

COAL BED METHANE

Coal bed methane (CBM) is an important component of any coal reserve today. The methane gas in the coal seam is a potential source of additional revenue for a mining operation if it can be recovered economically. There are many issues related to the economics of CBM production from environmental requirements, capital needs to upgrade the gas and compress it for delivery to a gas pipeline and the size of the gas reserve. SGS has the laboratory and technical capabilities to assist in the determination and definition of the quantity of CBM in the coal reserves at any site.

SGS METHODOLOGY

SGS, using the direct method for estimation of in-situ gas content in coal, can quantify the gas content of a coal seam. SGS sends temperature controlled core sample collection canisters to the field. SGS field staff monitor and record the time that elapses in the field from when the core is cut by the drill and when it is sealed into the collection container. Back at the SGS lab the samples are maintained at the ground temperature of the seam site, the gas volume recovered over time is measured. This is the desorbed gas content.

The lost gas quantity is extrapolated from the desorption curve based on the time measured between coring and containment of the core in the field. SGS then uses a rod mill to crush the coal cores to recover and measure the residue gas. The total amount of gas is the sum of the lost gas, the desorbed gas, and the residue gas. Using gas chromatography, we determine the gas composition of the gas samples collected.

RESERVE DEFINITION

SGS can also provide gas reserve engineering expertise to define the reserve and its production capability.

SERVICES OFFERED TO YOU

SGS offers a variety of services for coal bed methane including:

- Field collection of the cores in sealed containers and recording of the time between cutting the core and their placement in the containers.
- Measurement of desorbed gas volume, residual gas volume, and estimation of the lost gas volume from a core samples
- Analysis of the coal samples
- Determination of total gas IN SITU content or total gas volume desorbed per unit weight of coal.
- At producing wells SGS can collect CBM gas samples and monitor gas quality
- At producing wells SGS can provide the water and noise sampling required by CBM permits.



CONTACT INFORMATION

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