line:OBS_01 St 109 Deployment				

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Start	End	Category	Code	Duration (hrs)
Node operation Block:MGL2310 1 Line:OBS_01 St 110 Deployment				
Node operation Block:MGL2310 1 Line:OBS_01 St 111 Deployment				
Node operation Block:MGL2310 1 Line:OBS_01 St 112 Deployment				
Node operation Block:MGL2310 1 Line:OBS_01 St 113 Deployment				
Node operation Block:MGL2310 1 Line:OBS_01 St 113 Deployment				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

24-Aug	Hours	% Percent
Acquisition	16.617	69.236
Swath Move	16.617	69.236
Deploy	16.617	69.236
Mobilisation	7.383	30.764
Mob Offshore	7.383	30.764
Transit to Prospect	0.000	0.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment)

Category	Hours	% Percent
Mobilisation	79.383	82.691
Mob Offshore	7.383	7.691
Transit to Prospect	4.750	4.948
Mob Ashore	67.250	70.052
Acquisition	16.617	17.309
Swath Move	16.617	17.309
Deploy	16.617	17.309
Total	96.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

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

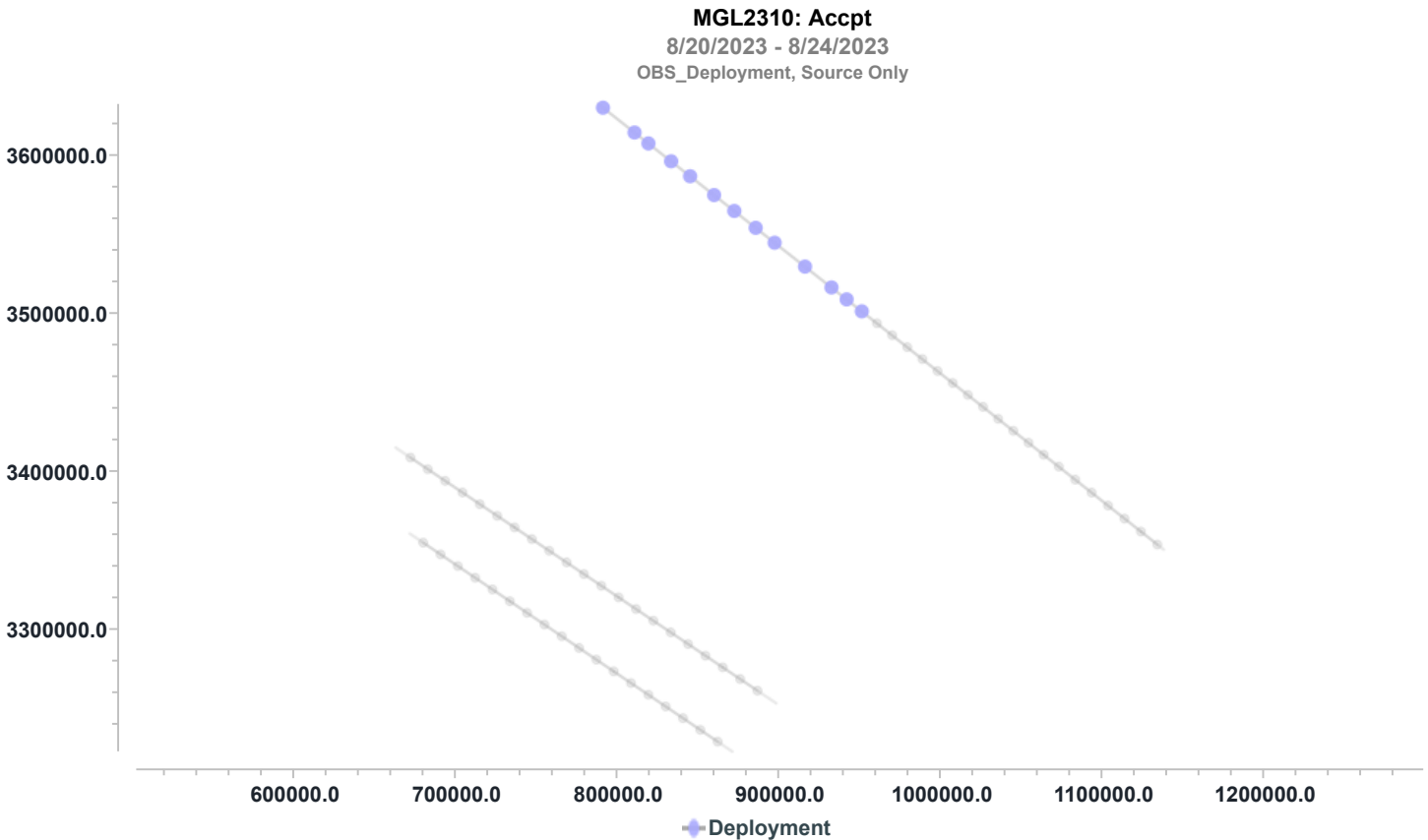
Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

OBS_Deployment, Source Only

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

8/24/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 24 Aug

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 24 Aug

Technical Staff On-board the Langseth

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Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

8/24/2023

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer


PSO Staff On-board the Langseth


Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
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Claudia Carrero - RPS PSO
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Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:40	16:15	 Departmental Meeting	Mtgs_Dept
HSE - Departmental Meeting			
Shiftchange handover on back deck.			

Daily Total Category	Code	Count
 Toolbox Meetings	Mtgs_Tbox	4
Toolbox meetings		
OBS Deployment Toolbox (4)		

8/25/2023

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Consultancy:
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Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 25 Aug

We completed deploying all 32 OBS units onto Line #1

We deployed all four gunstrings. We developed an autofire on gun 3-9 shortly after we brought the gunstrings to full gun volume. We brought the air pressure back down to troublehoot without any luck on reseating the gun to stop the autofire.

We were recovering gunstring #3 at the end of the day to swap out the rear cluster. We have to pick up gunstrings 1 & 2 to trouble shoot some PI errors. We are managing a very tight area to stay inside the prospect boundries while making these repairs.

PC02 is inoperable until we replace a fan. No spare parts available at the moment. We will torubleshoot this more when we get back into production. We may be able to swap in a fan from one of our PC's. This is not certain, however.

The TSG data is being recorded onto Riley's laptop.









Restarted the weather machine and mailer.

Daily Comment Summaries - Plan for Tomorrow

Fri 25 Aug

Repair and re-deploy guns and begin acquisition.

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	18:20	 Deploy	AC_SM_De	18.333
Node operation Block:MGL2310 1 Line:OBS_01 St 113 Deployment				
18:20	19:02	 Deployment	MB_DP	0.700
Mobilising offshore, deploying outboard equipment. MAGGIE AND PAM				
19:02	19:37	 Deployment	MB_DP	0.583
Mobilising offshore, deploying outboard equipment. Source sub-array #1				
19:37	20:09	 Deployment	MB_DP	0.533
Mobilising offshore, deploying outboard equipment. Source sub-array #2				
20:09	21:06	 Deployment	MB_DP	0.950
Mobilising offshore, deploying outboard equipment. Source sub-array #4				
21:06	21:44	 Deployment	MB_DP	0.633
Mobilising offshore, deploying outboard equipment. Source sub-array #3. All guns deployed.				
21:44	22:01	 Deployment	MB_DP	0.283
Chargeable standby d/t being in Transit back toward the BOL. Gun 3-9 autofires				
22:01	22:36	 Transit	SB_TRT	0.583
Chargeable standby d/t being in Transit to SOL. troubleshooting gunstring #3 enroute.				

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Start	End	Category	Code	Duration (hrs)
22:36	23:01	<div></div> Source	DT_SC	0.417
Downtime due to source. Picking up gunstring #3				
23:01	24:00	<div></div> Source	DT_SC	0.983
Downtime due to source. Repairing gunstring #3				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

25-Aug	Hours	% Percent
Acquisition	18.333	76.389
Swath Move	18.333	76.389
Deploy	18.333	76.389
Chargeable Standby	0.583	2.431
Transit	0.583	2.431
DownTime	1.400	5.833
Source	1.400	5.833
Mobilisation	3.683	15.347
Deployment	3.683	15.347
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment)

Category	Hours	% Percent
Mobilisation	83.067	69.222
Mob Offshore	7.383	6.153
Transit to Prospect	4.750	3.958
Deployment	3.683	3.069
Mob Ashore	67.250	56.042
Chargeable Standby	0.583	0.486
Transit	0.583	0.486
DownTime	1.400	1.167
Source	1.400	1.167
Acquisition	34.950	29.125
Swath Move	34.950	29.125
Deploy	34.950	29.125
Total	120.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

8/25/2023

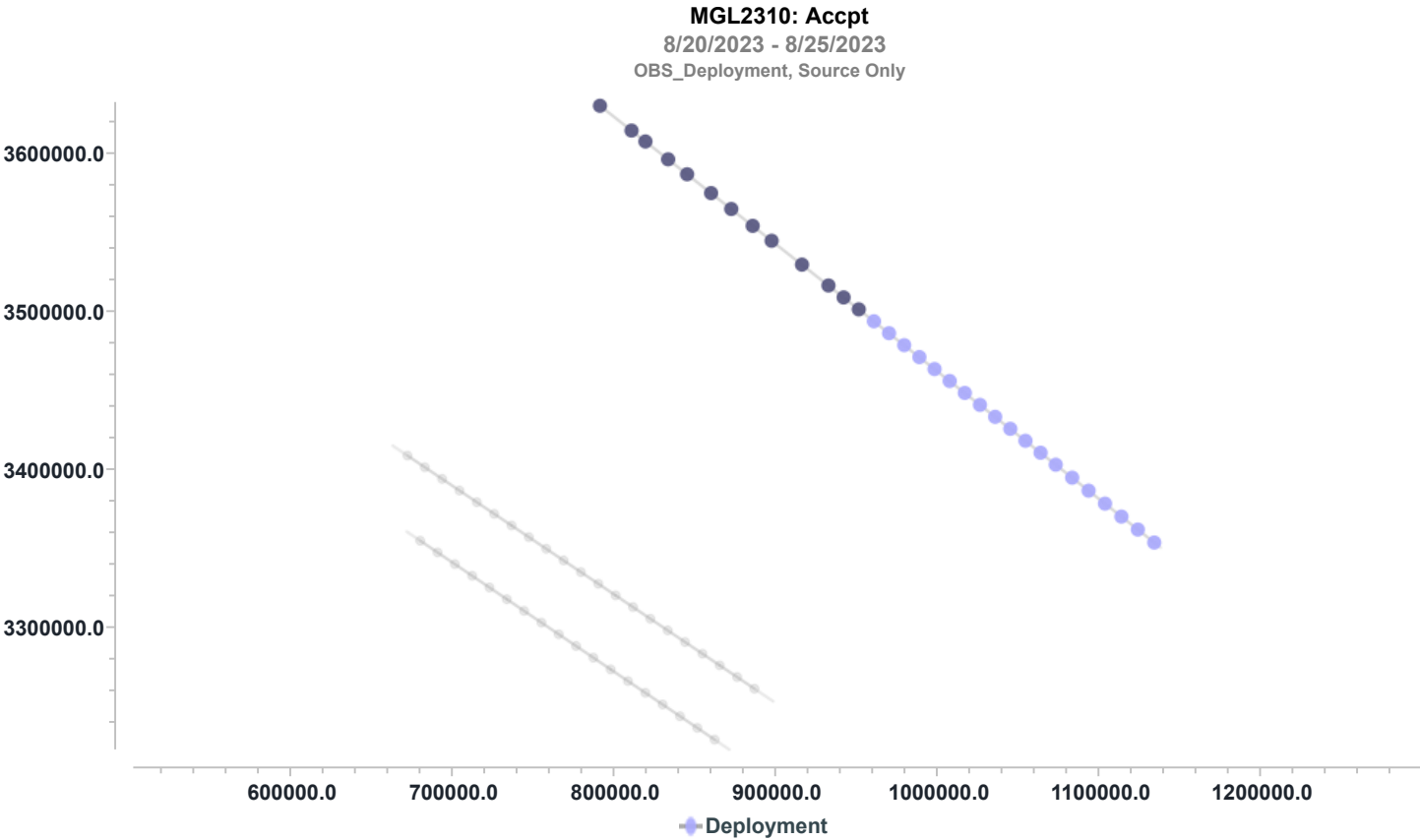
Page 3

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

OBS_Deployment, Source Only

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



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 25 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 25 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic

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Micahel Coufal - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/26/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries

Sat 26 Aug

Plan for Tomorrow

Continue shooting OBS 1 all day

Daily Summary

We are currently acquiring the first line on OBS #1. There were a lot of blood, sweat and tears getting started but the team did a great job pressing forward and getting it started! Top job by everyone.

We picked up gunstring # 3 to fix an auto-fire on 3-9

We picked up gunstring #1 bad pressure transducer

We picked up gunstring #2 to replace the PI transducer jumper

We replaced the last cluster on gunstring #3

We replaced the last cluster on string #2

We replaced the last cluster on string #1

PC02.still not working. we found a fan that may work.

Bulkhead connectors for the NFP's are underway.

Two GPS pods are not working on the gunstrings

Daily Comments On Status of Equipment

Navigation:

SOURCE GPS

Gunstring #1 BOTH good
Gunstring #2 FWD Intermittent AFT Good
Gunstring #3 FWD good AFT Bad
Gunstring #4 FWD good AFT Bad

Fixed shorted switch on PBX power switch

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

No Major issues to Report.

Personnel Onboard

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech

8/26/2023

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Leonid Ometciskii - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
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Nick Mathews - OBS Tech/Engineer

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Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

Daily Comment Summaries - Plan for Tomorrow

Sat 26 Aug

Continue shooting OBS 1 all day

Timing Diary (Marcus G Langseth, OBS_Deployment)



Start	End	Category	Code	Duration (hrs)
00:00	01:43	Source	DT_SC	1.717
Downtime due to source.Gunstring #3 back into place after repairs				
01:43	08:05	Source	DT_SC	6.367
Downtime due to source.Picking up gunstrings 1,2 for transducer failures. Gunstring #1 re-deployed.				
08:05	10:35	Source	DT_SC	2.500
Downtime due to source.Gunstring #2 redeployed				
10:35	11:52	Source	DT_SC	1.283
Downtime due to source.Heading back toward the BOL and inside prospect boundary for soft start				
11:52	12:41	Testing	MB_TE	0.817
Mobilisation - Testing Softstart sequence initiated and re-started				
12:41	13:21	Testing	MB_TE	0.667
SOL MGL23109002TEST SP100 Cycle test @ FV 6600ci to ensure all systems are working up to standard				
13:21	14:31	Testing	MB_TE	1.167
MGL2310001P1PRE1 - SP 104 - 36 Guns @ 6600 in3				
14:31	24:00	Production Prime	AC_PP	9.483

Start	End	Category	Code	Duration (hrs)
Seq: 0				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

26-Aug	Hours	% Percent
Acquisition	9.483	39.514
Production Prime	9.483	39.514
DownTime	11.867	49.444
Source	11.867	49.444
Mobilisation	2.650	11.042
Testing	2.650	11.042
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment)

Category	Hours	% Percent
Mobilisation	85.717	59.525
Mob Offshore	7.383	5.127
Transit to Prospect	4.750	3.299
Deployment	3.683	2.558
Mob Ashore	67.250	46.701
Testing	2.650	1.840
Acquisition	44.433	30.856
Production Prime	9.483	6.586
Swath Move	34.950	24.271
Deploy	34.950	24.271
Chargeable Standby	0.583	0.405
Transit	0.583	0.405
DownTime	13.267	9.213
Source	13.267	9.213
Total	144.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

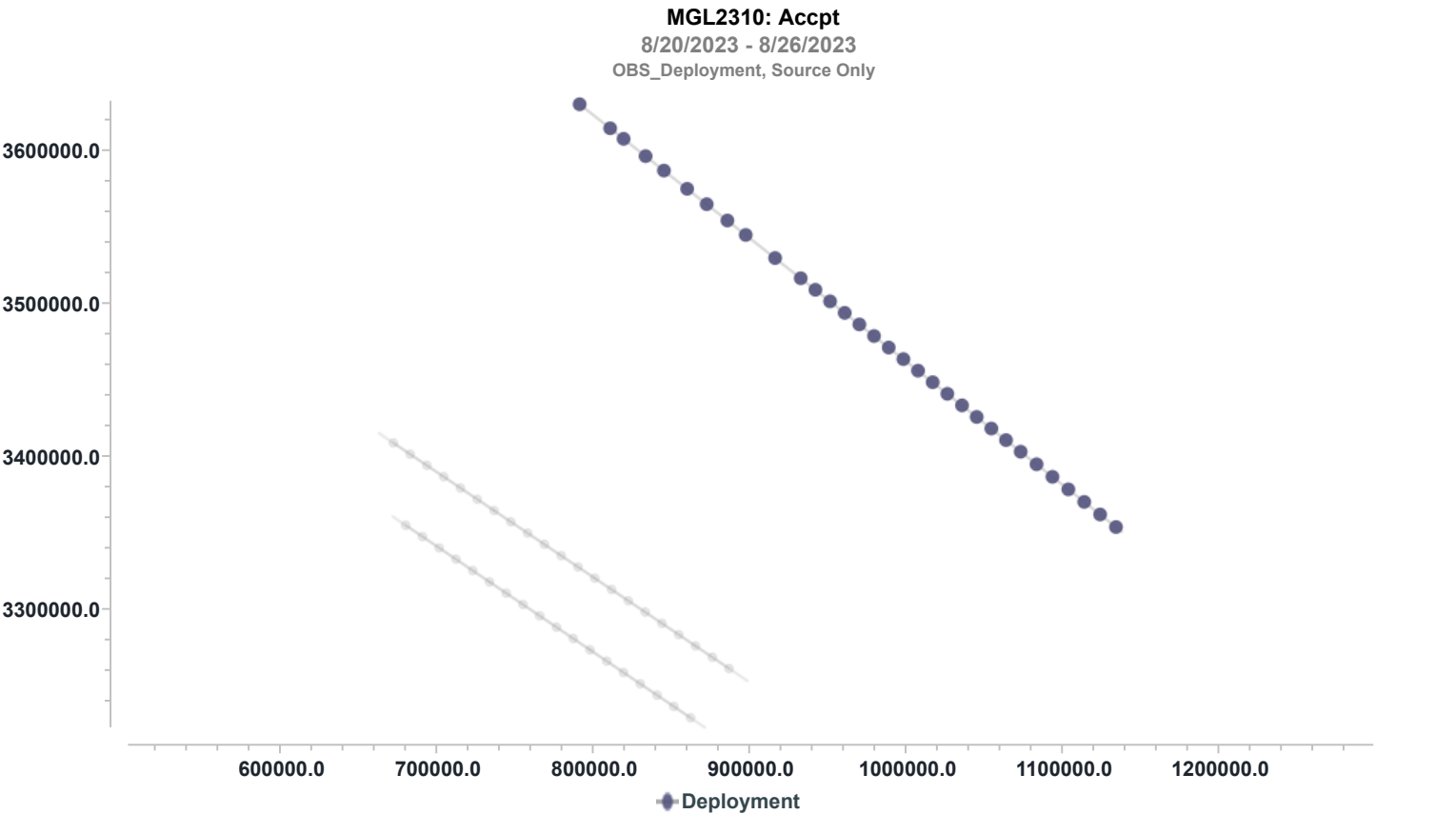
OBS_Deployment, Source Only

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

OBS_Deployment, Source Only

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



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 26 Aug

Navigation:

SOURCE GPS
Gunstring #1 BOTH good
Gunstring #2 FWD Intermittent AFT Good
Gunstring #3 FWD good AFT Bad
Gunstring #4 FWD good AFT Bad

Fixed shorted switch on PBX power switch

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 26 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer

Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Leonid Ometciskii - Contract Source Mech
Leon Da Silva E Souuza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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8/27/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 27 Aug

We shot for much of the day. About 10:30 local time we noticed a small airleak on gunstring #3. After discussing this with Harm it was decided that we would pick up gunstring #3 and fix the leak and adjust the tow to try and improve the separation between gunstrings 3 and 4.

We circled during this time to eliminate any holes in the data coverage.

We ended up replacing both clusters on gunstring #3. The air leak on the front cluster was the solenoid block. After we changed out the solenoid, we decided to change out the entire cluster to try and clear out a stubborn error that has been persistently present since the MCS project. We didn't have any luck either. We also changed out the sensor board in the rack. Next on the list is the GCU chassis and the Octo-block to fix this 'status return error'. It is not affecting the quality of the data, but we want to fix it.

We have the source separations nearly perfect at this time.

All of the gun GPS pods are working except the aft pod on gunstring #4

We are currently in production and progressing down the line.






We discussed the weather events and are keeping an eye on both Franklin and Gert. Neither of which are a huge concern for us at this time.

