# Oil Analysis

LEADING OIL CHARACTERIZATION

Recognized as an industry leader in hydrocarbon analysis and interpretation, GeoMark Research employs the latest technology to deliver consistent and validated results.

Our research team remains at the forefront of the industry in geochemical analytical techniques and workflows, and continues to deliver enhanced insights to petroleum systems around the world. GeoMark Research's methods and expertise provides crucial information, maximizing economic investment models and de-risking potential opportunities. We provide answers for hydrocarbon source, mixing, age, depositional environment, maturity and fluid quality predictions (i.e., GOR, biodegradation, sourness).



## WE ANSWER THE FUNDAMENTAL PETROLEUM SYSTEMS QUESTIONS

- Where did it come from?
- · Where did it go?
- How did it change on its journey?

### The GeoMark Research Advantage

LEADING ANALYSIS	GeoMark offers a wide range of traditional geochemistry analytical techniques, as well as specialized methods that are unique to our laboratory.  Seen as leaders in petroleum geochemistry, GeoMark Research is led by some of the industry's most recognized and published geochemists.		
EXPERTISE			
INTEGRATION	Supported by GeoMark Research's Source Rock, PVT and Mud Gas Isotope laboratories, along with RFDbase™ (the industry's largest oil, source rock and PVT database), our team integrates all data types to add value across the development timeline.		
RESEARCH AND DEVELOPMENT	GeoMark Research has a long history of performing research studies that expand the application of geochemistry in the global petroleum industry. Since its establishment, GeoMark Research has built lasting scientific research relationships with top-tier industry		

GeoMark Research has built lasting scientific research relationships with top-tier industry and academic institutions. These relationships continue today as the world looks to optimize and diversify energy supply.

HIGH RESOLUTION GAS CHROMATOGRAPHY (HRGC)	ULTRA HIGH RESOLUTION GAS CHROMATOGRAPHY (UHRGC)	BIOMARKERS	QQQ (Diamondoids)
ISOTOPES	SARA	API	COMPOUND SPECIFIC ISOTOPE ANALYSIS (CSIA)

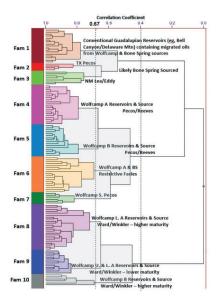


## From fluid characterization to basin modeling

#### **FLUID CHARACTERIZATION**

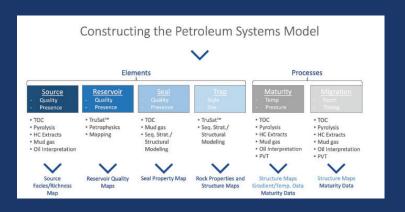
Using consistent methods for the past 30 years, GeoMark Research can make comparisons of fluid character to provide interpretations that define the source, maturity, and mobility oil of samples. Leveraging advanced analytics, this information creates a predictive geochemical framework that reduces the risk associated with fluid property predictions.

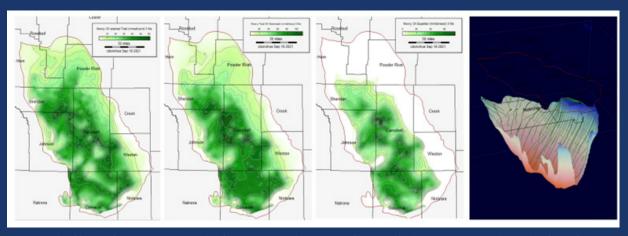
Integrating with source rock and other geochemical data, fluids take on geological context in mapped trends and depositionaly driven predictions.



#### **Basin Modeling**

GeoMark Research has the knowledge and experience to provide bespoke 1D and map-based basin modeling services. Projects can range from international bid round screening to hydrocarbon phase modeling for development plans. With GeoMark's talented staff of geologists, geochemists, and engineers as well as access to proprietary datasets and studies, clients can reach the answers they need without even submitting a sample for analysis. Additionally, models can be refined by integrating client specific data and providing updates as projects advance, always staying relevant to the questions at hand. GeoMark is a single stop for fully integrated geoscience solutions from our lab to your field.





**Total Oil Retained** 

Total Oil Generated

Oil Expelled

**Fetch and Migration** 

