

IODP EXP 358 Daily Geomechanics Report

Report #073 20190121

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:	R
Water Depth:	1,939.0 m	RT-MSL:	28.5 m
0600h Hole Depth:	5,052.0 mBRT (5049.0) (mTVD)	Section TD:	5,667.5 mBRT (5,664.5) (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 Note: 1.46sg FIT @ 4,757mBRT		
Current formation/ lithology:	Shale		
Sensor Offsets from the Bit:	N/A		
Other BHA Offsets from the Bit:	N/A		
Current Operations:	Continued attempting to free the drill out cement BHA.		

Geomechanics Alert

GREEN	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
Basis for Alert Level + Recommendations	1.39 sg remains recommended MW for Section 1. No further change in wellbore condition has been observed.

Principal Findings

Rock fragments that have been described as "tuff" which firstly occurred from 4840 mBRT in Hole C2R were reexamined by the Science Party and it was confirmed that those fragments are not composed of "tuff" but "cement" based on petrological analyses with XRD, XRF and polarized microscope. Misinterpretation was caused because those fragments actually looked like "tuff, did not show staining reaction with phenolphthalein and dissolution reaction with hydrochloric acid, and were distinctly softer than other evident cement fragments. The cement fragments looking like "tuff" are also regarded to be those formed in 2014 and derived from the annulus of Hole C2P. The trajectory data indicates that the separation between Holes C2R and C2P is only ~1m above 4840 mBRT. Hole C2R probably hit this particular cement zone formed around the C2P at 4840 mBRT.

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Observations Summary

Fracture Gradient	N/A
Pore Pressure	N/A
Wellbore Breakout	N/A
Tensile Failure	N/A
Drilling Parameters	N/A
Other	N/A