Daily Comment Summaries - Plan for Tomorrow

Sun 27 Aug

Shoot all day into OBS #1

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	15:14	 Production Prime	AC_PP	15.233
Seq: 0 MGL2310001P1OBS1 - SP 2287 - 36 Guns @ 6600 cuin EEOL dt air leak on gunstring #3 and separation issues. Picking up for repairs. Circle.				
15:14	19:44	 Source	DT_SC	4.500
Downtime due to source. Picking up gunstring #3. repair front cluster, replace back cluster, Fix GPS				
19:44	20:17	 Source	DT_SC	0.550
Begin Softstart. Softstart was aborted and restarted due to a MOB button on the deck.				
20:17	21:52	 Source	DT_SC	1.583
Downtime due to source. Transit to BOL after guns are ramped up.				
21:52	24:00	 Production Prime	AC_PP	2.133

Start	End	Category	Code	Duration (hrs)
Seq: 0				
Seq #3				
2401 last shot of JD 239				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

27-Aug	Hours	% Percent
Acquisition	17.367	72.361
Production Prime	17.367	72.361
DownTime	6.633	27.639
Source	6.633	27.639
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Mobilisation	85.717	51.022
Mob Offshore	7.383	4.395
Transit to Prospect	4.750	2.827
Deployment	3.683	2.192
Mob Ashore	67.250	40.030
Testing	2.650	1.577
Acquisition	61.800	36.786
Production Prime	26.850	15.982
Swath Move	34.950	20.804
Deploy	34.950	20.804
Chargeable Standby	0.583	0.347
Transit	0.583	0.347
DownTime	19.900	11.845
Source	19.900	11.845
Total	168.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

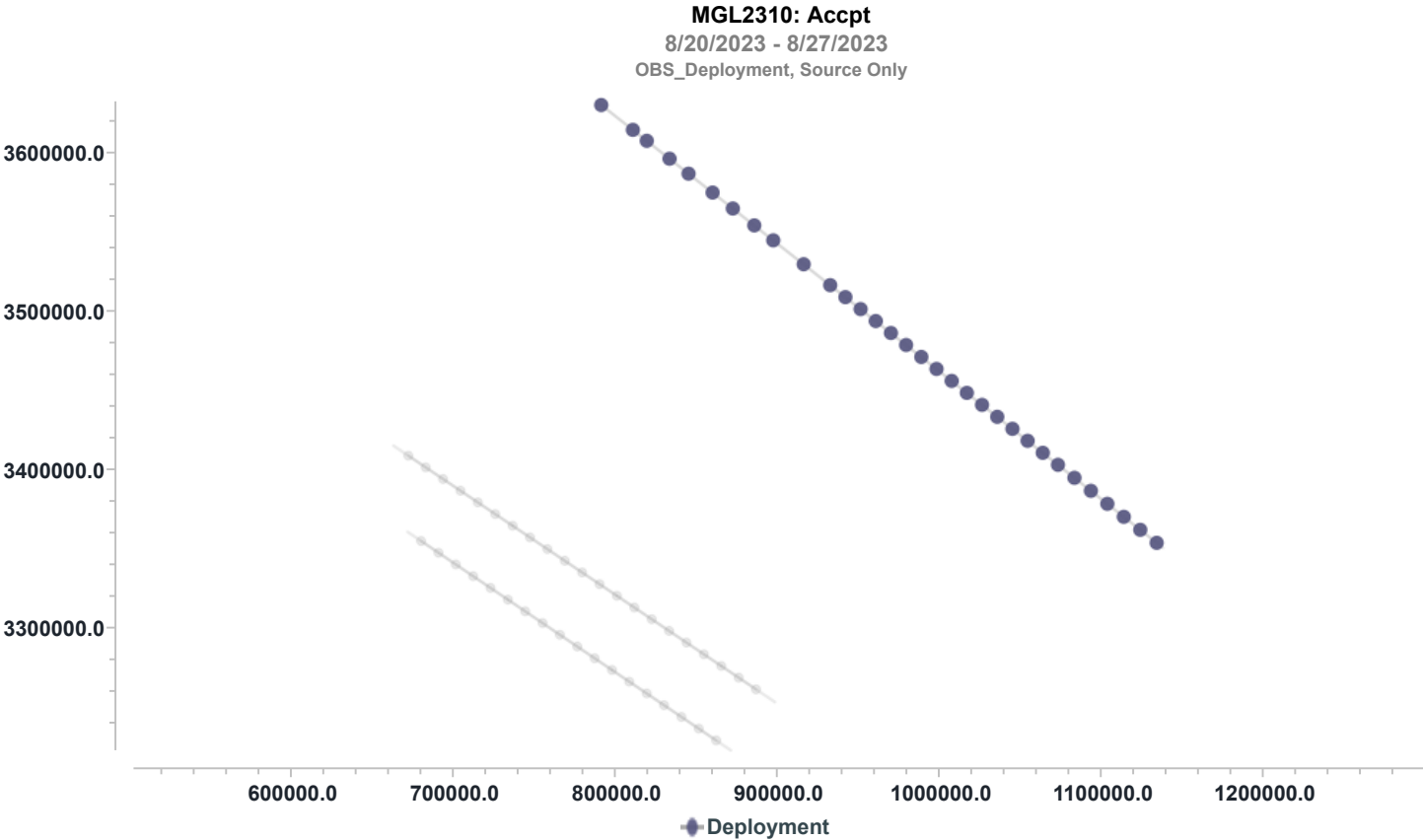
OBS_Deployment, Source Only

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

OBS_Deployment, Source Only

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



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 27 Aug

Navigation:
SOURCE GPS
Gunstring #1 FWD good AFT Good
Gunstring #2 FWD good AFT Good
Gunstring #3 FWD good AFT Good
Gunstring #4 FWD good AFT Bad

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 27 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Sean Seekins - Contract Source Mech

8/27/2023

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Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

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Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

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Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:00	17:30	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	4
Toolbox meeting to recover gunstrings Toolbox meeting for shiftchange Toolbox meeting for deployment of gunstring. Toolbox meeting for changing cluster.		

8/28/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 28 Aug

We shot guns all day while going down the line. We missed only four shotpoints when the port compressor had to be shut down because of a fuel filter issue. The engineers did a great job getting us swapped over to the starboard compressor very quickly. There were six low air pressure shotpoints. These were from 900 psi to 1800 psi. Harm was informed and after some discussion decided to continue down the line.

Both compressors are operable. We are currently operating on the stbd unit.

The Science Party has been cross training and completed a couple of XBT launches.

We should complete OBS #1 around 2-4 AM in the morning (local time). There is some ambiguity in our timing because we aren't sure how much the jet stream will slow us down later this evening. It is possible that we could finish shooting as early as midnight local at the current speed.

We will recover the gunstrings and commence recovering OBS's immediately. We have a thorough LMRA and toolbox meeting planned for each shift prior to recovering the OBS's. We have a lot of new faces on the deck and on the bridge.

Our OBSIC tech has been cleared to come back to work and will be a welcome new hand during the OBS recoveries.

We had the Daily Ops meeting and have developed a contingency plan for TS Idalia on Wednesday, if needed. We are monitoring this storm closely.




Top job by everyone so far this hitch. The galley has been hitting on all eight cylinders, as well. Let's stay focused while we enjoy the ride.

Daily Comment Summaries - Plan for Tomorrow

Mon 28 Aug

We should complete OBS #1 around breakfast time tomorrow morning. We will then commence to recovering OBS instruments all day.

Timing Diary (Marcus G Langseth, Source Only)

Start	End	Category	Code	Duration (hrs)
00:00	14:54	 Production Prime	AC_PP	14.900
Seq: 3 SOL Seq 3 Line:MGL2310003P2OBS1 Preplot:OBS_1 Block:MGL2310 FGSP:2402 FCSP:2402 Hdg:309° Prime EOL Seq 3 Line:MGL2310003P2OBS1 Preplot:OBS_1 Block:MGL2310 LGSP:3222 LCSP:3222 Incomplete				
14:54	15:02	 High Pressure	DT_HP	0.133
NTBP Seq 3 OBS_1 Block:MGL2310 FSP:3223 LSP:3226 Missed sps due to port compressor shut down.				
15:02	24:00	 Production Prime	AC_PP	8.967
Seq: 3 SOL Seq 3 Line:MGL2310003P2OBS1 Preplot:OBS_1 Block:MGL2310 FGSP:3227 FCSP:3227 Hdg:309° Prime MSP Seq 3 Line:MGL2310003P2OBS1 Preplot:OBS_1 Block:MGL2310 LGSP:3749 LCSP:3749 Midnight				

Timing Day By Day (Marcus G Langseth, OBS_Deployment, Source Only)

28-Aug	Hours	% Percent
Acquisition	23.867	99.444
Production Prime	23.867	99.444
DownTime	0.133	0.556
High Pressure	0.133	0.556
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Mobilisation	85.717	44.644
Mob Offshore	7.383	3.845
Transit to Prospect	4.750	2.474
Deployment	3.683	1.918
Mob Ashore	67.250	35.026
Testing	2.650	1.380
DownTime	20.033	10.434
High Pressure	0.133	0.069
Source	19.900	10.365
Acquisition	85.667	44.618
Production Prime	50.717	26.415
Swath Move	34.950	18.203
Deploy	34.950	18.203
Chargeable Standby	0.583	0.304
Transit	0.583	0.304
Total	192.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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)

OBS_Deployment, Source Only

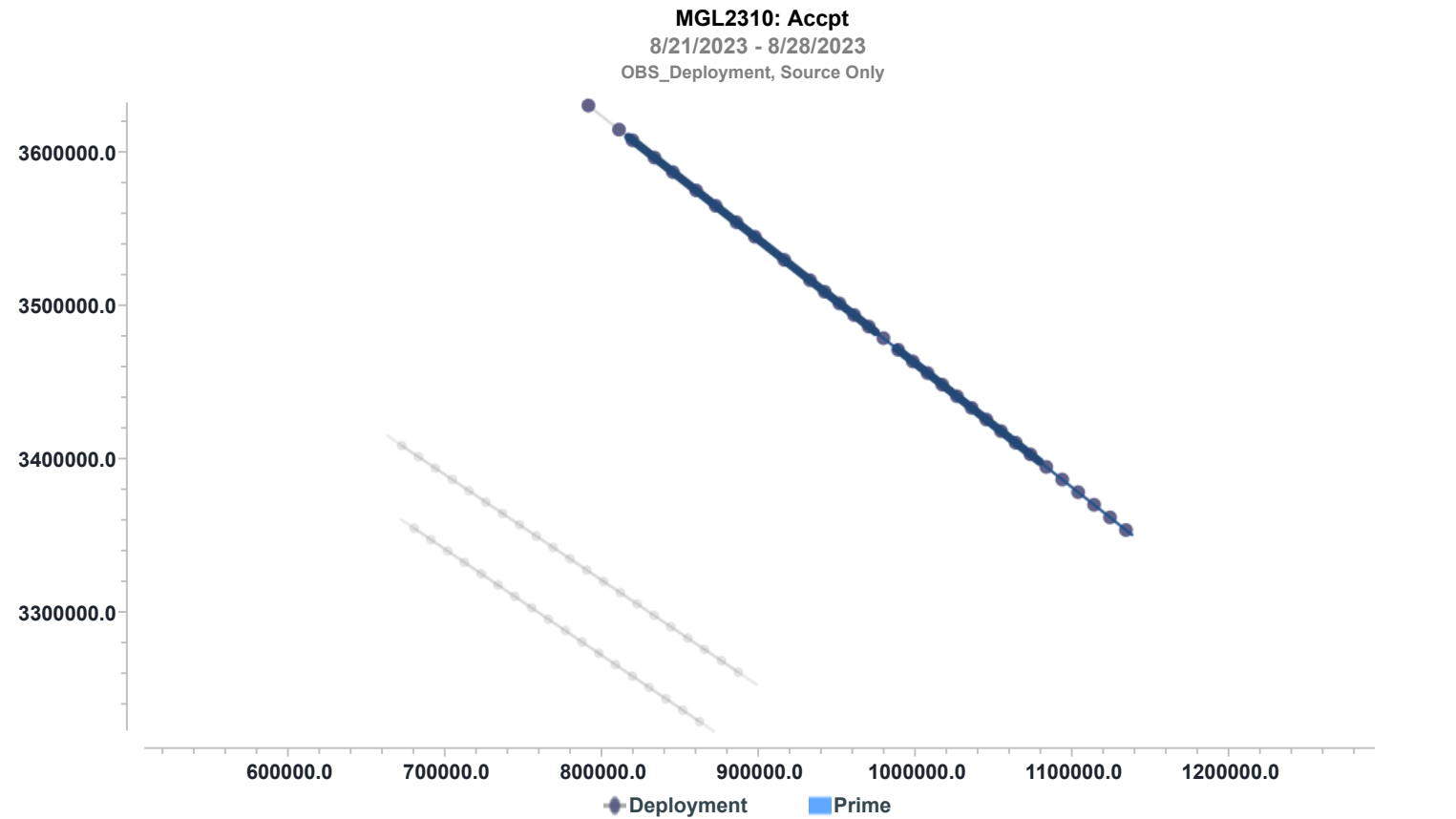
Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
2	MGL2310002P1OBS1	309.0	1506	2288	Prime	117.45	2.140	Complete	Complete
3	MGL2310003P2OBS1	309.0	2402	3749	Prime	201.60	4.577	Midnight	Part
NTBP: 3223 - 3226 (not chgd)									
Total						319.05			

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	319.05	319.05	411.75	411.75

Accepted km	Day	Week	Month	Project
Combined	319.05	319.05	411.75	411.75



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 28 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 28 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
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Koray Ergun - Contract Navigator

Aaron Martin - Contract Navigator
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Claudia Carrero - RPS PSO
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Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:00	18:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting. PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	2
Toolbox meeting for building cluster Toolbox meeting for shiftchange		

8/29/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 29 Aug

We completed shooting into OBS #1 at 04:00 GMT. (midnight local)

We turned the ship into a suitable heading and recovered all of the towed gear. We also performed a drop test.

We are currently recovering OBS instruments and have 8 units onboard at the time of this report. We intend to continue recovering OBS units until ~ breakfast time tomorrow morning and then reassess the weather situation in regards to TS Idalia. We will decide then if we need to move to the easterly end of the OBS line to start recovering from that end to give the storm a wide berth to pass by and start recovering the balance of the OBS's from the deep end.

We have several contingency plans in place to manage the weather and a possible transit into shore for a personal emergency. Separate emails are in place to discuss this.

Riley confirmed all of the gun serial numbers to update Gunlink database. Top job.

We held an abbreviated Weekly Tech Meeting today and will have a follow-up THC meeting on Thursday.

We have a good safe rhythm in place for recovering the OBS instruments.

Daily Comment Summaries - Plan for Tomorrow

Tue 29 Aug













Recover OBS instruments all day.

Avoid TS Idalia

Timing Diary (Marcus G Langseth, Source Only)



Start	End	Category	Code	Duration (hrs)
00:00	04:00	Production Prime	AC_PP	4.000
Seq: 3 SOL Seq 3 Line:MGL2310003P2OBS1 Preplot:OBS_1 Block:MGL2310 FGSP:3750 FCSP:3750 Hdg:309° Prime EOL Seq 3 Line:MGL2310003P2OBS1 Preplot:OBS_1 Block:MGL2310 LGSP:3993 LCSP:3993 Complete				
04:00	04:50	Tests	SB_TE	0.833
Drop test. Turning ship into the seas for recovery.				
04:50	08:19	Source Recovery	SB_PO_SOR	3.483
Picking up source array, PAM and Maggie to begin recovering OBS instruments. All gear onboard.				
08:19	10:01	Transit	SB_TRT	1.700
Chargeable standby d/t being in Transit to first OBS recovery location. Secured sonars. Secured compressors. Arrive at				
10:01	10:22	Field Operations	SB_FO	0.350

Start	End	Category	Code	Duration (hrs)
Planned Operations OBS Recovery. OBS 101 recovered.				
10:22	12:04	 Transit	SB_TRT	1.700
Transit to OBS 102				
12:04	12:50	 Field Operations	SB_FO	0.767
Planned Operations OBS Recovery. OBS 102 recovered.				
12:50	13:59	 Transit	SB_TRT	1.150
Transit to OBS 103				
13:59	14:59	 Field Operations	SB_FO	1.000
Planned Operations OBS Recovery. OBS 102 did NOT release from the seabed.				
14:59	17:02	 Nav Systems External	DT_NE	2.050
MGL initiated a search pattern over the OBS unit and sent multiple commands to release. This eventually succeeded and the unit responded. OBS 103 is recovered.				
17:02	18:51	 Transit	SB_TRT	1.817
Transit to OBS 104				
18:51	19:32	 Field Operations	SB_FO	0.683
Planned Operations OBS Recovery.OBS 104 recovered.				
19:32	21:03	 Transit	SB_TRT	1.517
Transit to OBS 105				
21:03	21:30	 Field Operations	SB_FO	0.450
Planned Operations OBS Recovery.OBS 105 recovered.				
21:30	23:02	 Transit	SB_TRT	1.533
Transit to OBS 106				
23:02	23:30	 Field Operations	SB_FO	0.467
Planned Operations OBS Recovery.OBS 106 recovered.				
23:30	24:00	 Transit	SB_TRT	0.500
Transit to OBS 107				

Timing Day By Day (Marcus G Langseth, Source Only)

29-Aug	Hours	% Percent
Acquisition	4.000	16.667
Production Prime	4.000	16.667
Chargeable Standby	17.950	74.792
Field Operations	3.717	15.486
Planned Operations	3.483	14.514
Source Recovery	3.483	14.514
Tests	0.833	3.472
Transit	9.917	41.319
DownTime	2.050	8.542
Nav Systems External	2.050	8.542
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	10.224
Nav Systems External	2.050	0.949
High Pressure	0.133	0.062
Source	19.900	9.213
Mobilisation	85.717	39.684
Mob Offshore	7.383	3.418
Transit to Prospect	4.750	2.199
Deployment	3.683	1.705
Mob Ashore	67.250	31.134
Testing	2.650	1.227
Chargeable Standby	18.533	8.580
Tests	0.833	0.386
Field Operations	3.717	1.721
Transit	10.500	4.861
Planned Operations	3.483	1.613
Source Recovery	3.483	1.613
Acquisition	89.667	41.512
Production Prime	54.717	25.332
Swath Move	34.950	16.181
Deploy	34.950	16.181
Total	216.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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)

OBS_Deployment, Source Only

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
3	MGL2310003P2OBS1	309.0	3750	3993	Prime	36.60	4.625	Complete	Complete
Total						36.60			

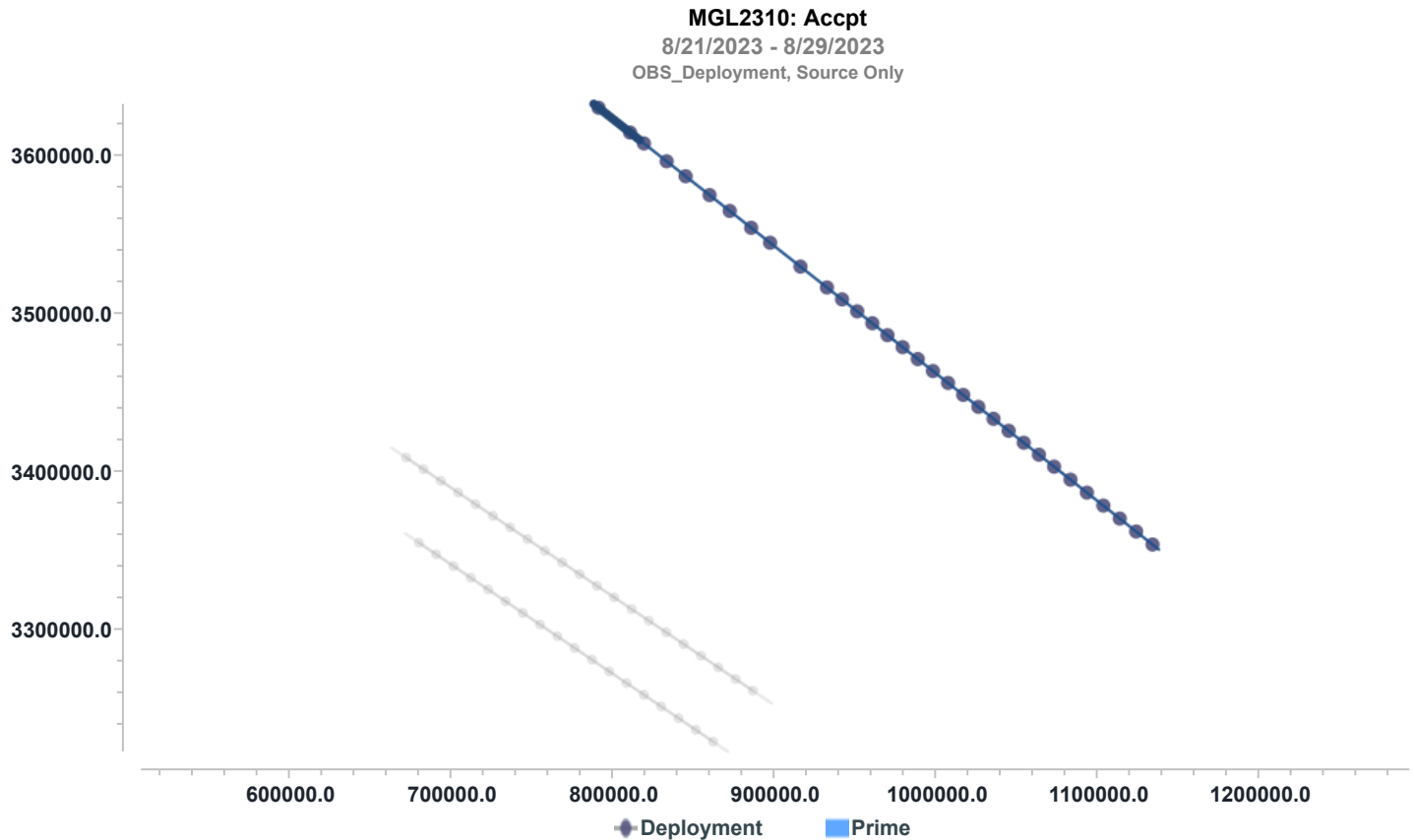
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	36.60	355.65	448.35	448.35
Combined	36.60	355.65	448.35	448.35

8/29/2023

Page 4



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 29 Aug

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 29 Aug

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

8/29/2023

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
19:00	19:35	Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting. PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			
19:55	20:55	Weekly Telecon	Mtgs_WTel
HSE - Weekly TECH ZOOM Call			

Daily Total Category	Code	Count
Toolbox Meetings	Mtgs_Tbox	6
Shiftchange toolbox meetings discussing OBS recovery Toolbox meeting discussing source recovery Toolbox meeting for PAM recovery Toolbox meeting for Maggie Toolbox meeting w/bridge to discuss failed OBS coms		

8/30/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 30 Aug

We recovered OBS's until about 3:45 local time this afternoon.

