Expert Testimony and Litigation Support

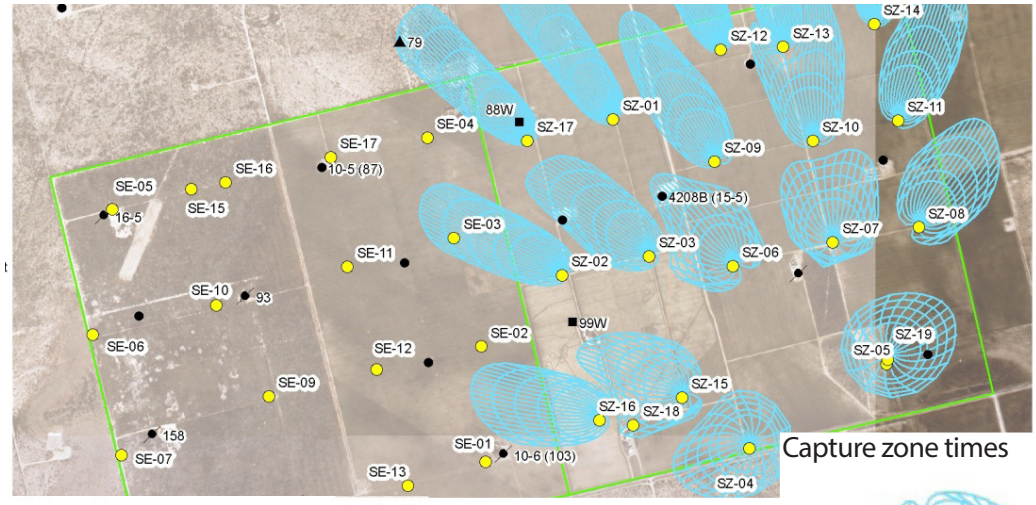
West Texas

Client

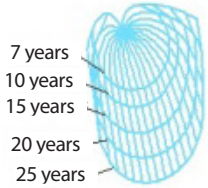
Pioneer Natural Resources

Highlights

- Provided expert testimony (deposition) and litigation support
- Evaluated quality of laboratory and field techniques
- Conducted detailed hydrogeologic analysis, including source of water to irrigation wells claimed to have been impacted



Capture zone times



Irrigation well
Oil well
Plugged oil well
Injection / disposal from oil well
Plugged injection well

DBS&A provided expert testimony and litigation support on behalf of Pioneer Natural Resources (Pioneer) for a case involving alleged brine contamination of a shallow aquifer by Pioneer oil production and injection wells. The case involved the following analyses:

- Review of oil well integrity
- Evaluation of the potential for migration of produced water along abandoned boreholes
- Evaluation of the potential for over-drilling and pumping of irrigation wells
- Comparison of regional water chemistry to local water quality
- Comparison of irrigation well capture zones to oil production well locations
- Calculation of potential travel times for produced water to impact irrigation wells
- Potential for over-irrigation and focused recharge from playa lakes to degrade water quality

DBS&A also evaluated the quality of the laboratory and field techniques used to collect and analyze water samples, which allowed comparison of the error in water chemistry results to the alleged potential impacts on irrigation wells. Based in large part on the strength of the technical analysis conducted by DBS&A, the case was not pursued by the plaintiffs.