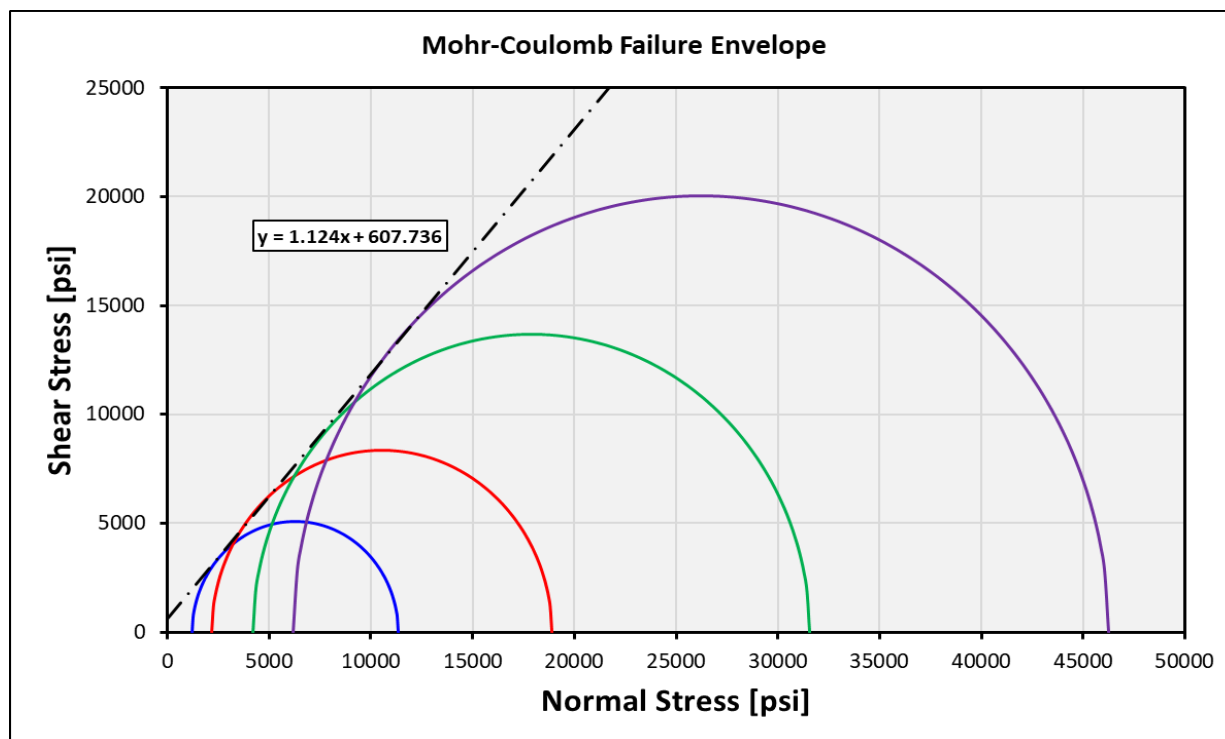
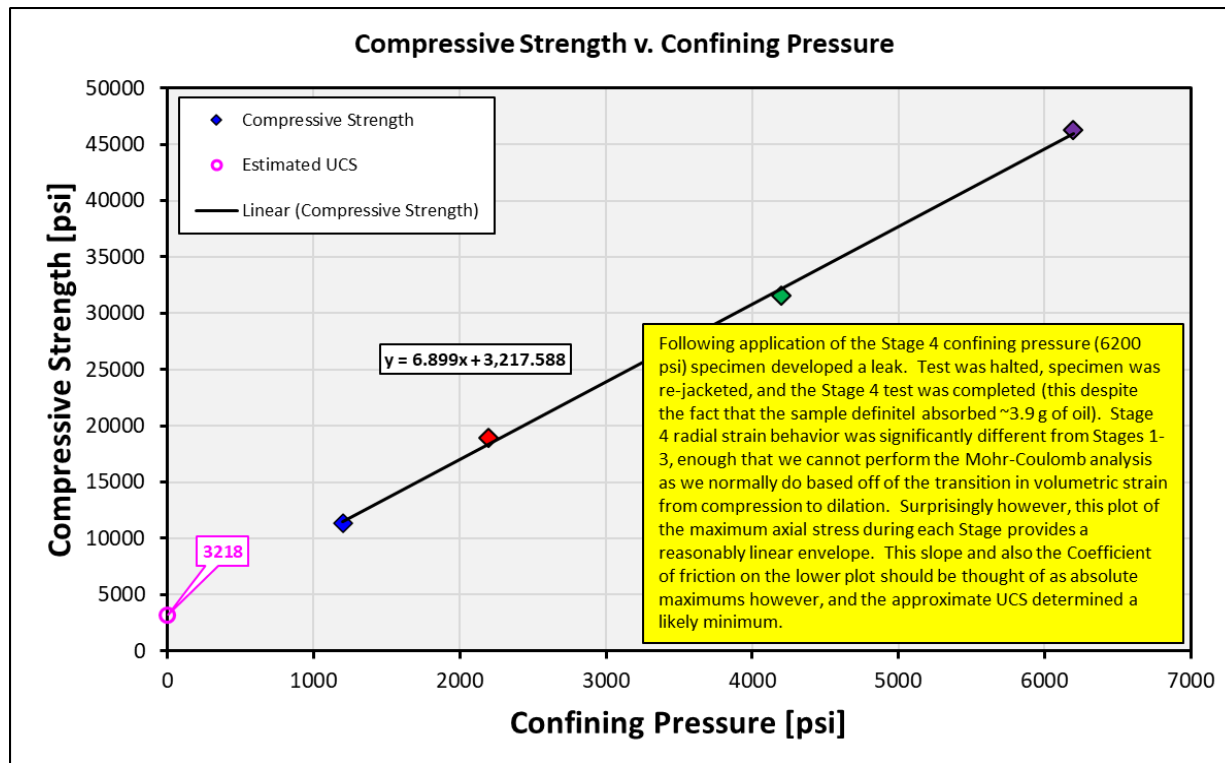


