SPECTRACHEM® is a patented chemical tracer technology uniquely designed to evaluate frac fluid flowback profiles and movement through the reservoir.

The SPECTRACHEM service involves injecting individual chemical frac tracers (CFT’s) at low concentrations into different frac stages or segments of a single of multi-stage stimulation procedure. Subsequent flowback samples from treatment and offset wells are analyzed providing precise flow back profiles and offset well interference recognition.

SPECTRACHEM tracers are routinely used to quantify and profile frac fluid clean-up and flowback efficiency over time. SPECTRACHEM is also employed to track fluid movement through the reservoir and fracture from treatment well(s) to nearby offset well(s) for informed well spacing decisions.

SPECTRACHEM is essential in understanding:
- Flow Assurance Across Horizontal Lateral
- Zonal Flowback Profile in Multi-Stage Completions
- Quantifiable Zonal Flowback Efficiency
- Interwell/Offset Fluid Communication and Interference
- Formation Ion Profile (Na, Ca, K, Mg, Cl)

Direct measurement of chemical response in treatment and offset wells provide the only means to determine many completion factors, and is routinely used for optimizing:
- Fluid Flowback Procedures
- Completion Strategy
- Stimulation Fluid Design
- Well Production
- Well Spacing
- Zonal Contribution
- Interwell Fluid Communication
- Well Placement
- Zonal Isolation
- Intelligent Well Performance

Samples collected according to a pre-determined sample schedule provide a chronological analysis of flowback. These samples are analyzed at ProTechnic’s state of the art Chemical Tracer Laboratory in Houston, TX using proprietary processes and procedures in conjunction with analytical analysis capable of tracer detection to the low (parts per trillion (ppt) range).

Stringent quality control measures are in place to ensure the highest level of accuracy of all sample analyses.

SPECTRACHEM tracers are compatible with commonly used stimulation fluids and are:
- HSE Friendly
- Safe to Transport, Handle, Store and Dispose

SPECTRACHEM Express

When timely flowback decisions are needed, 24 hour service is available.

ProTechnics has developed the industry standard Sample Management Program which ensures the most efficient and precise sample collection process. A managed program assures accurate and timely delivery of SPECTRACHEM samples to ProTechnics Chemical Laboratory for the quickest turn around in the industry.

Sample Management Program Features:
- Sample Schedules (Default and Custom)
- Field Delivery of Sample Collection Kits
- Assigned Sample Coordination With Field Operations
- Sample Progress Notification
- Project Management Summary Report