

IODP EXP 358 Daily Geomechanics Report

Report #084a 20190201 additional

RTG Team

RTG Supervisor(s)	David Castillo / Thomas Finkbeiner / Demian Saffer
RTG Watch Lead (00:00-12:00)	Kan Aoike
RTG Watch Lead (12:00-24:00)	Emily Wisbey

Well Status

Site Name:	C0002	Hole Name:	S
Water Depth:	1,939.0 m	RT-MSL:	28.5 m
0600h Hole Depth:	4,779.0 mBRT (4,777.0) (mTVD)	Section TD:	6,000.0 mBRT (5,998.0) (mTVD)
Section #:	1	CSG Depth/Size:	4,818.0 mBRT 11-3/4" ESET inches
Static MW:	1.39 sg	Current ECD:	- sg
FIT/LOT/ XLOT:	N/A <i>Note: 1.46sg FIT @ 4,757mBRT</i>		
Current formation/ lithology:	Shale		
Sensor Offsets from the Bit:	N/A		
Other BHA Offsets from the Bit:	N/A		
Current Operations:	N/A		

Geomechanics Alert

GREEN	<p>Green = Projected model remains accurate White = Unanticipated deviation from model which <i>should not</i> affect drilling Yellow = Unanticipated deviation from model which <i>may</i> affect drilling Red = Imminent requirement to stop drilling</p>
<p>Basis for Alert Level + Recommendations</p>	<p>RTG is recommending that C2S can initially be drilled with a 1.35 SG MW using only FracSeal as the mud additive. RTG is also recommending that while C2S is within 2-4 m horizontally from the C2P hole, an extra amount of FracSeal should be blended with the mud to seal the existing open cracks/beds/fractures as quickly and efficiently as possible. The extra FracSeal would help maximise stability in the fragile hole section near the C2S window and keep it stable during drilling, POOH with LWD BHA, and RIH/POOH with coring BHA operations.</p> <p>If we find earth stress gradients increases with depth (and UCS does not increase as quickly), RTG may recommend increasing the MW slightly (e.g., +0.01 SG increments) with Watch Leaders and Supervisors closely monitoring. This process could be repeated based on real-time learnings. Any subsequent increase in MW in C2S would not pose a serious risk of drilling fluid invasion in the shallower sections if FracSeal was applied generously.</p> <p>1.35 SG MW would increase ROP and perhaps deepen section TD if needed.</p>