Company: Alberta Geological Survey, Alberta Energy Regulator
Well: Multiple Wells
Field: #N/A
Location: Onshore, Canada
Sample ID: BCS 1 (Old); 25BCS001 (New)

Date: 31-Mar-2025
File: 202500182
Saturated Fluid: As-Received

Result of Triaxial Compressive Strength Test



Company: Alberta Geological Survey, Alberta Energy Regulator
 Well: Multiple Wells
 Field: #N/A
 Location: Onshore, Canada

Date: 31-Mar-2025
 File: 202500182
 Saturated Fluid: As-Received

Result of Triaxial Compressive Strength Test

Sample # (stage)	Depth [m]	Confining Pressure $P_c = \sigma_3$ [psi]	Differential Stress $\sigma_1 - \sigma_3$ [psi]	Compressive Strength σ_1 [psi]	Slope $\sigma_1 v. P_c$	Estimated UCS [psi]	Internal Friction Angle [deg.]	Internal Coefficient of Friction	Cohesive Strength [psi]
BCS 1 (Stage 1)	3025.5	1200	10148	11348	6.899	3218	48.3	1.124	608
BCS 1 (Stage 2)	3025.5	2201	16710	18911					
BCS 1 (Stage 3)	3025.5	4200	27344	31544					
BCS 1 (Stage 4)	3025.5	6197	40060	46257					

Note: Stages 1-3 are unloaded at the point where the volumetric strain transitions from compression to dilation, noting the differential stress at which this transition occurs. During Stage 4 we also note the differential stress at which this transition occurs, but then continue on to the ultimate failure of the sample. Typically we would scale the results of Stages 1-3 up based on the relationship between failure strength and axial stress at volumetric strain transition observed in Stage 4. In this case however, the radial deformation of the specimen appears to have been compromised due to the leak that occurred following the application of the Stage 4 confining pressure (6200 psi), as such we were unable to do the perform the scaling of the Stage 1-3 results. Therefore the Coefficient of Friction observe here is likely a maximum possible value, and Cohesive Strength and Estimated UCS are very likely minimum values.