

In accordance with TR-54 "1990 Annual Report" approval, the frequency of sampling for the following groundwater wells was modified to allow for semi-annual sampling (spring and fall): GA1, GA2, GB2, GB5, GD1, GD2, GD3, GE1, GE2, GF1, GF2, GF3, P5, 81-03A, GP3, GP4, GP5 and GP6. In the event ash disposal occurs upgradient of currently semi-annual monitored ash wells, quarterly monitoring will be required. The GD-1(2) monitoring well was proposed for semi-annual (list C) and annual (list B) sampling and replaces the requirement for sampling GD-1.

In October 1991, Trapper's domestic water well, GD-1, began to experience substantial production problems. In January 1992, Trapper established a new domestic water well GD-1(2) (see MR-115) to supplement water produced from GD-1.

Beginning in 1997, in accordance with Technical Revision TR-75, the frequency of sampling groundwater wells for water quality will be on a semi-annual basis (spring and fall). Sampling will be accomplished by pumping wells before water samples are taken. Monitoring of water level elevations for all groundwater wells will be on a quarterly basis. Groundwater sample data will be reported each year in the annual report. Table 4.8-13a lists the groundwater monitoring schedule for each well and Table 4.8-13 lists the parameters for each sample list.

On September 5, 2003, in accordance to TR-92, Trapper discontinued monitoring wells GB1, 2 and 5 and GF1, 2 and 3. Monitoring was no longer required due to Phase 2 bond release.

With approval of bond release application SL-7 in 2006, Trapper discontinued monitoring wells 81-03A, GE-1, GE-2, GE-3, GLUX-1 and GP-6. With the initiation of highwall mining in the I/J Pits complex, well 81-03A monitoring was reinstated in accordance with TR-126.

In late 2014, three groundwater monitoring wells were completed in order to establish baseline water quality data in the area east of the then current permit boundary. With the approval of PR-07 in 2015 the wells were included within the expanded permit boundary. These wells are named GLEV-1, GLEV-2 and GLEV-3. They will be sampled on the same schedule as the other established wells and will serve all areas within the PR-07 perimeter expansion and east.

In 2020, four groundwater monitoring wells were completed in order to establish baseline water quality data in the I/J Pits complex. These wells monitor alluvium (CY-A), First White Sandstone (CY-1), Second White Sandstone (CY-2) and Third White Sandstone (CY-3) aquifers in this area.

In 2022, monitor well GX-1 was completed in the Q Coal Seam in order to monitor potential water quality impacts down dip from highwall mining in Colt Pit.

Well P-3 completed in the Lewis Shale and located in Pyeatt gulch has collapsed and is no longer a viable monitoring well. The well produced limited water, and was completed in a strata that was not directly disturbed by mining operations. Monitoring of this well was discontinued in 2016 and will be abandoned.

Sampling of the established wells will continue as described in Tables 4.8-13 and 4.8-13a. See Trapper's Annual Reports (Appendix W) for complete hydrologic findings and analysis.