APPENDIX N

HISTORICAL PCE CONCENTRATIONS IN SOIL GAS AND GROUNDWATER AT BROADWAY SOUTH LANDFILL, BROADWAY PANTANO WQARF SITE, TUCSON, ARIZONA

FIGURES

SUMMARY

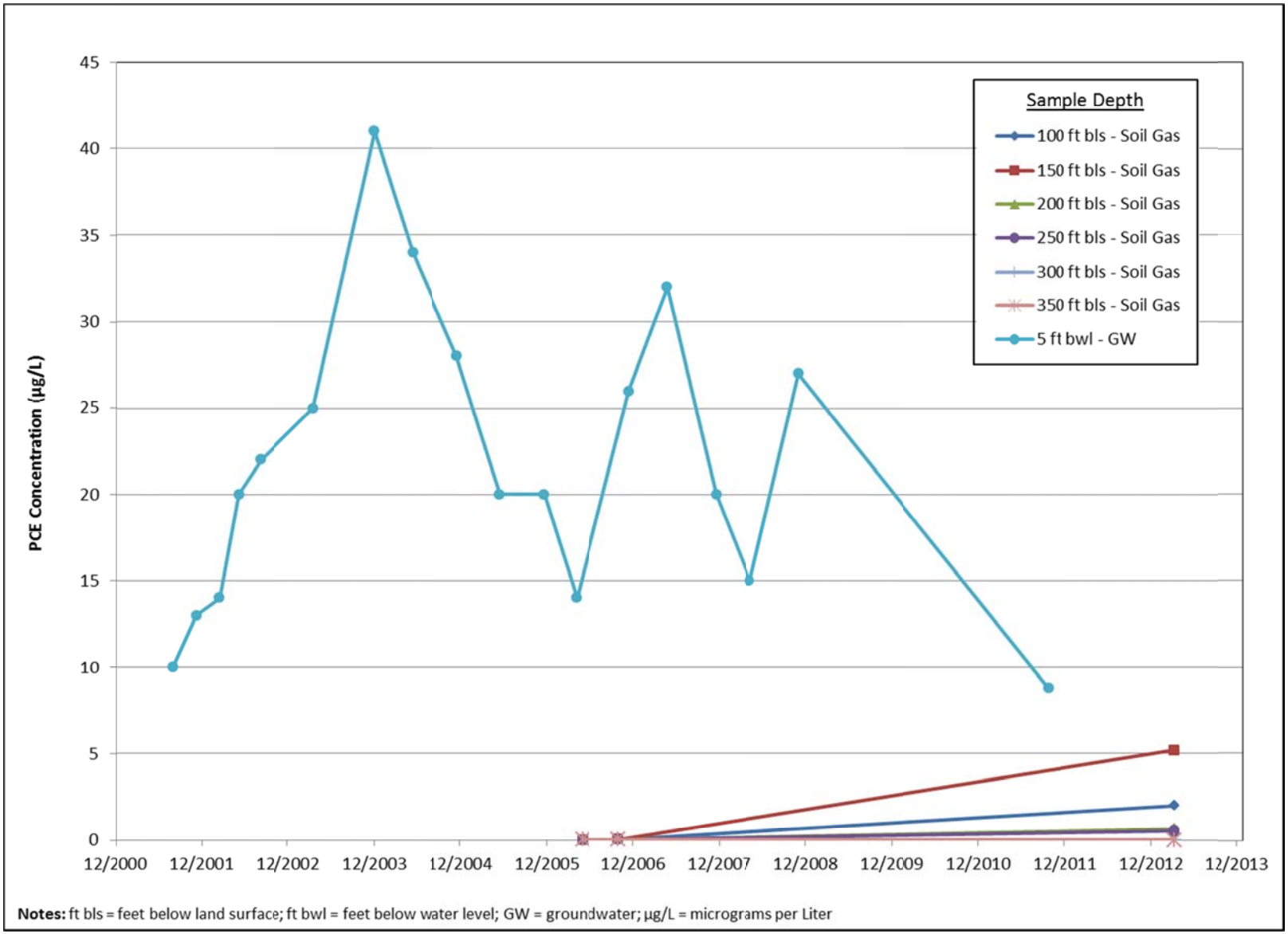
Spatially correlated soil-gas and groundwater samples have been collected at four locations within the boundaries of the Broadway South Landfill. The figures presented herein show historical PCE concentrations measured at various depths in soil gas and at the shallowest depth below the water table for which substantial historical data is available. These figures were included in response to comment 7 from the Broadway-Pantano Community Advisory Board (Appendix R).