We then went down for weather and started to move away from Hurricane Idalia. We are currently moving SE toward the SE end of OBS Line #1. We will make an assessment of the weather and sea state at that time about continuing to recover the OBS's on that line. This will happen around 4 AM local time on Thursday morning.

The weather has picked up considerably throughout the day, but the ride has been decent.

The decks are secure and the workspaces tidy.

Daily Comment Summaries - Plan for Tomorrow

Wed 30 Aug

Down for weather.Possible resume recovery of OBS's on Line #1.

Likely to transit to OBS Line #2 for OBS deployment

Timing Diary (Marcus G Langseth, Source Only)



Start	End	Category	Code	Duration (hrs)
00:00	00:40	Transit	SB_TRT	0.667
Transit to OBS 107				
00:40	01:20	Field Operations	SB_FO	0.667
Planned Operations OBS Recovery.OBS 107 recovered.				
01:20	02:24	Transit	SB_TRT	1.067
Transit to OBS 108				
02:24	03:34	Field Operations	SB_FO	1.167
OBS 108 recovered. Missed once.				
03:34	04:48	Transit	SB_TRT	1.233
Transit to OBS 109				
04:48	05:44	Field Operations	SB_FO	0.933
OBS 109 recovered				
05:44	07:20	Transit	SB_TRT	1.600
Transit to OBS 110				
07:20	09:08	Field Operations	SB_FO	1.800
OBS 110 recovered. Missed once.				
09:08	10:37	Transit	SB_TRT	1.483
Transit to OBS 111				

Start	End	Category	Code	Duration (hrs)
10:37	11:36	<div></div> Field Operations	SB_FO	0.983
OBS 111 recovered				
11:36	12:35	<div></div> Transit	SB_TRT	0.983
Transit to OBS 112				
12:35	13:41	<div></div> Field Operations	SB_FO	1.100
OBS 112 recovered				
13:41	15:15	<div></div> Transit	SB_TRT	1.567
Transit to OBS 113				
15:15	15:26	<div></div> Field Operations	SB_FO	0.183
OBS 113 recovered				
15:26	16:27	<div></div> Transit	SB_TRT	1.017
Transit to OBS 114				
16:27	17:45	<div></div> Field Operations	SB_FO	1.300
OBS 114 recovered				
17:45	18:43	<div></div> Transit	SB_TRT	0.967
Transit to OBS 115				
18:43	19:43	<div></div> Field Operations	SB_FO	1.000
OBS 115 recovered				
19:43	24:00	<div></div> Weather	NC_WX	4.283
Standby for weather. Transiting away from TS Idalia to the SE corner of Line OBS #1				

Timing Day By Day (Marcus G Langseth, Source Only)

30-Aug	Hours	% Percent
Chargeable Standby	19.717	82.153
Field Operations	9.133	38.056
Transit	10.583	44.097
Non-Chargeable StandBy	4.283	17.847
Weather	4.283	17.847
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	9.201
Nav Systems External	2.050	0.854
High Pressure	0.133	0.056
Source	19.900	8.292
Mobilisation	85.717	35.715
Mob Offshore	7.383	3.076
Transit to Prospect	4.750	1.979
Deployment	3.683	1.535
Mob Ashore	67.250	28.021
Testing	2.650	1.104

Category	Hours	% Percent
Chargeable Standby	38.250	15.938
Tests	0.833	0.347
Field Operations	12.850	5.354
Transit	21.083	8.785
Planned Operations	3.483	1.451
Source Recovery	3.483	1.451
Acquisition	89.667	37.361
Production Prime	54.717	22.799
Swath Move	34.950	14.563
Deploy	34.950	14.563
Non-Chargeable StandBy	4.283	1.785
Weather	4.283	1.785
Total	240.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

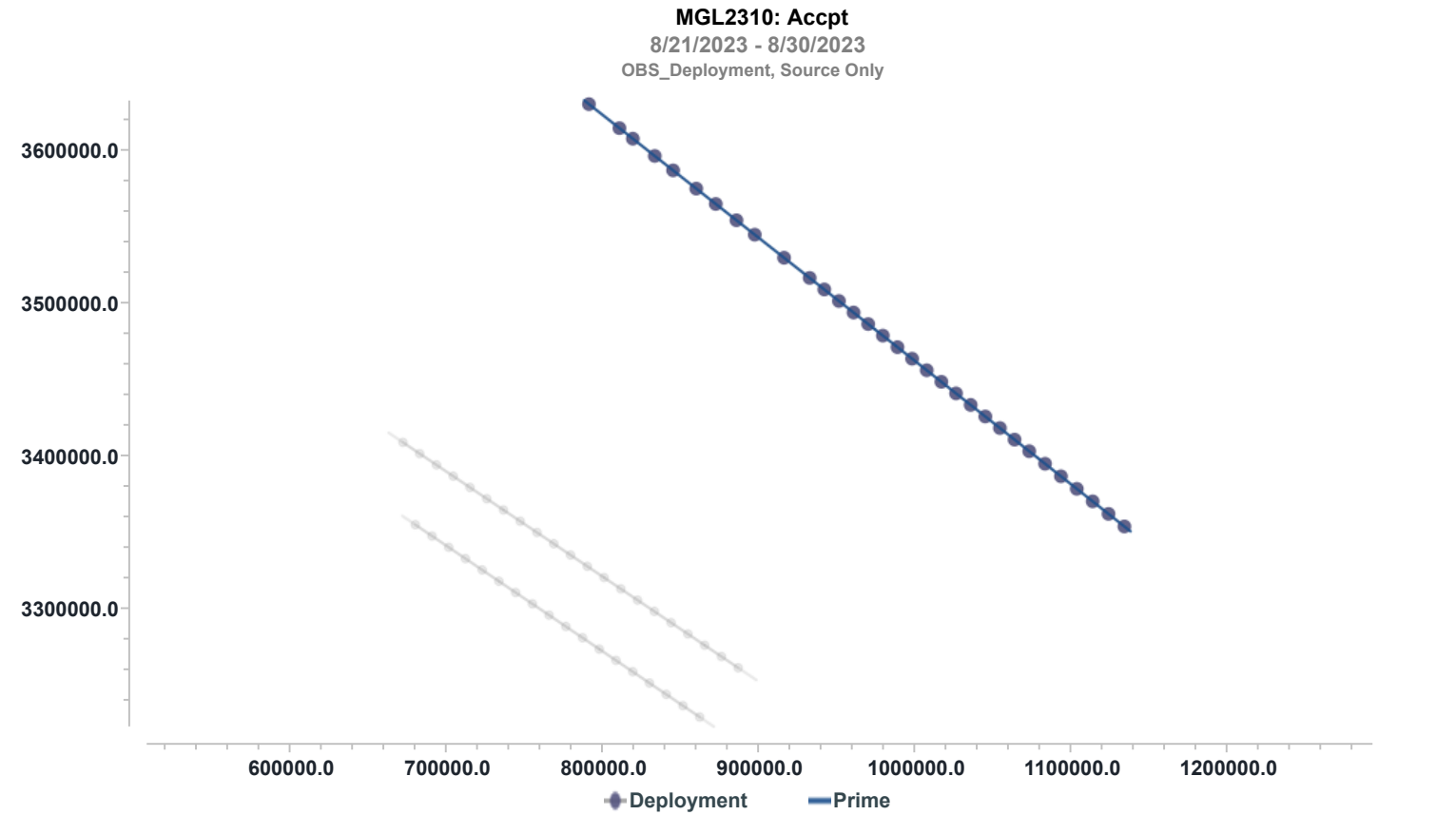
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	355.65	448.35	448.35
Combined	0.00	355.65	448.35	448.35



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 30 Aug

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 30 Aug

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

8/30/2023

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
19:00	20:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	3
Toolbox meeting for shiftchange. Toolbox meeting for WX transit		

8/31/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 31 Aug

We have been down for Hurricane Idalia all day. We transited to the SE corner of OBS Line 1. We arrived at the end of the line at ~4am local time. We then convened on the bridge to re-assess the weather and decided that it was too rough to attempt to pick up OBS's.

We re-assessed the wx after breakfast and decided to switch tactics and move towards the SE end of OBS Line #2 to be in a position to deploy OBS's of the wx allows.

Its much easier to deploy OBS units than it is to recover them, particularly in rough seas.

We are currently transiting to the SE end of OBS #2

We performed the BGM weekly tests yesterday.

We should arrive at the SE corner of OBS Line #2 at 6AM local time to begin deploying OBS's.

Daily Comment Summaries - Plan for Tomorrow

Thu 31 Aug

Begin deploying onto OBS Line 2

Timing Diary (Marcus G Langseth)

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Start	End	Category	Code	Duration (hrs)
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Timing Day By Day (Marcus G Langseth)

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	9.201
Nav Systems External	2.050	0.854
High Pressure	0.133	0.056
Source	19.900	8.292
Mobilisation	85.717	35.715
Mob Offshore	7.383	3.076
Transit to Prospect	4.750	1.979
Deployment	3.683	1.535
Mob Ashore	67.250	28.021
Testing	2.650	1.104
Chargeable Standby	38.250	15.938
Tests	0.833	0.347
Field Operations	12.850	5.354
Transit	21.083	8.785
Planned Operations	3.483	1.451

Category	Hours	% Percent
Source Recovery	3.483	1.451
Acquisition	89.667	37.361
Production Prime	54.717	22.799
Swath Move	34.950	14.563
Deploy	34.950	14.563
Non-Chargeable StandBy	4.283	1.785
Weather	4.283	1.785
Total	240.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

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

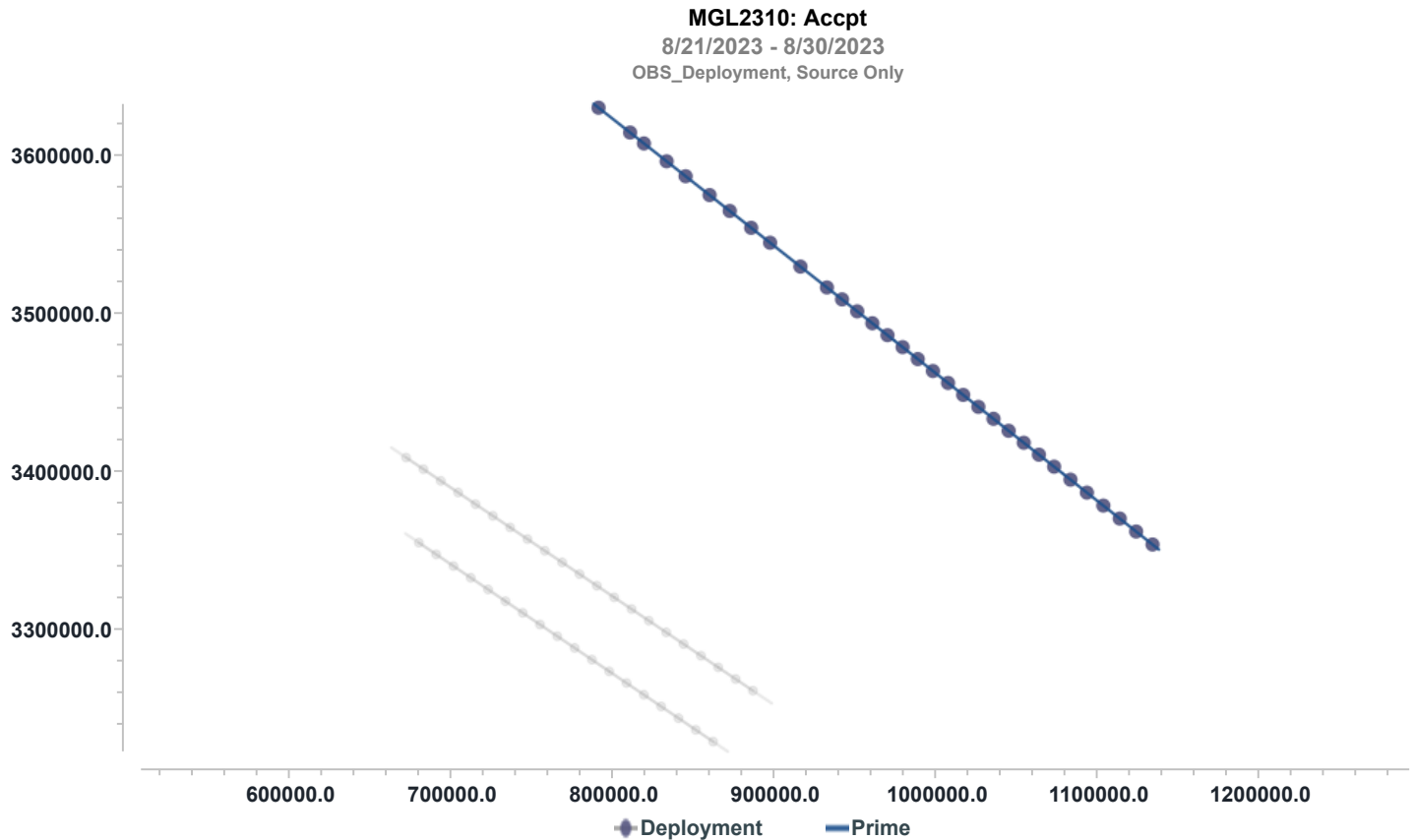
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	355.65	448.35	448.35
Combined	0.00	355.65	448.35	448.35

8/31/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 31 Aug

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 31 Aug

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

8/31/2023

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OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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9/1/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 01 Sep

We transited to OBS Line #2 in very rough seas and began deploying OBS's at ~ 11:18 GMT. We deployed nine of the twenty one OBS stations before we aborted the deployment to head into Jacksonville, FL for a medivac.

We should be in a position to transfer the personnel off by noon tomorrow. We will then transit back to the NW corner of OBS Line 2 to finish deploying OBS's.

The weather has improved dramatically today. The storm brought us a pretty good wallup but we are back in the saddle.




We will use the transit time to iron the #3 gun umbilical and make other preparations for a strong finish.

Daily Comment Summaries - Plan for Tomorrow

Fri 01 Sep

Complete Medivac to Jacksonville and transit back to prospect

Timing Diary (Marcus G Langseth, OBS_Deployment, Source Only)

Start	End	Category	Code	Duration (hrs)
00:00	11:18	 Weather	NC_WX	11.300
Non-chargeable standby due to weather.				
Transit to OBS LINE 2 in rough seas				
11:18	21:24	 Deploy	AC_SM_De	10.100
Node operation Block:MGL2310 2 Line:OBS_02 St 220 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 219 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 218 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 217 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 216 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 215 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 214 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 213 Deployment				
21:24	24:00	 Health and Safety	NC_HS	2.600
Non-chargeable standby due to Health and Safety.				
We are heading into Jacksonville for medivac.				

Timing Day By Day (Marcus G Langseth, OBS_Deployment, Source Only)

1-Sep	Hours	% Percent
Acquisition	10.100	42.083
Swath Move	10.100	42.083
Deploy	10.100	42.083
Non-Chargeable StandBy	13.900	57.917

1-Sep	Hours	% Percent
Health and Safety	2.600	10.833
Weather	11.300	47.083
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	7.668
Nav Systems External	2.050	0.712
High Pressure	0.133	0.046
Source	19.900	6.910
Mobilisation	85.717	29.763
Mob Offshore	7.383	2.564
Transit to Prospect	4.750	1.649
Deployment	3.683	1.279
Mob Ashore	67.250	23.351
Testing	2.650	0.920
Chargeable Standby	38.250	13.281
Tests	0.833	0.289
Field Operations	12.850	4.462
Transit	21.083	7.321
Planned Operations	3.483	1.209
Source Recovery	3.483	1.209
Acquisition	99.767	34.641
Production Prime	54.717	18.999
Swath Move	45.050	15.642
Deploy	45.050	15.642
Non-Chargeable StandBy	42.183	14.647
Health and Safety	2.600	0.903
Weather	39.583	13.744
Total	288.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

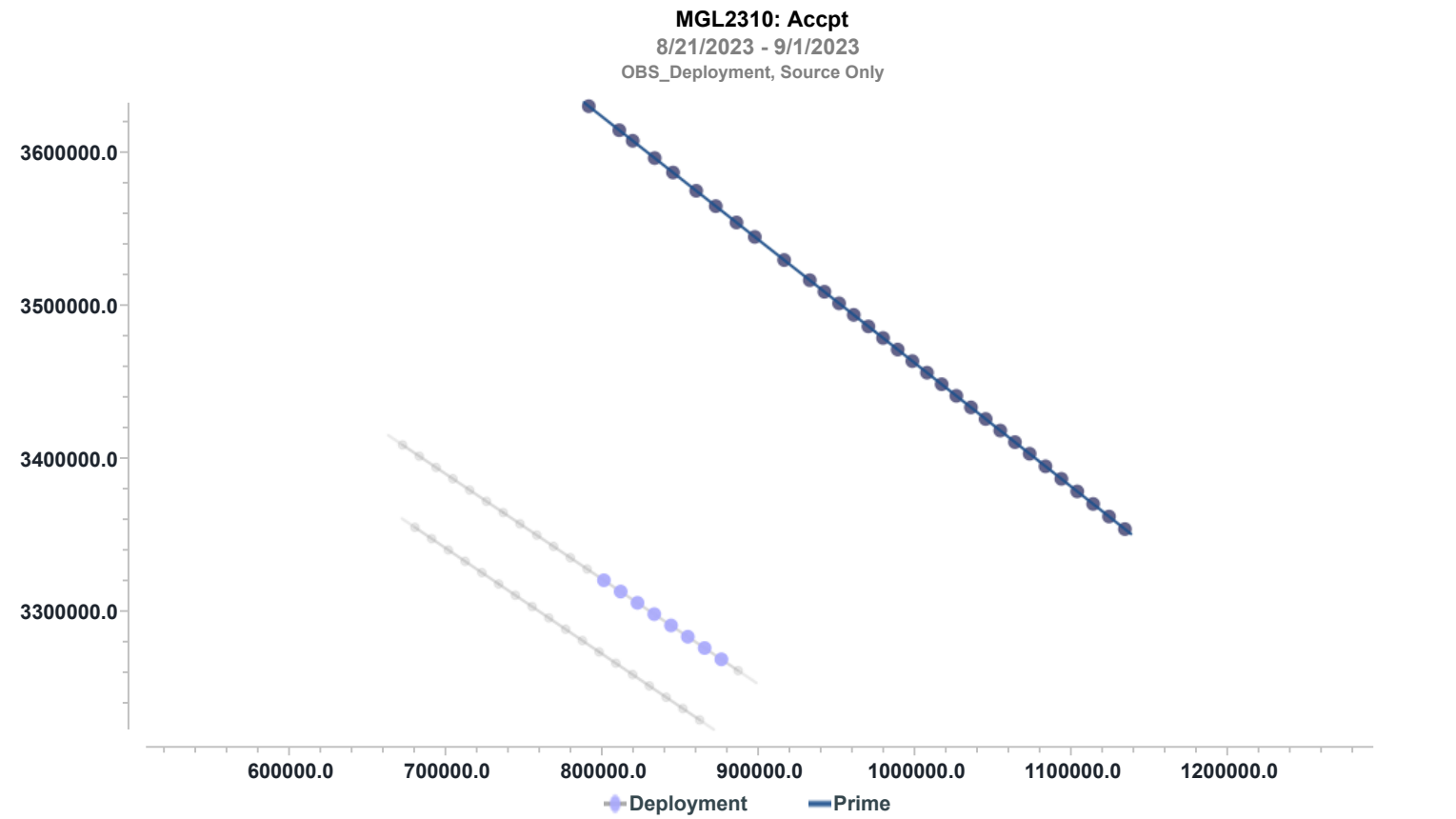
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	355.65	0.00	448.35
Combined	0.00	355.65	0.00	448.35



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 01 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 01 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Micahel Coufal - Contract Source Mech
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition

9/1/2023
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth
Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth
Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
18:55	19:55	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	4
(2) Big seas OBS deployments		

9/2/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 02 Sep

We transited to Jacksonville, FL for medivac rendezvous with US Coastguard to off-sign Contract Mech and OS. We arrived at the sea buoy at 10:48 local time. We are under-way back to the prospect at 11:06.

We are currently transiting to OBS Line #2, We should resume deployments at ~10:30 PM local time.

We confirmed that the CTD winch is working and reviewed the start up procedures for this. Everything worked well when we followed the procedure..




