

IODP EXP 358 Daily Geomechanics Report

Report #095 20190212

RTG Team

RTG Supervisor(s)	David Castillo / Thomas Finkbeiner / Demian Saffer
RTG Watch Lead (00:00-12:00)	-
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:	4,901.4 mBRT (4,899.4 mTVD)	Section TD:	6,000.0 mBRT (5,998.0 mTVD)
Section #:	1	CSG Depth/Size:	4,769~4,775 mBRT 11-3/4" ESET inches
Static MW:	1.35 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		
Current Operations:	POOH divert sub cementing BHA serviced rig and RIH 8-1/8" overshot assembly to 4,517mBRT. Reamed down overshot to 4,818mBRT.		

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>
Basis for Alert Level + Recommendations	<p>1.35 sg remains recommended MW for C2S; however, RTG also recognizes that it is reasonable to reduce MW to 1.33 sg and still maintaining hole integrity. This reduction in MW will likely improve ROP.</p> <p>Earth stress gradients may rapidly increase with depth (with UCS not increasing as rapidly). If this occurs, 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>

Principal Findings

N/A

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Observations Summary

Fracture Gradient	N/A
Pore Pressure	No indication suggesting abnormal pressure has been observed.
Wellbore Breakout	Minor isotropic and/or anisotropic breakouts were identified below 4,835 mBRT.
Tensile Failure	N/A
Drilling Parameters	N/A
Other	N/A

Analysis

Drilling Experience Analysis

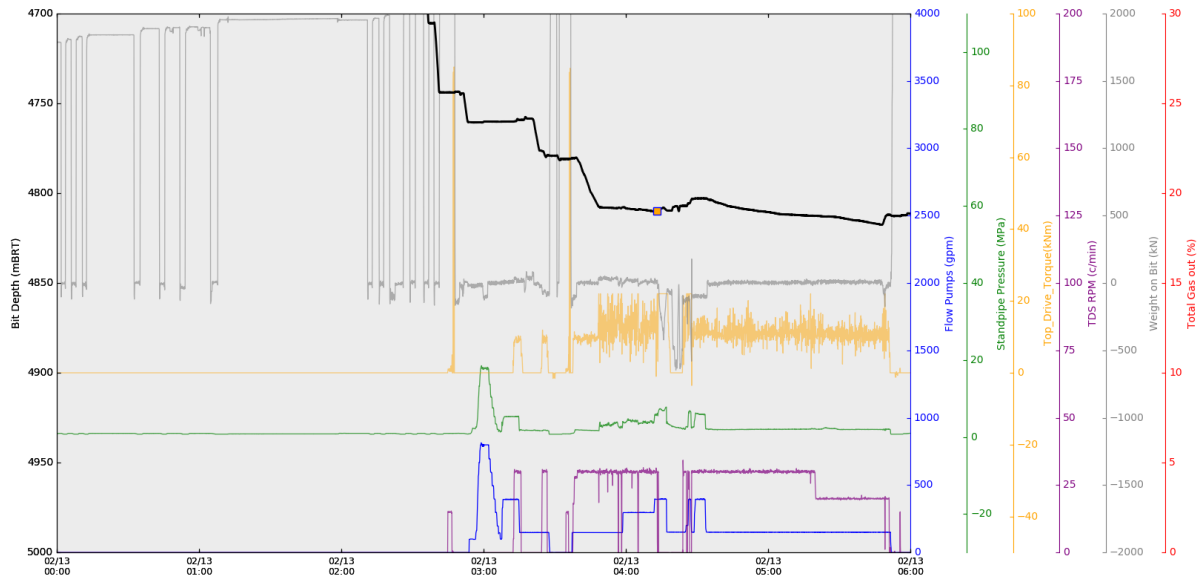


Figure 1 Drilling Experiences on the 13th February (last 6hrs)

- Troubleshoot iron roughneck from 0200 – 0315.
- Took weight at 4,808m and 4,810.7m while reaming down

Cuttings and Cavings Analysis

N/A

LWD Data Analysis

- Image / LWD data over interval where weight was taken is too poor quality (due to enlarged borehole) for any interpretation.