The partitioning of contaminants from soil gas into groundwater is considered the primary mechanism for contamination of the groundwater operable unit at the Broadway-Pantano site. Recent VOC concentrations in soil gas from several depths and locations at BSL are higher than those measured during the previous monitoring event in 2006. PCE concentrations in groundwater have increased in wells BP-22 and BP-23, concurrent with the observed increase in soil gas concentrations. However, the spatially limited monitoring network combined with the complex nature and large extent of the potential source area limit the usefulness of direct comparisons at any individual location.

APPENDIX N
FIGURES

FIGURE N1

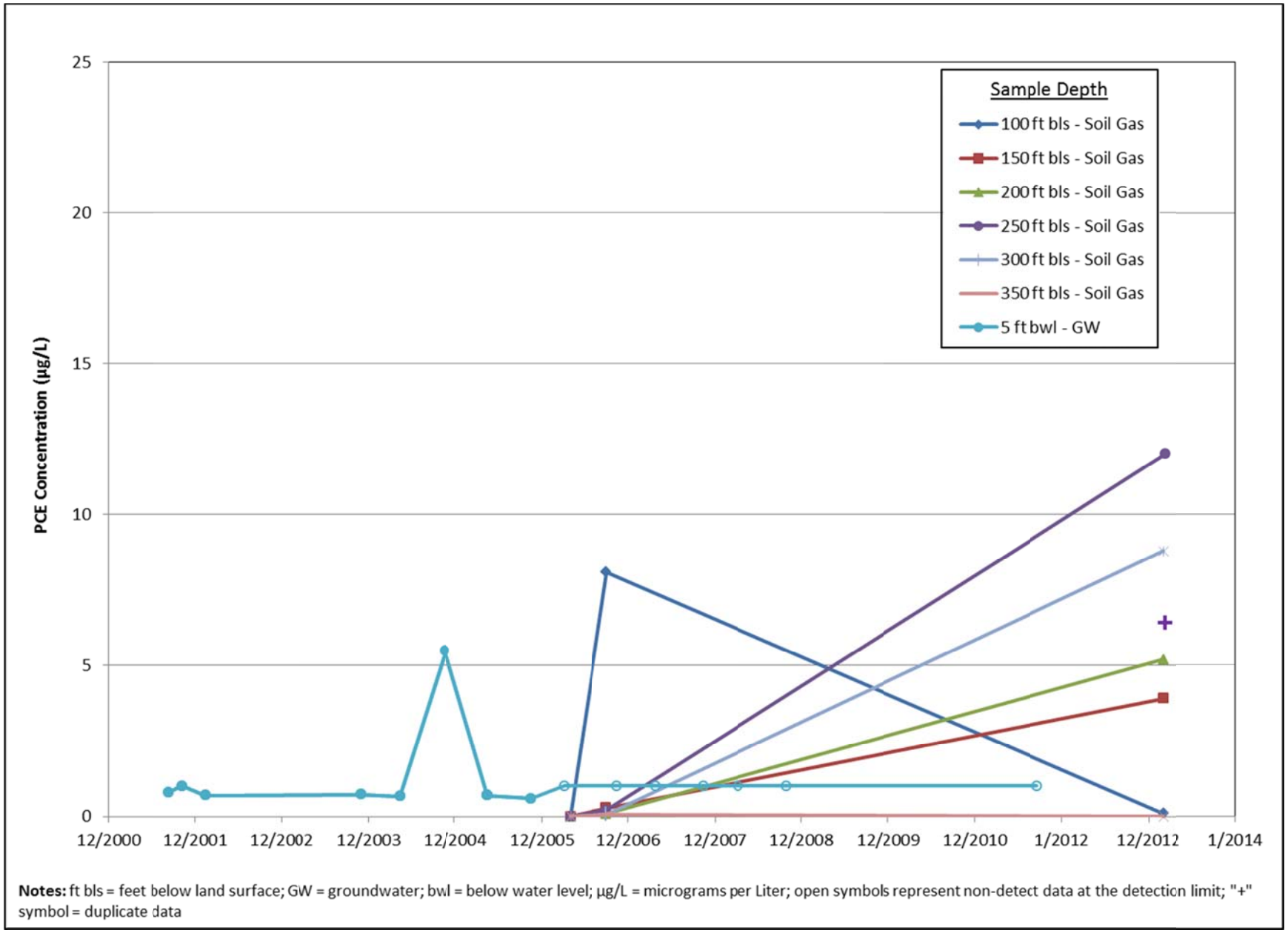
BSDP-1 PCE Concentrations in Soil Gas and WR-367A PCE Concentrations in Groundwater



