Final

BUILDING 41
SOUTH SETTLING BASIN
SITE INVESTIGATION REPORT
FORMER YORK NAVAL ORDNANCE PLANT

SAIC Project 166345.00.08232.6072.00

Prepared for:

Harley-Davidson
Motor Company Operations, Inc.
York, PA

December 2009

Science Applications International Corporation
6310 Allentown Boulevard / Harrisburg, PA 17112 / tel: 717.901.8100 / www.saic.com

Final

Building 41 South Settling Basin
Site Investigation Report
Former York Naval Ordnance Plant

SAIC Project 166345.00.08232.6072.00

Prepared for:

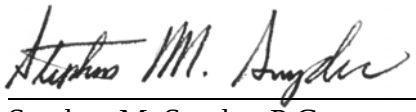
Harley-Davidson Motor Company Operations, Inc.
York, PA

Prepared by:

Science Applications International Corporation
6310 Allentown Boulevard
Harrisburg, PA 17112
(717) 901-8100

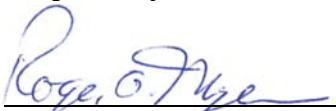
December 2009

Reviewed by:



Stephen M. Snyder, P.G.
Project Director

Respectfully submitted,



Roger D. Myers
Project Manager

TABLE OF CONTENTS

Page

1.0 INTRODUCTION AND BACKGROUND 1
2.0 TANK INSPECTION 4
3.0 SUBSURFACE SOIL INVESTIGATION 5
4.0 SOIL SAMPLING RESULTS 7
5.0 MONITORING WELL INSTALLATION 9
6.0 WATER SAMPLING RESULTS 10
7.0 SUMMARY 12
8.0 REMEDIAL ALTERNATIVES AND CONCLUSIONS 14

LIST OF FIGURES

Figure 1, Site Location Map ..... Following Text
Figure 2, Building 41 South Basin Soil Samples ..... Following Text
Figure 3, Building 41 South Basin Groundwater Chemistry Summary ..... Following Text

LIST OF TABLES

Table 1, Soils Data Summary – Building 41 – South Settling Basin ..... Following Text
Table 2, Water Data Summary – Building 41 (B41) South Settling Basin ..... Following Text

LIST OF APPENDICES

Appendix A, Photographs ..... Following Text
Appendix B, Historical Photographs and Drawings ..... Following Text
Appendix C, Soil Boring Logs ..... Following Text
Appendix D, Well Construction Log for MW-116 ..... Following Text
Appendix E, Groundwater Sampling Log ..... Following Text
Appendix F, Waste Disposal Documentation ..... Following Text

1.0 INTRODUCTION AND BACKGROUND

This site investigation report is for the former South Settling Basin (known as Solid Waste Management Unit [SWMU] No. 37), as well as the former Neutralization Tank (SWMU No. 40), which includes the two small basins to the east of the South Settling Basin, and the Oxidation Tank (SWMU No.41), which is the larger basin to the northeast of the South Settling Basin. Throughout this report, the three basins to the east of the South Settling Basin are collectively referred to as the "Eastern Basins." SWMU No. 37, No. 40, and No. 41 were located in the northeast end of Building 41 at the former York Naval Operations Plant (fYNOP) facility in York, Pennsylvania (see location on Figure 1). Activities conducted for this project were performed in accordance with the scope of work in Science Applications International Corporation (SAIC) proposal number 01-1633-71-2009-048, dated March 14, 2008. Photographs of the site activities are included in Appendix A.

Harley-Davidson entered into a Settlement Agreement with the Department of Defense and the Department of the Navy (as facilitated by the United States Army Corps of Engineers [USACE]) on January 24, 1995. That agreement established a cost sharing arrangement between Harley-Davidson, as the present site owner, and the United States, as the past owner, for costs incurred in response to environmental contamination at the facility. A Trust Fund was established to handle the cost sharing of those response actions. All environmental response actions must be completed in accordance with federal methods. This scope of work and proposal were approved by Harley-Davidson and the York Remediation Trust Fund on March 26, 2008.

Building 41 is located in the northern part of the fYNOP facility, north of Buildings 4 and 2 (see Figure 1). This building has been operated as a wastewater treatment plant (WWTP) since 1969. It was built and installed in 1968. A photographic and historical drawing summary of Building 41 is shown in Appendix B.

The plant has historically performed treatment of process water generated from fabrication, machining, plating, and painting operations. Wastes treated in the plant which have the potential to impact soil or groundwater have included process wastewaters such as spent acid and alkaline

cleaners; wastewaters containing nickel, zinc, chromium, and cyanides; and several organic constituents listed in the total toxics organics list. The WWTP had operated under National Pollutant Discharge Elimination System (NPDES) Permit No. 0007765, which was originally issued on December 15, 1983. The types of treatment that were conducted in the WWTP included cyanide oxidation, equalization, chrome reduction, pH adjustment, chemical precipitation, flocculation, settling, neutralization, oxidation, and sludge processing (by filter press). The facility no longer performs cyanide oxidation. Most of the treatment processes still continue but have been upgraded over the years to improve the treatment efficiencies or to minimize environmental liabilities and meet regulatory reporting requirements. Treated wastewater effluent was originally discharged from the WWTP to Codorus Creek through Outfall 001, which consisted of treated process waste streams. In 1994, the effluent flow was redirected to the Springettsbury Township sanitary sewer.

