

LEGEND

- | | |
|-------------------------------|--|
| I-4 INJECTION WELL | --- DEEP TCE CONTOUR (ug/L or ppb) |
| E-4 EXTRACTION WELL | — SHALLOW TCE CONTOUR (ug/L or ppb)
(DASHED WHERE INFERRED) |
| □ EX. WELL IN LAYER 1 | — UNLINED DITCH |
| ⊕ EX. WELL IN LAYER 2 | ---- BEDROCK BLOCK AS IMPLEMENTED IN MODEL |
| ⊕ EX. WELL IN LAYERS 1 & 2 | |
| ⊕ EX. WELL IN LAYERS 1, 2 & 3 | |

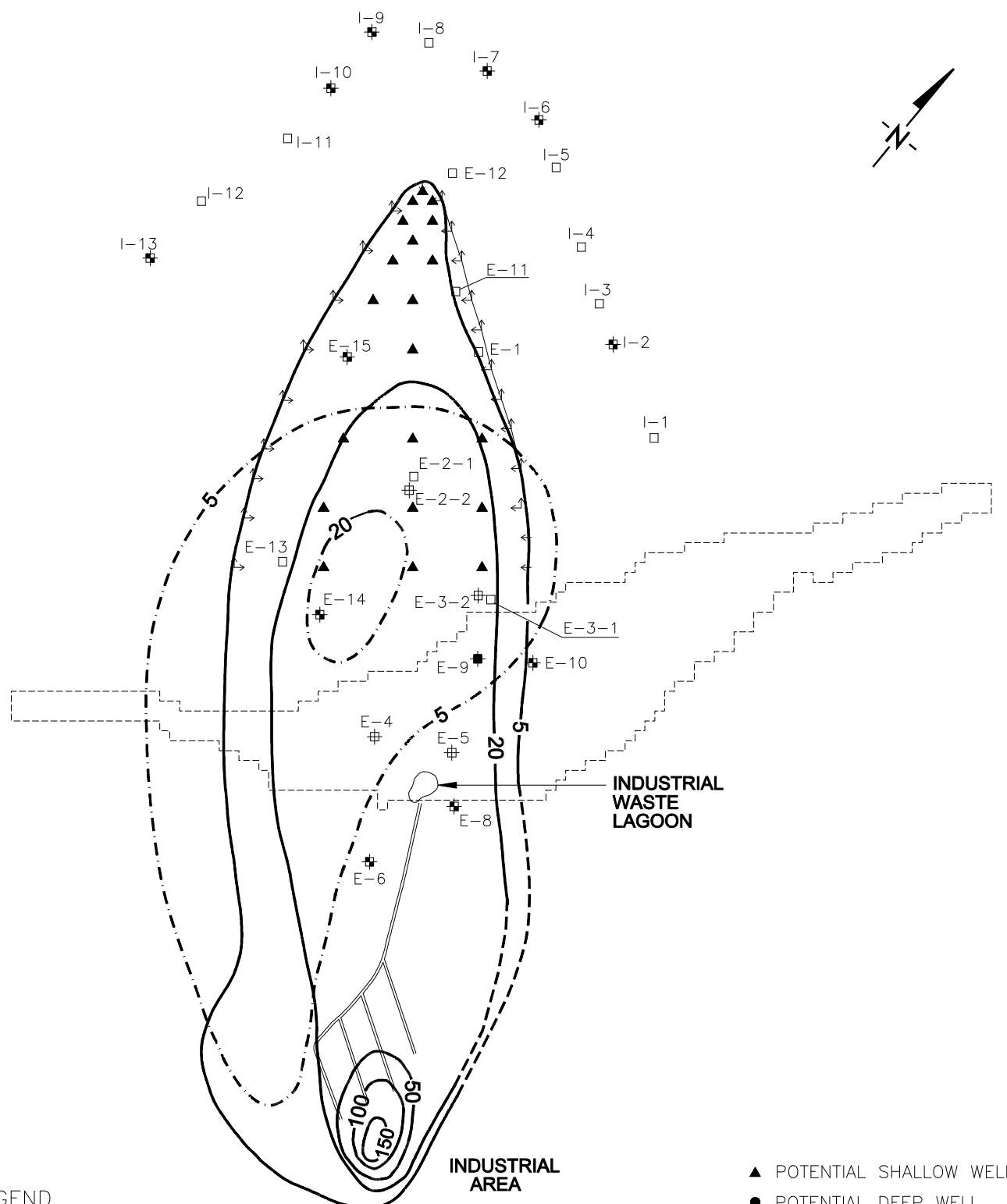


SCALE IN FEET
ADAPTED FROM KLEINFELDER (1998)

Figure 5-3. TCE concentrations and current remediation wells, Tooele.



H012004A.DWG



LEGEND

- I-4 INJECTION WELL
- E-4 EXTRACTION WELL
- EX. WELL IN LAYER 1
- ⊕ EX. WELL IN LAYER 2
- ⊕ EX. WELL IN LAYERS 1 & 2
- ⊕ EX. WELL IN LAYERS 1, 2 & 3

- DEEP TCE CONTOUR (ug/L or ppb)
- SHALLOW TCE CONTOUR (ug/L or ppb) (DASHED WHERE INFERRED)
- ==== UNLINED DITCH
- BEDROCK BLOCK AS IMPLEMENTED IN MODEL