Analysis

Drilling Experience Analysis

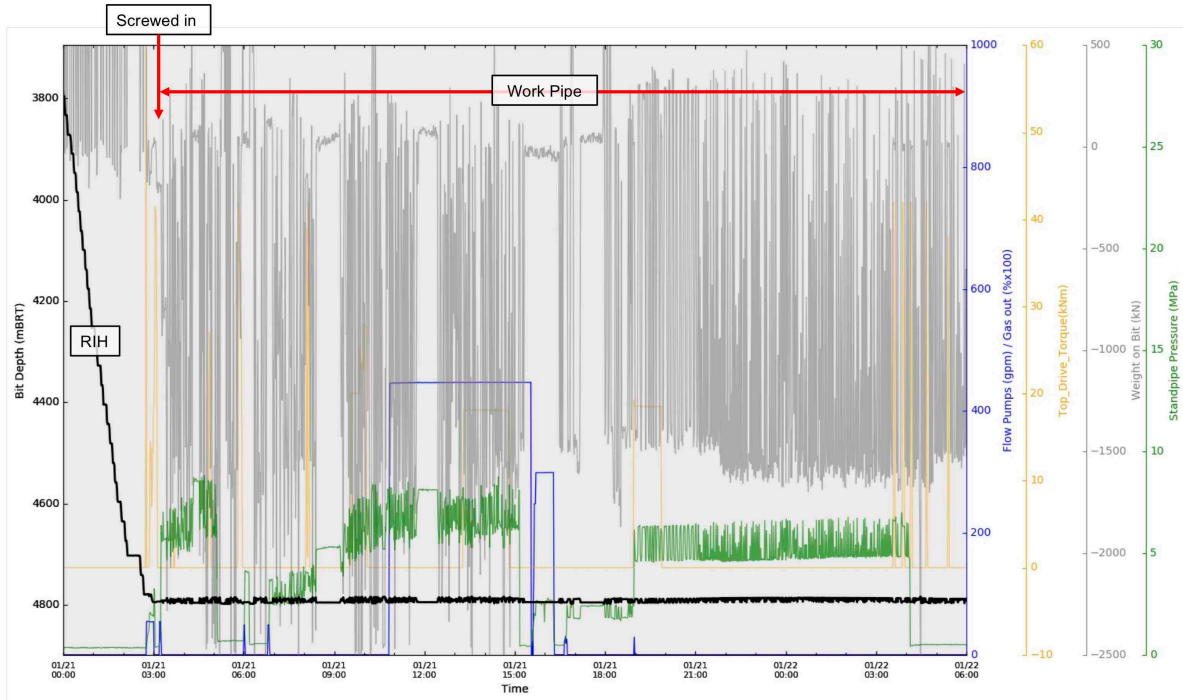


Figure 1 Drilling Experiences over last 27hrs

No particular indication related to borehole condition was observed.

Cuttings and Cavings Analysis

N/A – Only circulating the riser.

LWD Data Analysis

N/A

SFIB Analysis

No further updates.

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Geomechanical Model Review

No change in the current stress model.

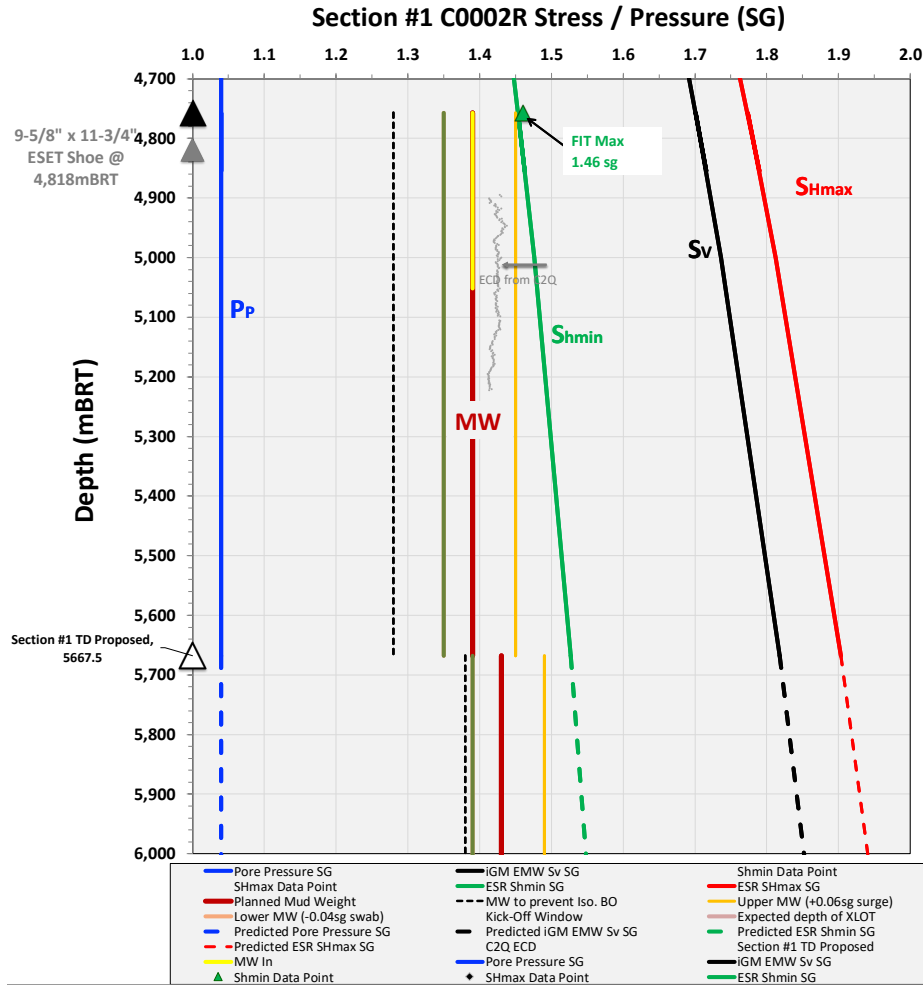


Figure 2 Current stress model for Section #1