



Team Viking

eCIP Case Study

How CIP can optimize sample collection purity from steam separators in boilers for SAGD

A major SAGD producer in Alberta faced challenges with the maintenance of their steam sample separators, a critical component in ensuring steam quality for Once-Through Steam Generators (OTSGs).

Steam Quality in boilers is often determined by measuring the change in conductivity or other dissolved ions, in the boiler feedwater (BFW) and the boiler blowdown (BD). Dissolved impurities remain in the water phase and as a result the concentration of these impurities can be used to calculate the change in the volume of water and thereby determine the volume of steam generated.



This measurement process requires accurate sampling and analysis of the BFW and BD water streams. BD water in particular can be prone to scale formation and fouling in the sampling system. This fouling has the potential to impact the chemical composition of the water stream and can provide inaccurate concentrations which result in incorrect calculations of outlet boiler quality and inefficient boiler operation.

The project demonstrated the value of effective partnerships and the potential for specialized chemical cleaning to optimize maintenance procedures and minimize downtime in the SAGD industry.