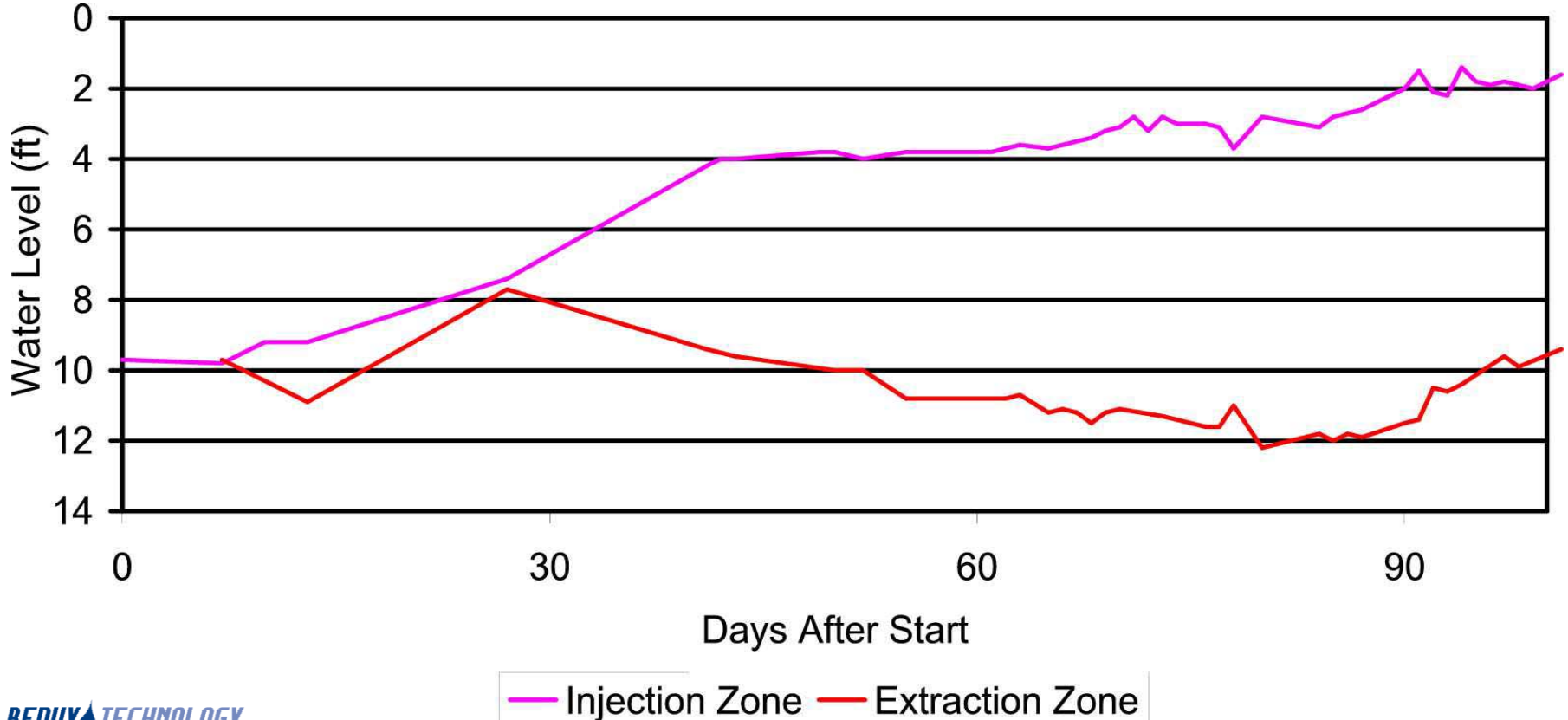


# Case Study #4

## Nutrient Injection Well Fouling

- Aberdeen Proving Ground, MD, DOD Remediation
- Pulsed injection of the vitamin B12/Ti(III)-citrate mix



# Case Study #4 (cont'd)

- **Treatment program:**
  - Redux B-T20 reducing type biocide**
  - Daily additions at 150 ppm**
  - Favorable degradation rate**
- **Bacteriostatic activity was limited to a treatment zone surrounding the injection point**
- **B-T20 prevented premature citrate utilization and thus extended the area of treatment.**
- **B-T20 regulatory approvals: EPA registered product and EPA Green Chemistry Award**

# Case Study #4 (cont'd)

Water Level (Restart with biocide)