- ▲ POTENTIAL SHALLOW WELL
- POTENTIAL DEEP WELL
- ↑ HEAD DIFFERENCE CONSTRAINT
- ↗ RELATIVE GRADIENT CONSTRAINT

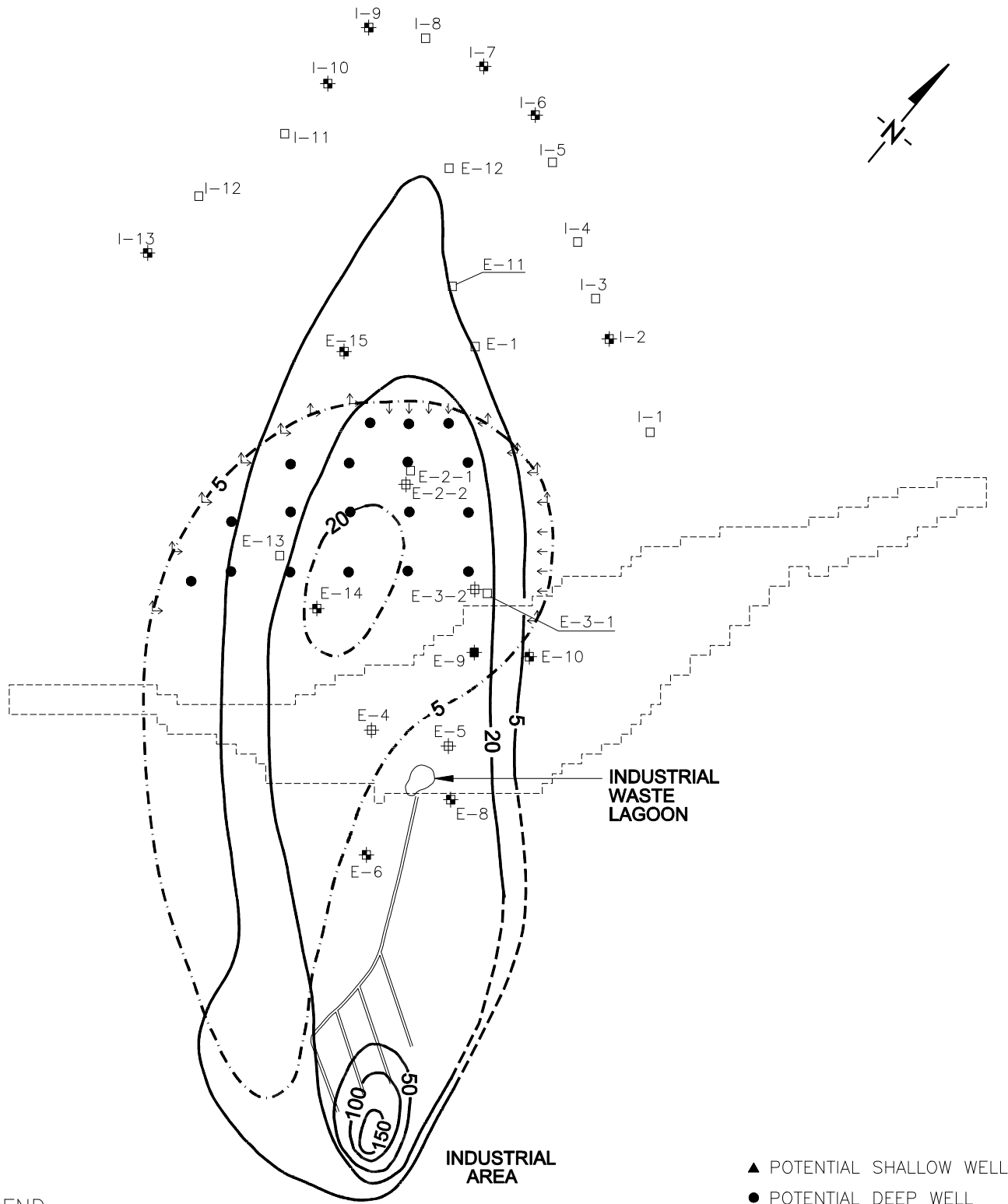


Figure 5-4. Constraint locations and potential additional wells, shallow 5-ppb plume, Tooele.



H012005A.DWG

HO12006A.DWG



LEGEND

I-4 INJECTION WELL

E-4 EXTRACTION WELL

□ EX. WELL IN LAYER 1

⊕ EX. WELL IN LAYER 2

⊕ EX. WELL IN LAYERS 1 & 2

⊕ EX. WELL IN LAYERS 1, 2 & 3

--- DEEP TCE CONTOUR (ug/L or ppb)

— SHALLOW TCE CONTOUR (ug/L or ppb)
(DASHED WHERE INFERRED)

— UNLINED DITCH

--- BEDROCK BLOCK AS IMPLEMENTED IN MODEL

▲ POTENTIAL SHALLOW WELL

● POTENTIAL DEEP WELL

↑ HEAD DIFFERENCE CONSTRAINT

↗ RELATIVE GRADIENT CONSTRAINT

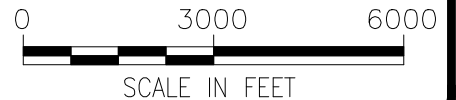
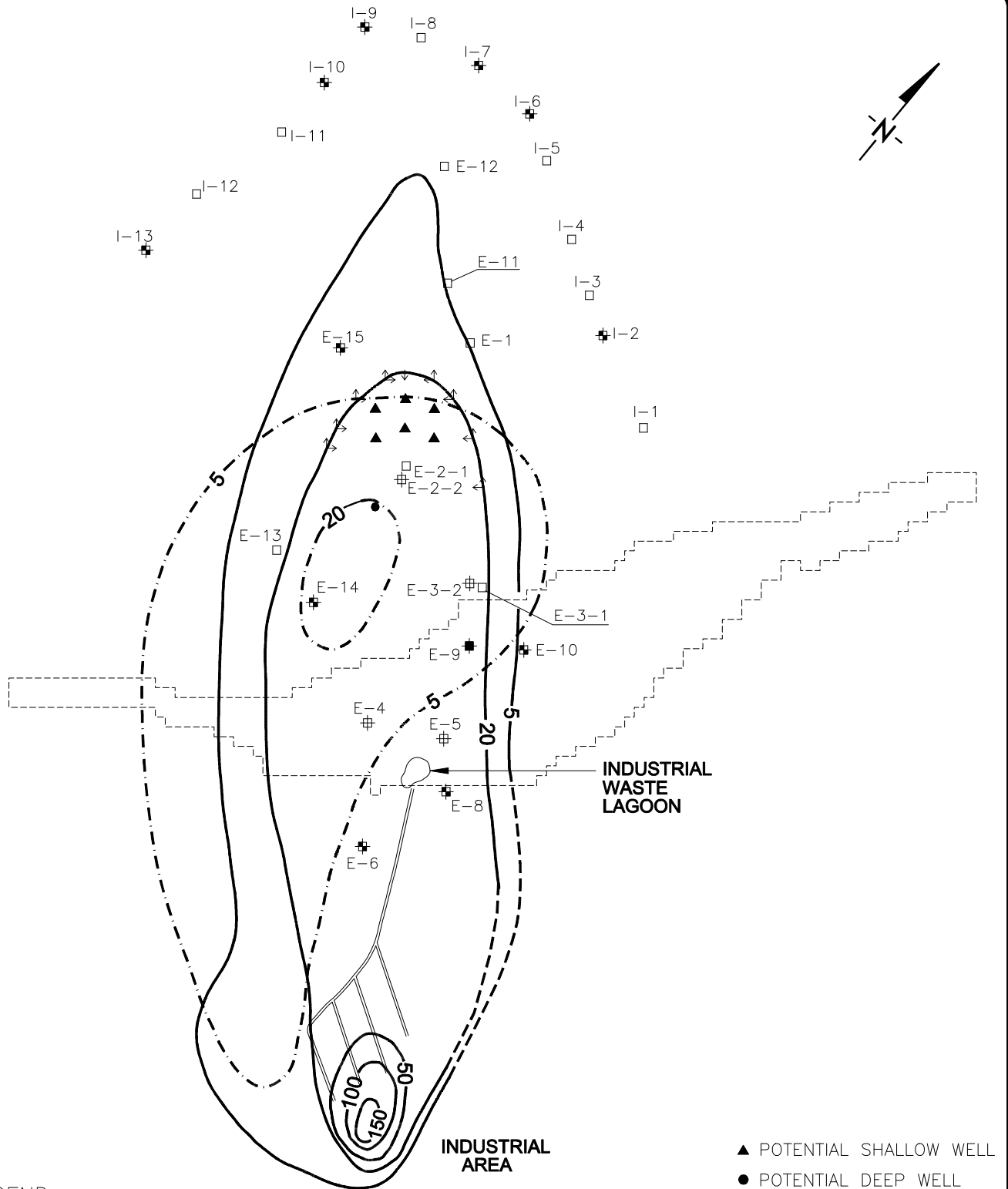


Figure 5-5. Constraint locations and potential additional wells, deep 5-ppb plume, Tooele.



