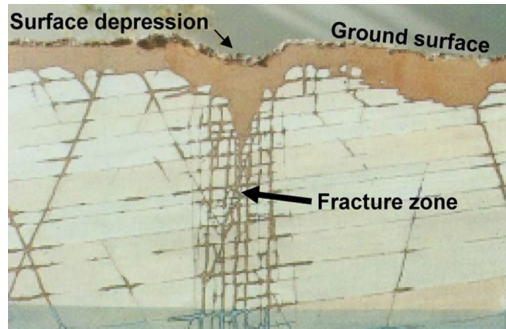


## Diagram of a Fracture Zone in a Cross-Section View



### Clients

- Home and Property Owners
- Farmers (Agriculture)
- Ranchers (Livestock)
- Realtors
- Real Estate Investors & Developers
- Commercial Land Developers
- Resorts and Hotels/Lodges
- Golf Course Developers
- Commercial/Industrial Businesses
- Water Well Drilling Companies
- Municipalities
- Environmental & Engineering Firms
- Anyone who needs clean, fresh water



## Fracture Trace Analysis Frequently Asked Questions

**Question:** When should I have a fracture trace analysis completed?

**Answer:** Before you have a geophysical groundwater survey conducted and before you start drilling.

**Question:** What part of the country does AquaSearch offer this service?

**Answer:** We provide this service anywhere in the world because this service can be completed remotely for our customers.

**Question:** How much does it cost to do a fracture trace analysis?

**Answer:** It all depend on the size of your property. Because of this, each fracture trace analysis is different and the cost can vary from one site to another. We do offer a free phone consultation to help determine the feasibility and cost. Please feel free to call us at **800-741-2816** to determine the cost to complete a fracture trace analysis of your property.

**Question:** Why should I have a fracture trace analysis completed for my property?

**Answer:** Drilling a new water well is a big investment \$10,000 - \$15,000 + ... if you cannot afford to risk your investment on a dry well or low yielding well then act now and call AquaSearch today at **800-741-2816** to schedule a fracture trace analysis for your property.

**Question:** What will I receive after having a fracture analysis completed?

**Answer:** You will be given a final report with our recommendations and a satellite or aerial photo map indicating potential fractures on your properties. In addition you will be provided with GPS coordinates of where to conduct an on-the-ground geophysical groundwater survey.



# FRACTURE TRACE ANALYSIS SERVICE

**Identifying the Best Drilling  
Location for New Water Wells**



**AquaSearch**  
**(800) 741-2816**

The availability of groundwater depends primarily on the geology of the area. Where the pores or fractures of rocks are interconnected, groundwater can flow easily and the rocks are said to be permeable. Certain rock formations have a higher potential for groundwater development than others.

A fracture trace analysis is a photo-geologic groundwater exploration tool used to locate potential rock fractures below the surface of the earth. Rock fractures are naturally occurring and can be an excellent conduit or storage vessel for groundwater. For this reason, they should be considered in the overall exploration plan when siting new water wells. Think of fractures as vertical and horizontal cracks or crevices formed in rocks that can hold or store groundwater. Once potential fractures are identified and mapped, they can assist in determining where to focus an on-the-ground geophysical groundwater survey. Using a fracture trace analysis, provides a whole new perspective and provides “the big picture” when determining where to drill new water wells, because it starts thousands of feet above the surface of the earth, using satellite and aerial photos and not at ground level.

One of the benefits of using this technology is that it can help minimize the total number of water wells needed to identify and pinpoint groundwater resources. Water wells drilled using this method, generally produce greater than average yields and reduce the occurrence of drilling multiple dry holes or low producing wells. Identifying and mapping fractures is often the only way you will find groundwater in semi-arid to arid areas of the world where clean, fresh water is scarce.

Fracture traces can be identified and mapped by a trained specialist’s evaluation of satellite and or low altitude aerial photographs.

To maximize the ability in locating a high capacity well a reliable on-the-ground geophysical groundwater survey must be conducted after completing a fracture trace analysis. We highly recommend the reliable Seismoelectric technology for the on-the-ground geophysical groundwater survey. This leading edge technology is based on science for locating groundwater. No other geophysical technology today will provide the vital decision-making information such as depth of water, thickness of aquifer and potential yield that you need to decide to drill at a specific location.

One of the benefits of using a fracture trace analysis is identifying where two or more fracture traces intersect one another. The zone of fracturing increases at the intersection point and this can potentially increase the groundwater volume when you drill. Thousands of successful, high yield wells have been drilled using a fracture trace analysis technology worldwide.

The presence of groundwater beneath the surface of the earth follows well-established natural laws and hydrogeological principles within its geological environment. Depending on the water requirement and hydrogeological conditions, the odds of drilling a high-volume well using random site selection and without a fracture trace analysis can be very low. A fracture trace analysis will not predict what the potential yield might be or what depth potential groundwater might be obtained. This information is only provided from a reliable on-the-ground geophysical groundwater survey.

A fracture trace analysis helps pinpoint where to conduct the on-the-ground geophysical groundwater survey. This method is especially helpful on larger properties or where the exploration for groundwater is wide open. In addition, this method to identify a potential drilling location can reduce the cost and time associated with an on-the-ground geophysical groundwater survey.

- Using this groundwater exploration method can potentially reduce the chance that multiple wells will be needed to finally obtain a water producing well with a good yield.
- Utilizing the fracture trace method of well location can potentially save tens of thousands of dollars in drilling costs and other associated costs.
- Fracture trace well sites can result in improved yields which means more gallons per minute.
- A fracture trace analysis can be an economical and successful way to more accurately find groundwater resources on your property.

