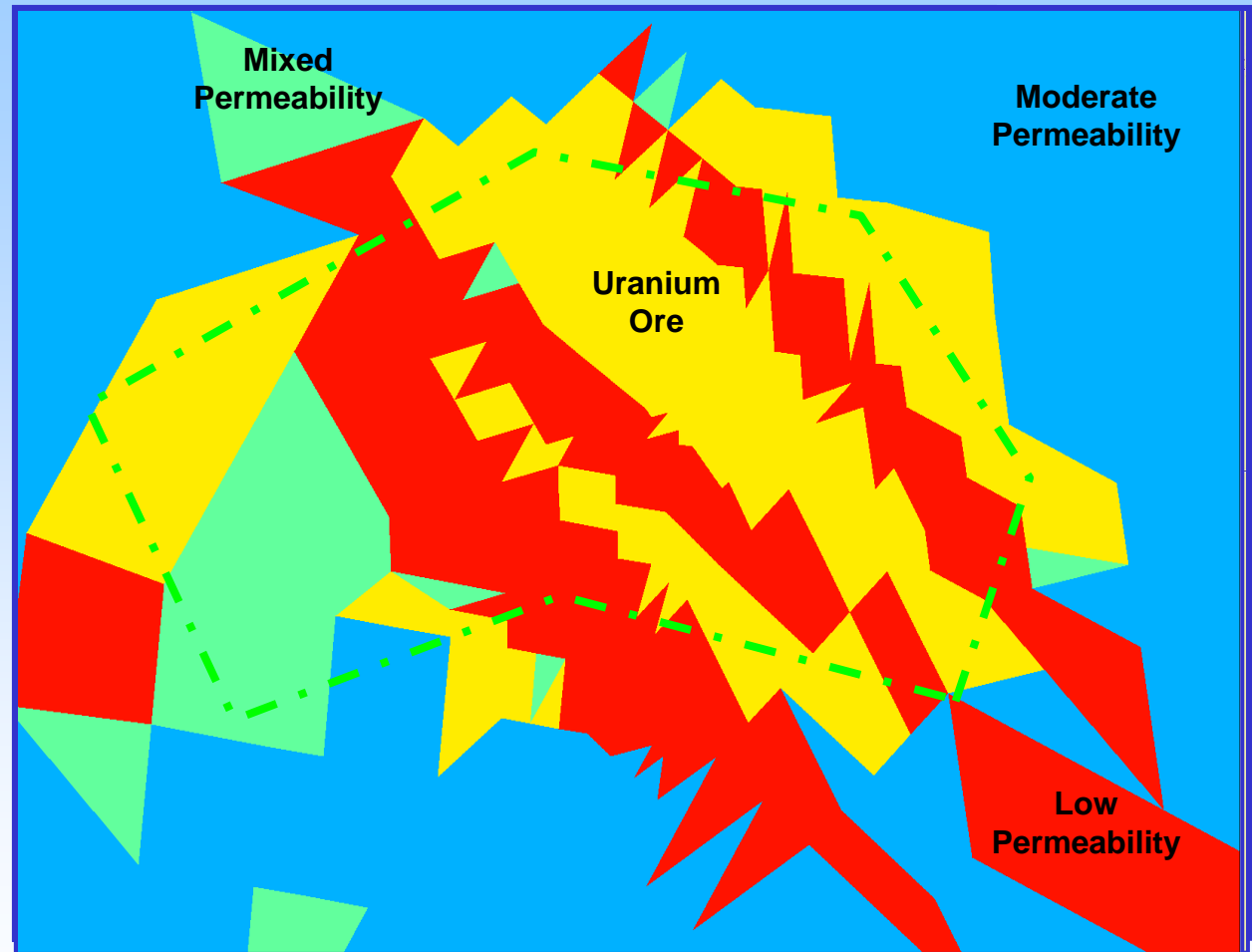


Lixiviant Delivery/Recovery System Optimization

Ore Body Scenario

Fluvial Depositional Environment



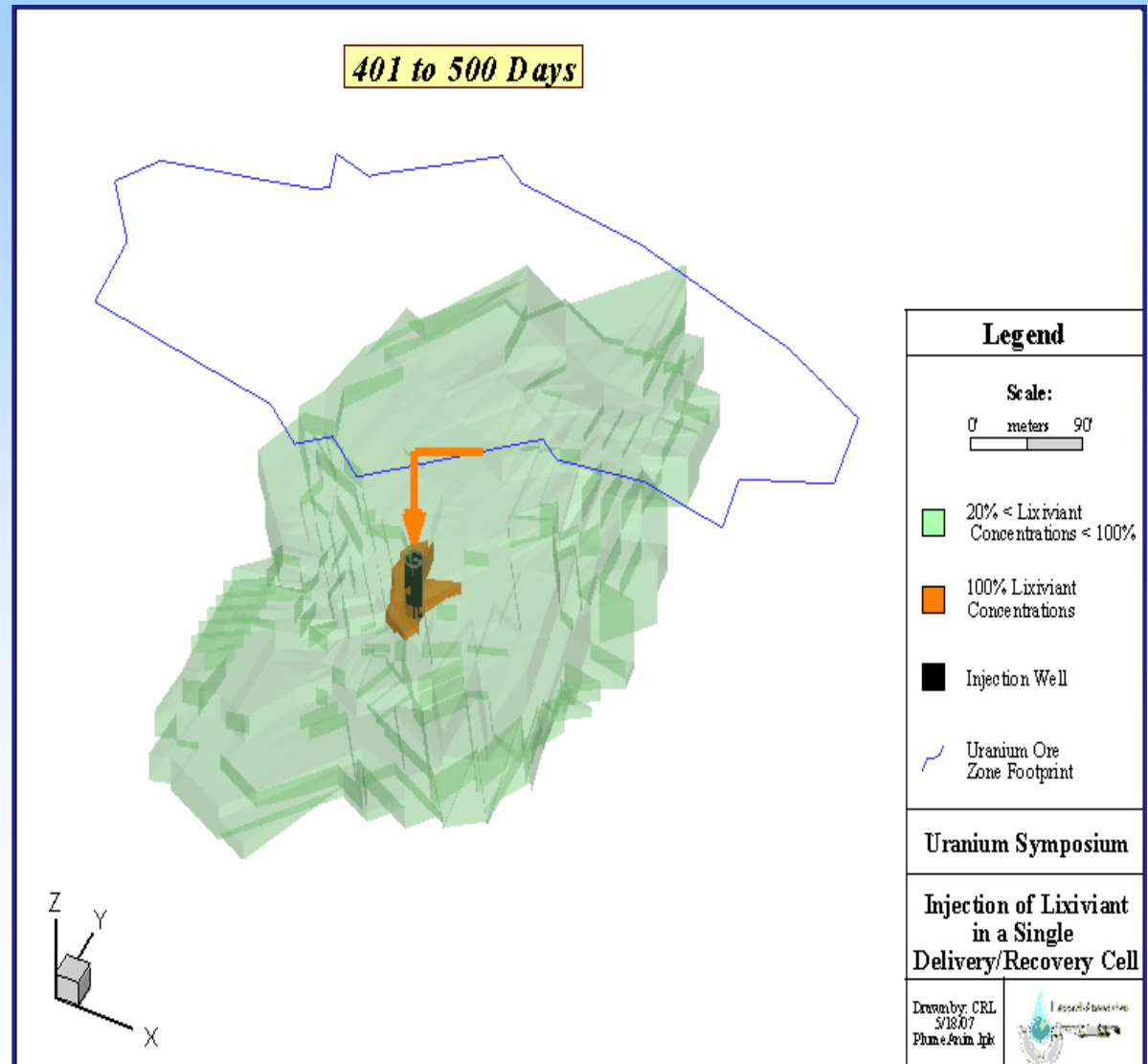
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Examine the Injection

150 gpm Injection



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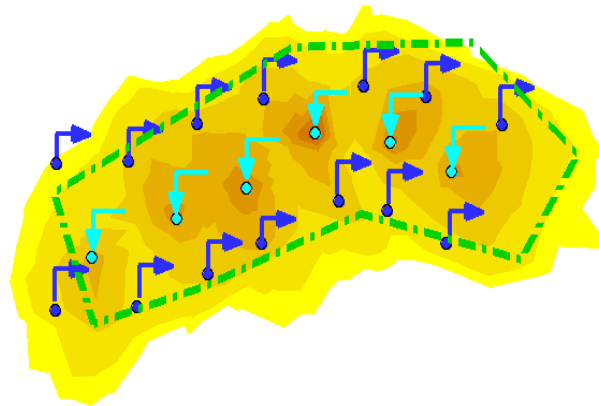
Examine the Injection