HO12007A.DWG



LEGEND

I-4 INJECTION WELL

E-4 EXTRACTION WELL

□ EX. WELL IN LAYER 1

⊕ EX. WELL IN LAYER 2

⊕ EX. WELL IN LAYERS 1 & 2

⊕ EX. WELL IN LAYERS 1, 2 & 3

--- DEEP TCE CONTOUR (ug/L or ppb)

— SHALLOW TCE CONTOUR (ug/L or ppb)
(DASHED WHERE INFERRED)

— UNLINED DITCH

--- BEDROCK BLOCK AS
IMPLEMENTED IN MODEL

▲ POTENTIAL SHALLOW WELL

● POTENTIAL DEEP WELL

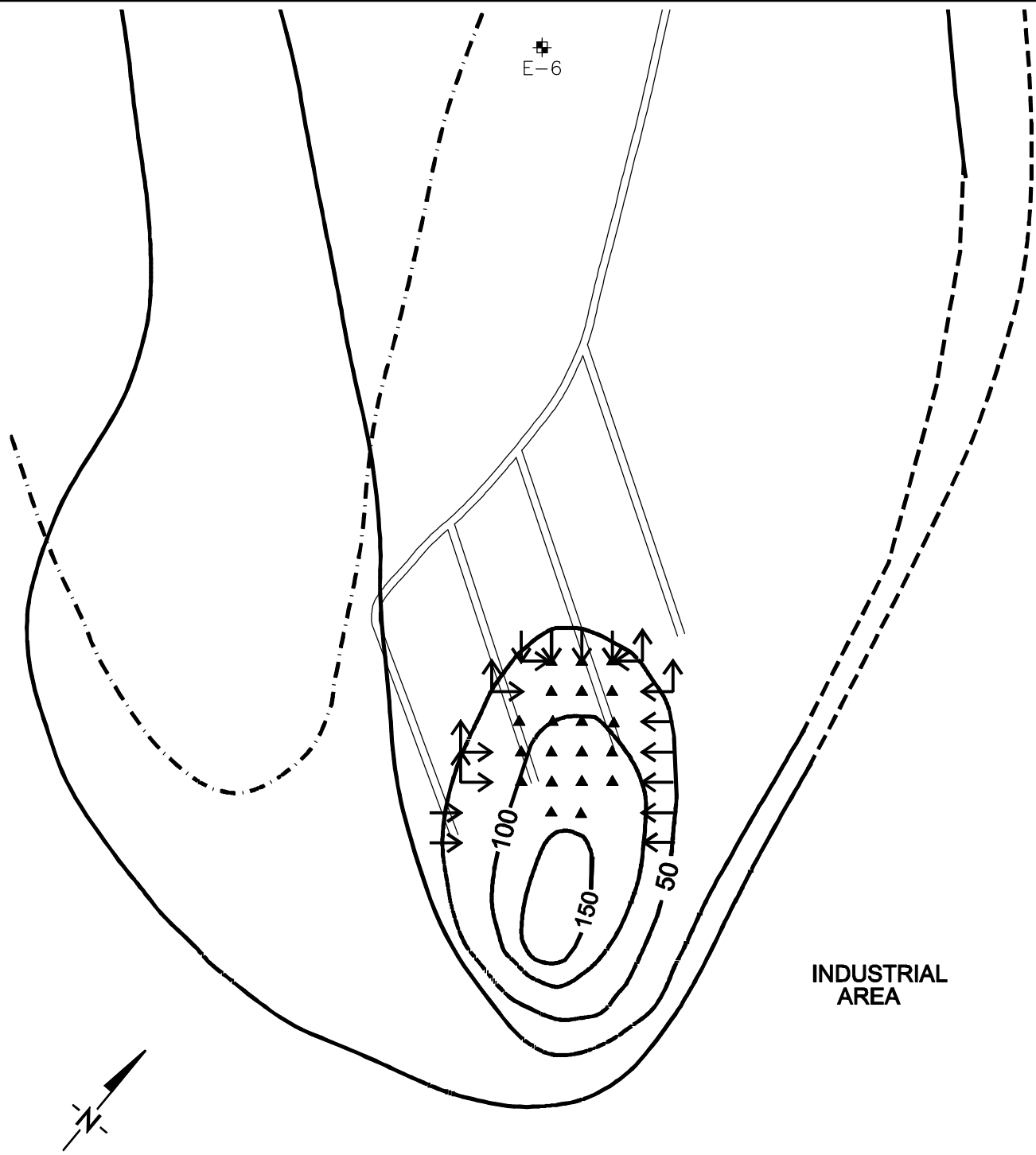
↑ HEAD DIFFERENCE
CONSTRAINT

↓ RELATIVE GRADIENT
CONSTRAINT

Figure 5-6. Constraint locations and potential additional wells, shallow 20-ppb plume, Tooele.



HO12008A.DWG



LEGEND

I-4 INJECTION WELL

E-4 EXTRACTION WELL

□ EX. WELL IN LAYER 1

⊕ EX. WELL IN LAYER 2

⊕ EX. WELL IN LAYERS 1 & 2

⊕ EX. WELL IN LAYERS 1, 2 & 3

--- DEEP TCE CONTOUR (ug/L or ppb)

— SHALLOW TCE CONTOUR (ug/L or ppb)
(DASHED WHERE INFERRED)

==== UNLINED DITCH

---- BEDROCK BLOCK AS
IMPLEMENTED IN MODEL

▲ POTENTIAL SHALLOW WELL

● POTENTIAL DEEP WELL

↑ HEAD DIFFERENCE
CONSTRAINT

↗ RELATIVE GRADIENT
CONSTRAINT

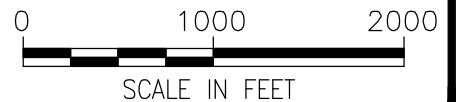
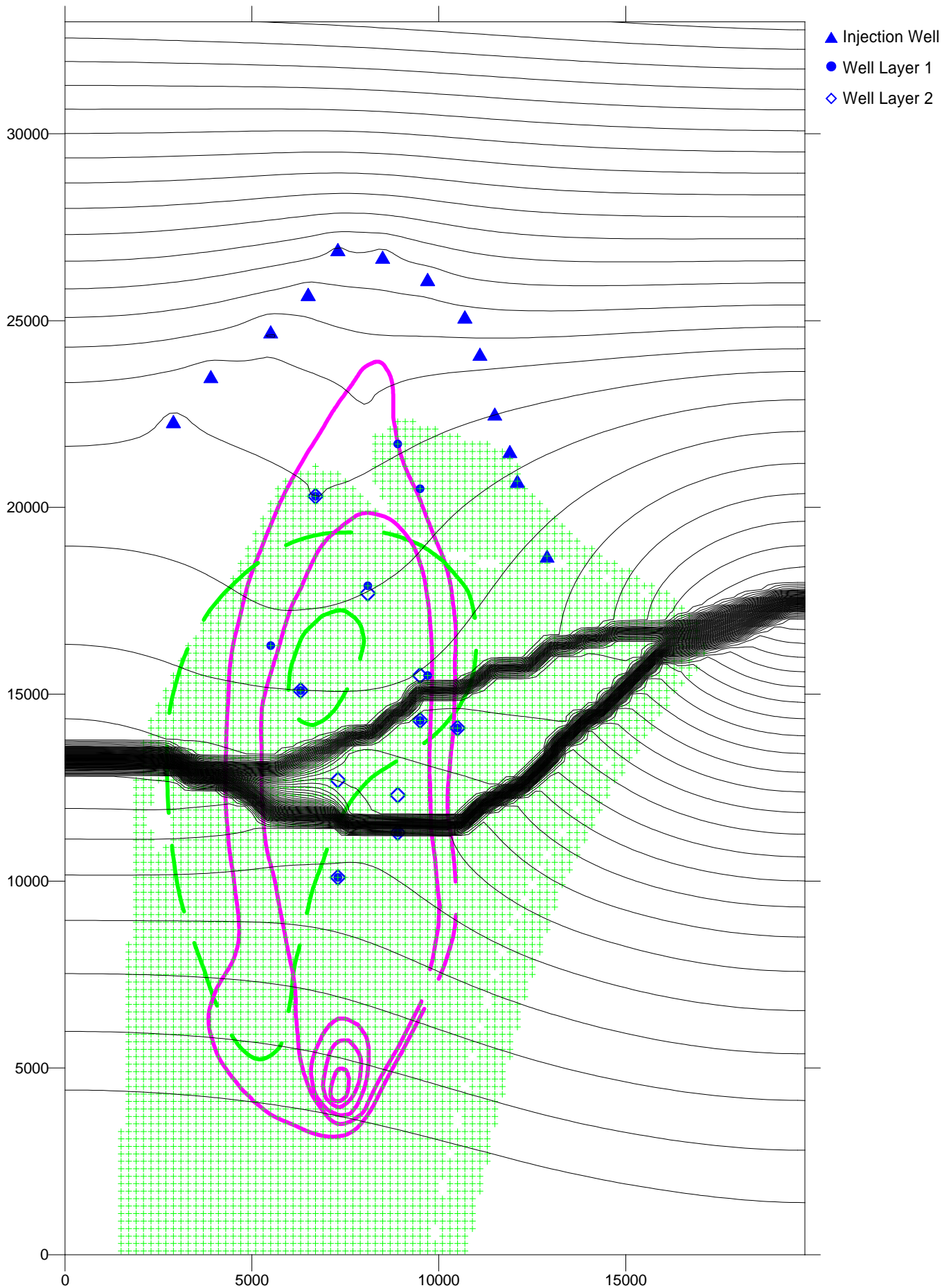


