Figure 11. Photograph of the drip leg inside the utility tunnel (from DOE/NE-ID 2004).
Figure 12. Plan view of the drain line penetrating the utility tunnel wall (from Drawing 135577).
Figure 13. Section view of the drain line and shallow injection well (from Drawing 135577).
Figure 14. Plot plan of the CPP-633 Closure Cap area (from Drawing 055705).
5. **46-CPP**

Shallow injection well 46-CPP is similar to 45-CPP in that it also received a steam condensate discharge from steam header 8-in. HSN-101623. However, it is located south of the Olive Avenue branch of the INTEC utility tunnel, northeast of building CPP-663, and is approximately 7 feet below grade. Figure 8 shows the general location of the utility tunnel and its proximity to several buildings at INTEC.

Steam header 8–in. HSN-101623 in the Olive Avenue branch of the INTEC utility tunnel had a second drip leg and associated drain line that penetrated the wall of the utility tunnel through a 2-inch carbon steel pipe sleeve. This second drain line discharged into shallow injection well 46-CPP. Figure 15 shows a plan view of the steam line in this part of the utility tunnel, Figure 10 shows a detail of a drip leg, and Figure 16 is a photograph of this drip leg inside the utility tunnel. Figure 13 shows the 3/4-inch diameter drain line for the drip leg extending through the outside wall of the utility tunnel. The drain line is perforated with 1/8-inch holes and discharges into the shallow injection well 46-CPP. This shallow injection well also contains 2 cubic feet of medium-sized rock that surrounds the drain line.

46-CPP was also determined to be in close proximity to the CPP-633 Closure Cap (Figure 14) and was eliminated. Therefore, the drip leg and drain line were cut and rerouted to the INTEC condensate return system in December 2004.

Based on the following reasons, no additional environmental protection is expected by filling shallow injection well 46-CPP with an impermeable material (e.g., bentonite grout, cement grout):

- The condensate discharge from steam header 8–in. HSN-101623 has been rerouted, and the drip leg and drain line into 46-CPP have been cut
- The shallow injection well is currently filled with rocks
- Filling 46-CPP with an impermeable material will not prevent transmission of water through the surrounding soils, which are highly permeable at a depth greater than that of the shallow injection well and lack any natural impermeable layers.

Therefore, INL requests IDWR approval to permanently abandon this shallow injection well by leaving it in its present condition.
Figure 15. Plan view of the steam line in the utility tunnel (from Drawing 135548).
Figure 16. Photograph of the drip leg inside the utility tunnel (from DOE/NE-ID 2004).
6. REFERENCES


Drawing 0523141, 1968, “CPP CF-674 Flowsheet for Redesign of High Pressure Air System at Chemical Engineering Laboratory.”

Drawing 055705, 2005, “INTEC Plot Plan.”

Drawing 095657, 2004, “CPP-665 First Floor Heating Ventilating and Air Conditioning System.”


Drawing 135548, 1994, “Priority Utilities Project Piping Distribution Plan III”

Drawing 135577, 1997, “CPP Piping Distribution Sections & Details II.”

Drawing 135594, 1954, “P.U.P. Piping Distribution Sections & Details II.”

