

SITE CHARACTERIZATION OF A VEHICLE MAINTENANCE GARAGE

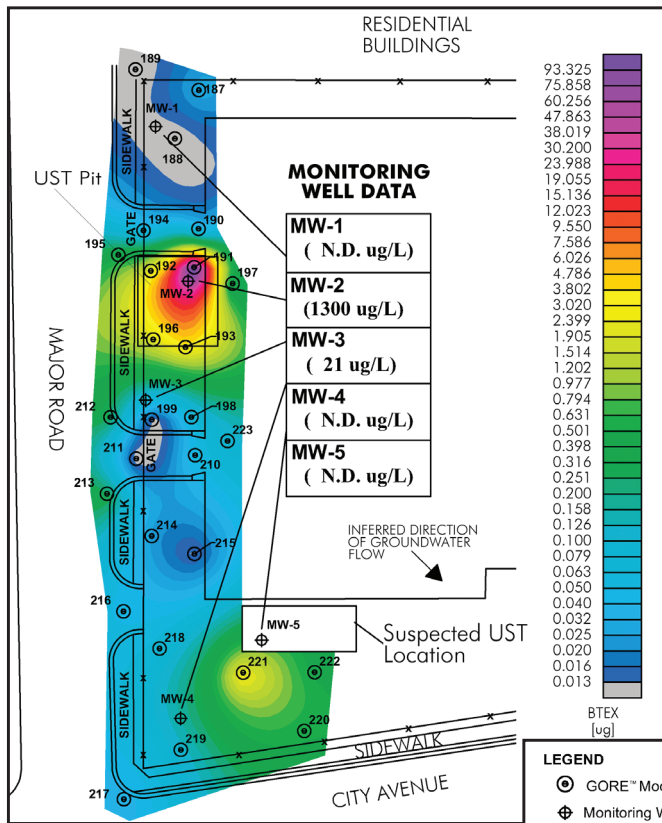


Figure 1. AGI Survey - BTEX Results

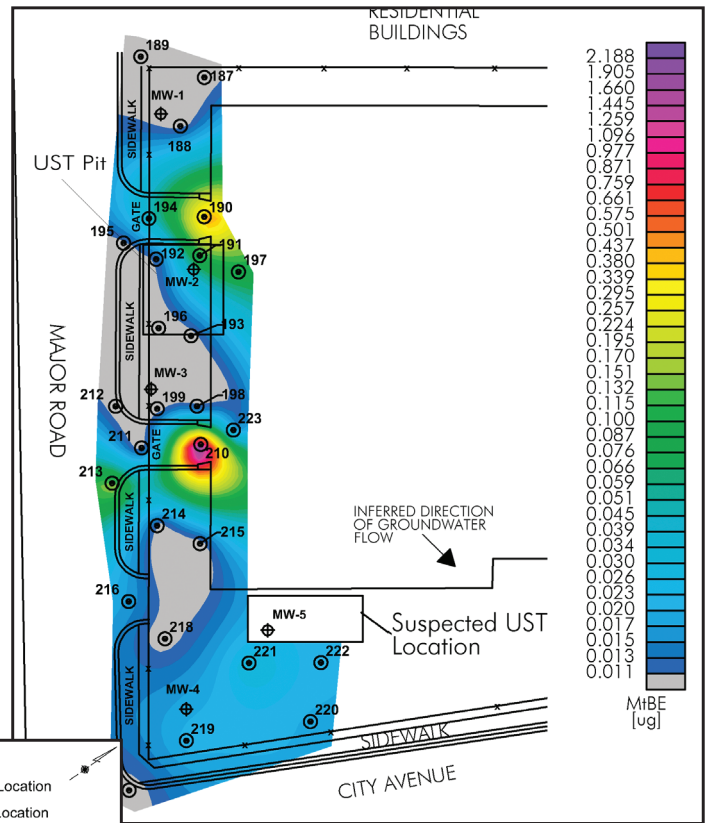


Figure 2. AGI Survey - MtBE Results

Survey Summary

Location: Northeastern US

Property: Vehicle Maintenance Garage

Objective: Optimize placement of monitoring wells

- USTs suspected of leaking fuels
- BTEX and MtBE impact delineated
- AGI Survey and groundwater data compared

Survey Objective

Located within a residential area, this commercial site was a suspected source of groundwater contamination, possibly the result of leaking fuels from USTs. The objective of this survey was to delineate a suspected BTEX plume from two 5,000 gal. USTs, and to identify the optimum placement of monitoring wells.

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Site Background & Geology

- Vehicle maintenance garage, Northeastern US
- 18,000 sq. ft. L-shaped survey
- Silty clays
- Groundwater depth: 10 - 20 ft.; apparent southerly flow

AGI Survey

- 27 AGI passive samplers
- Random grid, avg. 20 ft. spacing; 3 – 4 ft. install deep
- 14-day exposure
- Modified EPA method 8260/8270 GC/MS analysis at Gore labs

Survey Results

The AGI Survey revealed the presence of two BTEX plumes (Fig. 1): one in an area of known USTs; the other, a less intense BTEX plume, in an area where an older UST was later identified. MtBE was also observed in the soil gas (Fig. 2), and appeared to “lead” the BTEX plume, as elevated levels were located away from the source at the time of the survey. As a result of the AGI Survey, optimized installations sites were identified for five monitoring wells. Soil borings analyzed for BTEX yielded non-detectable levels. However, water quality data from the monitoring wells compared favorably with the Gore™ Survey (Fig. 1).

Survey Conclusions

The AGI Survey delineated the nature and extent of the subsurface impact by BTEX and other fuel-related compounds, efficiently and accurately. Placement of monitoring wells was optimized.