Daily Comment Summaries - Plan for Tomorrow

Sat 02 Sep

Complete transit to OBS Line #2 and resume deploying OBS's

Transit to OBS Line #1 and resume OBS recoveries.

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	14:48	 Health and Safety	NC_HS	14.800
Medivac run to Jacksonville.				
14:48	15:06	 Health and Safety	NC_HS	0.300
Coastguard alongside. Two crewman off-signed.				
15:06	24:00	 Health and Safety	NC_HS	8.900
Non-chargeable standby due to Health and Safety.				
Transit back to Line OBS #2 to resume deploying OBS instruments				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

2-Sep	Hours	% Percent
Non-Chargeable StandBy	24.000	100.000
Health and Safety	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	7.078
Nav Systems External	2.050	0.657
High Pressure	0.133	0.043

Category	Hours	% Percent
Source	19.900	6.378
Mobilisation	85.717	27.473
Mob Offshore	7.383	2.366
Transit to Prospect	4.750	1.522
Deployment	3.683	1.181
Mob Ashore	67.250	21.554
Testing	2.650	0.849
Chargeable Standby	38.250	12.260
Tests	0.833	0.267
Field Operations	12.850	4.119
Transit	21.083	6.757
Planned Operations	3.483	1.116
Source Recovery	3.483	1.116
Acquisition	99.767	31.976
Production Prime	54.717	17.537
Swath Move	45.050	14.439
Deploy	45.050	14.439
Non-Chargeable StandBy	66.183	21.213
Health and Safety	26.600	8.526
Weather	39.583	12.687
Total	312.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

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

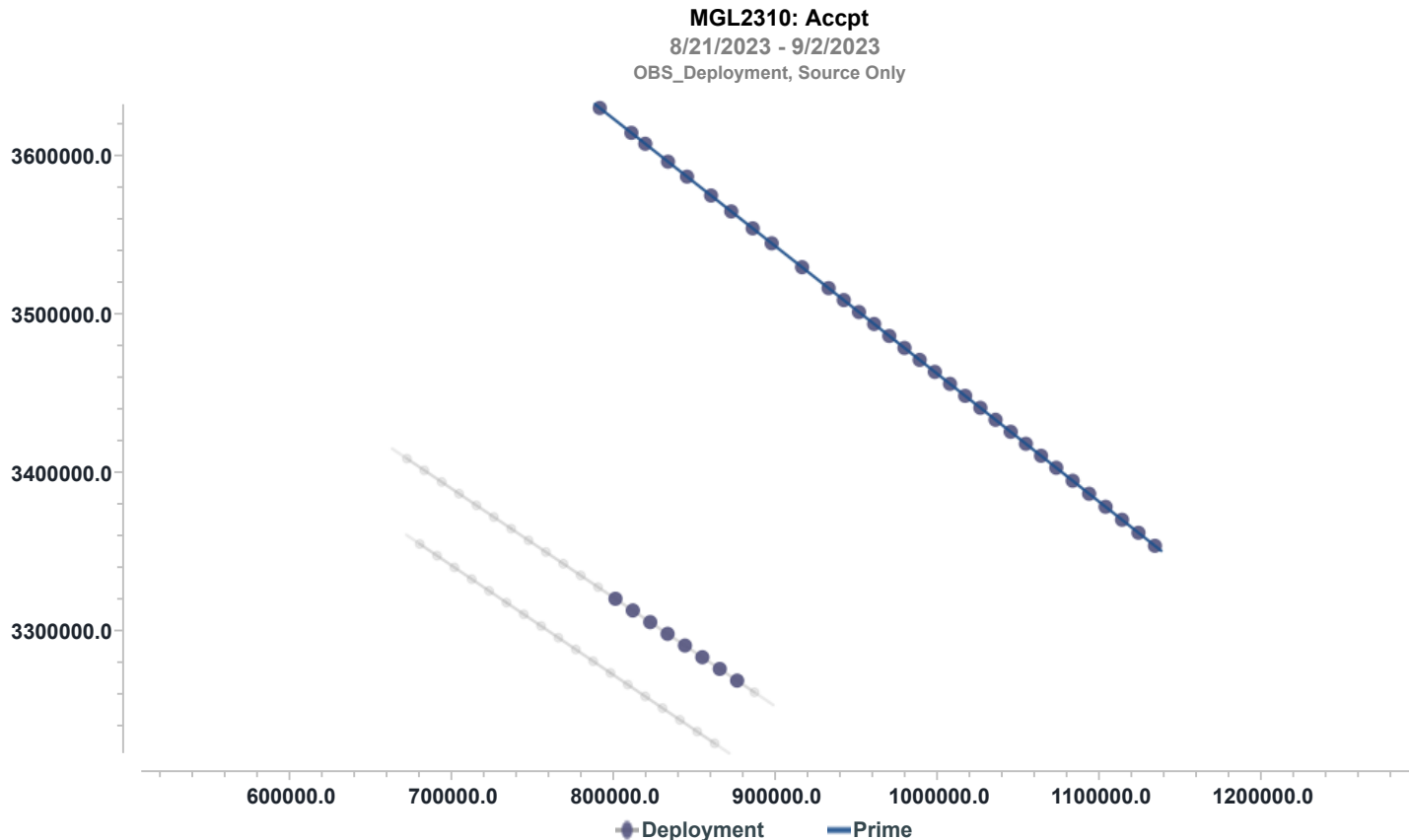
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	355.65	0.00	448.35
Combined	0.00	355.65	0.00	448.35

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Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 02 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 02 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

9/2/2023

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Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth
Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
14:48		 Medevac	lal_MedV
HSE - Medevac			
Following Contractor Incident/Report No:			
Two people. Contract Mechanic and OS			

Daily Total Category	Code	Count
 Toolbox Meetings	Mtgs_Tbox	4
2 Shiftchange toolbox		
2 Toolbox for dis-embarkation ops		

9/3/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 03 Sep

We arrived on the NW end of OBS Line #2 at ~03:00 UTC and finished deploying this line at ~15:00 UTC

We are currently transiting to OBS Line #1 to finish recovering the 17 OBS's that we didn't get picked up before Hurricane Idalia.

Riley megged the #3 umbilical and built a 16 pin shorting plug and checked for continuity. We have leakage through the bundle. Ran a jumper from plate 2 to plate 1 and successfully click tested it. This bundle should finish this job and the errors on 3-1 are ok now. This bundle will need to be addressed before Puerto Rico.

We should finish recovering OBS Line #1 early on the 6th and will begin deploying OBS Line #3.




Daily Comment Summaries - Plan for Tomorrow

Sun 03 Sep

We will recover OBS's from OBS Line #1 all day. There are 17 units to recover here, 116-132

Timing Diary (Marcus G Langseth, OBS_Deployment)



Start	End	Category	Code	Duration (hrs)
00:00	02:50	 Health and Safety	NC_HS	2.833
Non-chargeable standby due to Health and Safety. Medivac in Jacksonville.				
02:50	15:16	 Deploy	AC_SM_De	12.433
Node operation Block:MGL2310 2 Line:OBS_02 St 220 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 219 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 218 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 217 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 216 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 215 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 214 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 213 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 201 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 202 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 203 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 204 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 205 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 206 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 207 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 208 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 209 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 210 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 211 Deployment Node operation Block:MGL2310 2 Line:OBS_02 St 212 Deployment				
15:16	24:00	 Weather	SB_WX	8.733

Start	End	Category	Code	Duration (hrs)
Chargeable standby d/t being in Transit due to WX				
Transit to recover OBS instruments leftover from Line OBS #1				
This is an extra transit due to Hurricane Idalia				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

3-Sep	Hours	% Percent
Acquisition	12.433	51.806
Swath Move	12.433	51.806
Deploy	12.433	51.806
Chargeable Standby	8.733	36.389
Weather	8.733	36.389
Non-Chargeable StandBy	2.833	11.806
Health and Safety	2.833	11.806
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	6.572
Nav Systems External	2.050	0.610
High Pressure	0.133	0.040
Source	19.900	5.923
Mobilisation	85.717	25.511
Mob Offshore	7.383	2.197
Transit to Prospect	4.750	1.414
Deployment	3.683	1.096
Mob Ashore	67.250	20.015
Testing	2.650	0.789
Chargeable Standby	46.983	13.983
Tests	0.833	0.248
Field Operations	12.850	3.824
Transit	21.083	6.275
Weather	8.733	2.599
Planned Operations	3.483	1.037
Source Recovery	3.483	1.037
Acquisition	112.200	33.393
Production Prime	54.717	16.285
Swath Move	57.483	17.108
Deploy	57.483	17.108
Non-Chargeable StandBy	69.017	20.541
Health and Safety	29.433	8.760
Weather	39.583	11.781
Total	336.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

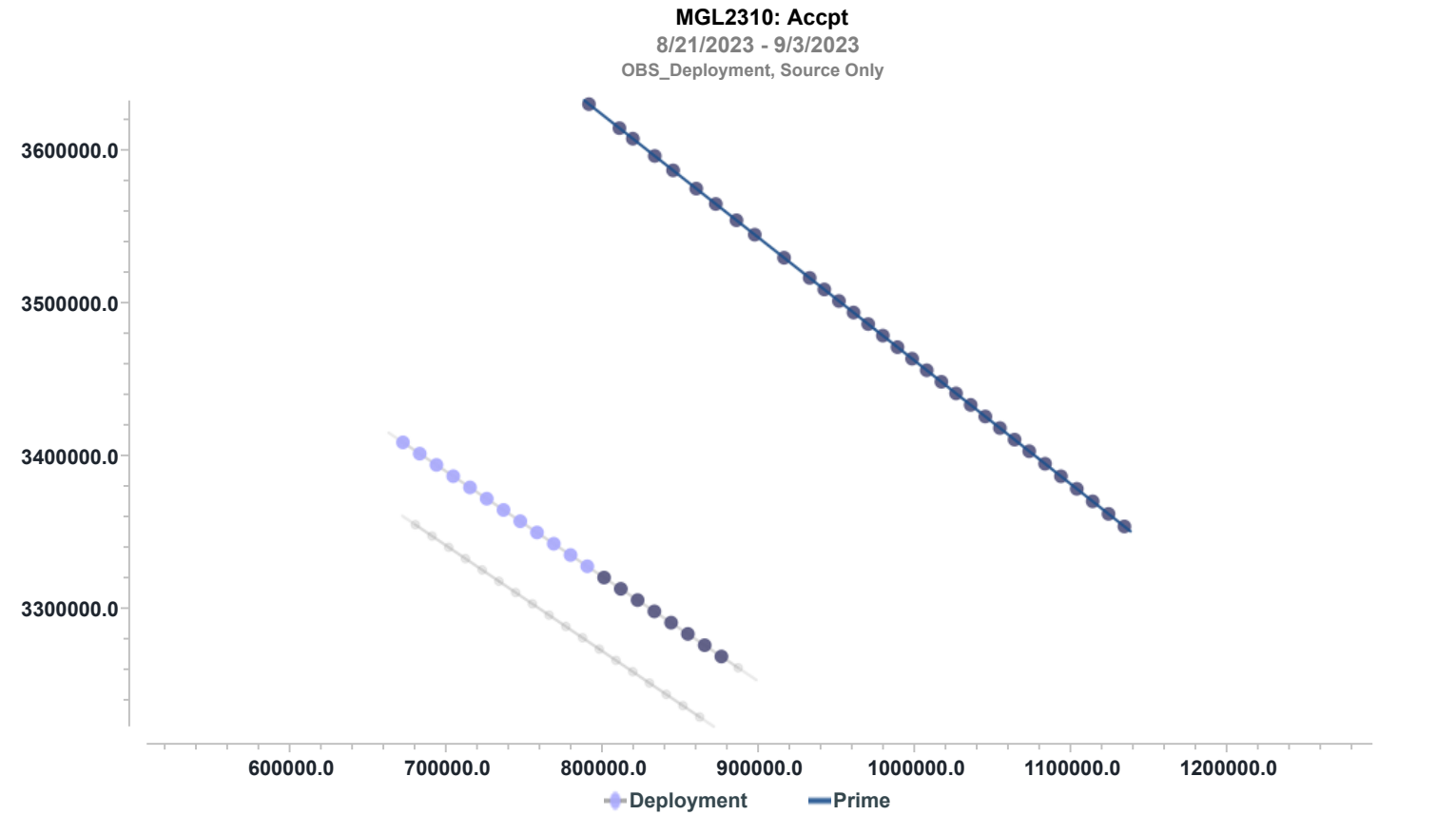
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	355.65	0.00	448.35
Combined	0.00	355.65	0.00	448.35



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 03 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 03 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souuza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth
Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth
Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
17:00	18:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting. PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	3

9/4/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 04 Sep

We recovered OBS's for most of the day. We have eight more to recover at the time of this report. These are some of the deepest ones on the prospect. We should be done recovering them late tomorrow.

The EM122 Multibeam is locked out after discovering two transmit boards shorted out. We will contact the MAC group and Kongsberg for additional advice.

Good steady progress.

Daily Comment Summaries - Plan for Tomorrow

Mon 04 Sep

Recover OBS's all day. Begin transit to OBS Line #1

Timing Diary (Marcus G Langseth, OBS_Deployment)



Start	End	Category	Code	Duration (hrs)
00:00	05:40	 Weather	SB_WX	5.667
Chargeable standby due to weather.				
05:40	06:50	 Field Operations	SB_FO	1.167
OBS 116 recovered				
06:50	07:50	 Transit	SB_TRT	1.000
Transit to OBS 117				
07:50	09:13	 Field Operations	SB_FO	1.383
OBS 117 recovered				
09:13	10:28	 Transit	SB_TRT	1.250
Transit to OBS 118				
10:28	11:49	 Field Operations	SB_FO	1.350
OBS 118 recovered				
11:49	12:51	 Transit	SB_TRT	1.033
Transit to OBS 119				
12:51	13:54	 Field Operations	SB_FO	1.050
OBS 119 recovered				
13:54	15:06	 Transit	SB_TRT	1.200
Transit to 120				
15:06	16:24	 Field Operations	SB_FO	1.300
OBS 120 recovered				

Start	End	Category	Code	Duration (hrs)
16:24	17:38	<div>Transit</div>	SB_TRT	1.233
Transit to OBS 121				
17:38	18:43	<div>Field Operations</div>	SB_FO	1.083
OBS 121 recovered				
18:43	19:30	<div>Transit</div>	SB_TRT	0.783
Transit to OBS 122				
19:30	20:59	<div>Field Operations</div>	SB_FO	1.483
OBS 122 recovered				
20:59	21:50	<div>Transit</div>	SB_TRT	0.850
Transit to OBS 123				
21:50	23:10	<div>Field Operations</div>	SB_FO	1.333
OBS 123 recovered				
23:10	24:00	<div>Transit</div>	SB_TRT	0.833
Transit to OBS 124				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

4-Sep	Hours	% Percent
Chargeable Standby	24.000	100.000
Field Operations	10.150	42.292
Transit	8.183	34.097
Weather	5.667	23.611
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	22.083	6.134
Nav Systems External	2.050	0.569
High Pressure	0.133	0.037
Source	19.900	5.528
Mobilisation	85.717	23.810
Mob Offshore	7.383	2.051
Transit to Prospect	4.750	1.319
Deployment	3.683	1.023
Mob Ashore	67.250	18.681
Testing	2.650	0.736
Chargeable Standby	70.983	19.718
Tests	0.833	0.231
Field Operations	23.000	6.389
Transit	29.267	8.130
Weather	14.400	4.000
Planned Operations	3.483	0.968
Source Recovery	3.483	0.968
Acquisition	112.200	31.167

Category	Hours	% Percent
Production Prime	54.717	15.199
Swath Move	57.483	15.968
Deploy	57.483	15.968
Non-Chargeable StandBy	69.017	19.171
Health and Safety	29.433	8.176
Weather	39.583	10.995
Total	360.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

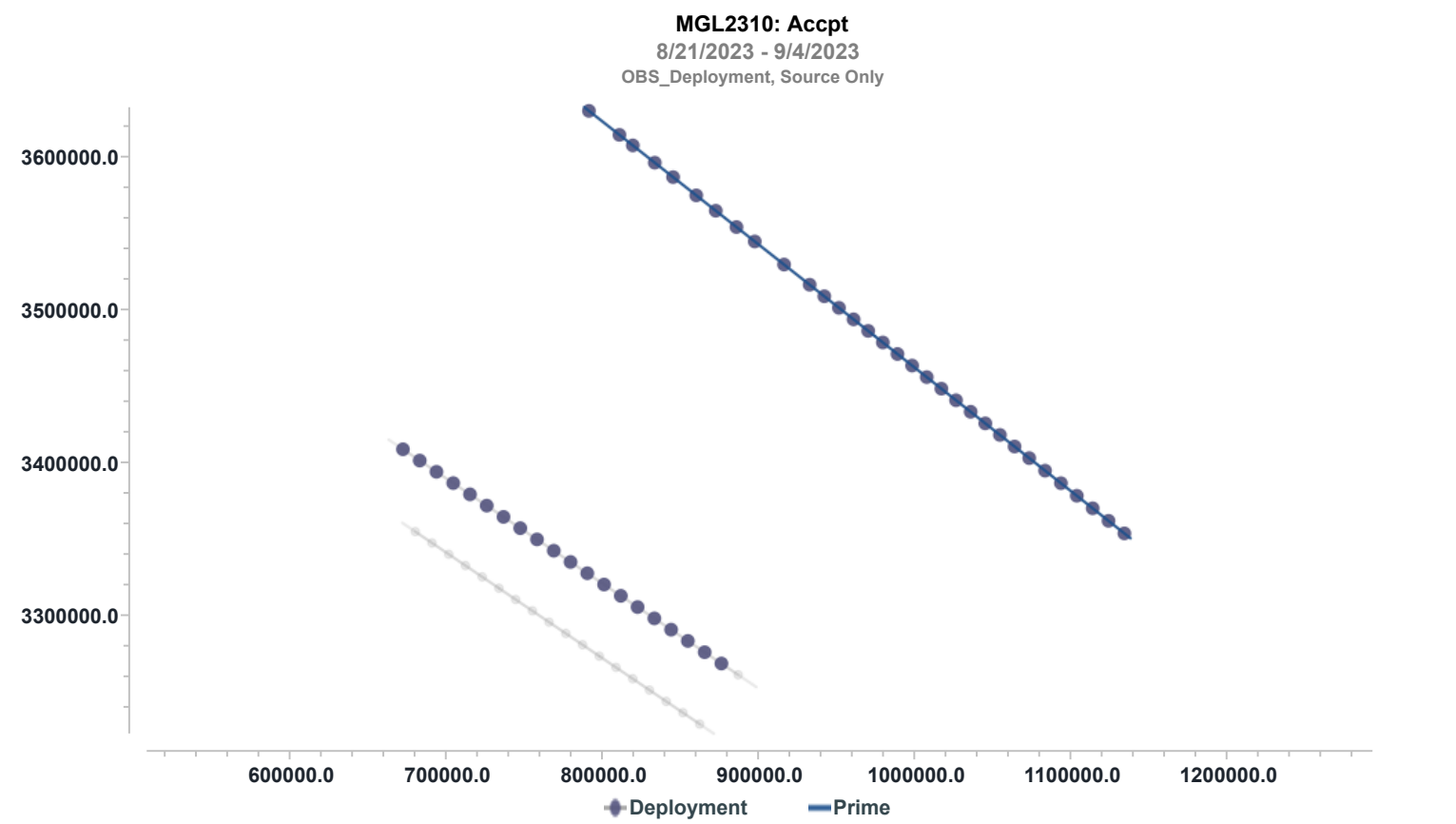
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	448.35
Combined	0.00	0.00	0.00	448.35



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 04 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 04 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

9/4/2023

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:00	16:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	5
2 Toolbox meeting to review radio protocol on deck		
2 Toolbox meeting to discuss taglines on OBS in swells.		
Toolbox to discuss lockout tagout on EM122		

9/5/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 05 Sep

We have completed the recovery of the OBS's on Line #1. The last unit was recovered at approximately 7:30 PM local time.

We were unable to recover OBS 131. We sent many burn commands but were never able to get a response from this instrument. We waited for an hour past what would have been the surface time for the unit before moving on. After we recovered OBS 132, we transited back to the OBS 131 location to scan the area one more time for the unlikely chance that it surfaced without replying. It was deployed in ~4200 meters of water depth and is accepted as a loss. We were unable to recover this instrument.

We are currently transiting to deploy OBS Line #3. We will arrive there at ~11AM at the current speed.

We continue to make progress on gun maintenance and other preparations to finish strong.

Daily Comment Summaries - Plan for Tomorrow

Tue 05 Sep





Transit to OBS Line #3 and begin deploying OBS's. We should arrive at OBS 318 site at ~11AM local time.

Room inspections between 11-1 tomorrow. This will give us time to make any repairs or instructions before crew change.

