



OPTIMIZE YOUR **PROFIT** **POTENTIAL**

CORE PROCESSING SERVICES

SGS has a long history of working closely with clients to provide innovative services that will help improve the cost and time efficiency of your operations from our core handling, viewing and sampling facilities.

Our wide range of services include drilling services, on-site core viewing & inspection services, laboratory analysis, and specialized services.

SGS OIL SANDS OVERVIEW

SGS is the world's leading inspection, testing, verification and certification company. We have been providing services to Fort McMurray and the province of Alberta for over 25 years. We provide lab and field operations tailored specifically to oil sands operations.

SGS is committed to providing safe testing, leading edge technology, ethical certification and efficient verification services to oil sands operators and stakeholders.

We have earned the respect of the industry as we partner with firms across many disciplines. With our commitment to technical excellence, our reputation and our broad range of services, SGS is a trusted partner in the oil sands industry.

By combining local oil sands expertise with best practices from other disciplines, SGS has forged a service offering that is integrated, comprehensive and diversified. We offer the best of industry-standard approaches, often enhanced with innovative ideas and technologies.

SGS

CORE SERVICES FOR THE OIL SANDS

CORE VIEWING AND SAMPLING SERVICES

Once your sample arrives, the core is transferred directly into our sample storage area. After splitting, the core is photographed and is available for logging and sampling. The imagery and subsequent analytical data is entered into a computer database.

RECEPTION OF SAMPLE

Core is transferred directly into our -20°C freezers. We store the core in your containers until processing starts, to avoid sample mix-up. Core is kept frozen to avoid oxidation and moisture loss.

SAMPLE TRACKING

Core is entered into a computer database and tracked from there.

CORE PROCESSING

Individual holes are removed from cold storage and core cases are cut horizontally and then longitudinally (slabbed). This generates the A side and a B side. The B side is immediately placed back in the freezer to avoid oxidation and moisture loss.

SGS has developed a dry cut method to eliminate potential sample contamination as wet cutting may.

The A side is washed to remove residue from cutting, thus ensuring a pristine surface for logging. The A side core is then dried.

CORE PHOTOGRAPHY

After drying, the core is then photographed using SGS' custom digital photography facility. Over 600 metres of core can be documented per day, ensuring a permanent record.



CORE ANNOTATION

The digital images of the core are annotated with down-hole distances, sample intervals and other features of interest. These files are then used by your loggers to record lithologic information.

CORE LOGGING

SGS' core logging area is set up to allow you and/or your contractors secure confidential access to your core. We lay out the core in down-hole sections in our well lit viewing rooms and you can log it in the detail you need. Included in your self-contained area is a conference room for consultation, internet access, a wash-up area, and private washroom facilities. Together, this makes for an ideal area to log your core. If you want samples taken, we will do that. If you want to see another hole for correlation purposes, we can help with that too.

Normally, clients or subcontract geologists log their own core. However, if desired, SGS can supply the geological expertise needed.

SAMPLING & V-NOTCHING

Typically, after the A side of the core is logged, samples are required. In this case, we retrieve the B side of the core from the freezer and take a V-notch sample from the centre zone of the core. This involves sectioning the core with two passes with a saw with a specially inclined blade.

The V-shaped sample is then removed. Collected from the centre of the B side of the core, it is the most representative sample possible. It is the least oxidized and has the minimum amount of water loss, since it has been frozen continually prior to sampling and analysis.

HOMOGENIZATION

Once collected, samples are stored double heat-sealed and double bagged in the freezer until it is time for analysis. The samples are then homogenized and sampled for analytical testing.



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