Notes: ft bls = feet below land surface; ft bwl = feet below water level; GW = groundwater; µg/L = micrograms per Liter

FIGURE N2

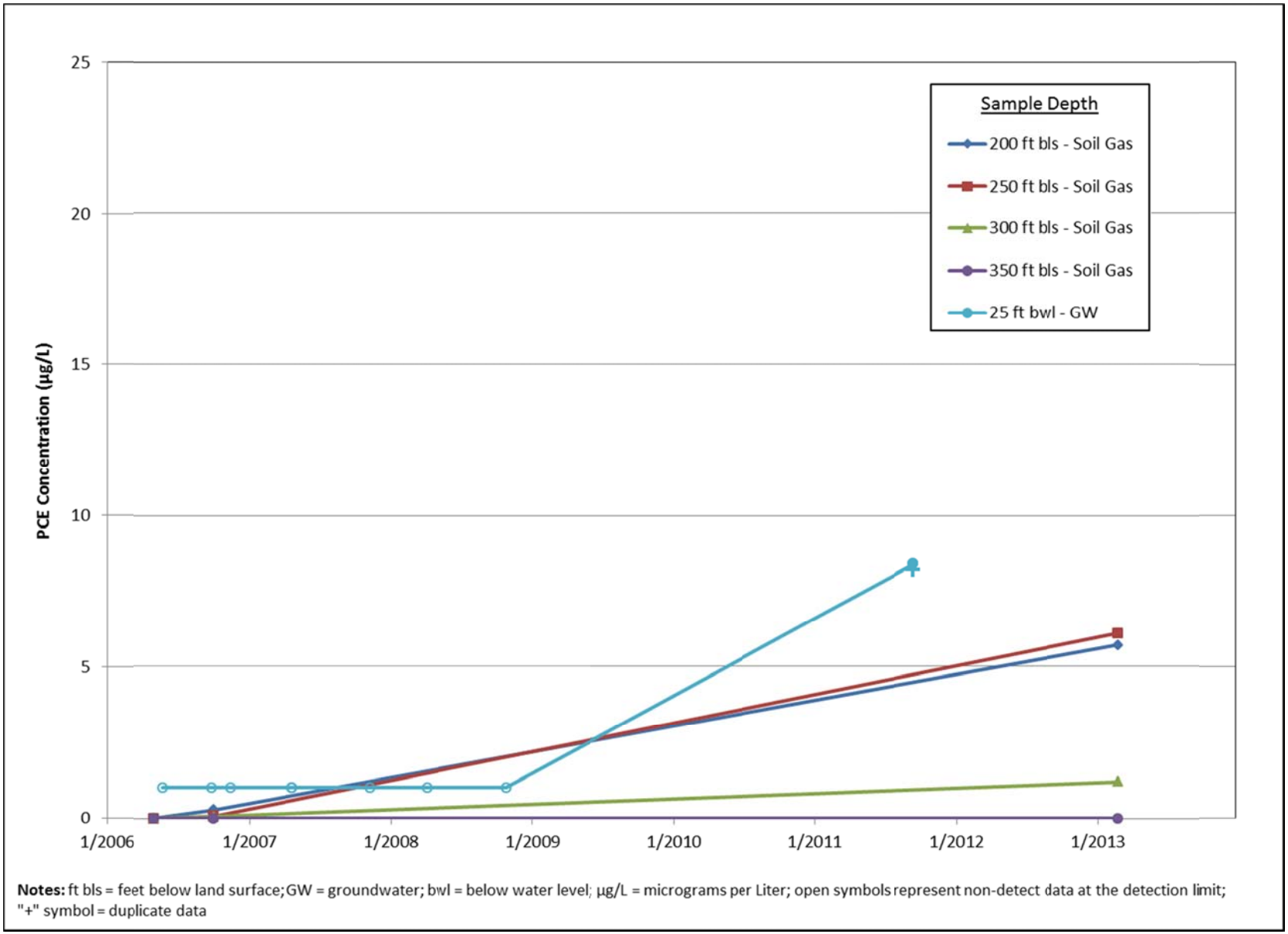
BSDP-2 PCE Concentrations in Soil Gas and BP-11 PCE Concentrations in Groundwater



Notes: ft bls = feet below land surface; GW = groundwater; bwl = below water level; µg/L = micrograms per Liter; open symbols represent non-detect data at the detection limit; "+" symbol = duplicate data