Timing Diary (Marcus G Langseth, OBS_Deployment)



Start	End	Category	Code	Duration (hrs)
00:00	00:09	Transit	SB_TRT	0.150
Continued transit to OBS 124				
00:09	01:22	Field Operations	SB_FO	1.217
OBS 124 recovered				
01:22	02:12	Transit	SB_TRT	0.833
Transit to OBS 125				
02:12	03:37	Field Operations	SB_FO	1.417
OBS 125 recovery missed. Circle				
03:37	04:03	Field Operations	SB_FO	0.433
OBS 125 recovered				
04:03	05:03	Transit	SB_TRT	1.000
Transit to OBS 126				
05:03	06:33	Field Operations	SB_FO	1.500
OBS 126 recovered				
06:33	07:34	Transit	SB_TRT	1.017
Transit to OBS 127				
07:34	08:45	Field Operations	SB_FO	1.183
OBS 127 recovered				

Start	End	Category	Code	Duration (hrs)
08:45	09:45	 Transit	SB_TRT	1.000
Transit to OBS 128				
09:45	11:20	 Field Operations	SB_FO	1.583
OBS 128 recovered				
11:20	12:20	 Transit	SB_TRT	1.000
Transit to OBS 129				
12:20	14:32	 Field Operations	SB_FO	2.200
OBS 129 recovered				
14:32	15:42	 Transit	SB_TRT	1.167
Transit to OBS 130				
15:42	17:10	 Field Operations	SB_FO	1.467
OBS 130 recovered				
17:10	18:47	 Transit	SB_TRT	1.617
Transit to OBS 131. Sent several commands to OBS and not getting any responses. Moved locations and continued to send commands.				
18:47	20:35	 Nav Systems In-Sea	DT_NI	1.800
Downtime due to in sea navigation systems.OBS would not respond. Abandon attempts to recovery OBS 131 after repeated attempts and waiting.				
20:35	21:19	 Transit	SB_TRT	0.733
Transit to OBS 132				
21:19	23:18	 Field Operations	SB_FO	1.983
OBS 132 recovered				
23:18	24:00	 Transit	SB_TRT	0.700
Transit to deploy OBS's onto OBS Line #3				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

5-Sep	Hours	% Percent
Chargeable Standby	22.200	92.500
Field Operations	12.983	54.097
Transit	9.217	38.403
DownTime	1.800	7.500
Nav Systems In-Sea	1.800	7.500
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	23.883	6.220
Nav Systems External	2.050	0.534
Nav Systems In-Sea	1.800	0.469
High Pressure	0.133	0.035
Source	19.900	5.182
Mobilisation	85.717	22.322
Mob Offshore	7.383	1.923

Category	Hours	% Percent
Transit to Prospect	4.750	1.237
Deployment	3.683	0.959
Mob Ashore	67.250	17.513
Testing	2.650	0.690
Chargeable Standby	93.183	24.266
Tests	0.833	0.217
Field Operations	35.983	9.371
Transit	38.483	10.022
Weather	14.400	3.750
Planned Operations	3.483	0.907
Source Recovery	3.483	0.907
Acquisition	112.200	29.219
Production Prime	54.717	14.249
Swath Move	57.483	14.970
Deploy	57.483	14.970
Non-Chargeable StandBy	69.017	17.973
Health and Safety	29.433	7.665
Weather	39.583	10.308
Total	384.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

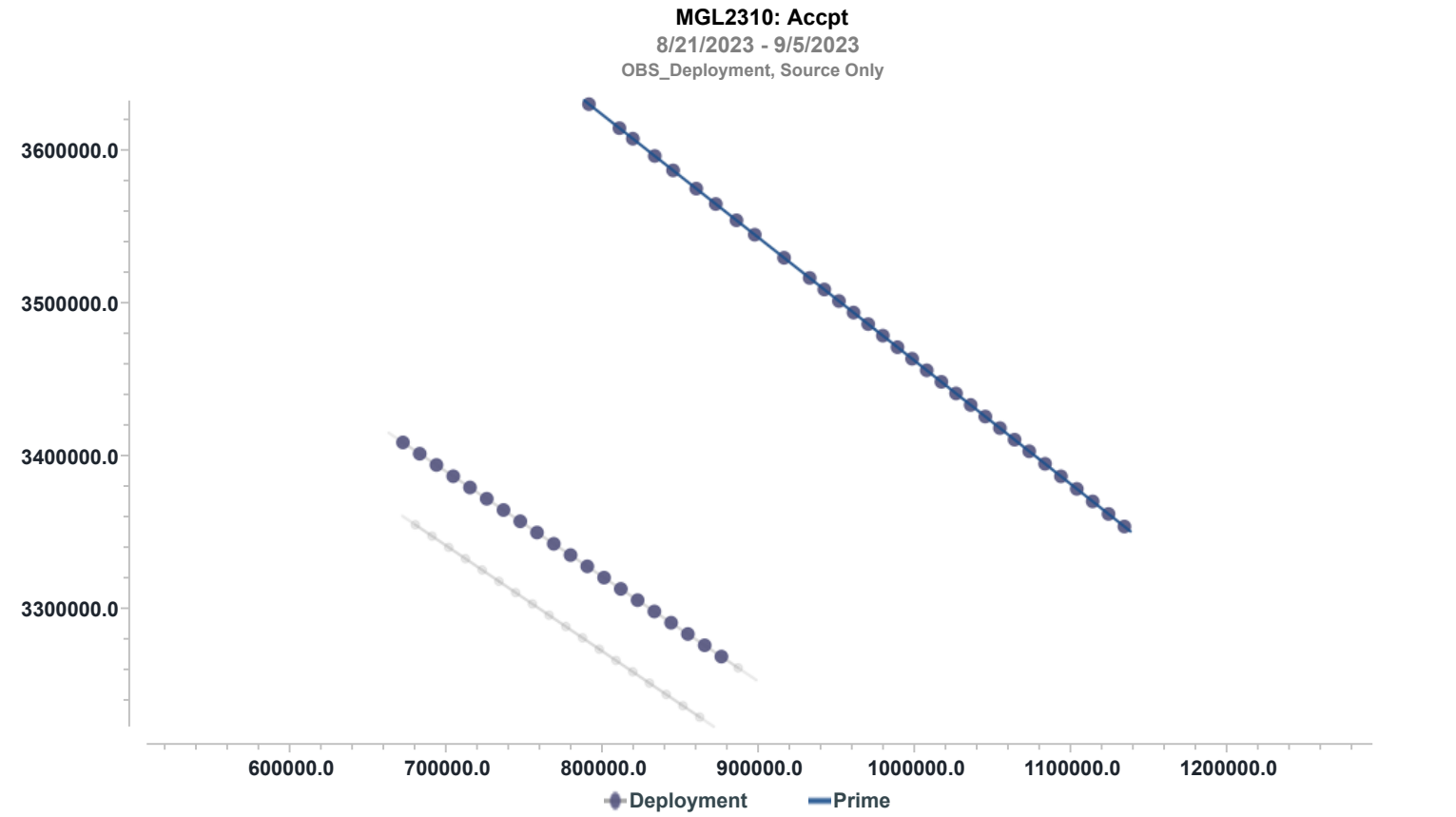
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	448.35
Combined	0.00	0.00	0.00	448.35



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 05 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 05 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

9/5/2023

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth
Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
14:55	15:55	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	4

9/6/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 06 Sep

Transited across the Bahama EZ to OBS Line #3 to begin deploying the last 18 instruments.

We have half of this line deployed at the time of this report. We will complete the OBS deployments before breakfast and immediately deploy the source to start shooting into the next line. There are nine more OBS's to deploy on this project.

The weather is terrific at the moment. We have one eye on the storm brewing out in the middle of the Atlantic. We have begun discussing scenarios but it is too early to begin to make reasonable plans. Steady production is the current plan. It will not affect our next few days of shooting.

A lot of preparations on the gundeck for a smooth finish.

We inspected all of the rooms today and compiled a list of items that need to be fixed or resolved.

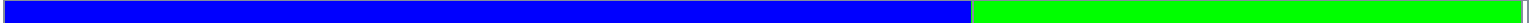
A brief Zoom meeting to discuss ops.



Daily Comment Summaries - Plan for Tomorrow

Wed 06 Sep

Finish deploying the last OBS's and begin shooting the next line.

Timing Diary (Marcus G Langseth, OBS_Deployment)



Start	End	Category	Code	Duration (hrs)
00:00	15:20	 Transit	SB_TRT	15.333
Continue transit to OBS Line #3				
15:20	24:00	 Deploy	AC_SM_De	8.667
Node operation Block:MGL2310 3 Line:OBS_03 St 318 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 317 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 316 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 315 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 314 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 313 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 312 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 311 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 310 Deployment Transit to OBS Line #3 thru the Bahama EZ				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

6-Sep	Hours	% Percent
Acquisition	8.667	36.111
Swath Move	8.667	36.111
Deploy	8.667	36.111
Chargeable Standby	15.333	63.889
Transit	15.333	63.889
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	23.883	5.854
Nav Systems External	2.050	0.502
Nav Systems In-Sea	1.800	0.441
High Pressure	0.133	0.033
Source	19.900	4.877
Mobilisation	85.717	21.009
Mob Offshore	7.383	1.810
Transit to Prospect	4.750	1.164
Deployment	3.683	0.903
Mob Ashore	67.250	16.483
Testing	2.650	0.650
Chargeable Standby	108.517	26.597
Tests	0.833	0.204
Field Operations	35.983	8.819
Transit	53.817	13.190
Weather	14.400	3.529
Planned Operations	3.483	0.854
Source Recovery	3.483	0.854
Acquisition	120.867	29.624
Production Prime	54.717	13.411
Swath Move	66.150	16.213
Deploy	66.150	16.213
Non-Chargeable StandBy	69.017	16.916
Health and Safety	29.433	7.214
Weather	39.583	9.702
Total	408.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

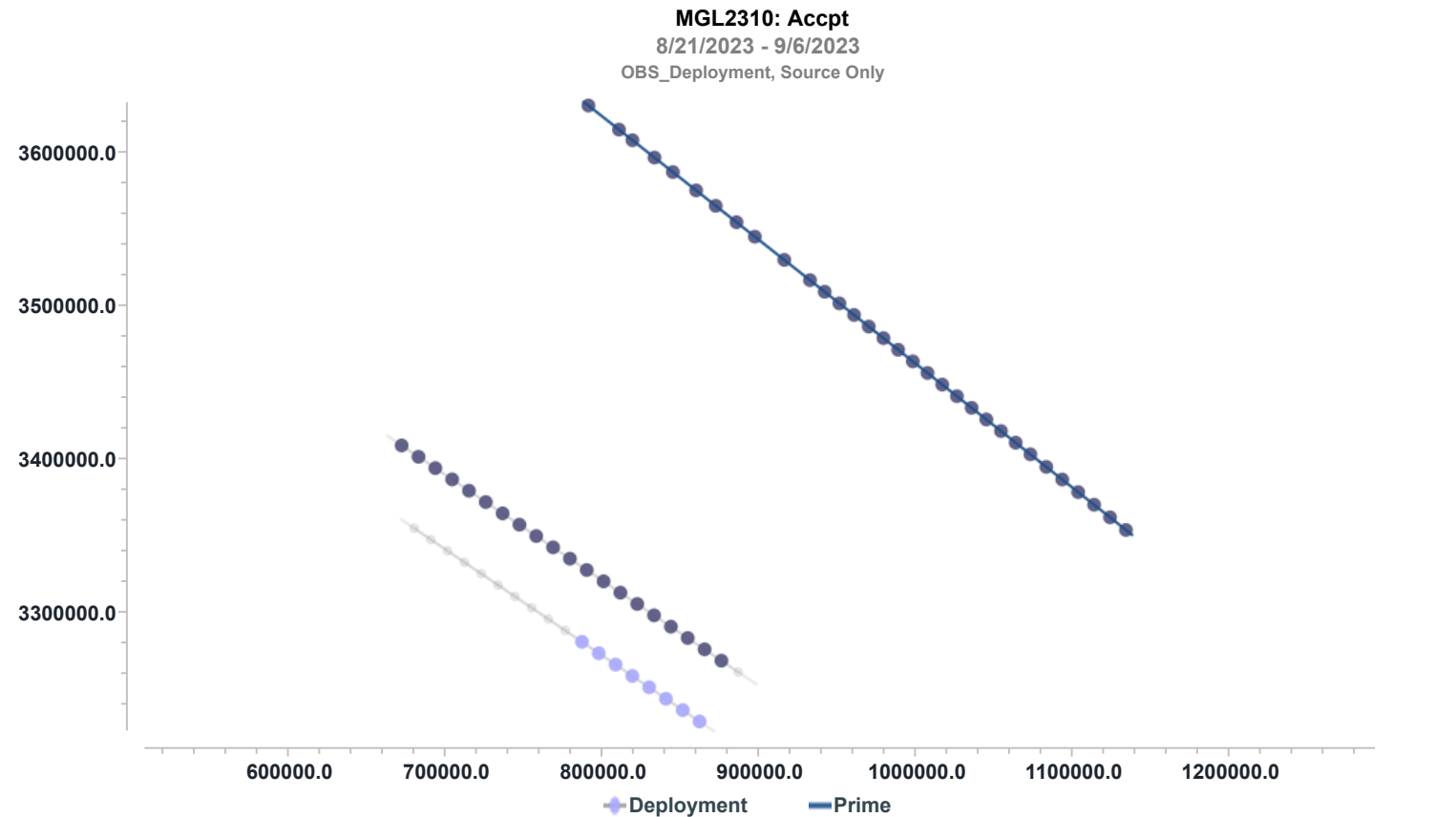
Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	448.35

Accepted km	Day	Week	Month	Project
Combined	0.00	0.00	0.00	448.35



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 06 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 06 Sep

- Technical Staff On-board the Langseth
- Todd Jensvold L-DEO OMO Chief Science Officer
 - Malcolm Moody L-DEO OMO Senior Source Mechanic
 - Sean Seekins - Contract Source Mech
 - Leon Da Silva E Souza - Contract Source Mech
 - Tawfik Mohammed Naas - Contract Source Mech/OBS
 - Riley Lopez L-DEO OMO Marine Science Technician - OBS
 - Klayton Curtis - Contract Seismic Acquisition
 - Koray Ergun - Contract Navigator
 - Aaron Martin - Contract Navigator

9/6/2023
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
14:55	15:55	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting. PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			
17:35	18:35	<div></div> Chiefs Meeting	Mtgs_Chfs
HSE - Chiefs Meeting Zoom meeting with Ops team on shore and PI. Review recent medivac and approaching storm			
Daily Total Category		Code	Count
<div></div> Toolbox Meetings		Mtgs_Tbox	4

9/7/2023

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Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Thu 07 Sep

We completed deploying OBS's onto Line #3 at 9:40 UTC or 5:40 AM local time.

We deployed the PAM cable and Maggie and made preparations to begin deploying the source sub-arrays.

After a thorough toolbox meeting we began our deployment at 6:40AM. All four gunstrings were fully deployed at 9:42. It was a very safe and deliberate process and we did not have to recover any gunstrings to make repairs or adjustments. Top job by the gun mechanics. We conducted the softstart and began acquiring live data shortly thereafter.

The sea current was pretty strong starting out, but has moderated significantly over the day. ETA to EOL is currently ~8pm local time tomorrow.

All eight GPS gun pods are working.

Gun 3-7 is disabled due to open line on the sensor. G

Daily Comment Summaries - Plan for Tomorrow

Thu 07 Sep

Complete shooting Line OBS #3 and transit to last line. OBS Line #2.

Timing Diary (Marcus G Langseth, OBS_Deployment, Source Only)

Start	End	Category	Code	Duration (hrs)
00:00	09:39	<div></div> Deploy	AC_SM_De	9.650
Node operation Block:MGL2310 3 Line:OBS_03 St 310 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 309 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 308 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 307 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 306 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 305 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 304 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 303 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 302 Deployment Node operation Block:MGL2310 3 Line:OBS_03 St 301 Deployment				
09:39	10:40	<div></div> Mob Offshore	MB_MO	1.017
Mobilising offshore, deploying outboard equipment. MAGGIE AND PAM				
10:40	11:12	<div></div> Mob Offshore	MB_MO	0.533
Deploy Gunstring #1				
11:12	11:51	<div></div> Mob Offshore	MB_MO	0.650
Deploy Gunstring #2				
11:51	12:52	<div></div> Mob Offshore	MB_MO	1.017
Deploy Gunstring #4				
12:52	13:42	<div></div> Mob Offshore	MB_MO	0.833

Start	End	Category	Code	Duration (hrs)
Deploy unstring #3				
13:42	14:14	Testing	MB_TE	0.533
Softstart and turning toward line				
14:14	14:56	Transit	SB_TRT	0.700
Transit to SOL and testing guns.				
14:56	24:00	Production Prime	AC_PP	9.067
Seq: 4 SOL Seq 4 Line:OBS_3 Block:MGL2310 FGSP:1017 FCSP:1017 Hdg:124.7° Prime MSP Seq 4 Line:OBS_3 Block:MGL2310 LGSP:1478 LCSP:1478 Midnight LSP of the day is 1478				

Timing Day By Day (Marcus G Langseth, OBS_Deployment, Source Only)

7-Sep	Hours	% Percent
Acquisition	18.717	77.986
Production Prime	9.067	37.778
Swath Move	9.650	40.208
Deploy	9.650	40.208
Chargeable Standby	0.700	2.917
Transit	0.700	2.917
Mobilisation	4.583	19.097
Mob Offshore	4.050	16.875
Testing	0.533	2.222
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	23.883	5.529
Nav Systems External	2.050	0.475
Nav Systems In-Sea	1.800	0.417
High Pressure	0.133	0.031
Source	19.900	4.606
Mobilisation	90.300	20.903
Mob Offshore	11.433	2.647
Transit to Prospect	4.750	1.100
Deployment	3.683	0.853
Mob Ashore	67.250	15.567
Testing	3.183	0.737
Chargeable Standby	109.217	25.282
Tests	0.833	0.193
Field Operations	35.983	8.329
Transit	54.517	12.620
Weather	14.400	3.333
Planned Operations	3.483	0.806
Source Recovery	3.483	0.806
Acquisition	139.583	32.311

Category	Hours	% Percent
Production Prime	63.783	14.765
Swath Move	75.800	17.546
Deploy	75.800	17.546
Non-Chargeable StandBy	69.017	15.976
Health and Safety	29.433	6.813
Weather	39.583	9.163
Total	432.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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)

OBS_Deployment, Source Only

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
4	OBS_3	124.7	1017	1478	Prime	69.30	4.118	Midnight	Part
Total						69.30			

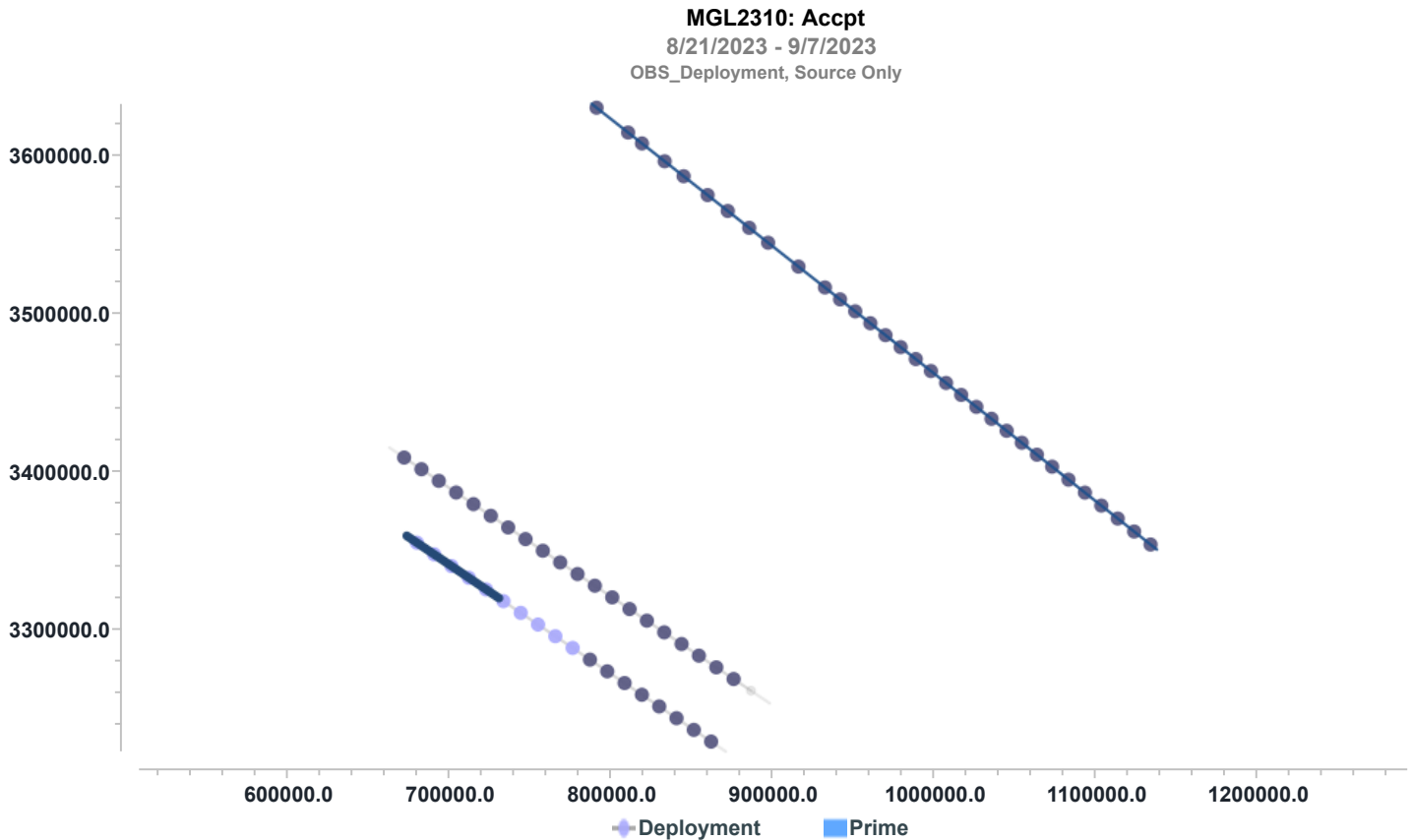
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	69.30	69.30	69.30	517.65
Combined	69.30	69.30	69.30	517.65

9/7/2023

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Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 07 Sep

Navigation:

SOURCE GPS
Gunstring #1 BOTH good
Gunstring #2 BOTH good
Gunstring #3 BOTH good
Gunstring #4 BOTH good

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

No Major Issues to Report

Towing and Handling (Source):

No Major Issues to Report

General Purpose Science:

Maggie is not passing data thru the Moxie. The unit is working. See email.

