



**MEMORANDUM – NESTED SCREEN ZONES: MW-3D and MW-8D
HOFF VC SITE
NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA
REQUISITION NUMBER GTAC5-1-263**

May 17, 2013

SAIC Energy, Environment & Infrastructure (SAIC) is pleased to present this memorandum to the Pennsylvania Department of Environmental Protection (DEP) to present and discuss proposed nested well screen intervals for wells MW-3D and MW-8D. The proposed screen intervals were selected based upon review of well logs, borehole geophysical surveys, straddle packer sampling, and related site characterization data.

MD-3D

MW-3D was drilled to a total depth of 250 feet below grade (fbg), cased to 40 fbg and had a final blown yield less than 0.5 gallons per minute (gpm). Data collected during well installation, geophysical surveying and packer sampling indicate water-bearing zones between 50 and 105 fbg and between 150 and 180 fbg. SAIC recommends that nested well screens target the zones between 50 to 110 fbg and 150-210 fbg. These zones were observed to yield sufficient water during straddle packer sampling and appear to represent two distinct aquifer zones. Sampling the upper zone (50-110 fbg) will provide information about the water quality near the weathered bedrock/bedrock interface. The deeper zone (150 to 210 fbg) is likely to have low yield but is assumed to be representative of the deeper, fractured bedrock aquifer at the site.

MD-8D

MW-8D was drilled to a total depth of approximately 250 fbg, cased to 40 fbg and had an estimated blown yield of 0.5 gpm. Data collected during well installation, geophysical surveying and packer sampling indicate water-bearing zones between 40 and 150 fbg and between 180 and 250 fbg. SAIC recommends that nested well screens target the zones between 45 to 120 fbg and 180-250 fbg. These zones were observed to yield sufficient water during straddle packer sampling and appear to represent two distinct aquifer zones. Sampling the upper zone (45-120 fbg) will provide information about the water quality in the shallow bedrock aquifer. The deeper zone (180 to 250 fbg) is likely to have low yield but is assumed to be representative of the deeper, fractured bedrock aquifer at the site.

Nested Well Screen Installation

The nested well screens proposed above shall be installed in accordance with the methodology specified in the August 16, 2012 Work Scope.