150 gpm Injection

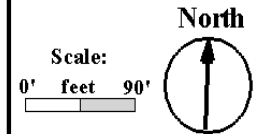
Mechanical Design

Simple 5 Well-Spot Pattern

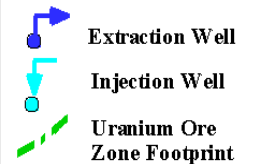
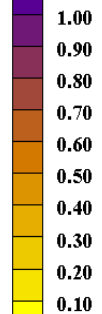
6 Cells
Injection 150 gpm
Extraction 157.5 gpm
Extraction for 2 Years



Legend



Relative Lixiviant Concentration



Uranium Symposium

Mechanical Placement
of Delivery/Recovery
Lixiviant Distribution
at 730 days

Drawn by: CRL
5/18/07
Conc2.lpk



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150 gpm Injection

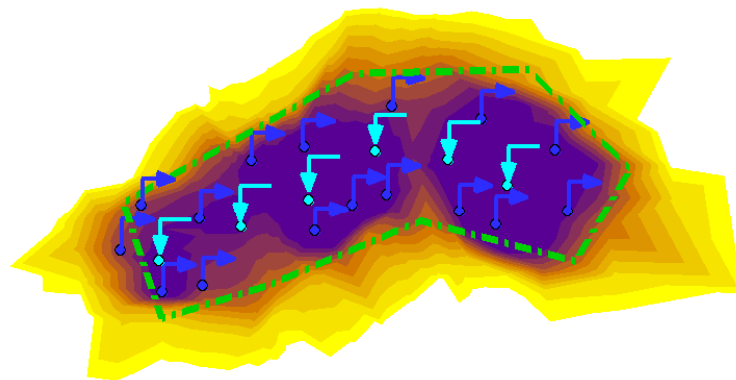
Mechanical Design

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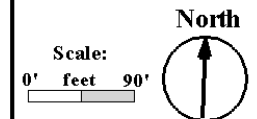
Optimized Design

Site-Specific Adjustment

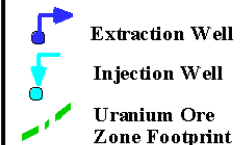
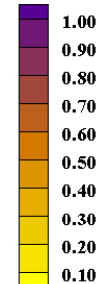
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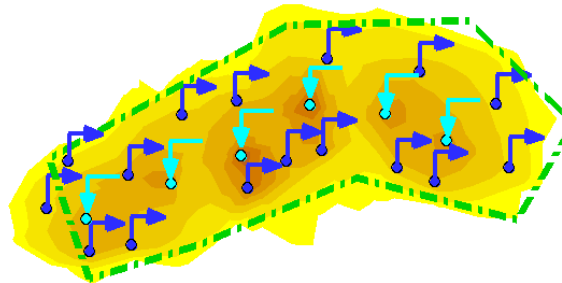
Optimized Design

Site-Specific Adjustment

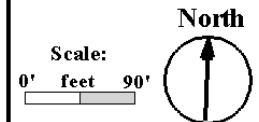
Sweeping Design

Cyclic Sweep Design

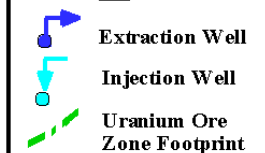
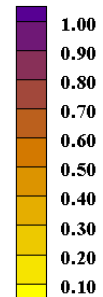
6 Cells
Injection 150 gpm
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Scenario Comparison

Optimization Approach

Comparison Criteria

- (1) Volume of Ore Zone Porous Media having a Lixiviant Saturation >50%**
 - **Maximize Lixiviant Delivery**
- (2) Average Residence Time of Lixiviant**
 - **Maximize Recovery ... Minimize Residence Time**
- (3) Volume of Lixiviant Remaining after 1/2 Year of Clean-Water Injection/Extraction**
 - **Minimize Restoration Activities**



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