Daily Comment Summaries - Personnel Onboard

Thu 07 Sep

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator

9/7/2023

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Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer


PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
Daily Total Category		Code	Count
	Toolbox Meetings	Mtgs_Tbox	4
Toolbox meeting pre-source deployment to discuss each person's roll. We stressed the need to be slow and deliberate as we form a new team for deployment.			
Toolbox meeting to discuss OBS deployments at shiftchange.			
Toolbox meeting for Maggie and PAM			

9/8/2023

Page 1

Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 08 Sep

We completed OBS Line #3 and a connector line between Line #3 and Line #2

We are currently shooting OBS Line #2. We should finish this line at 7AM on the 10th.

Several organizational meetings.

Daily Comment Summaries - Plan for Tomorrow

Fri 08 Sep

Shoot on OBS Line #2 all day.

OBS recovery preparations.

Timing Diary (Marcus G Langseth, Source Only)

Start	End	Category	Code	Duration (hrs)
00:00	21:04	<div></div> Production Prime	AC_PP	21.067
Seq: 4 SOL Seq 4 Line:OBS_3 Block:MGL2310 FGSP:1479 FCSP:1479 Hdg:124.7° Prime EOL Seq 4 Line:OBS_3 Block:MGL2310 LGSP:2701 LCSP:2701 Complete				
21:04	21:28	<div></div> Prime Line Change	AC_PLC	0.400
Seq: 5 Line: TIE LINE1 Nominal Prime line change.				
21:28	24:00	<div></div> Production Prime	AC_PP	2.533
Seq: 5 SOL Seq 5 Line:TIE LINE1 Preplot:OBS_2 Block:MGL2310 FGSP:1016 FCSP:1016 Hdg:45.1° Prime MSP Seq 5 Line:TIE LINE1 Preplot:OBS_2 Block:MGL2310 LGSP:1169 LCSP:1169 Midnight Tie Line Between OBS #3 and OBS #2				

Timing Day By Day (Marcus G Langseth, Source Only)

8-Sep	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	0.400	1.667
Production Prime	23.600	98.333
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	23.883	5.238
Nav Systems External	2.050	0.450
Nav Systems In-Sea	1.800	0.395

Category	Hours	% Percent
High Pressure	0.133	0.029
Source	19.900	4.364
Mobilisation	90.300	19.803
Mob Offshore	11.433	2.507
Transit to Prospect	4.750	1.042
Deployment	3.683	0.808
Mob Ashore	67.250	14.748
Testing	3.183	0.698
Acquisition	163.583	35.874
Prime Line Change	0.400	0.088
Production Prime	87.383	19.163
Swath Move	75.800	16.623
Deploy	75.800	16.623
Chargeable Standby	109.217	23.951
Tests	0.833	0.183
Field Operations	35.983	7.891
Transit	54.517	11.955
Weather	14.400	3.158
Planned Operations	3.483	0.764
Source Recovery	3.483	0.764
Non-Chargeable StandBy	69.017	15.135
Health and Safety	29.433	6.455
Weather	39.583	8.681
Total	456.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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)

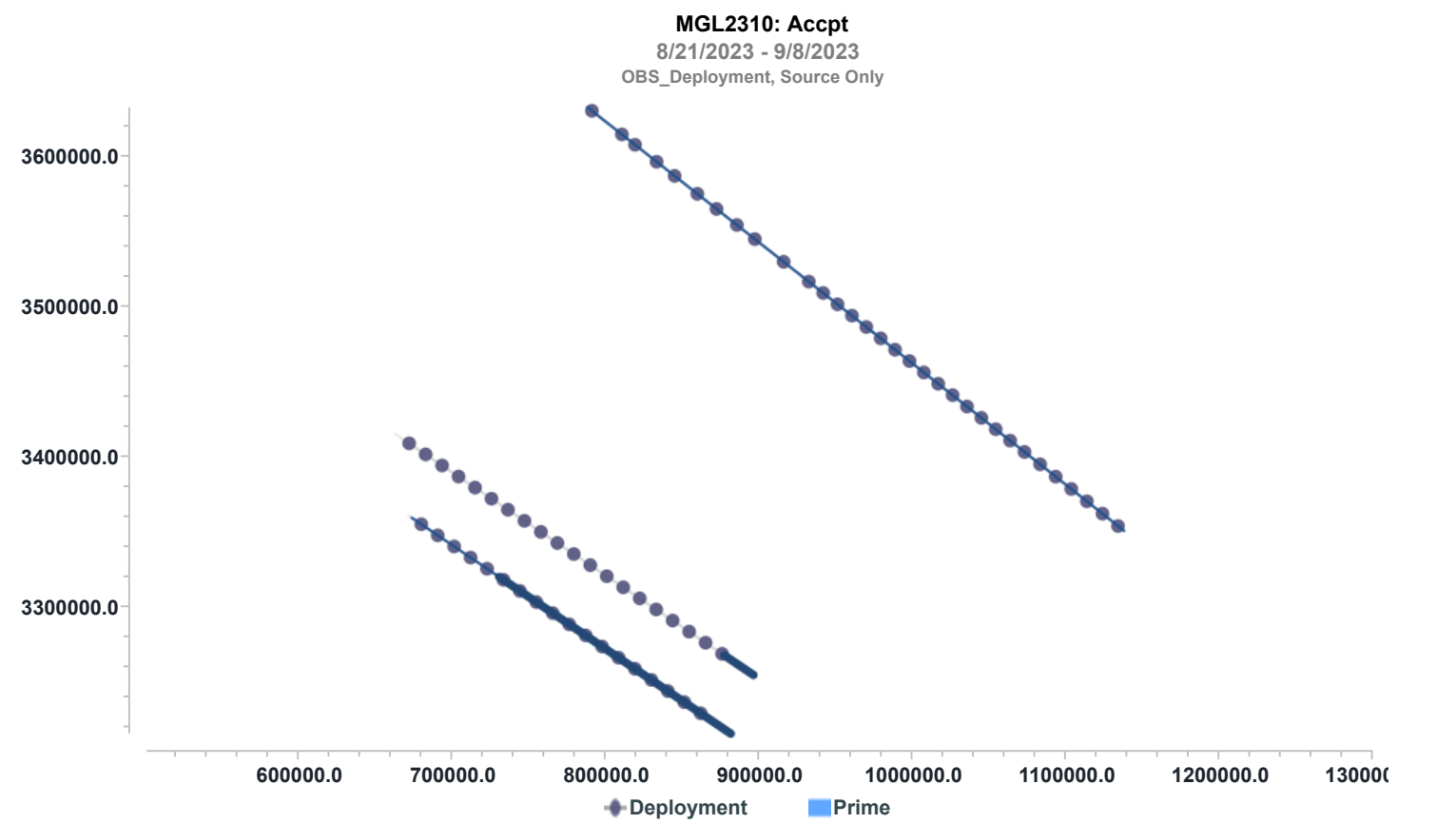
OBS_Deployment, Source Only

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
4	OBS_3	124.7	1479	2701	Prime	183.45	4.526	Complete	Complete
5	TIE LINE1	45.1	1016	1169	Prime	23.10	4.938	Midnight	Part
Total						206.55			

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	206.55	275.85	275.85	724.20
Combined	206.55	275.85	275.85	724.20



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 08 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 08 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

9/8/2023

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Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth
Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth
Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
Daily Total Category		Code	Count
	<div>Toolbox Meetings</div>	Mtgs_Tbox	4

9/9/2023

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sat 09 Sep

We shot the entire day without incident. We have been slowing down significantly as we get into the stronger sea current. It now looks like we will finish shooting ~noon tomorrow. Time will tell. Our currently SOG is hovering around 4knots. It could get considerably slower as we get close to the finish line.

The word on the street is that there will be a BBQ on the muster deck tomorrow!!

The current weather continues to cooperate. Hurricane Lee has slowed down and appears to be giving us an opportunity to complete the OBS recoveries and arrive into Charleston on time. Several caveats and disclaimers included..


Daily Comment Summaries - Plan for Tomorrow

Sat 09 Sep

We will complete the the shooting of the project tomorrow in the late morning. OBS recovery will begin immediately after the last shot point.

Timing Diary (Marcus G Langseth, Source Only)



Start	End	Category	Code	Duration (hrs)
01:58	24:00	 Production Prime	AC_PP	22.033
Seq: 6 SOL Seq 6 Line:OBS_2 Block:MGL2310 FGSP:1001 FCSP:1001 Hdg:304.5° Prime MSP Seq 6 Line:OBS_2 Block:MGL2310 LGSP:2164 LCSP:2164 Midnight				

Timing Day By Day (Marcus G Langseth, Source Only)

9-Sep	Hours	% Percent
Acquisition	22.033	91.806
Production Prime	22.033	91.806
Day's Total	22.033	91.806

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
DownTime	23.883	4.996
Nav Systems External	2.050	0.429
Nav Systems In-Sea	1.800	0.377
High Pressure	0.133	0.028
Source	19.900	4.163
Mobilisation	90.300	18.890
Mob Offshore	11.433	2.392
Transit to Prospect	4.750	0.994
Deployment	3.683	0.771

Category	Hours	% Percent
Mob Ashore	67.250	14.068
Testing	3.183	0.666
Acquisition	185.617	38.829
Prime Line Change	0.400	0.084
Production Prime	109.417	22.889
Swath Move	75.800	15.857
Deploy	75.800	15.857
Chargeable Standby	109.217	22.847
Tests	0.833	0.174
Field Operations	35.983	7.527
Transit	54.517	11.404
Weather	14.400	3.012
Planned Operations	3.483	0.729
Source Recovery	3.483	0.729
Non-Chargeable StandBy	69.017	14.438
Health and Safety	29.433	6.157
Weather	39.583	8.280
Total	478.033	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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)

OBS_Deployment, Source Only

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
5	TIE LINE1	45.1	1170	1267	Prime	14.70	4.938	Complete	Complete
6	OBS_2	304.5	1001	2164	Prime	174.60	4.275	Midnight	Part
Total						189.30			

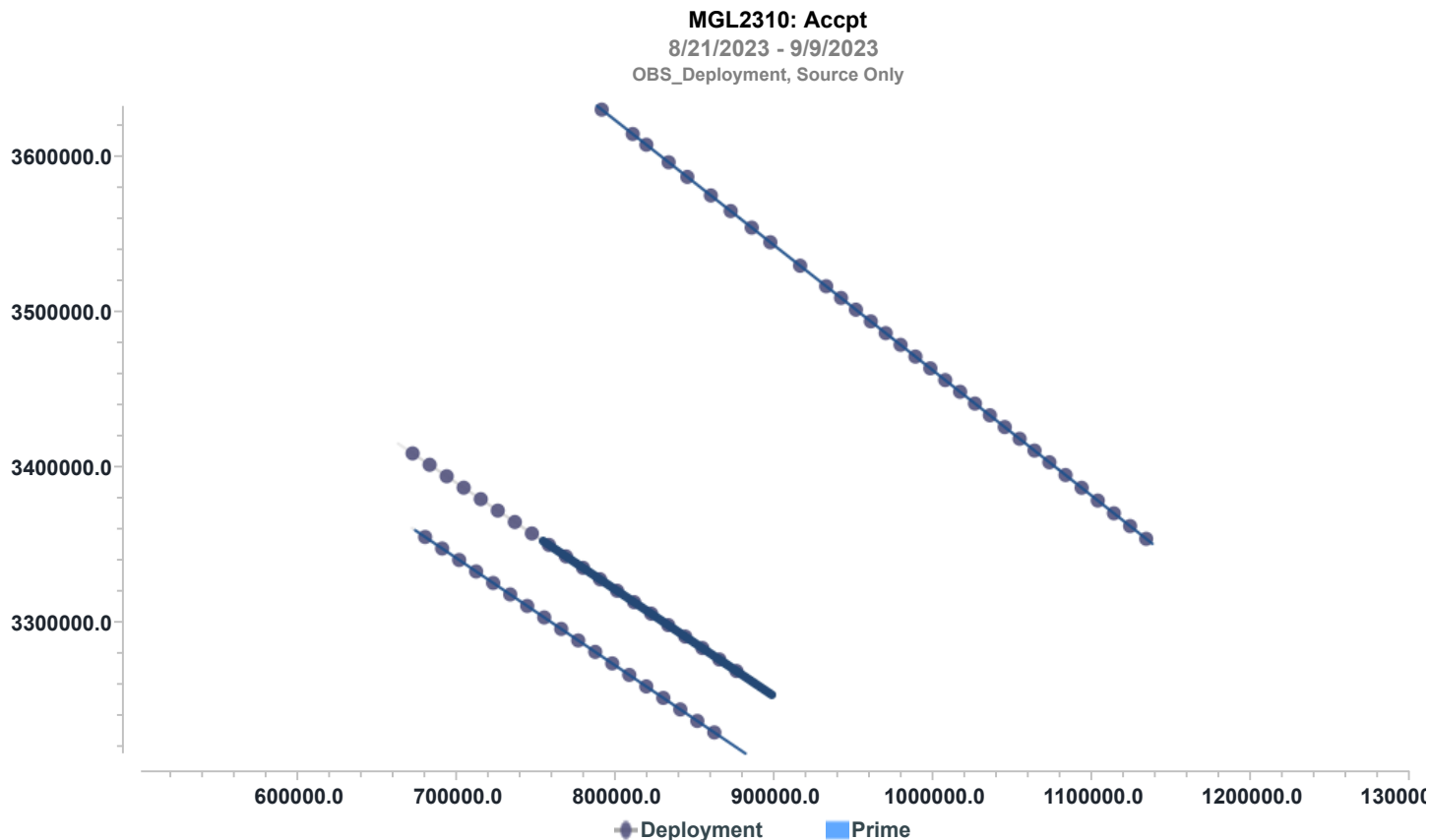
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	189.30	465.15	465.15	913.50
Combined	189.30	465.15	465.15	913.50

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Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 09 Sep

Navigation:

SOURCE GPS
Gunstring #1 BOTH good
Gunstring #2 FWD failed. AFT good
Gunstring #3 BOTH good
Gunstring #4 BOTH good

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 09 Sep

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator

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Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader
Lorena Oyosa - RPS PSO
Laura Danos - RPS PSO
Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:00	16:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category		Code	Count
<div></div> Toolbox Meetings		Mtgs_Tbox	4

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Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Sun 10 Sep

There were two circles today. One was for the port compressor stopping during a fuel filter change. The other was for an auto-firing gun. Gun 4-4

We re-acquired both deficiencies in coverage after we circled.

We completed our last shotpoint of the OBS survey at 5:23PM local.

The guns were recovered at ~9PM. We had some difficulty recovering gunstring #4.

Heading to pick up the first OBS at the time of this report.

A special thank you to Jim, June and Ireland for preparing the feast on the grills today. Everyone appreciates your hard work and the good food at today's picnic.

Daily Comment Summaries - Plan for Tomorrow

Sun 10 Sep

Recovery OBS's all day

Timing Diary (Marcus G Langseth, Source Only)



Start	End	Category	Code	Duration (hrs)
00:00	01:56	Production Prime	AC_PP	1.933
Seq: 6 SOL Seq 6 Line:OBS_2 Block:MGL2310 FGSP:2165 FCSP:2165 Hdg:304.5° Prime EOL Seq 6 Line:OBS_2 Block:MGL2310 LGSP:2268 LCSP:2268 Complete				
01:56	02:09	High Pressure	DT_HP	0.217
NTBP Seq 6 OBS_2 Block:MGL2310 FSP:2269 LSP:2279 Reshoot low pressure shotpoints after circle.				
02:09	04:10	High Pressure	DT_HP	2.017
Downtime due to onboard source pressure issues. Operator error servicing the port compressor				
04:10	07:52	Production Prime	AC_PP	3.700
Seq: 7 SOL Seq 7 Line:OBS_2 Block:MGL2310 FGSP:2259 FCSP:2259 Hdg:304.6° Prime EOL Seq 7 Line:OBS_2 Block:MGL2310 LGSP:2481 LCSP:2481 Complete EEOL dt autofire on gun 4-4				
07:52	13:24	Source	DT_SC	5.533
Autofire on Gun 4-4. Circle for repairs and reshoot.				
13:24	13:50	Source	DT_SC	0.433
Softstart				

Start	End	Category	Code	Duration (hrs)
13:50	21:23	<div></div> Production Prime	AC_PP	7.550
Seq: 8 SOL Seq 8 Line:OBS_2 Block:MGL2310 FGSP:2456 FCSP:2456 Hdg:304.6° Prime EOL Seq 8 Line:OBS_2 Block:MGL2310 LGSP:2902 LCSP:2902 Complete LSP of Survey is 2902				
21:23	21:52	<div></div> Recovery	DM_RC	0.483
Toolbox meeting traveling straight to recover.				
21:52	22:25	<div></div> Recovery	DM_RC	0.550
Recovering gunstring #3				
22:25	23:54	<div></div> Recovery	DM_RC	1.483
Recovering gunstring #4 Recovering PAM				
23:54	24:00	<div></div> Recovery	DM_RC	0.100
Turning back towards the first OBS recovery				

Timing Day By Day (Marcus G Langseth, Source Only)

10-Sep	Hours	% Percent
Acquisition	13.183	54.931
Production Prime	13.183	54.931
Demobilisation	2.617	10.903
Recovery	2.617	10.903
DownTime	8.200	34.167
High Pressure	2.233	9.306
Source	5.967	24.861
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Demobilisation	2.617	0.519
Recovery	2.617	0.519
DownTime	32.083	6.366
Nav Systems External	2.050	0.407
Nav Systems In-Sea	1.800	0.357
High Pressure	2.367	0.470
Source	25.867	5.132
Mobilisation	90.300	17.917
Mob Offshore	11.433	2.269
Transit to Prospect	4.750	0.942
Deployment	3.683	0.731
Mob Ashore	67.250	13.343
Testing	3.183	0.632
Acquisition	200.383	39.759
Prime Line Change	0.400	0.079
Production Prime	124.183	24.640
Swath Move	75.800	15.040

Category	Hours	% Percent
Deploy	75.800	15.040
Chargeable Standby	109.600	21.746
Tests	0.833	0.165
Field Operations	35.983	7.140
Transit	54.900	10.893
Weather	14.400	2.857
Planned Operations	3.483	0.691
Source Recovery	3.483	0.691
Non-Chargeable StandBy	69.017	13.694
Health and Safety	29.433	5.840
Weather	39.583	7.854
Total	504.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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)

OBS_Deployment, Source Only

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	OBS_2	304.5	2165	2268	Prime	15.60	4.282	Complete	Complete
NTBP: 2269 - 2279 (not chgd)									
7	OBS_2	304.6	2259	2481	Prime	33.45	4.860	Complete	Complete
8	OBS_2	304.6	2456	2902	Prime	67.05	4.785	Complete	Complete
Total						116.10			

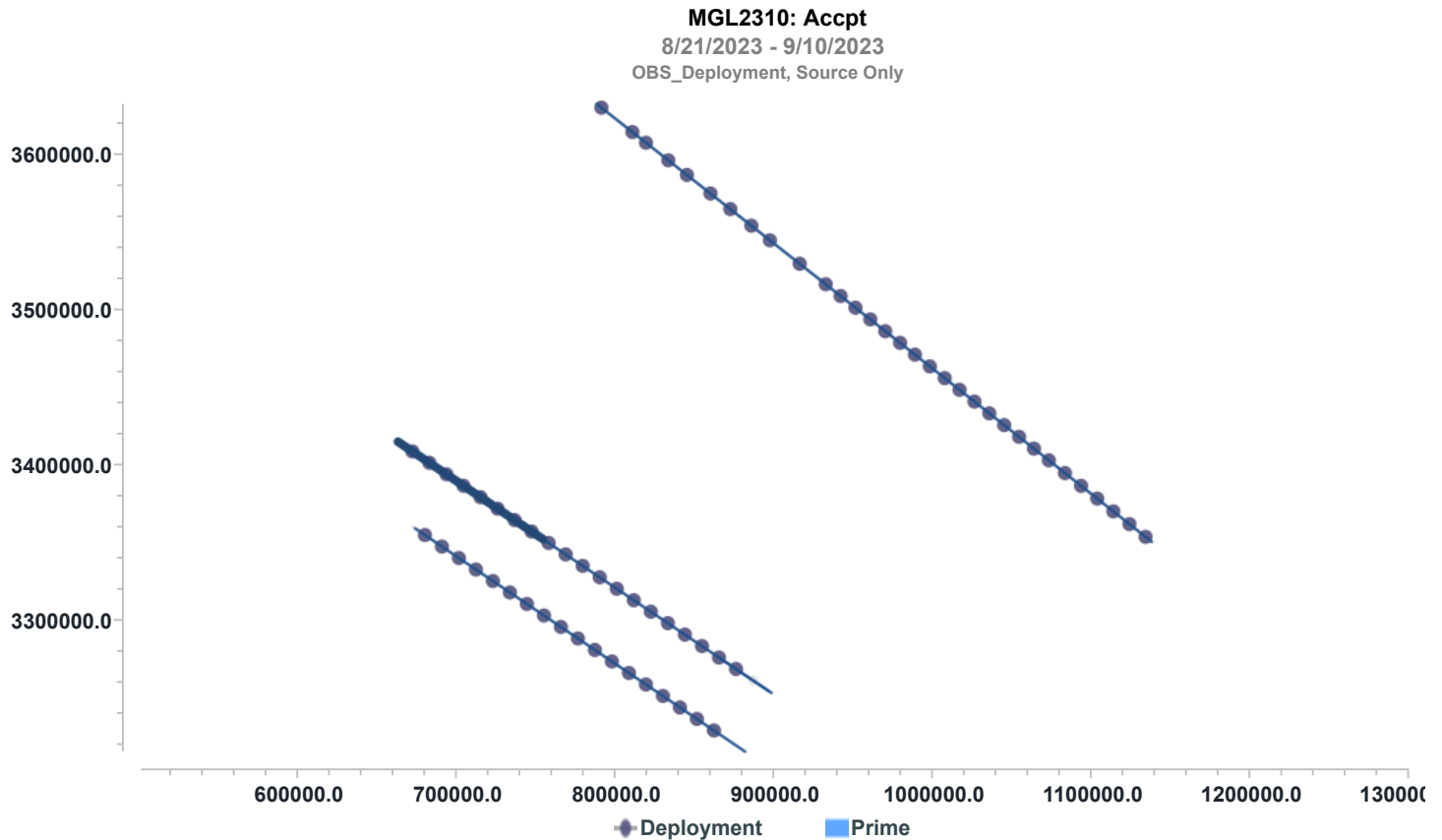
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	116.10	581.25	581.25	1029.60
Combined	116.10	581.25	581.25	1029.60

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Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 10 Sep

Navigation:

SOURCE GPS
Gunstring #1 BOTH good
Gunstring #2 FWD failed. AFT good
Gunstring #3 BOTH good
Gunstring #4 BOTH good

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 10 Sep

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Koray Ergun - Contract Navigator

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Nikko Hernandex - MATE Intern Navigator

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Nick Mathews - OBS Tech/Engineer

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Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:00	16:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	4
Toolbox for source recovery		

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Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Mon 11 Sep

We have recovered 15 out of 21 OBS's on OBS Line #2. We should complete this Line around 6AM local time.

