

Pre- and Post-PetroFix Performance Monitoring Parameters

Analytical Parameter	Method
Recommended	
Contaminants of Concern (COC's)	Varies by site. Recommend a minimum of BTEX analysis plus Total Petroleum Hydrocarbon (TPH) measurements for gasoline (TPH-G) and/or diesel range contamination (TPH-D) based on contaminant source.
pH	Meter reading taken in flow-through cell (DO can also be measured with a Hach kit)
Dissolved Oxygen (DO)	
Oxidation Reduction Potential (ORP)	
Methane and CO ₂	ASTM D1945
Sulfate	EPA 375.3 or EPA 9056
Nitrate	EPA 353.1 or EPA 9056
Visual Confirmation of PetroFix in Wells*	Use bailer or pump to pull groundwater samples into 40 mL VOA bottle or other.
Optional	
Total Fe	Colorimetric Hach Method or EPA 6000 series with filtered and unfiltered samples
Total Mn	
Dissolved Fe	
Dissolved Mn	
Sulfide	EPA 376.1
Chemical Oxygen Demand (COD)	EPA 410.1-.2
Biological Oxygen Demand (BOD)	EPA 5210B
Evaluation of biodegradation response through measurement of functional genes	QuantArray Petroleum

Regenesis recommends that baseline samples of all monitoring parameters be taken before injection. Please check any state specific underground injection control (UIC) guidelines for parameters that may also need to be collected, but not included in this table.

*As is normal in any injection PetroFix may flow into adjacent wells during application. Observation in wells is helpful in knowing that you are achieving product distribution. As an option, PetroFix can be flushed from wells post injection with a clearwater flush. PetroFix normally takes a few weeks/months to attach to soils and clarify from groundwater and sampling precautions should be taken if sampling is needed during the attachment phase. **Helpful technical bulletins on post-application groundwater sampling, well flushing and other information is provided online per the link below.**

[Regenesis Groundwater Sampling, Well Flushing, and Product Handling Technical Bulletins Link](#)