Figure 5-7. Constraint locations and potential additional wells, 50-ppb plume, Tooele.

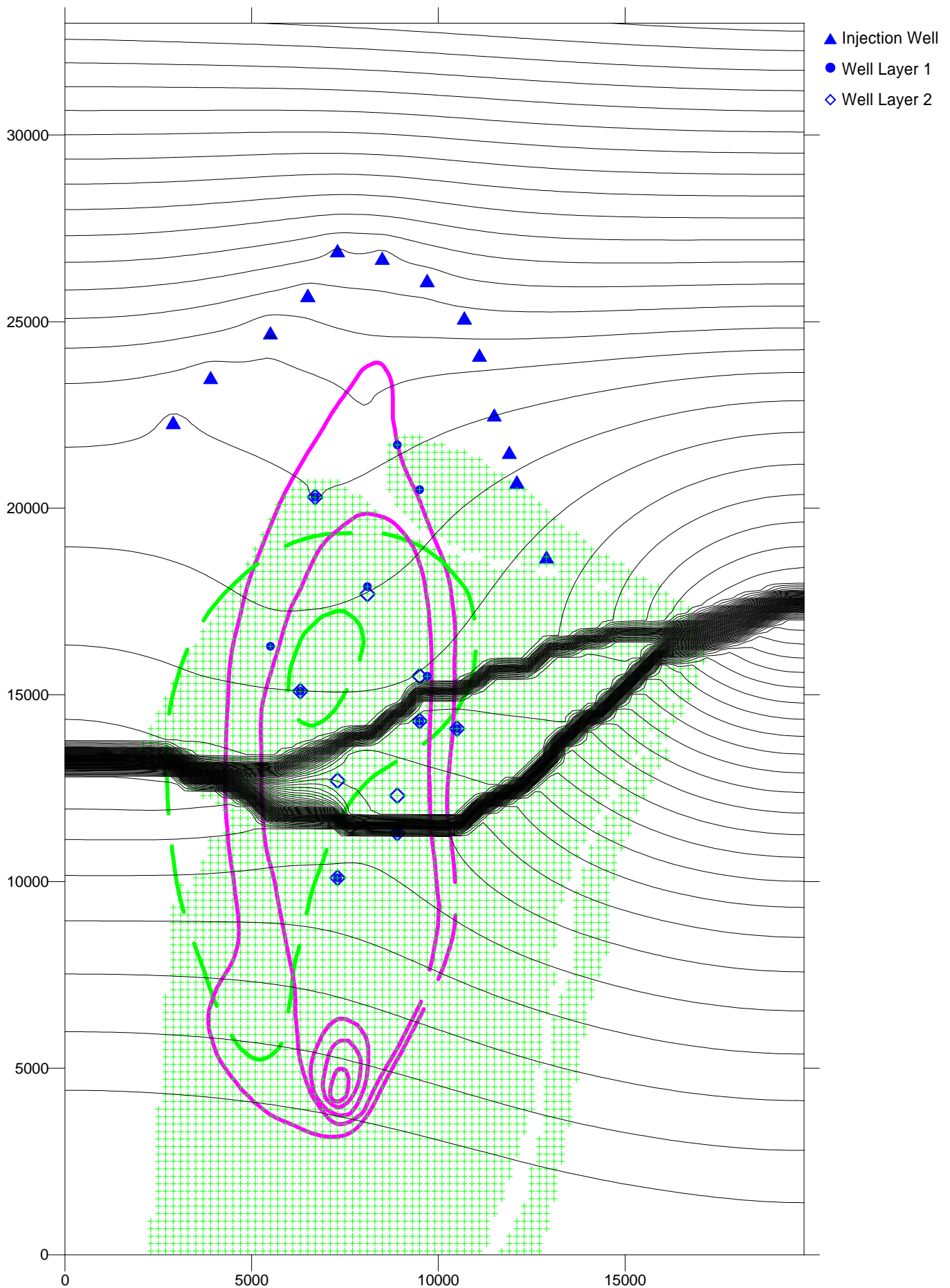


Figure 5-8: Shallow Particles, Layer 1 heads, Pumping on April 6, 1998
(~7460 gpm, 15 existing wells)



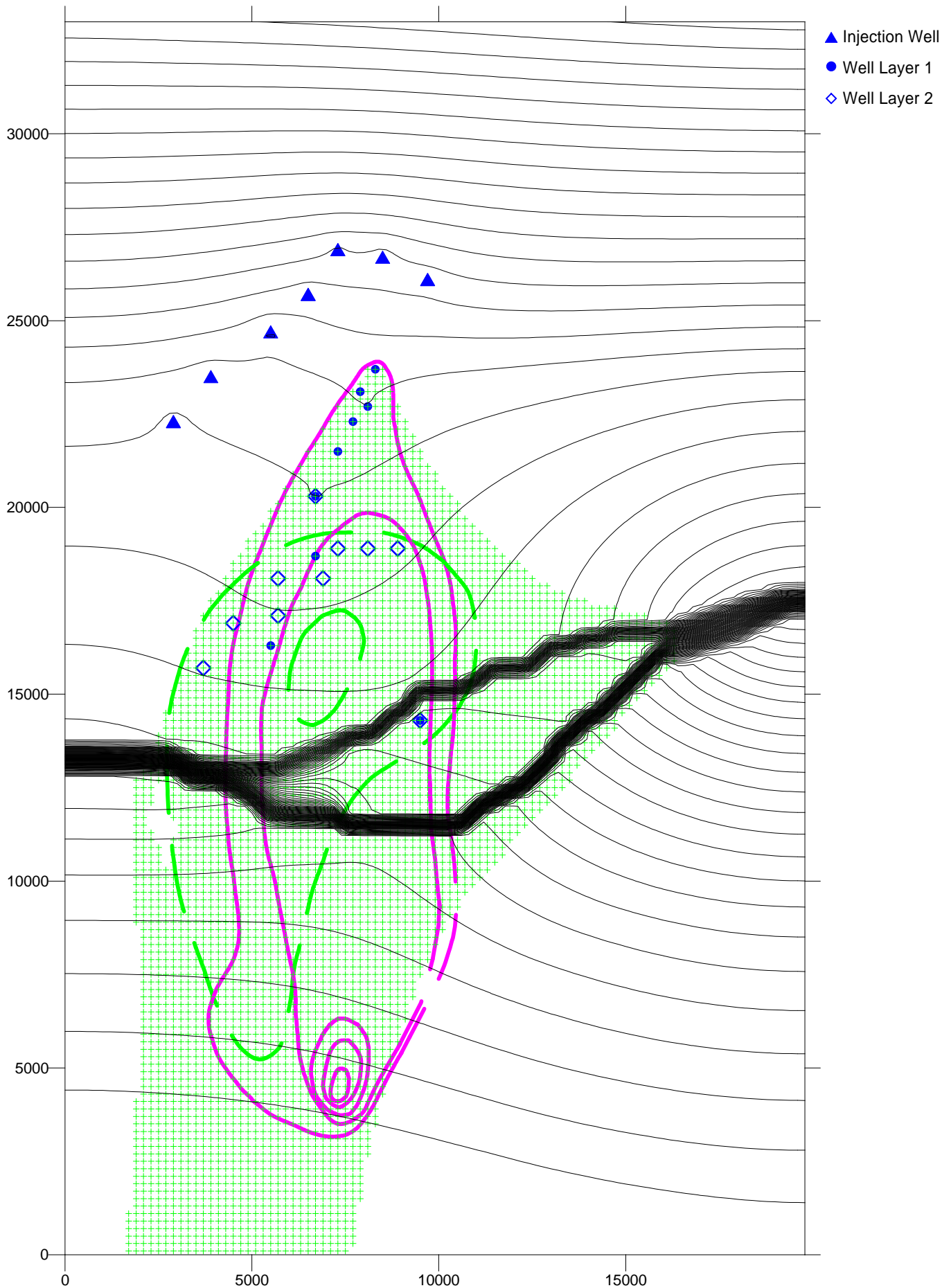
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Shallow particles originate half-way down in layer 1.