After a short transit, we will begin recovering the last 21 instruments on OBS Line #3

We have a very good rhythm in place. The bridge crew is doing a terrific job and the OBS techs are nailing it. We are at a pace where we could conceivably be finished recovering OBS's by the afternoon of the 13th. Wednesday the 13th.

Daily Comment Summaries - Plan for Tomorrow

Mon 11 Sep

Finish recovering OBS instruments from OBS #2 around breakfast.

Begin recovery of OBS's on OBS Line #3. Recover all day.

Timing Diary (Marcus G Langseth, Source Only)

Start	End	Category	Code	Duration (hrs)
00:00	03:00	Recovery	DM_RC	3.000
Finish recovering gunstring #1 and Maggie. Transit to recover OBS 201				
03:00	03:34	Recovery	DM_RC	0.567
Recover OBS 201				
03:34	04:40	Recovery	DM_RC	1.100
Transit to OBS 202				
04:40	05:51	Recovery	DM_RC	1.183
Recover OBS 202				
05:51	06:30	Recovery	DM_RC	0.650
Transit to OBS 203				
06:30	07:18	Recovery	DM_RC	0.800
Recover OBS 203				
07:18	08:04	Recovery	DM_RC	0.767
Transit to OBS 204				
08:04	08:38	Recovery	DM_RC	0.567
Recover OBS 204				
08:38	09:36	Recovery	DM_RC	0.967
Transit to OBS 205				
09:36	10:09	Recovery	DM_RC	0.550
Recover OBS 205				

Start	End	Category	Code	Duration (hrs)
10:09	11:12	 Recovery	DM_RC	1.050
Transit to OBS 206				
11:12	11:32	 Recovery	DM_RC	0.333
Recover OBS 206				
11:32	12:21	 Recovery	DM_RC	0.817
Transit to OBS 207				
12:21	12:46	 Recovery	DM_RC	0.417
Recover OBS 207				
12:46	13:37	 Recovery	DM_RC	0.850
Transit to OBS 208				
13:37	14:06	 Recovery	DM_RC	0.483
Recover OBS 208				
14:06	14:51	 Recovery	DM_RC	0.750
Transit to OBS 209				
14:51	15:36	 Recovery	DM_RC	0.750
Recover OBS 209				
15:36	16:27	 Recovery	DM_RC	0.850
Transit to OBS 210				
16:27	17:12	 Recovery	DM_RC	0.750
Recover OBS 210				
17:12	18:10	 Recovery	DM_RC	0.967
Transit to OBS 211				
18:10	18:28	 Recovery	DM_RC	0.300
Recover OBS 211				
18:28	19:09	 Recovery	DM_RC	0.683
Transit to OBS 212				
19:09	19:39	 Recovery	DM_RC	0.500
Recover OBS 212				
19:39	20:34	 Recovery	DM_RC	0.917
Transit to OBS 213				
20:34	21:08	 Recovery	DM_RC	0.567
Recover OBS 213				
21:08	21:58	 Recovery	DM_RC	0.833
Transit to OBS 214				
21:58	22:34	 Recovery	DM_RC	0.600
Recover OBS 214				
22:34	23:24	 Recovery	DM_RC	0.833
Recover OBS 215				
23:24	23:57	 Recovery	DM_RC	0.550

Start	End	Category	Code	Duration (hrs)
Recover OBS 215				
23:57	24:00	<div></div> Recovery	DM_RC	0.050
Transit to OBS 216				

Timing Day By Day (Marcus G Langseth, Source Only)

11-Sep	Hours	% Percent
Demobilisation	24.000	100.000
Recovery	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Demobilisation	26.617	5.041
Recovery	26.617	5.041
DownTime	32.083	6.076
Nav Systems External	2.050	0.388
Nav Systems In-Sea	1.800	0.341
High Pressure	2.367	0.448
Source	25.867	4.899
Mobilisation	90.300	17.102
Mob Offshore	11.433	2.165
Transit to Prospect	4.750	0.900
Deployment	3.683	0.698
Mob Ashore	67.250	12.737
Testing	3.183	0.603
Acquisition	200.383	37.951
Prime Line Change	0.400	0.076
Production Prime	124.183	23.520
Swath Move	75.800	14.356
Deploy	75.800	14.356
Chargeable Standby	109.600	20.758
Tests	0.833	0.158
Field Operations	35.983	6.815
Transit	54.900	10.398
Weather	14.400	2.727
Planned Operations	3.483	0.660
Source Recovery	3.483	0.660
Non-Chargeable StandBy	69.017	13.071
Health and Safety	29.433	5.574
Weather	39.583	7.497
Total	528.000	

Basic Project Details

Source Only
General Details

Source Only					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

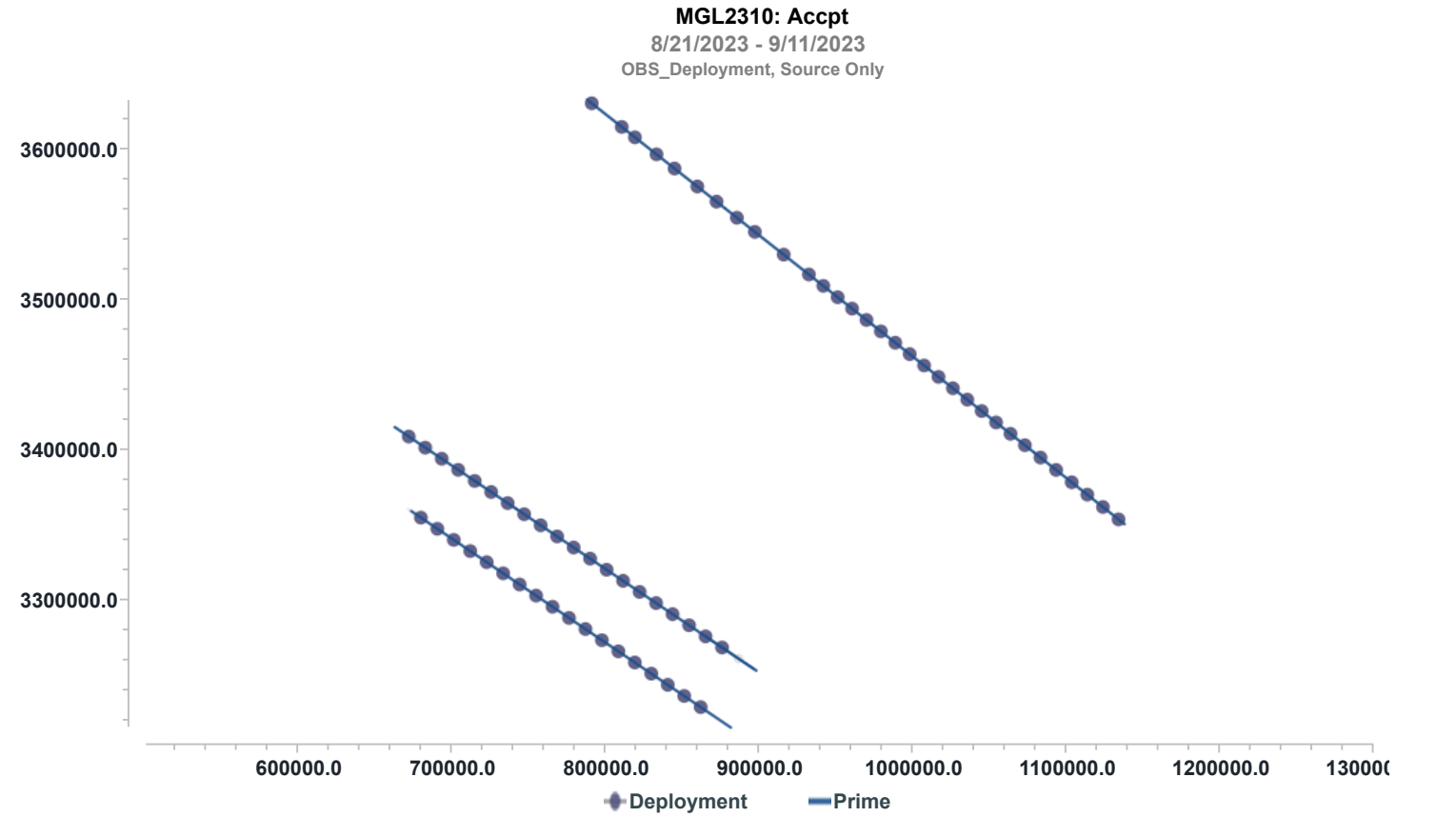
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	581.25	1029.60
Combined	0.00	0.00	581.25	1029.60



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 11 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
No Major Issues to Report

Towing and Handling (Source):

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No Major Issues to Report

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Mon 11 Sep

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souuza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
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Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Tue 12 Sep

We completed OBS Line #2 and transited to OBS Line #3. We had half of OBS Line #3 finished at the new day.

We have three OBS instruments left to recover this morning and will be finished before 11AM.

The swell has picked up significantly.

The weekly tech meeting was held via zoom.

Daily Comment Summaries - Plan for Tomorrow

Tue 12 Sep

Finish recovering all OBS's and begin transit to Charleston, SC

Timing Diary (Marcus G Langseth, OBS_Deployment)



Start	End	Category	Code	Duration (hrs)
00:00	00:56	Recovery	DM_RC	0.933
Transit to OBS 216				
00:56	01:27	Recovery	DM_RC	0.517
Recover OBS 216				
01:27	02:54	Recovery	DM_RC	1.450
Transit to 217				
02:54	03:10	Recovery	DM_RC	0.267
Recover OBS 217				
03:10	03:59	Recovery	DM_RC	0.817
Transit to OBS 218				
03:59	04:38	Recovery	DM_RC	0.650
Recover OBS 218				
04:38	05:31	Recovery	DM_RC	0.883
Transit to OBS 219				
05:31	06:31	Recovery	DM_RC	1.000
Recover OBS 219				
06:31	07:05	Recovery	DM_RC	0.567
Transit to OBS 220				
07:05	07:27	Recovery	DM_RC	0.367
Recover OBS 220				

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Start	End	Category	Code	Duration (hrs)
07:27	08:28	 Recovery	DM_RC	1.017
Transit to OBS 221				
08:28	09:10	 Recovery	DM_RC	0.700
Recover OBS 221				
OBS LINE#2 Complete				
09:10	11:11	 Recovery	DM_RC	2.017
Transit to OBS Line #3				
11:11	11:38	 Recovery	DM_RC	0.450
Transit to OBS 318				
11:38	12:12	 Recovery	DM_RC	0.567
Recover OBS 318				
12:12	13:04	 Recovery	DM_RC	0.867
Transit to OBS 317				
13:04	13:42	 Recovery	DM_RC	0.633
Recover OBS 317				
13:42	14:44	 Recovery	DM_RC	1.033
Transit to OBS 316				
14:44	15:21	 Recovery	DM_RC	0.617
Recover OBS 316				
15:21	16:29	 Recovery	DM_RC	1.133
Transit to OBS 315				
16:29	17:01	 Recovery	DM_RC	0.533
Recover OBS 315				
17:01	17:55	 Recovery	DM_RC	0.900
Transit to OBS 314				
17:55	18:27	 Recovery	DM_RC	0.533
Recover OBS 314				
18:27	19:30	 Recovery	DM_RC	1.050
Transit to OBS 313				
19:30	20:19	 Recovery	DM_RC	0.817
Recover OBS 313				
20:19	21:15	 Recovery	DM_RC	0.933
Transit to OBS 312				
21:15	21:55	 Recovery	DM_RC	0.667
Recover OBS 312				
21:55	22:57	 Recovery	DM_RC	1.033
Transit to OBS 311				
22:57	23:30	 Recovery	DM_RC	0.550
Recover OBS 311				

Start	End	Category	Code	Duration (hrs)
23:30	24:00	<div></div> Recovery	DM_RC	0.500
Transti to OBS 310				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

12-Sep	Hours	% Percent
Demobilisation	24.000	100.000
Recovery	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Demobilisation	50.617	9.170
Recovery	50.617	9.170
DownTime	32.083	5.812
Nav Systems External	2.050	0.371
Nav Systems In-Sea	1.800	0.326
High Pressure	2.367	0.429
Source	25.867	4.686
Mobilisation	90.300	16.359
Mob Offshore	11.433	2.071
Transit to Prospect	4.750	0.861
Deployment	3.683	0.667
Mob Ashore	67.250	12.183
Testing	3.183	0.577
Acquisition	200.383	36.301
Prime Line Change	0.400	0.072
Production Prime	124.183	22.497
Swath Move	75.800	13.732
Deploy	75.800	13.732
Chargeable Standby	109.600	19.855
Tests	0.833	0.151
Field Operations	35.983	6.519
Transit	54.900	9.946
Weather	14.400	2.609
Planned Operations	3.483	0.631
Source Recovery	3.483	0.631
Non-Chargeable StandBy	69.017	12.503
Health and Safety	29.433	5.332
Weather	39.583	7.171
Total	552.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 m

Source Only					
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

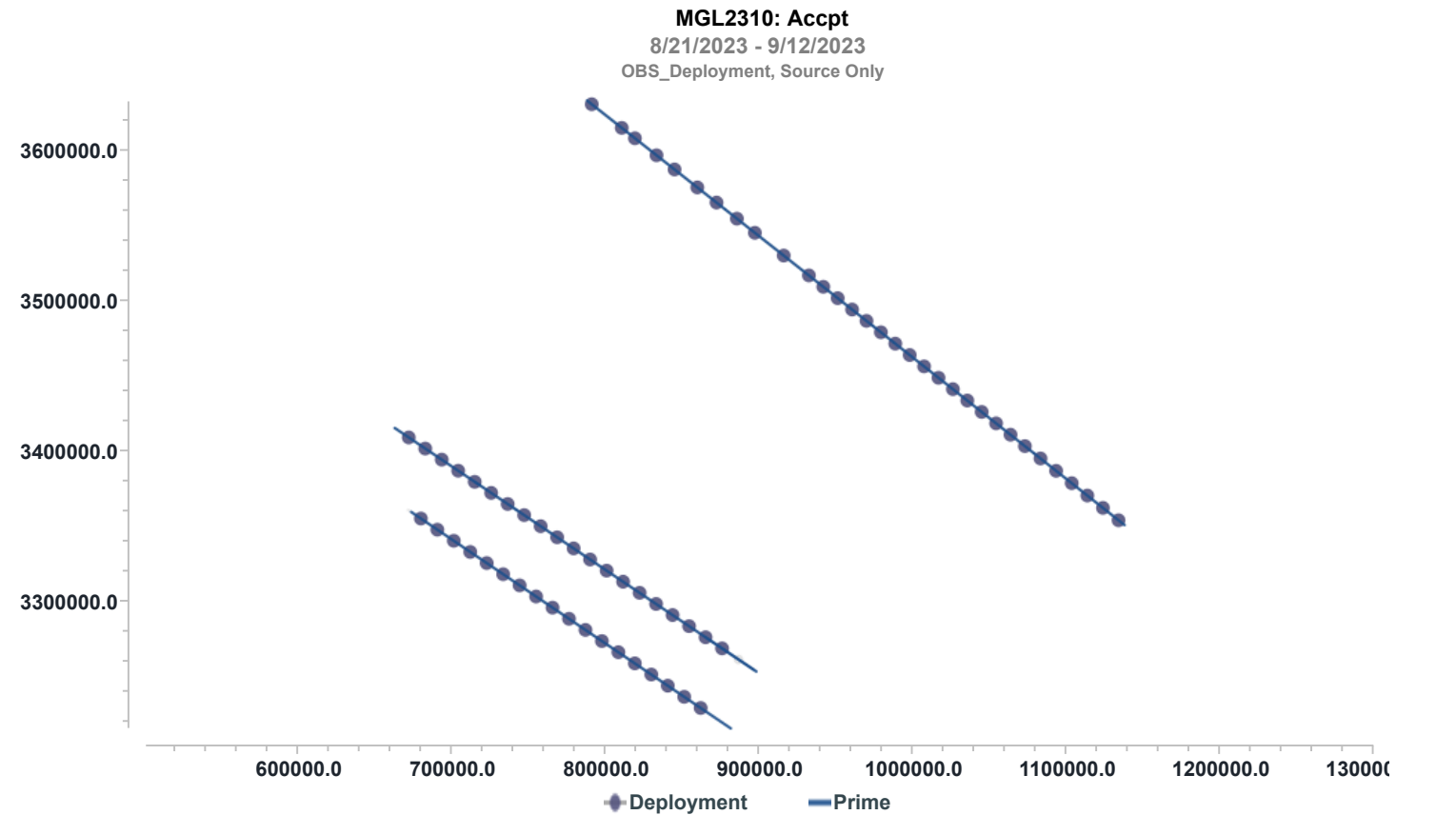
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	581.25	1029.60
Combined	0.00	0.00	581.25	1029.60



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 12 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
No Major Issues to Report

Towing and Handling (Source):
Opened #3 bell housing on the source umbilical. Will change this out in port

9/12/2023

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General Purpose Science:

No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Tue 12 Sep

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
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Claudia Carrero - RPS PSO
Ana Tirado - RPS PSO

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfik Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:05	16:05	 Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
 Toolbox Meetings	Mtgs_Tbox	3
Toolbox to pick up OBS in rough swell		
Toolbox to open umbilical bell house		

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Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Wed 13 Sep

We completed the last OBS recovery at 14:44 UTC precisely.

Harm and the entire science party did a terrific job. Everyone pitched in and helped wherever possible. There was a lot of weather and some rough seas this hitch, but everyone persevered! I tip my hat to the entire crew. Well done.

We are currently transiting into Charleston, SC. We will take the pilot around ~630AM, anticipate alongside ~8:30.

There will be a lot of crew departing tomorrow and Friday. Details in separate email.

We are hydro-testing the #3 umbilical and will swap the spare umbilical in and the old one out tomorrow.

PSO's and OBS Techs departing tomorrow.









Daily Comment Summaries - Plan for Tomorrow

Wed 13 Sep

Crew change. Port call.

