

## **Production chemistry data within minutes**

## On-asset solution for Production Chemistry and Flow Assurance challenges.

The Epsilon 1 wells is an on-asset monitoring solution that gives you critical production chemistry and flowassurance data within minutes. It maximizes uptime and production by giving you the ability to make data driven decisions about production parameters for scale-squeezes and other interruptions in real time.



Fast on-site measurements



Easy to operate and maintain



Real-time data



No sample alterations

With the Epsilon 1 Wells you can predict with confidence when a scale squeeze needs to take place, saving millions of dollars. Shell has been successfully using this technology for several years.





# Applications (all sample types except gas)

- Water composition: produced water, injection water, flowback water, aqueous treatment chemicals, scale formation, proppants, corrosion inhibitors.
- Scale composition: barium, calcium, strontium, sulfur, phosphorus.
- Oil composition: sulfur, nickel, vanadium and other contaminants.
- Sand/solid/metal composition, emulsion/sludge estimation.
- Production contaminants monitoring (e.g. mercury and others), condensate impurities.

### Solution capabilities

- Fast on-site measurements (lab quality data in 20 mins).
- Better insight by minimal sample alterations due to long transportation times.
- Offshore optimized Benchtop XRF analyzer DNV-GL certification pending.
- Easy to operate and maintain minimal consumables (10mL sampling cup).



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