Figure 5-9: Deep Particles, Layer 1 heads, Pumping on April 6, 1998
(~7460 gpm, 15 existing wells)



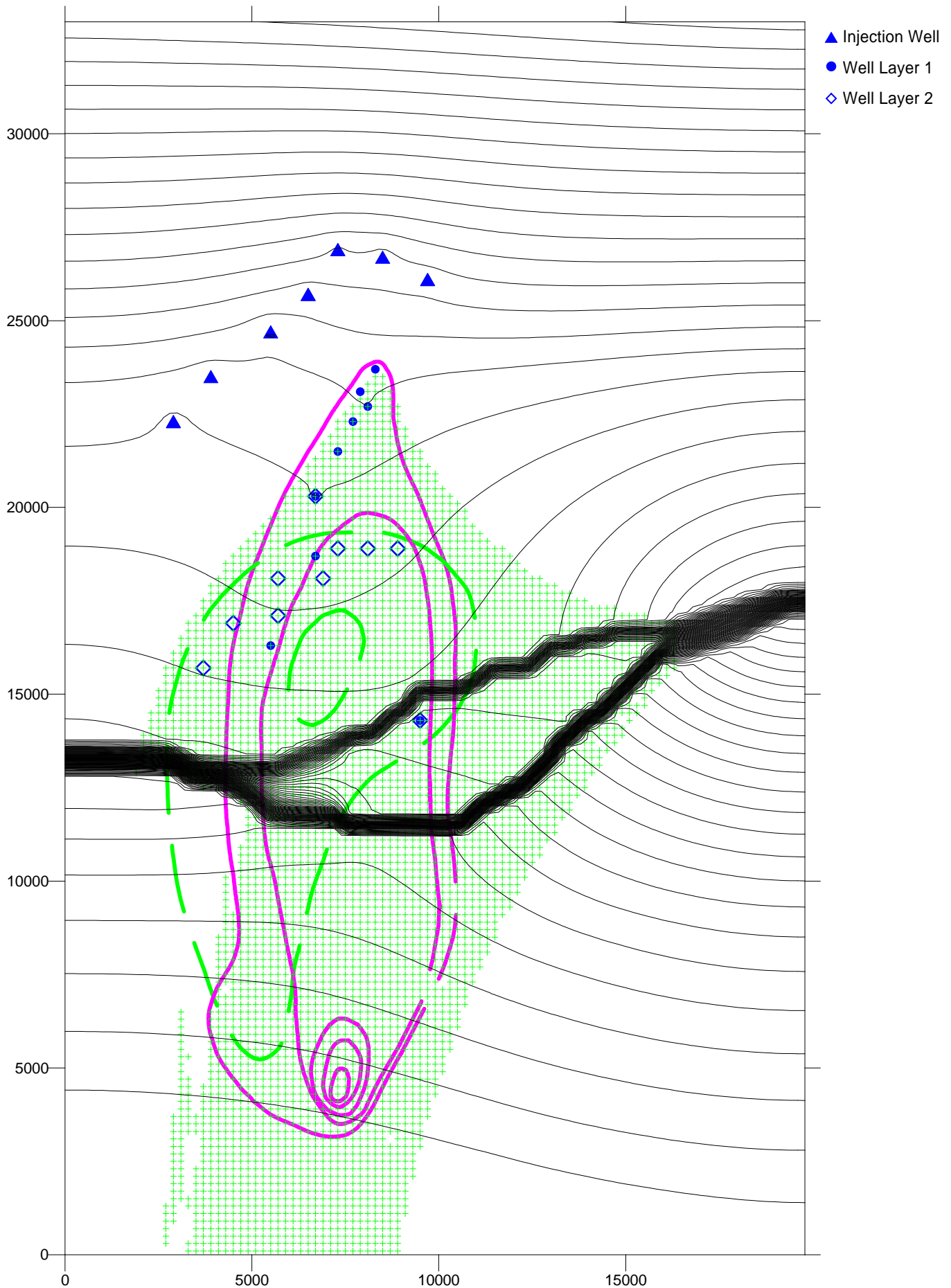
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Deep particles originate half-way down in layer 2.

Figure 5-10: Shallow Particles, Contain Shallow & Deep 5-ppb Plume
(4163 gpm, 14 new wells, 3 existing wells)