Swap #3 umbilical

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	00:28	 Recovery	DM_RC	0.467
Transit to OBS 310				
00:28	01:08	 Recovery	DM_RC	0.667
Recover OBS 310				
01:08	01:59	 Recovery	DM_RC	0.850
Transit to OBS 309				
01:59	02:31	 Recovery	DM_RC	0.533
Recover OBS 309				
02:31	03:21	 Recovery	DM_RC	0.833
Transit to OBS 308				
03:21	04:07	 Recovery	DM_RC	0.767
Recover OBS 308				
04:07	05:07	 Recovery	DM_RC	1.000
Transit to OBS 307				
05:07	05:40	 Recovery	DM_RC	0.550

Start	End	Category	Code	Duration (hrs)
Recover OBS 307				
05:40	06:32	<div></div> Recovery	DM_RC	0.867
Transit to OBS 306				
06:32	07:00	<div></div> Recovery	DM_RC	0.467
Recover OBS 306				
07:00	07:50	<div></div> Recovery	DM_RC	0.833
Transit to OBS 305				
07:50	08:22	<div></div> Recovery	DM_RC	0.533
Recover OBS 305				
08:22	09:03	<div></div> Recovery	DM_RC	0.683
Transit to OBS 304				
09:03	09:58	<div></div> Recovery	DM_RC	0.917
Recover OBS 304				
09:58	10:51	<div></div> Recovery	DM_RC	0.883
Transit to OBS 303				
10:51	11:26	<div></div> Recovery	DM_RC	0.583
Recover OBS 303				
11:26	12:47	<div></div> Recovery	DM_RC	1.350
Transit to OBS 302				
12:47	13:01	<div></div> Recovery	DM_RC	0.233
Recover OBS 302				
13:01	14:16	<div></div> Recovery	DM_RC	1.250
Transit to OBS 301				
14:16	14:44	<div></div> Recovery	DM_RC	0.467
Recover OBS 301				
The LAST OBS was recovered at 14:44				
14:44	24:00	<div></div> Transit From Prospect	DM_TF	9.267
Transit to Charleston for crew change and demob.				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

13-Sep	Hours	% Percent
Demobilisation	24.000	100.000
Recovery	14.733	61.389
Transit From Prospect	9.267	38.611
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Demobilisation	74.617	12.954
Recovery	65.350	11.345
Transit From Prospect	9.267	1.609

Category	Hours	% Percent
DownTime	32.083	5.570
Nav Systems External	2.050	0.356
Nav Systems In-Sea	1.800	0.313
High Pressure	2.367	0.411
Source	25.867	4.491
Mobilisation	90.300	15.677
Mob Offshore	11.433	1.985
Transit to Prospect	4.750	0.825
Deployment	3.683	0.639
Mob Ashore	67.250	11.675
Testing	3.183	0.553
Acquisition	200.383	34.789
Prime Line Change	0.400	0.069
Production Prime	124.183	21.560
Swath Move	75.800	13.160
Deploy	75.800	13.160
Chargeable Standby	109.600	19.028
Tests	0.833	0.145
Field Operations	35.983	6.247
Transit	54.900	9.531
Weather	14.400	2.500
Planned Operations	3.483	0.605
Source Recovery	3.483	0.605
Non-Chargeable StandBy	69.017	11.982
Health and Safety	29.433	5.110
Weather	39.583	6.872
Total	576.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

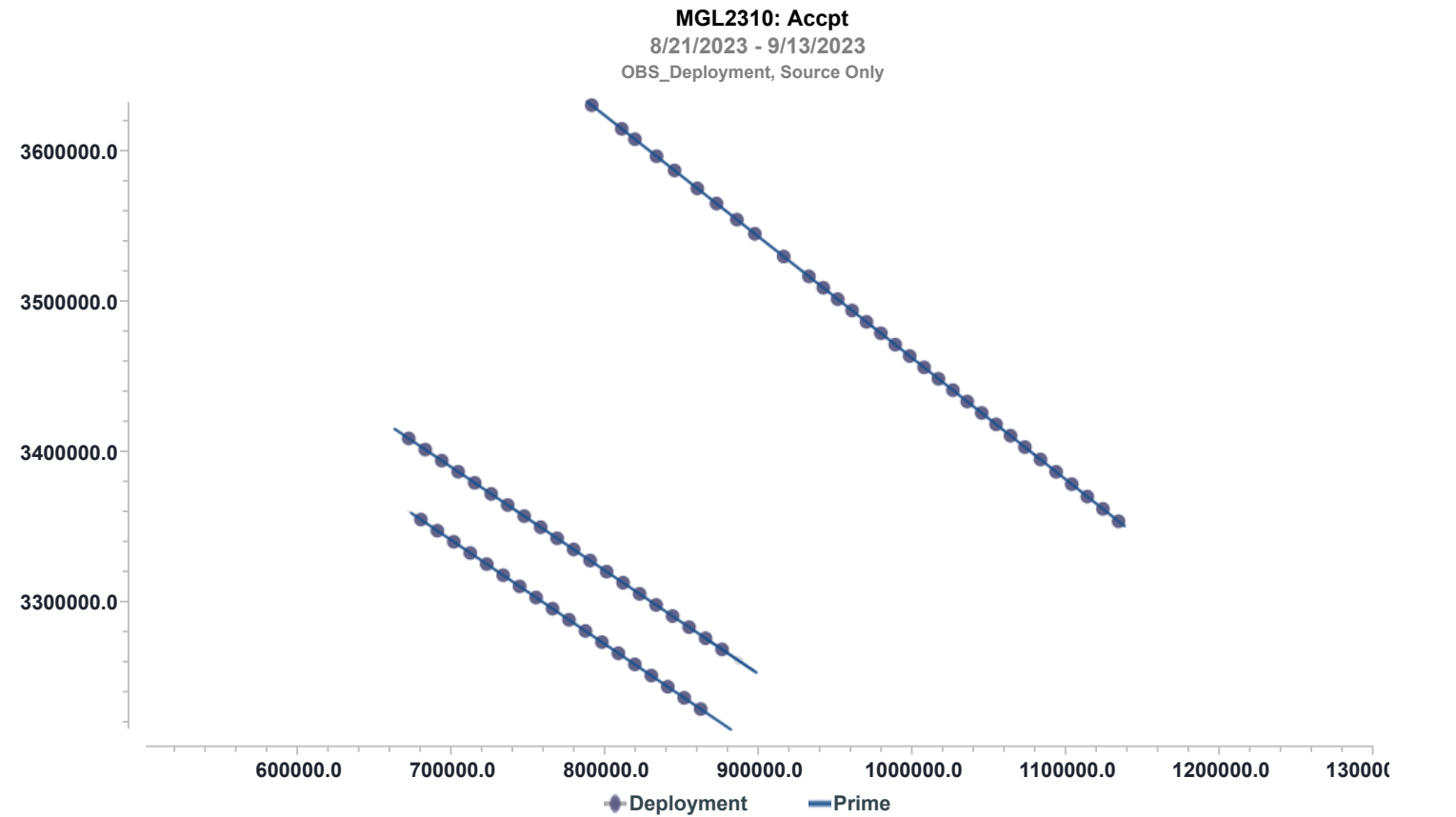
Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	581.25	1029.60

Accepted km	Day	Week	Month	Project
Combined	0.00	0.00	581.25	1029.60



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 13 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
No Major Issues to Report

Towing and Handling (Source):
Hydrotest #3

General Purpose Science:
No Major issues to Report.

Daily Comment Summaries - Personnel Onboard

Wed 13 Sep

Technical Staff On-board the Langseth
Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator

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Nikko Hernandex - MATE Intern Navigator

OBSIC Team On-board the Langseth

Alan Gardner - OBS Team Leader
Daniel Kot - OBS Tech/Engineer
Nick Mathews - OBS Tech/Engineer

PSO Staff On-board the Langseth

Cassandra Frey - RPS PSO Team Leader

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist
Savannah Evans - Scientist
Elika Zilis - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:00	16:00	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	5
Toolbox to discuss hydro-testing the umbilical.		
Toolbox to discuss changing umbilical		
Toolbox to discuss large swell OBS recoveries		

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Client: Lamont-Doherty Earth Observatory
Job No:
Block: MGL2310
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2310
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Todd Jensvold
Client Reps: Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries

Thu 14 Sep

Plan for Tomorrow

Daily Summary

We arrived into Charleston, SC at the pier ~ 8:30 AM

The PSO's all departed to vessel. They took care of all of their end of trip processes.

The OBS techs left the vessel. Will finish offloading gear in WHOI

We received NOAA shipment to fix PC02 machine.

Two from the science party departed the ship.

We finished hydrotest on the #3 umbilical and moved it to streamer reel #1.

Positioned the new umbilical to be loaded onto the reel tomorrow.

We completed some of the room inspections.

Crew change clean up.

We will have a tour group from the College of Charleston.

Daily Comments On Status of Equipment

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
No Major Issues to Report

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

General Purpose Science:
No Major issues to Report.

Personnel Onboard

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition

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Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist

Daily Comment Summaries - Plan for Tomorrow

Thu 14 Sep

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	10:00	Transit From Prospect	DM_TF	10.000
Demobilising, In Transit from prospect for demobilisation ashore.				
Pilot onboard				
10:00	12:00	Transit From Prospect	DM_TF	2.000
Transit with pilot to pier. Alongside at ~8am local.				
12:00	24:00	Demob Ashore	DM_DA	12.000
Crew change, port call.				

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

14-Sep	Hours	% Percent
Demobilisation	24.000	100.000
Demob Ashore	12.000	50.000
Transit From Prospect	12.000	50.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, OBS_Deployment, Source Only)

Category	Hours	% Percent
Demobilisation	98.617	16.436
Demob Ashore	12.000	2.000
Recovery	65.350	10.892
Transit From Prospect	21.267	3.544
DownTime	32.083	5.347
Nav Systems External	2.050	0.342
Nav Systems In-Sea	1.800	0.300
High Pressure	2.367	0.394
Source	25.867	4.311
Mobilisation	90.300	15.050
Mob Offshore	11.433	1.906

Category	Hours	% Percent
Transit to Prospect	4.750	0.792
Deployment	3.683	0.614
Mob Ashore	67.250	11.208
Testing	3.183	0.531
Acquisition	200.383	33.397
Prime Line Change	0.400	0.067
Production Prime	124.183	20.697
Swath Move	75.800	12.633
Deploy	75.800	12.633
Chargeable Standby	109.600	18.267
Tests	0.833	0.139
Field Operations	35.983	5.997
Transit	54.900	9.150
Weather	14.400	2.400
Planned Operations	3.483	0.581
Source Recovery	3.483	0.581
Non-Chargeable StandBy	69.017	11.503
Health and Safety	29.433	4.906
Weather	39.583	6.597
Total	600.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

OBS_Deployment, Source Only

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

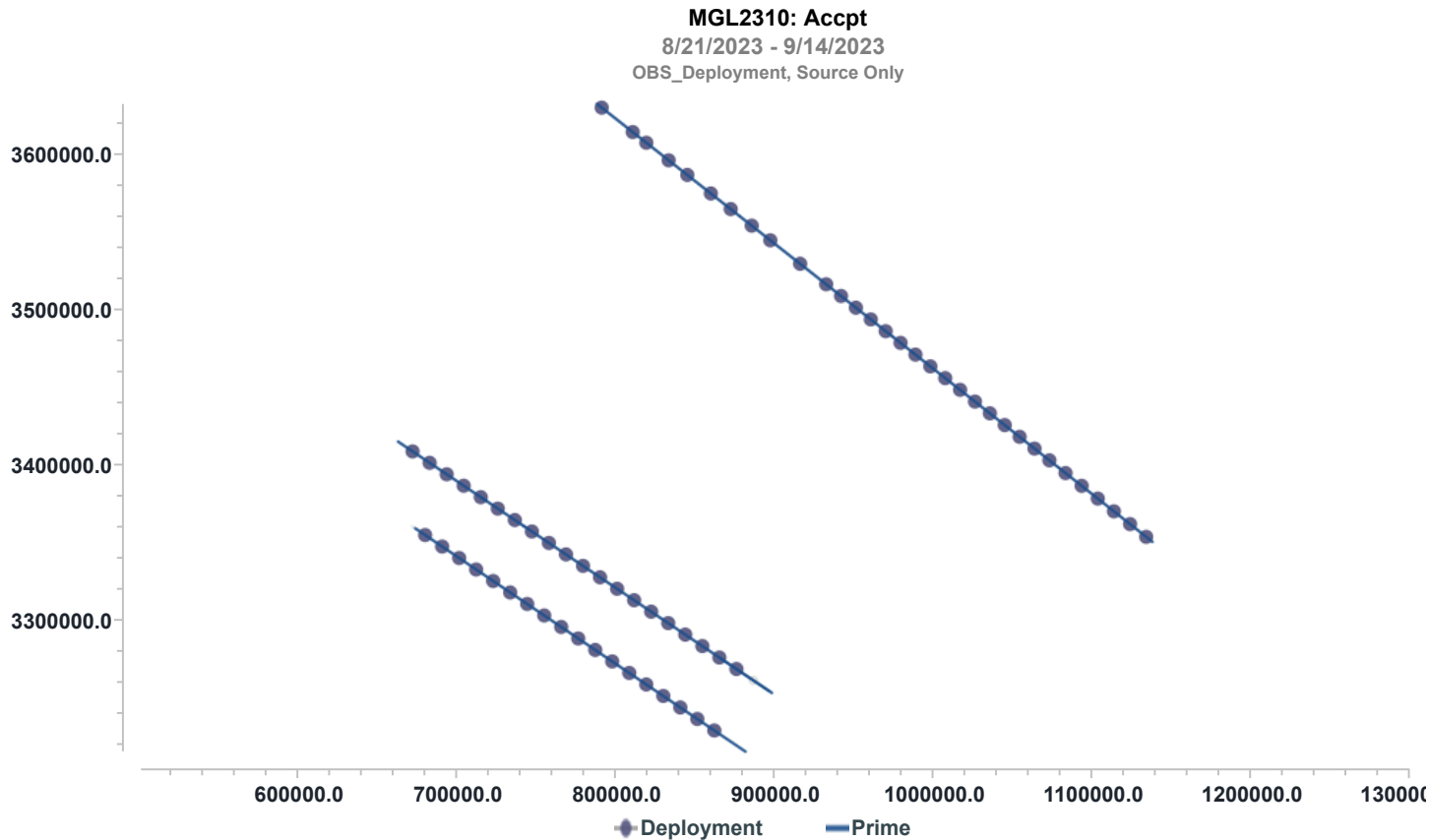
Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	581.25	1029.60
Combined	0.00	0.00	581.25	1029.60

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Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 14 Sep

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (OBS):

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 14 Sep

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Leon Da Silva E Souza - Contract Source Mech
Tawfik Mohammed Naas - Contract Source Mech/OBS
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Klayton Curtis - Contract Seismic Acquisition
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

Science Party On-board the Langseth

Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
14:55	15:55	<div></div> Daily HSE Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting.			
PI, CSO, Captain, OBSIC, LEAD PSO. Discuss daily issues.			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	4

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Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:		Job No:	MGL2310
Block:	MGL2310	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Todd Jensvold
Job No:		Client Reps:	Harm Van Avendonk / Nathan Bangs / Anne Becel

Daily Comment Summaries - Daily Summary

Fri 15 Sep

We gave a tour to the a group from the College of Charleston today. Steve Jaume brought ten students along that were a terrific look at the future scientists coming down the pike!

We worked on a lot of misc port call items.

The gravity tie was completed today. the land tie was at the Citadel.

This is the last daily log for MGL2310.


Daily Comment Summaries - Plan for Tomorrow

Fri 15 Sep

The Science Party will depart the vessel and head to the airport tomorrow. A job well done!

Timing Diary (Marcus G Langseth, OBS_Deployment)



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

Timing Day By Day (Marcus G Langseth, OBS_Deployment)

15-Sep	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, OBS_Deployment, Source Only)

Category	Hours	% Percent
Demobilisation	122.617	19.650
Demob Ashore	36.000	5.769
Recovery	65.350	10.473
Transit From Prospect	21.267	3.408
DownTime	32.083	5.142
Nav Systems External	2.050	0.329
Nav Systems In-Sea	1.800	0.288
High Pressure	2.367	0.379
Source	25.867	4.145
Mobilisation	90.300	14.471
Mob Offshore	11.433	1.832
Transit to Prospect	4.750	0.761
Deployment	3.683	0.590

Category	Hours	% Percent
Mob Ashore	67.250	10.777
Testing	3.183	0.510
Acquisition	200.383	32.113
Prime Line Change	0.400	0.064
Production Prime	124.183	19.901
Swath Move	75.800	12.147
Deploy	75.800	12.147
Chargeable Standby	109.600	17.564
Tests	0.833	0.134
Field Operations	35.983	5.767
Transit	54.900	8.798
Weather	14.400	2.308
Planned Operations	3.483	0.558
Source Recovery	3.483	0.558
Non-Chargeable StandBy	69.017	11.060
Health and Safety	29.433	4.717
Weather	39.583	6.343
Total	624.000	

Basic Project Details

Source Only					
General Details					
Record length:	0 ms	Sample rate:	0 ms	Shotpoint interval:	150 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

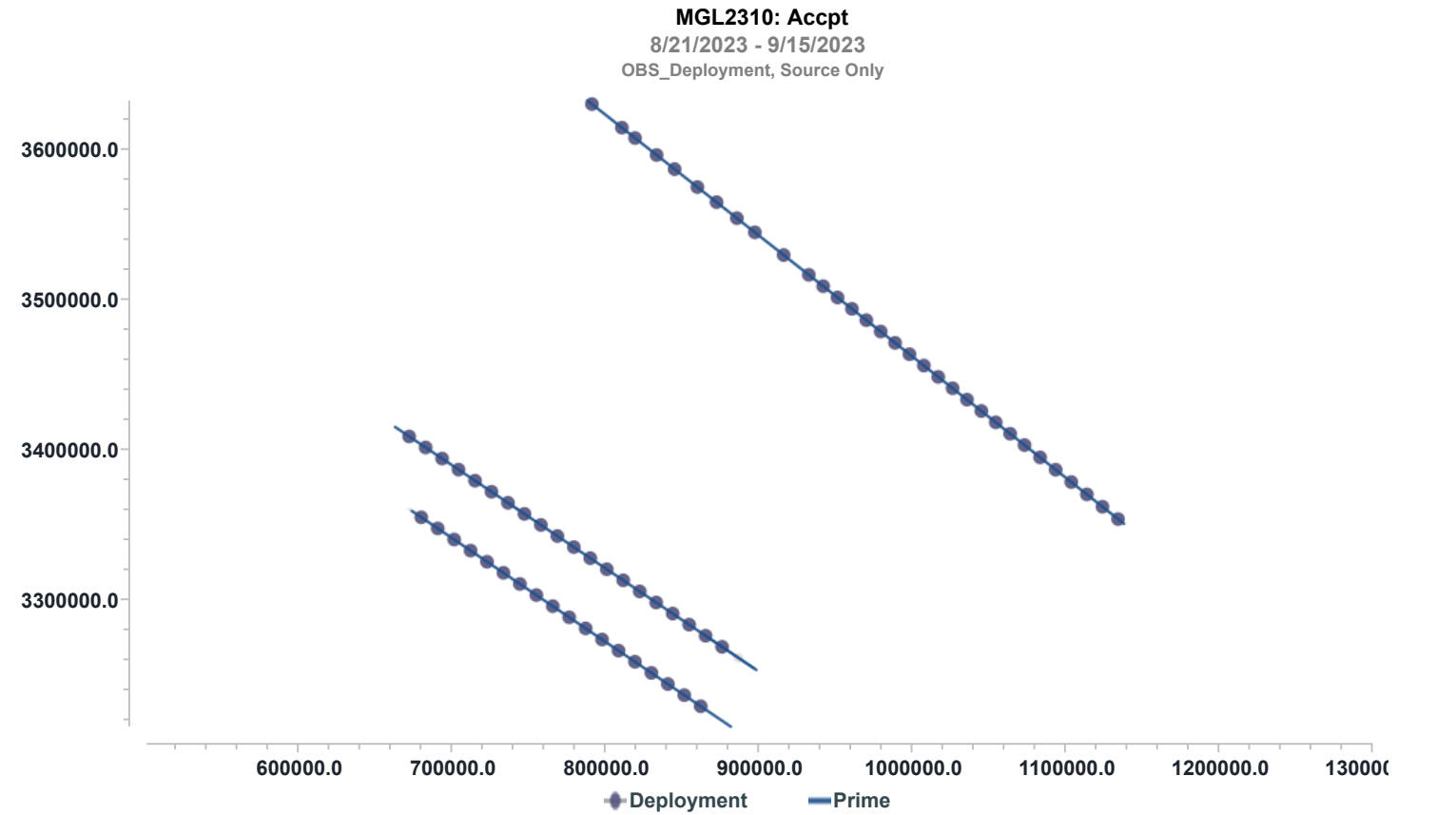
OBS_Deployment, Source Only

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

Production Totals (Accpt Main km)

OBS_Deployment, Source Only

Accepted km	Day	Week	Month	Project
Prime	0.00	0.00	581.25	1029.60
Combined	0.00	0.00	581.25	1029.60



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 15 Sep

Navigation:
No Major Issues to Report

Information Technology (IT):
No Major Issues to Report

Acquisition (OBS):
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 15 Sep

Technical Staff On-board the Langseth

Todd Jensvold L-DEO OMO Chief Science Officer
Malcolm Moody L-DEO OMO Senior Source Mechanic
Sean Seekins - Contract Source Mech
Riley Lopez L-DEO OMO Marine Science Technician - OBS
Koray Ergun - Contract Navigator
Aaron Martin - Contract Navigator
Nikko Hernandex - MATE Intern Navigator

Science Party On-board the Langseth

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Harm Van Avendonk - Research scientist PI
Tawfic Yakubu - Scientist
Victor Obi - Scientist
Ranpeng Li - Scientist

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
08:55	09:55	<div></div> Chiefs Meeting	Mtgs_Chfs
Chiefs Meeting-ops			

Daily Total Category	Code	Count
<div></div> Toolbox Meetings	Mtgs_Tbox	4
Toolbox to discuss spooling the umbilical. Toolbox to discuss building the front end of the streamer Toolbox to discuss the group tour Toolbox to discuss shipping items		