FIGURE N3

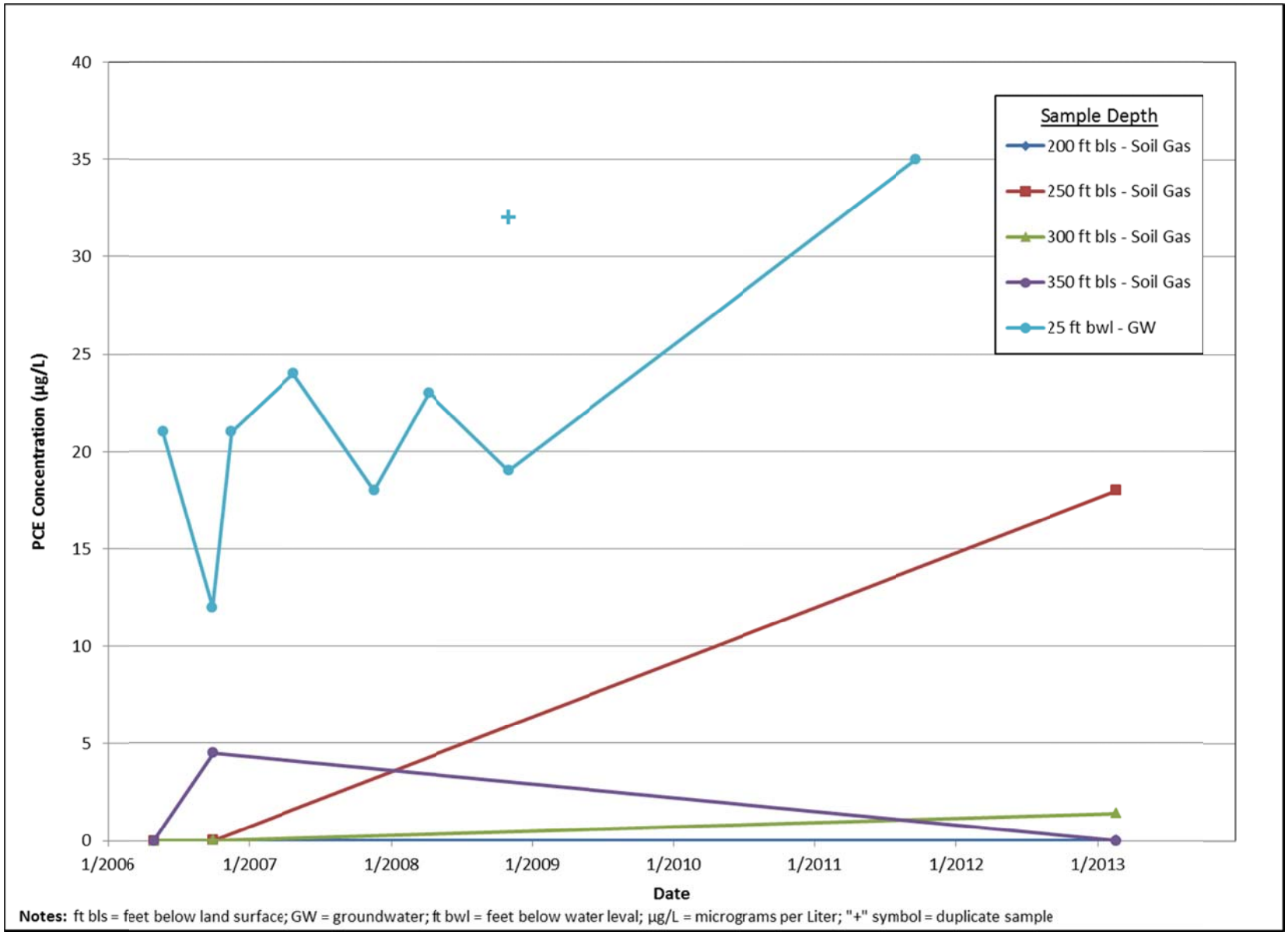
BP-22 PCE Concentrations in Soil Gas and Groundwater



Notes: ft bls = feet below land surface; GW = groundwater; bwl = below water level; µg/L = micrograms per Liter; open symbols represent non-detect data at the detection limit; "+" symbol = duplicate data

FIGURE N4

BP-23 PCE Concentrations in Soil Gas and Groundwater



Notes: ft bls = feet below land surface; GW = groundwater; ft bwl = feet below water leval; µg/L = micrograms per Liter; "+" symbol = duplicate sample