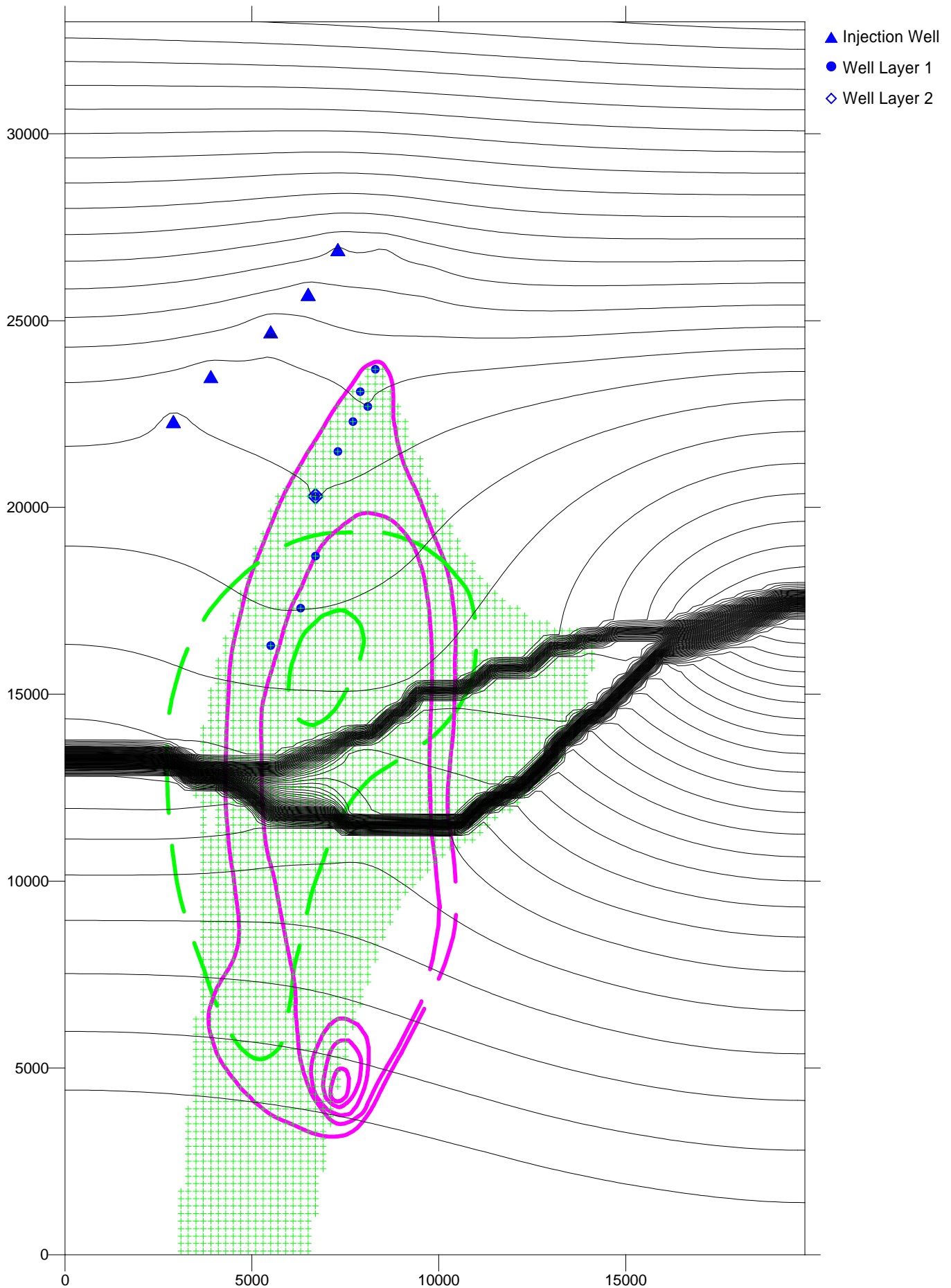
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Shallow particles originate half-way down in layer 1.

Figure 5-11: Deep Particles, Contain Shallow & Deep 5-ppb Plume
(4163 gpm, 14 new wells, 3 existing wells)



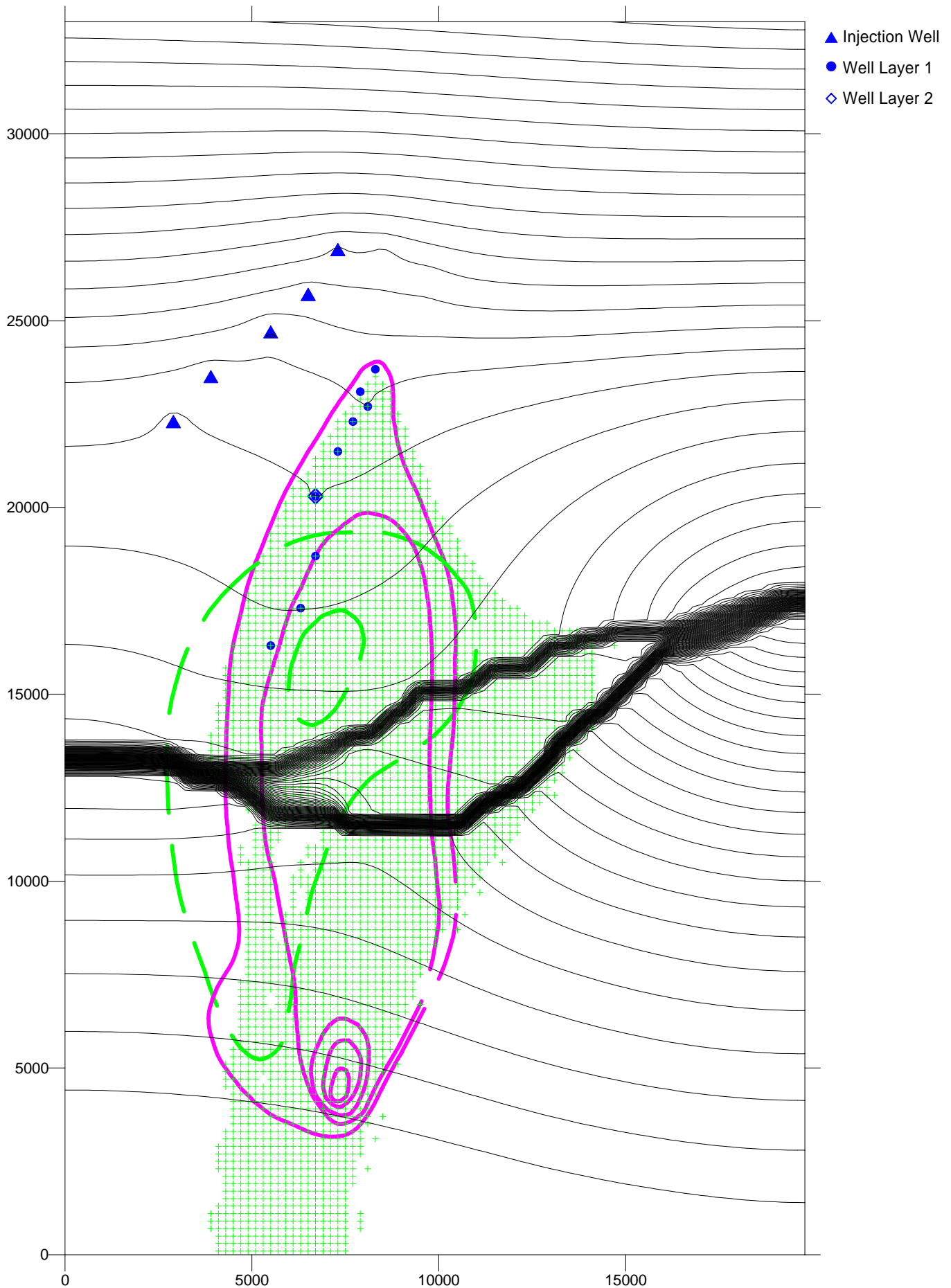
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Deep particles originate half-way down in layer 2.

Figure 5-12: Shallow Particles, Contain Shallow 5-ppb Plume
(2622 gpm, 7 new wells, 2 existing wells)



