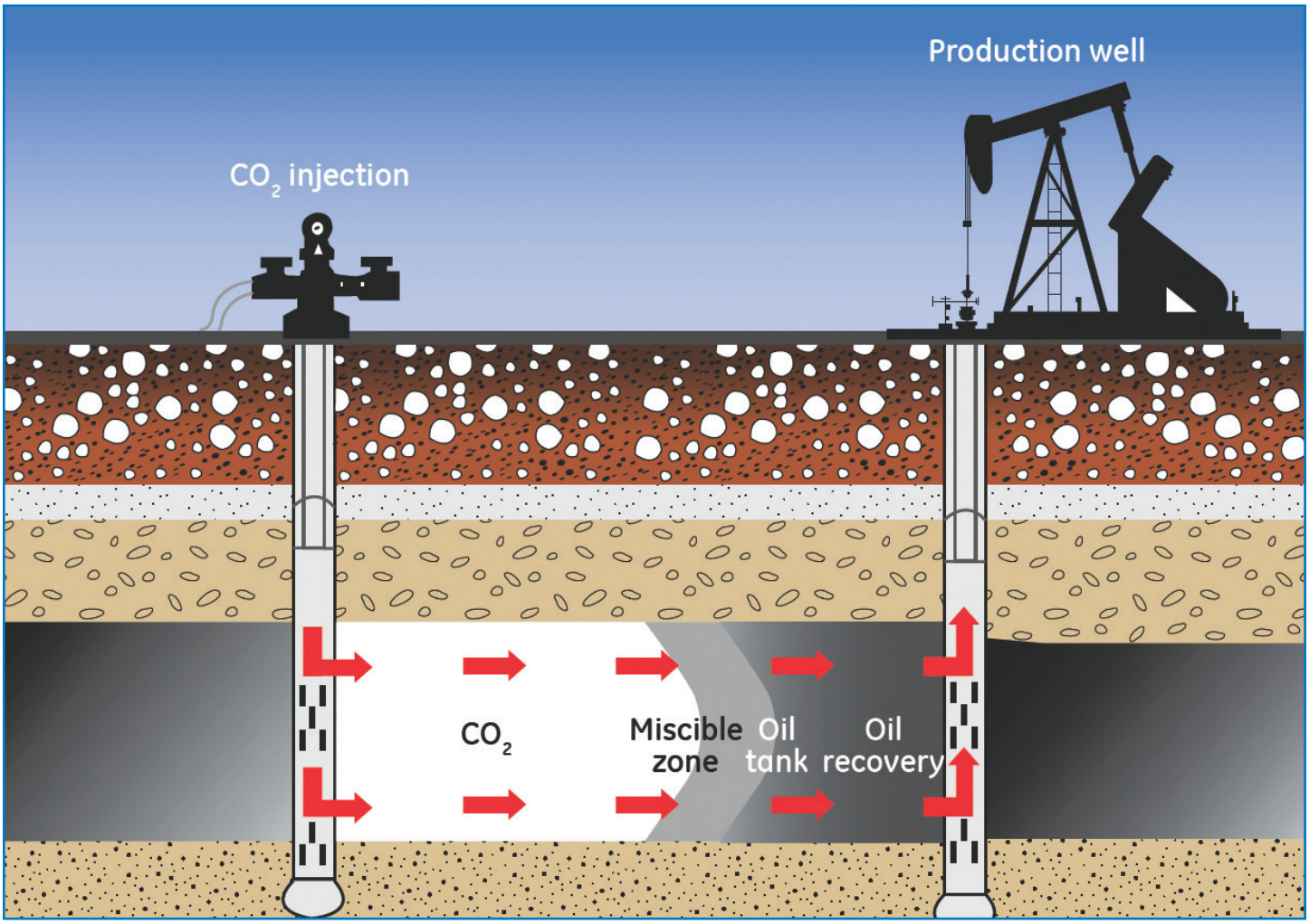
Moisture in Carbon Dioxide



What it is?

Enhanced oil recovery (EOR) is a generic term for techniques to increase the amount of crude oil that can be extracted from an oil field. Using EOR, 30-60%, or more, of the reservoir's original oil can be extracted. Gas reinjection with carbon dioxide is presently the most commonly used approach to enhanced oil recovery. Currently CO_2 EOR is used to produce about 250,000 barrels per day of oil in the USA. It is estimated that 4 to 47 billion barrels of oil could be recovered using CO_2 EOR. In addition, 8 billion tons of carbon dioxide (the greenhouse gas) could be sequestered in oil wells as opposed to being released into the atmosphere. Most global governments are supporting the development economically and technically viable EOR and carbon capture projects to reduce emissions and produce more energy.

Why is moisture measurement important?

The CO_2 used in this process must be dried to levels of -40°C dew point (about 127 parts per million by volume) or lower. This is to prevent corrosion of equipment as well as reduce energy consumed by injection process.

Why Aurora Moisture Analyzers?

Aurora's fast response immediately alerts operators when moisture concentrations are out of compliance or dehydration process is upset; once corrected, gas can be quickly cleared for re-entry to the process. The measurement is non-contact so there is no drift or need for calibration. Aurora analyzers require very little maintenance and come with a complete sample system and easy intuitive user interface for simple installation and startup. With a local service team to support the analyzers, you have the confidence of knowing that Aurora analyzers are always ready for immediate moisture measurement.
Just connect and go.

Table of critical specifications:

	Aurora
Accuracy	±5 ppm_v (parts per billion by volume) or ±3% of reading, whichever is greater
Repeatability	±2 ppb_v below 200 ppm, 1% above 200 ppm
Hazardous Area Certification	US/Canada: Explosion-proof for Class I, Division 1, Groups B, C&D
	ATEX and IEC Ex: Ex de IIB+H2 T6 -20°C to +65°C Flameproof with increased safety compartment

www.gemeasurement.com

930-168A