

# Well Flow Management

## Fluids Sampling and Analysis

### Measurement of Radon Activity in Natural Gas

Radon is commonly found in natural gas, being a component of the uranium decay chain, and is indicative of the presence of this radioactive species in source rock.

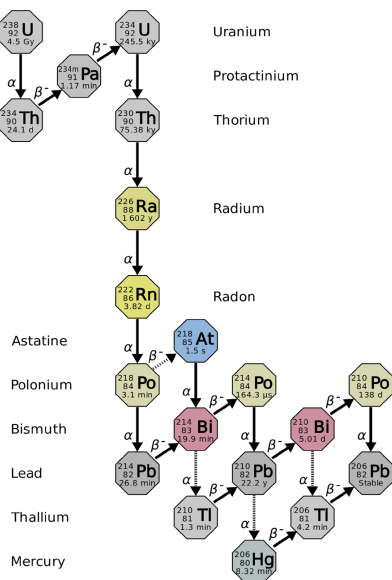
Radon is associated with various health issues, including lung cancer, so exposure must be managed. During hydrocarbon production, radon can accumulate in scale.

Expro provide measurements of radon in gas using Lucas cells with scintillation counter e.g. Pylon AB-5, AB-7 or Scintrex RD-200

Measurements are carried out onsite to minimise loss of radon through radioactive decay (half life 3.8 days)

Gas can be sampled directly from the sample point or separator into the analysis cell, or can be sampled into gas bags first. The average analysis time for one sample is 6 hours; results are available directly following the conclusion of the analysis.

Data can be reported in Becquerels per Cubic Meter (Bq/m<sup>3</sup>) or Picocuries per Cubic Meter (pCi/m<sup>3</sup>) as per requirement. The Radon Decay Chain Measurement of Radon Activity in Natural Gas



*The Radon Decay Chain*

