Frontier High-gradation *Where to shoot your next seismic*

What do you need for frontier block?

In frontier block/basin without a proven working hydrocarbon system or with numbers of target area identified by limited sparse 2D seismic data, the need for shooting more seismic for further maturation can be a conflict with limited budget and time. Alternative data may be required to help decide where to shoot your next seismic, and speed is the essence.

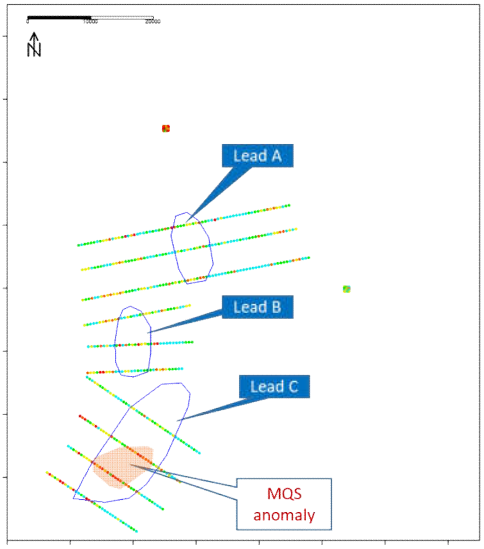
Why can we help?

Using surface hydrocarbon detection technology MGCE (Microbial Geochemical Exploration), we can help you both to confirm what you see on 2D seismic and to evaluate the hydrocarbon potential of the target area within months.

How we do it?

Through collection of soil samples at the surface or sediment at sea bottom and analysis of specific microbial population and geochemical parameters in such samples, MGCE can provide direct evidence, to test the existence of hydrocarbons accumulation the work area.

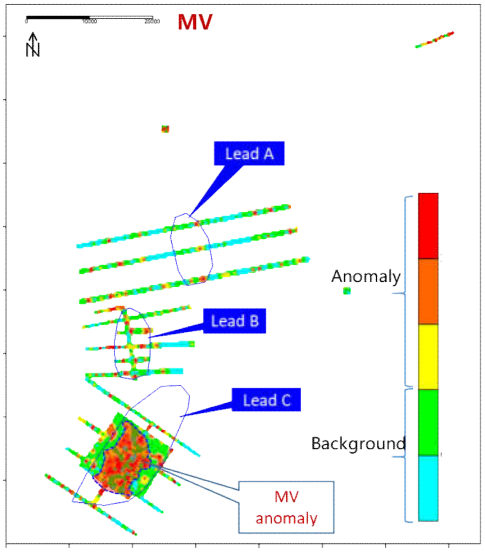
Case history below is in a frontier block without a proven working hydrocarbon system, geology survey and sparse 2D seismic data (poor resolution in mountainous area) identified 3 structural traps in the work area, the client was struggling where to shoot the next seismic or even to drill a well. A two phase MGCE survey helped the client to solve the problem in a very short period time.



Phase I

(Screening survey along seismic lines)

Samples were collected along the existing 2D seismic lines and covered the 3 structures, Lead A, B and C. Samples were analyzed on-site using AE&E's unique proprietary MQS technology. Lead C turned out to be the one with the highest potential



Phase II

(Detail evaluation of hydrocarbon potential)

Most of the Phase II infill samples were collected over Lead C which was further confirmed with significant anomaly over it. The client drilled one were over Lead C later and had a discovery, a 3D seismic survey was also planned over the discovery

Why do it?

With an extra small percentage increase of your exploration cost (less than 8% of the seismic cost in the case mentioned above), MGCE can help you to make quick decision based on additional useful dataset. It is therefore a very cost-effective and fast turnaround technology to use in early stage of reconnaissance exploration.

Need more information? please email "Samuel"; shicai.deng@aee-t.com

Who are we?

Advanced Energy & Environmental Technologies. Inc (AE&E), headquartered in Beijing, is a major service provider using Microbial Geochemical Technology for oil and gas exploration. As a pioneer to open China's geo-biotechnology service market, AE&E has launched over 97 survey projects both on- and offshore and has gained increasing industry recognition and approval. With over 12 years of industry experience and a multi-disciplinary team of Geology, Geophysics, Geochemistry and Geomicrobiology, AE&E is confident that it can support your exploration efforts.