VIEW20

Cost effective de-risking for your prospects and leads

Surface Geochemistry

Analysing C₅ to C₂₀ hydrocarbon potential using surface based, direct measurement, hydrocarbon detection technology
Surface Geochemistry

Analyzing C$_2$ to C$_{20}$ hydrocarbon potential using surface based, direct measurement, hydrocarbon detection technology

Surface geochemical data acquisition and analysis provides a cost effective way of identifying the presence of hydrocarbon accumulations. This key element of the petroleum system is conventionally not addressed until later in the petroleum exploration and production lifecycle.

Substantially more expensive techniques, such as seismic data interpretation and well data analysis, are the conventional tools to assess the abundance and habit of hydrocarbons. View$_{20}$ allows more focused use of these costly techniques to de-risk the permit prospects and leads.

Even when applied later in the exploration and production lifecycle, the technique can also drive additional value by optimising field production.

**BENEFITS AT EACH STAGE OF EXPLORATION AND PRODUCTION LIFE CYCLE**

**Reconnaissance Pre-Bid**
- Evaluate source / charge / seal
- Reduce bid risks related to charge

**Cost Effectively Priorise Exploration Effort Where Hydrocarbons Demonstrated**
- Quickly and efficiently evaluate very large blocks
- Validate petroleum systems
- Decide to keep or drop blocks
- Define geochemical leads
- Focus a seismic program to hydrocarbon prone areas

**Robust Ranking of Identified Prospects and Leads**
- Prioritize prospects
- Investigate charge in structural and stratigraphic traps
- Define charged channel sands
- Help identify drilling locations stratigraphic correlations

**Improved Formation Evaluation and Pay Definition**
- Hydrocarbon phase identification
- Compartmentalisation & seal rock integrity
- Identify by-passed pay zones (possibly
- Increasing potential resource estimates)
- Stratigraphic correlations

**Improve Production Returns by Focusing Resources**
- Define areal extent of producing fields
- Locate potential areas for secondary recovery
- Help to increase production
- Build reserves by finding by-passed pay
- Improve the effective design of water and CO$_2$ flooding
AIPC is a technical services provider and specialist consultancy to the upstream oil and gas sector. We specialise in exploration geoscience, well delivery and support services. We strive to deliver exceptional services, people and skills throughout the lifecycle of your exploration campaign.

SURFACE GEOCHEMISTRY SERVICE

The advanced surface geochemistry service delivers surface based, direct adsorbent hydrocarbon characterisation using simple, compact, reliable, repeatable and highly sensitive technology.

In today’s challenging operating environment, View20 surface geochemistry adds value through de-risking your prospects and leads portfolio prior to more expensive tools such as seismic data acquisition.

AIPC is the exclusive provider in Australasia of unique surface geochemistry technology* produced by Amplified Geochemical Imaging (AGI). The AGI Modules detect micro-seepage of hydrocarbons down to parts per trillion to establish accurate and reliable hydrocarbon distribution maps for integration with subsurface structure and play analysis.

VOLATILE HYDROCARBONS - C2 TO C20+

Modules adsorb volatile hydrocarbons in the C2 to C20+ range from micro-seepage, routinely detecting at least 87 different compounds in the sub parts-per-billion range.

THE TECHNOLOGY

The technology used by AIPC in its View20 service is highly accurate, sensitive and reliably repeatable.

- Modules detect minute quantities of volatile hydrocarbons in the soil and are the only technology which remains unaffected by water.
- Full spectrum of hydrocarbons can be measured, from C2 to C20+.
- Extremely low levels of hydrocarbons are detectable.
- Module analysis is performed under strict protocols, ensuring quality data and interpretation to deliver reliable petroleum system characterisation.

COMPLETING THE HYDROCARBON SPECTRUM (C2)

Where the inclusion of C2 in the service is important, AIPC utilises a separate, cost effective, analytical technology to analyse water, soil, cuttings or core samples, addressing C2 as an adjunct to the main analytical program.

High Sensitivity (ppt) to Key Compounds

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THE ENTIRE WORKFLOW

If data is available - Combine lead and prospect data to create the survey design. Perform recon survey if necessary.
2 - 6 weeks

Install modules (minimum ~100), 17 - 21 days residency then retrieve and send to lab in USA.
6 weeks av.

Sample processing to produce raw results. Data processing to generate models.
3 weeks

Integrate with existing earth models, client collaboration, final results.
5 - 7 days

Final report, hard copy and digital data & maps. Entire process ~ 4 months max.

Data Analysis and Interpretation

Data Analysis
- Utilises analytical compound standards
- Broad range of compounds: ethane to phytane (C₂ - C₉₀) Aliphatics / Aromatics / NSO compounds

Interpretation & Integration
- Examination of chemical “fingerprints”
- Advanced statistical interpretation
- Integration of geochemical data with geological and geophysical data

Final Report
Results are summarised and reported in a professional package that includes:
- QA/QC summary
- Geochemical modelling
- Contoured probability and compound maps
- Summary and conclusions
- Full digital database

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* Originally known as Surveys for Oil and Gas Exploration, based on technology formerly offered by W.L. Gore & Associates, Inc. as GORESM Surveys for Oil and Gas Exploration.