



11-09-2015

117-4170010

Preferential Pathway Borehole Locations and Descriptions

Note: The existing water lines are the shallowest utility lines and have the highest potential to conduct groundwater contaminated with petroleum remnants away from the site. The fiber optic lines running east west below the sidewalk along the south side of Spencer Street are presumed to be located at 24"-36" below grade and are too shallow to conduct groundwater.

As both a Hydro-Vac unit to locate (via the water pressure "pot hole" method) the utility fill soils next to the utility pipes, and a Geoprobe unit to obtain soil and groundwater samples are required for this phase of the investigation, the selected borehole locations will be used to gain the greatest amount of groundwater plume definition with a single mobilization for each unit.

B-16: Geoprobe to 13' depth as close as possible to the west side of the fire hydrant. This location should allow the imported backfill around the fire hydrant piping to be PID sampled. The water table should be evident at 5'. Collect one soil sample for VOCs based on PID readings. Install a monitor well screened from 3' to 13' for groundwater sampling, unless obvious groundwater contamination is present. If obvious groundwater contamination is present, collect a grab groundwater sample and then abandon the borehole.

B-17: Geoprobe to 13' depth to reach the shallow water table. This location could be the northern limit of the groundwater plume. Screen the soils and collect one soil sample for VOCs based on PID readings. Install a monitor well screened from 3' to 13' for groundwater sampling. If obvious soil and/or groundwater contamination is present at B-17, skip the PB-18 and PB-20 installations, as it can be presumed soil and groundwater at the water table is affected between MW-6 and B-17.

PB-18: Hydro-vac (pot hole) next to the 8" water line, and then install a borehole to 13', screening the water line permeable backfill. Collect one soil sample for VOCs based on PID readings. If no PID readings above 10 are found and no evidence of petroleum contamination is found, collect a grab groundwater sample and abandon the borehole. If groundwater contamination is suspected, install a monitor well, unless a monitor well is installed at B-16.

PB-19: Hydro-vac (pot hole) next to the 12" water main, and then install a borehole to 13', screening the water line permeable backfill. Collect one soil sample for VOCs Based on PID readings. If no PID readings above 10 are found and no evidence of petroleum contamination is found, collect a grab groundwater sample and abandon the borehole. If groundwater contamination is suspected, install a monitor well.

PB-20: Hydro-vac (pot hole) next to the 16" water line, and then install a borehole to 13', screening the water line permeable backfill. Collect one soil sample for VOCs based on PID readings. If no PID readings above 10 are found and no evidence of petroleum contamination is found, collect a grab groundwater sample and abandon the borehole. If groundwater contamination is suspected, install a monitor well, unless a monitor well is installed at B-17.

PB-21: Hydro-vac (pot hole) adjacent to the 8X8 water line tee, and then install a borehole to 13', screening the water line permeable backfill. Collect one soil sample for VOCs based on PID readings. If no PID readings above 10 are found and no evidence of petroleum contamination is found, collect a grab

groundwater sample and abandon the borehole. If evidence of petroleum contamination is found, move east along the water line 100 feet and duplicate the soil and groundwater sampling effort at PPB-23.

PB-22: Hydro-vac (pot hole) next to the 6" water line, and then install a borehole to 13', screening the water line permeable backfill. Collect one soil sample for VOCs based on PID readings. If no PID readings above 10 are found and no evidence of petroleum contamination is found, collect a grab groundwater sample and abandon the borehole. If evidence of petroleum contamination is found, move west along the water line 100 feet and duplicate the soil and groundwater sampling effort at PPB-24 (renumber as PPB-23 if PPB-23 not installed east of PB-21).