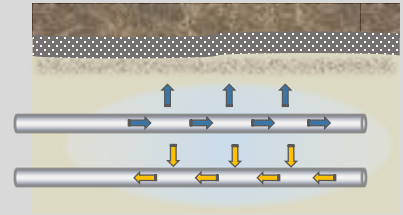


BIG GUNS ENERGY SERVICES



Your Trusted Partner in Enhanced Oil Recovery GeoContainment™

GeoContainment™ involves containing subsurface operations within designated systems to prevent adverse consequences. It is crucial for the success and safety of enhanced oil recovery methods. The caprock above the reservoir must possess the necessary hydraulic and mechanical integrity to withstand injection pressures and stress field changes over time in order to control the mobility of steam, bitumen, waste or other fluids. This ensures controlled and safe operations, minimizing potential risks and enhancing the effectiveness of these recovery processes.



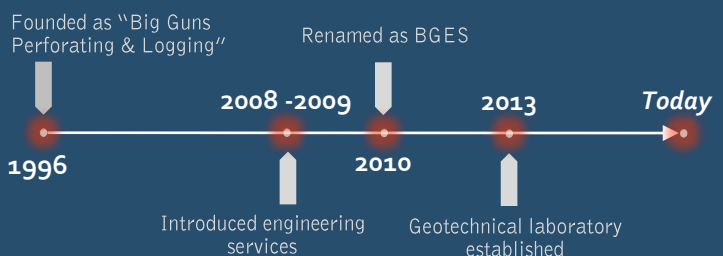
BGES (Big Guns Energy Services Inc.) is a leading provider of specialized geocontainment testing and evaluation in Canada. Our distinguished track record includes the 2022 Company of the Year award, the inaugural Oil & Gas Canada Consultant of the Year recognition, and a spot among Alberta Oil Magazine's Top 200 companies. Our solutions address a wide range of sectors, from unconventional oil & gas production to carbon capture, utilization, and storage, subsurface storage and disposal, salt cavern management, hydrogen energy, geothermal production, compressed air storage, solution mining, and potash extraction, among others.



COMPANY HISTORY

An award-winning geoscience, engineering & data acquisition professional service company

Founded in 1996 as a cased-hole wireline firm, the company has transformed into Canada's leading provider of integrated geocontainment evaluation services for the energy and mining sectors. Our mission is to utilize our technical expertise and operational proficiency to mitigate safety, environmental, and financial risks.





BGES' end-to-end geocontainment / caprock integrity assessment service offerings span from wellsite core collection, geotechnical lab testing, various forms of reservoir and caprock injection testing, cased-hole logging, wireline completions, digital data acquisition, data analyses, computer simulation and numerical modelling, project management, to regulatory reporting and application coordination.

A transparent process is maintained through every stage: from clear management of data collected in the field and in the lab, data input and development of 3D simulation model, to delivery of the final report and regulatory application documentation. Our expert Geoscience & Engineering team is available for support through the entire process.



Scientific

BGES excels in merging science and practice, leveraging expertise, and prioritizing work quality through real-world experience, cross-disciplinary knowledge, experiments, technology, and advanced testing methods.



Expertise



Quality-Focused



Integrated

We offer cost-effective solutions through seamless integration of services, streamlining field operations and providing customized, flexible options to meet specific needs.



Flexible



Cost-Effective



**THE BGES
ADVANTAGE**

GEOCONTAINMENT EVALUATIONS



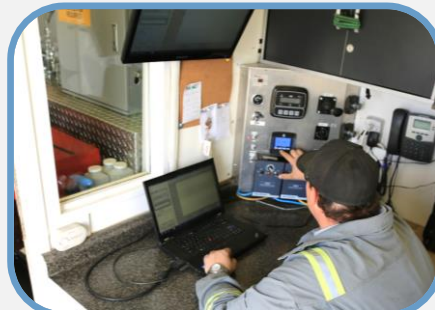
Core Recovery & Management

Effective lab tests rely on meticulous core management. BGES ensures success by having seasoned experts oversee wellsite core recovery. Subsequently, cores are preserved and transported to our specialized lab.



Geotechnical Lab Testing

BGES provides vital geotechnical lab testing services tailored for caprock modeling. Our patented core testing includes ambient and high-temp triaxial analyses, multi-stress, and multi-temp permeability tests.



In-situ Stress Testing

Mini-frac or DFIT testing, conducted by skilled technicians with advanced injection units, offers cost-effective insight into caprock's in-situ stress. A comprehensive report includes interpretation by technical experts.



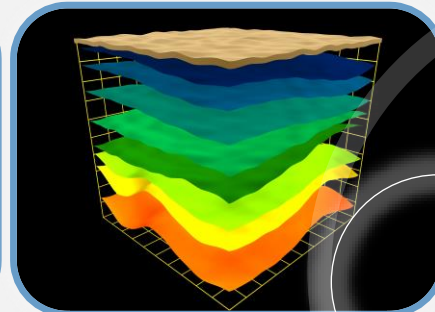
Injectivity/Mobility Testing

Improve reservoir model's precision by comprehending subsurface fluid mobility and connectivity. Our injectivity / mobility tests provide reliable data on formation parameters, heterogeneities, layering, and connectivity.



Cased-Hole Completions

BGES excels in cased-hole services, offering expertise in logging, perforating, data acquisition, and decommissioning. High-temp TCP and well-pair ranging can optimize reservoir and productivity for thermal operations.



Modelling & Simulation

Reservoir & geomechanical simulations are essential tools for predicting changes in in-situ stresses and parameters during thermal recovery and subsurface storage operations, ensuring caprock integrity and public safety.

Contact Us



info@bges.ca



www.bges.ca



[https://ca.linkedin.com/company/
big-guns-energy-services-inc-](https://ca.linkedin.com/company/big-guns-energy-services-inc-)

Head Office & Geotechnical Lab



Unit 21, 3030 Sunridge Way NE
Calgary, AB, Canada T1Y 7K4



+1.403.294.1444



+1.403.206.6196

Red Deer Office



#13 Burnt Valley Avenue
Red Deer, AB, Canada T4P 0J5



+1.403.347.2512 (24 hours)



+1.403.342.0224

Bonnyville Office



45521 Hwy 660 #111 Bay 5
Bonnyville, AB, Canada T0A 1H0



+1.403.347.2512 (24 hours)

