gPRO® Technology

gPRO® HP DEMONSTRATION: KINSTON, NORTH CAROLINA

PILOT CASE STUDY: PETROLEUM HYDROCARBON LEAK AT A GAS STATION

BACKGROUND

- Pyramid Environmental and Engineering is the current consultant.
- Petroleum release from underground storage tanks at a former Kwik Mart facility.
- The site has been accepted for the Performance Based Clean Up program by NC DENR
- The upper 15 to 18 feet below land surface is characterized by gray to brown sand, sandy clay, and silty sand.
- Dark gray silty to clayey sand was encountered from approximately 18 to 43 feet below land surface.
- For purposes of the site remediation the uppermost 20 feet of the saturated aquifer is the target zone for treatment.
- Depth to ground water is about 6 feet, and the surficial aquifer thickness is about 40 feet.
- iSOC was the technology of choice for the remediation

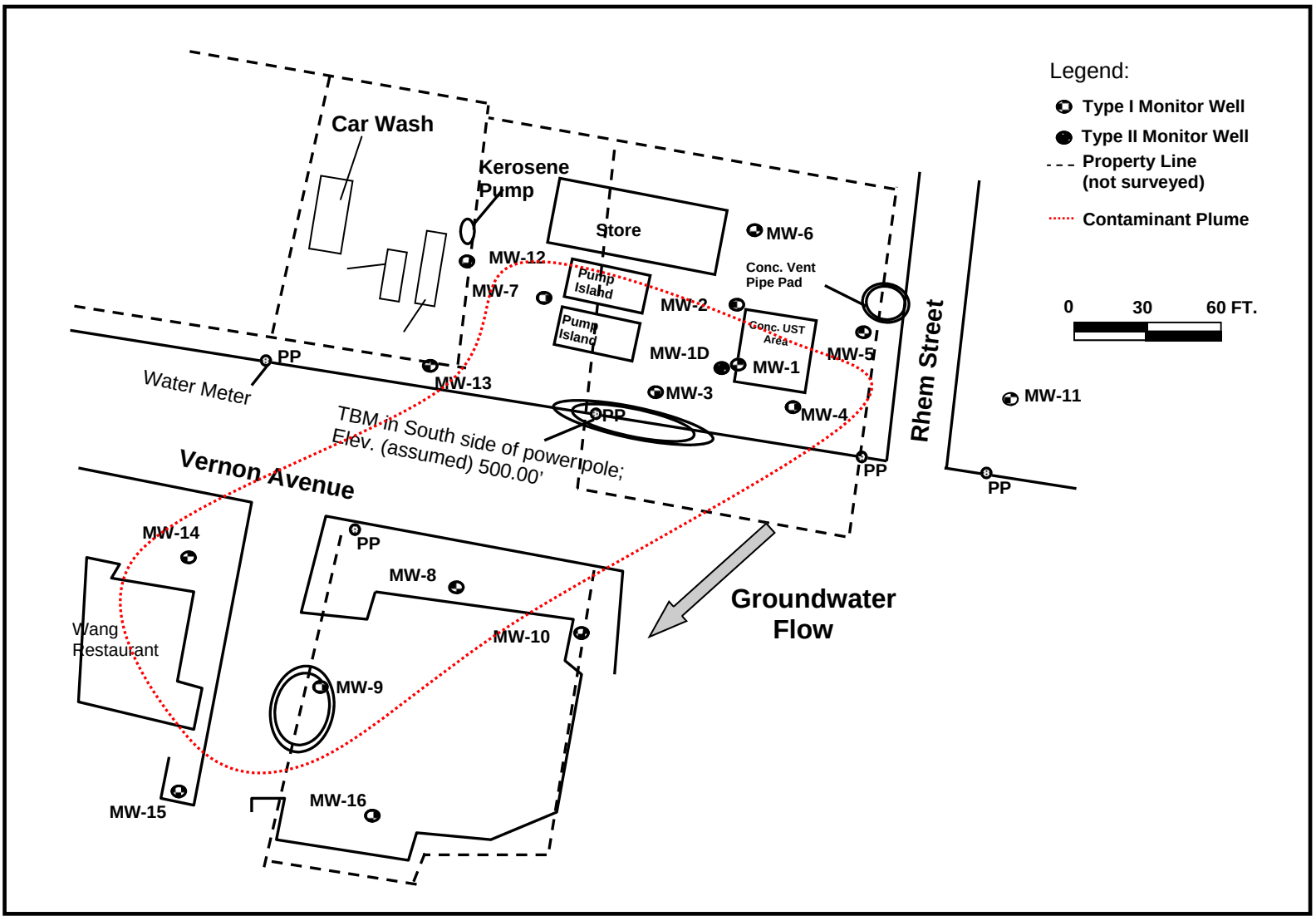
inVentures STRATEGY

- inVentures wants to showcase the gPRO and get it demonstrated at as many sites as possible.
- inVentures offered a gPRO HP unit to be used for a short period of time dramatically to boost oxygen levels in the aquifer

CLEAN-UP STRATEGY

- There are very high concentrations of BTEX and MTBE in a very localized area of the site
- The periphery areas are being handled by the original six iSOC used
- In the high concentration areas a vacuum truck was used to pull vapors and contaminated water from the site
- The gPRO was used to replace the water removed with clean highly oxygenated water (~ 60 to 70 ppm)

SITE MAP



RESULTS

- The work was carried out very recently and there are no sampling events allowed for 90 days after this removal and reinjection process. The gPRO proved easy to move around the site and worked well in the vacuum / reinjection of highly oxygenated water remediation scenario. The vacuum / reinjection method is another way in which gPRO can be used.