

Seq# 006		Line Name: MGL2310006P1OBS2 Line Brg : 306.55 °		NAVIGATION LINE LOGS		DATE: 2023-09-09 JULIAN DAY: 252		Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY EARTH INSTITUTE	
CLIENT: NSF - Harm Van Avendonk				SURVEY: OBS		AREA: Blake Plateau			
DC SOL: 4.1 m		DEPTH SOL : 1199.0 m		NAVIGATION SYSTEM USED: C-Nav3050 - Primary					
DC EOL: -99.3 m		DEPTH EOL : 803.4 m		NAVIGATION SYSTEM USED: SeaPath 330					
BSP SOL: 4.6 kts		FEATHER SOL: N/A *		NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted					
BSP EOL: 3.8 kts		FEATHER EOL: N/A *							
WEATHER		MAX FEATHER: N/A *		GRAVITY METER: BMG-II: used, SN223					
WIND SOL: S7 kts		shift hours		Nav.		shift hours			
WIND EOL: NE 3.5 kts		12:00 - 24:00		Aaron Martin		12:00 - 24:00			
SEAS SOL: 1 m		0:00-12:00		Koray Ergun		00:00 - 12:00			
SEAS EOL: 1 m				Nikko Hernandez		Riley Lopez			
COMMENTS									
SP	Orca Ref	UTC	EVENT	VESSEL POSITION					
12000	1001	1:58	SOL						
12104	1105	3:49							
12400	1401	9:20							
12804		16:21							
13163	2164	23:59	LS JD 252						
13164	2165	0:00	FS JD 253						
13267	2268	1:56	LGSP						
13268	2269	1:57							
13271	2272	2:00							
13272	2273	2:01							
13278	2279	2:09	LSP						
Posnet locations & remarks: good - none - intermittent									
Gun string #1									
Gun string #2									
Gun string #3									
Gun string #4									
Compasses									
D.I.s									
PROCESSING NOTES									
13267 LGSP dt source firing timing out caused by compressor failure requiring a PSO watch and rampup.									
Overall Comments				LGSP 13267: requiring PSO watch and rampup dt exceeding no-fire time regulations					

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

NRP – Stern	29.2m
NRP – COS	276.6m
NRP – CNG	N/A
COS – CNG	N/A
NRP – CMP	N/A

SP spacing: 150.0m
line status: Complete

Seq# 008

Line Name: MGL2310008P3OBS2
Line Brg : 306.55 °

NAVIGATION
LINE LOGS

DATE: 2023-09-10
JULIAN DAY: 253

Lamont-Doherty Earth Observatory
COLUMBIA UNIVERSITY | EARTH INSTITUTE

CLIENT: NSF - Harm Van Avendonk					SURVEY: OBS					AREA: Blake Plateau				
DC SOL: -114.7 m					DEPTH SOL : 815.2 m					NAVIGATION SYSTEM USED: C-Nav3050 - Primary				
DC EOL: 4.7 m					DEPTH EOL : 728.5 m					NAVIGATION SYSTEM USED: SeaPath 330				
BSP SOL: 4.5 kts					FEATHER SOL: N/A *					NAVIGATION SYSTEM USED: C-Nav3050-Stern Mounted				
BSP EOL: 4.8 kts					FEATHER EOL: N/A *					GRAVITY METER: BMG-II: used, SN223				
WEATHER					MAX FEATHER: N/A *					MAGNETOMETER: Geometrics 882				
WIND SOL: S 2 kts					shift hours					Nav				
WIND EOL: E 2.9 kts					12:00 - 24:00					12:00 - 24:00				
SEAS SOL: 0.5 m					0:00-12:00					Aarón Marín				
SEAS EOL: 0.5 m					0:00-12:00					Koray Ergun				
										00:00 - 12:00				
										Nikko Hernandez				
										Riley Lopez				
COMMENTS														
SP	Orca Ref	UTC	EVENT											
13455	2456	13:50	SOL	SOL- 36 Guns @ 6600 in^3										
13480	2481	14:17		Last duplicate SP where SEQ007 was a bad shot and SEQ008 was good										
13455-13634				Overlapping and duplicate SPs to SEQ007										
13558	2559	15:36		Gun2 on GS2 no fire. Disabled SP 13558. New volume 6240cuin										
		15:40		Back to 35 Guns @ 6600cuin Gun volume										
				Back to 36 Guns @ 6240cuin Gun volume										
13650 - EOL				Subarray 2 position not correct in ORCA - confirmed visually it is in the right place										