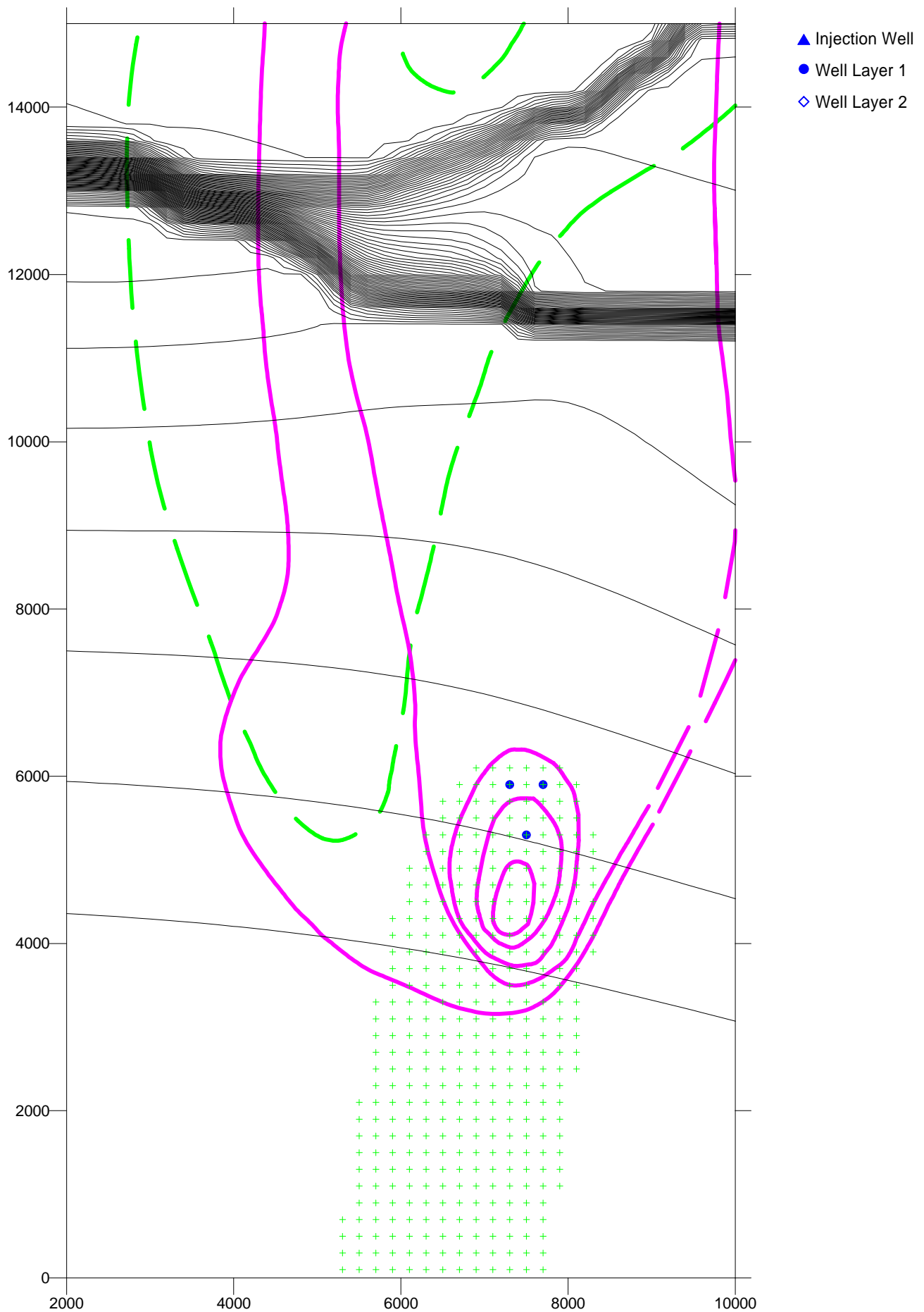
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Shallow particles originate half-way down in layer 1.

Figure 5-13: Deep Particles, Contain Shallow 5-ppb Plume
(2622 gpm, 7 new wells, 2 existing wells)



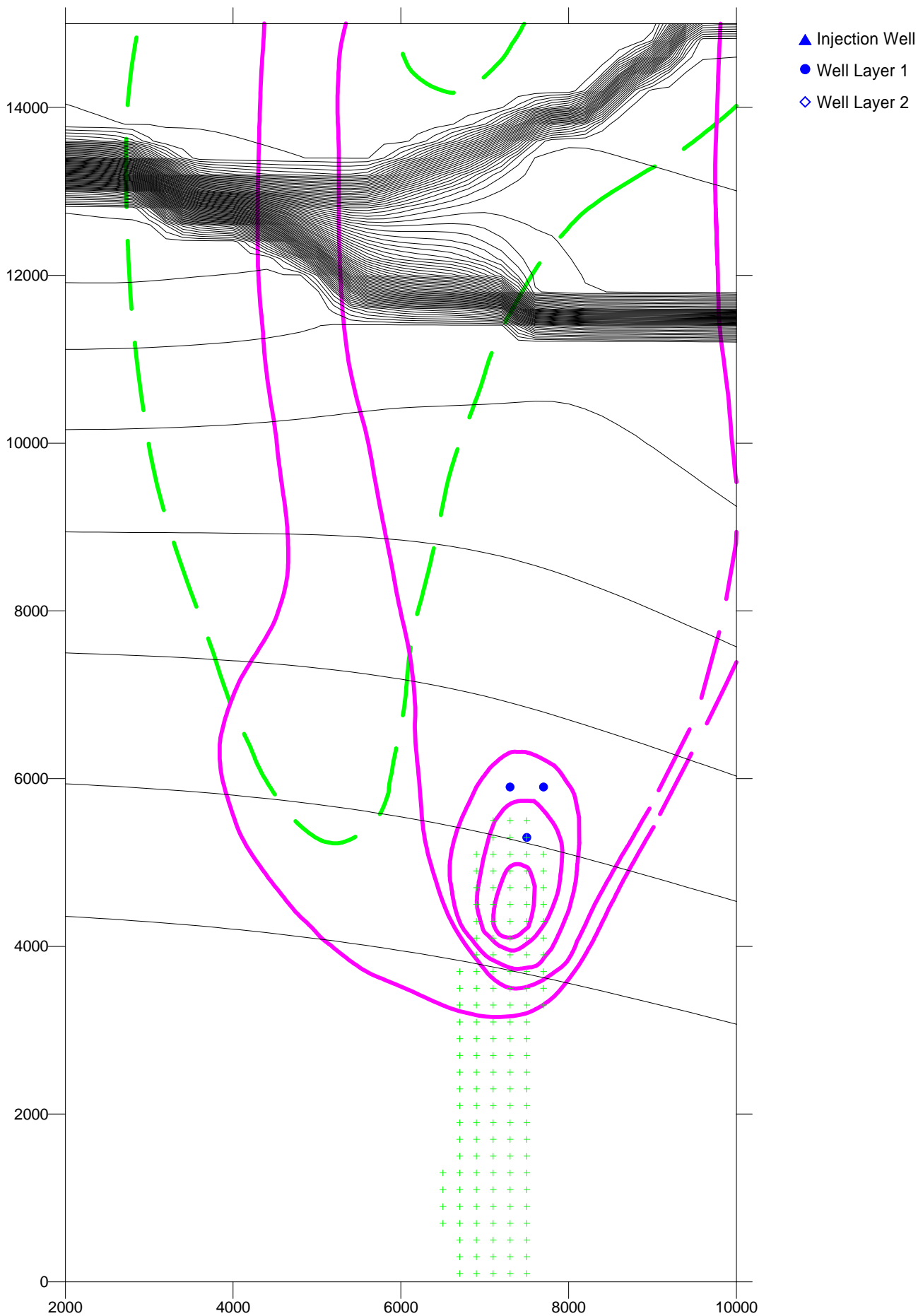
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Deep particles originate half-way down in layer 2.