SFIB Analysis

N/A

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Geomechanical Model Review

No change in the current stress model.

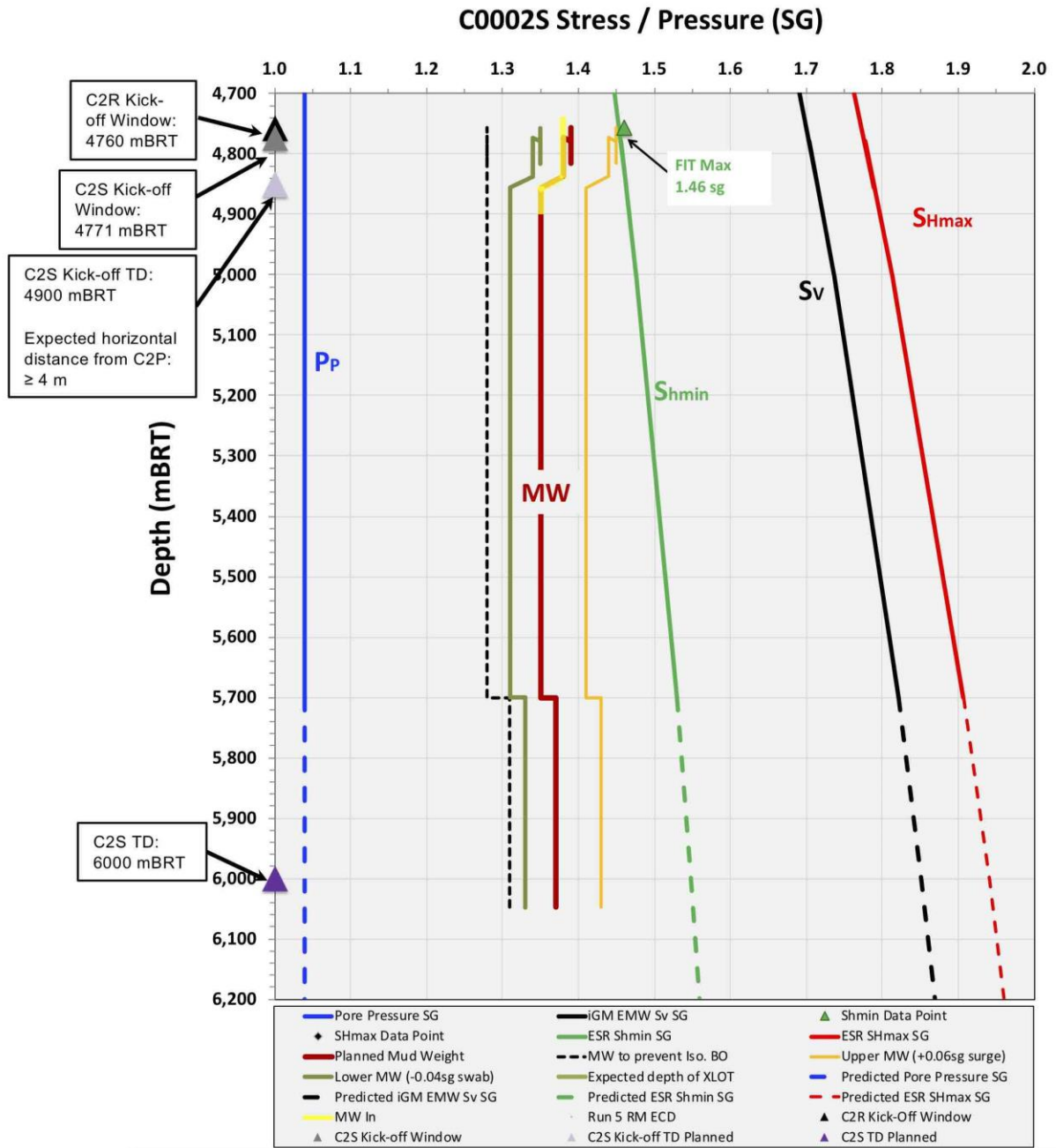


Figure 2 Current stress model for C2S