The South Settling Basin is identified as SWMU No. 37 in the January 1989, Phase II Resource Conservation and Recovery Act (RCRA) Facility Assessment report prepared by A.T. Kearney, Inc. (Kearney) for the United States Environmental Protection Agency (EPA), Region III. In that report, two settling basins were identified as Settling Tank No. 1 (north basin, SWMU No.36) and Settling Tank No. 2 (south basin, SWMU No. 37). These tanks operated in parallel as flocculation and settling tanks. They received wastewater from the flocculation tank (SWMU No. 35) via an open channel conduit. Sludge from the two settling basins was pumped into a nearby sludge settling tank (SWMU No. 38) and then into a filter press (SWMU No. 39). Clarified discharge water from the two settling basins flowed over a weir and into a neutralization tank (SWMU No. 40) and then into an oxidation tank (SWMU No. 41), prior to gravity discharge to the east via an open channel. The Kearney report concludes that the potential for a release to soil or groundwater from these settling basins was low because of biannual inspections and continuous monitoring of flows into and out of the two tanks. The report further suggests verifying the integrity of the tanks and conducting soil sampling where the integrity of the tanks was questionable.

The South Settling Basin is a subgrade, 12-inch-thick concrete-lined open-top tank with approximate dimensions of 49 feet long x 14 feet wide x 6 feet deep. The concrete tank is

underlain by 10 inches of crushed stone. The tank design had a capacity of 27,000 gallons. The South Settling Basin was formerly used to settle sludge from influent wastewater prior to being sent to the filter press. Sludge was pumped from the concrete sludge sump in the west end of the tank to the filter press several times a week during routine operations. Wastewater coming into this tank was received from the flocculation tank (and for a brief period from the pH adjustment tank). Influent entered the tank from the west end via two 4-inch-diameter openings, while clarified effluent exited the tank through the weir at the east end. Clarified discharge from this tank was sent to the neutralization tank.

In early 2008, the South Settling Basin in Building 41 was emptied in order to conduct the subsurface soil investigations described in this report. During January 2008, SAIC collected subsurface soil samples from eight soil borings in the South Settling Basin. In addition, SAIC collected soil samples from five borings in several smaller basins to the east. The two smallest eastern basins have been identified by EPA as a neutralization tank (SWMU No. 40). The northern tank to the east was identified by EPA as the oxidation tank (SWMU No. 41).

During the soil investigation of the South Settling Basin, black silty water was encountered in the gravel layer beneath the concrete under much of the area. It contained elevated concentrations of heavy metals and some organic compounds. The source of the water found in this excavation is unclear, but it is theorized that it may be from historic spills from the one or more of the wastewater tanks in the building or from a historic release of solvent fuels in the pipe trench leading from the Old Waste Containment area to Building No. 10, Power House.

2.0 TANK INSPECTION

Removal of the South Settling Basin and Eastern Basins consisted of dismantling equipment, removing liquid and sludge, permanently plugging influent and effluent lines, and cleaning the concrete surface. These tasks were completed by others prior to SAIC mobilizing to the site (see photographs in Appendix A). SAIC's initial involvement included an inspection of the concrete surfaces in the North Settling Basin for cracks or other evidence of past releases.

The settling basin inspection activities were performed in accordance with confined space entry protocol. Details regarding the procedures utilized were outlined in a site-specific health and safety plan. All work was completed safely and without incident.

Subsequently, SAIC inspected the concrete surfaces of the South Settling Basin and the smaller eastern basins for cracks or other evidence of past releases. SAIC's inspection revealed a possible crack on the floor in the middle of the southern side of the South Settling Basin. One vertical crack in the wall between the northernmost of the eastern basins was observed. It appeared that this crack had been repaired previously. No other indications of cracks were observed during an inspection of the eastern basins. SAIC attempted to locate soil borings as close to the observed crack as possible to determine if any of regulated compounds had been released. Photographs of the crack and work conducted are included in Appendix A.