Figure 5-14: Shallow Particles, Contain Shallow 50-ppb Plume
(1124 gpm, 3 new wells, 0 existing wells)



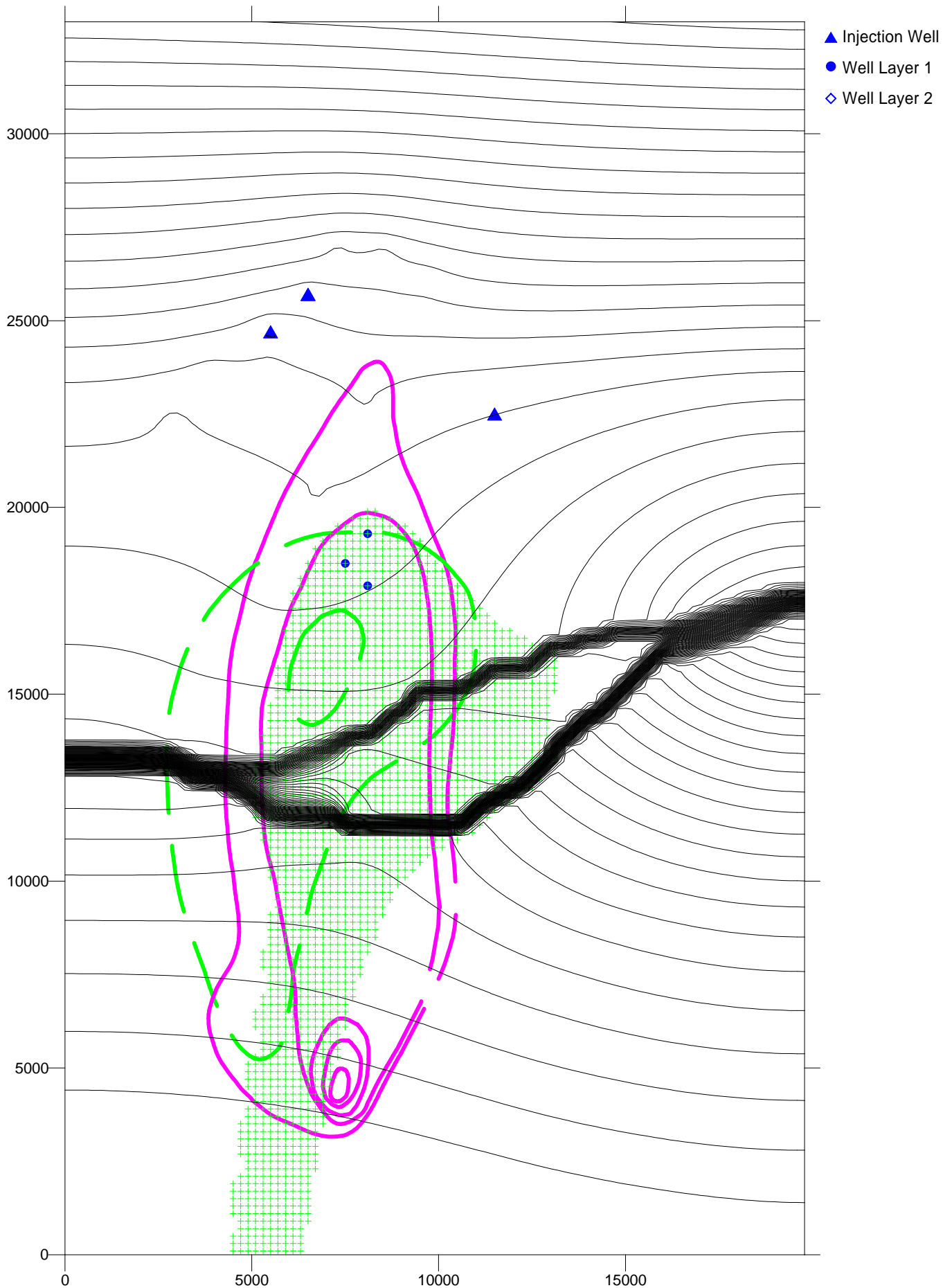
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Shallow particles originate half-way down in layer 1.

Figure 5-15: Deep Particles, Contain Shallow 50-ppb Plume
(1124 gpm, 3 new wells, 0 existing wells)



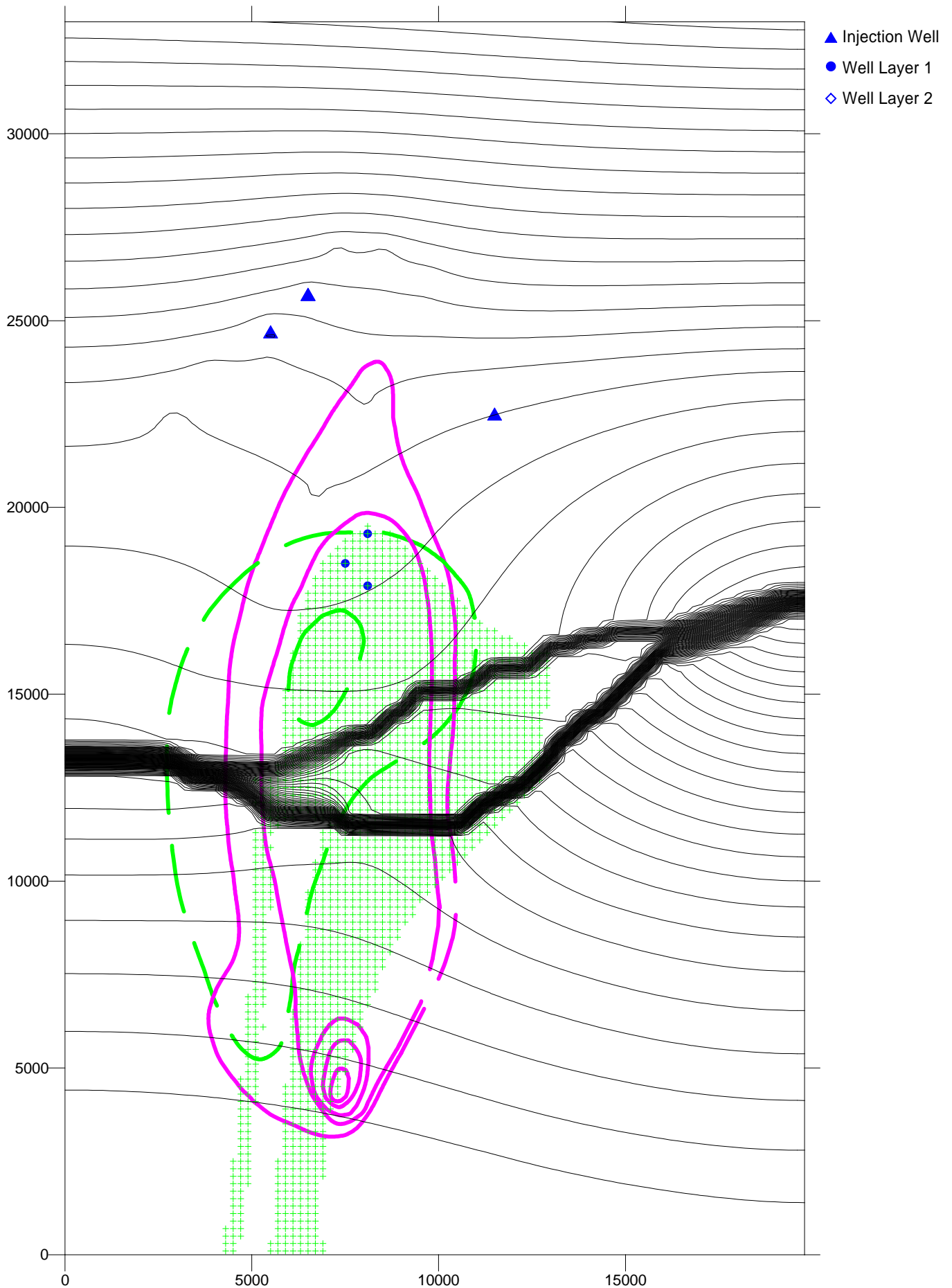
A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Deep particles originate half-way down in layer 2.

Figure 5-16: Shallow Particles, Contain Shallow 20-ppb Plume
(1377 gpm, 2 new wells, 1 existing well)



A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Shallow particles originate half-way down in layer 1.

Figure 5-17: Deep Particles, Contain Shallow 20-ppb Plume
(1377 gpm, 2 new wells, 1 existing well)



A "+" symbol indicates that a particle starting at that location is captured by one of the remediation wells, based on particle tracking with MODPATH. Deep particles originate half-way down in layer 2.