



Zero Valent Iron (ZVI) InjectionNano scale ZVI injected at DOE Hanford Site Treatability test to determine if ZVI injection could be used to repair an existing redox manipulation barrier 98,000 gallons of 1% solids solution injected over a period of 5 days (14 gpm approx)









































Conclusions

- Resistivity and IP were useful for monitoring ZVI injection despite difficult conditions
- Borehole EM worked well but limited borehole
 access
- Susceptibility measurements on sediment cores indicate potential for monitoring with magnetics
- GPR promising for foam injection monitoring
- Moisture content changes following injection suggest that resistivity could also be useful
- If tracer materials are incorporated, IP and other methods also potentially viable

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