3.0 SUBSURFACE SOIL INVESTIGATION

Based on the results of the inspection and knowledge of the treatment process at the WWTP, eight soil boring locations (SB-001 through SB-008) were chosen for the South Settling Basin. Due to the detection of impacted soil and evidence of black water in the gravel layer under portions of the South Settling Basin, SAIC added several soil borings to the study in order to determine the limits of these impacts. Five soil boring locations (SB-009 through SB-013) were added in the eastern basins, and two soil boring locations (SB-014 and SB-015) were chosen to the east of the eastern settling basins. SAIC completed the soil borings on February 5-8, 2008; April 2, 2008; and May 13, 2008. Figure 2 shows the locations of these soil borings. Concrete coring was used to cut through the concrete floor of the basin, and vacuum extraction was used to remove the crushed stone subbase. Concrete thickness varied from 6 inches to 12 inches, and the crushed stone subbase thickness varied from 3 inches at SB-013 to 18 inches at SB-003. The soil borings were advanced with a Geoprobe® sampler until refusal or a maximum depth of 10 feet below the top of the concrete floor. During soil boring advancement, soil type, color, photoionization detector (PID) response, and other relevant information were recorded on soil boring logs, which are included in Appendix C.

Although two soil samples had been proposed to be collected from each boring, the actual number of samples that were collected from each boring was modified based on observed conditions. Two samples were collected from borings SB-003, 005, and 006. Three samples were collected from boring 007, and four samples were collected from boring 014. No samples were collected from boring 011 because of Geoprobe® refusal at 2.7 feet below top of concrete. One sample was collected from the remainder of the borings. For quality assurance/quality control (QA/QC) purposes, duplicate samples were collected from borings 005 and 006. At boring locations 004, 005, 009, and 011, a black liquid was encountered. A sample of the liquid was collected at boring 009. All soil samples and the liquid sample were submitted to TestAmerica Laboratories, Inc. (TestAmerica) for analysis of priority pollutant volatile organic compounds (VOCs), priority pollutant semi-volatile organic compounds (SVOCs), total priority pollutant metals, hexavalent chromium, cyanide (total and free), and percent solids. After the soil samples were collected, the borings were filled with bentonite, and the surface was sealed

with concrete, except for locations 009 and 011, which were left open temporarily for monitoring of the black liquid found in the excavation.

4.0 SOIL SAMPLING RESULTS

Upon receipt of the laboratory analytical data package from TestAmerica, the results were tabulated and compared to Pennsylvania Department of Environmental Protection's (DEP) nonresidential medium-specific concentrations (MSCs) for soils for the direct contact and soil-to-groundwater pathways. Analytical data received from TestAmerica are handled in accordance with SAIC's Quality Assurance Project Plan (QAPP, July 2009). Laboratory data packages are verified at SAIC and evaluated for completeness, technical holding times, blanks, duplicates, laboratory control samples, matrix spike samples, surrogates, and calibration to standards. Electronic data deliverables from the laboratory are entered into the fYNOP data base, which is stored in the ARC IMS system and checked for completeness against the chain-of-custody record. Electronic analytical data are stored on an SAIC server, as well as at the laboratory. Laboratory records are retained at TestAmerica for a period of five years after the report is issued. The analytical results are summarized and compared with the selected criteria in Table 1.

The concentration of vinyl chloride (0.63 milligrams per kilogram [mg/kg]) detected in the sample from boring 004 at 1 to 3 feet deep exceeded the soil-to-groundwater MSC of 0.2 mg/kg. The concentration of n-nitrosodi-n-propylamine (0.075 mg/kg) detected in the sample from boring 007 at 1 to 3 feet deep exceeded the soil-to-groundwater MSC of 0.037 mg/kg. The concentrations of cis-1,2-dichloroethene (13 mg/kg), tetrachloroethene (51 mg/kg), and trichloroethene (8.9 mg/kg) detected in the sample from boring 007 at 4 to 6 feet deep exceeded the soil-to-groundwater MSCs of 7 mg/kg, 0.5 mg/kg, and 0.5 mg/kg, respectively. The concentration of tetrachloroethene (4.1 mg/kg) and trichloroethene (1.1 mg/kg) detected in the sample from boring 007 at 8 to 10 feet deep exceeded the soil-to-groundwater MSCs of 0.5 mg/kg (the MSC value is the same for both compounds). The concentration of tetrachloroethene (2.1 mg/kg) detected in the sample from boring 014 at 14 to 16 feet deep exceeded the soil-to-groundwater MSC of 0.5 mg/kg.

Two additional soil borings (S4N and S7N) were installed on April 1-2, 2008, using the same techniques described above to further delineate the impacted soil in the South Settling Basin adjacent to borings 004 and 007 (see Figure 2 for these sample locations). Two soil samples

were collected from S4N, and three samples were collected from S7N. Concentrations of tetrachloroethene (up to 8.1 mg/kg) and trichloroethene (up to 1.5 mg/kg) detected in the samples from boring S7N at 10 to 12 feet deep, 13 to 14 feet deep, and 15 to 16 feet deep exceeded the soil-to-groundwater MSCs of 0.5 mg/kg. The concentration of tetrachloroethene (2.1 mg/kg) detected in boring 014 along the eastern wall of the building exceeded the soil-to-groundwater MSC of 0.5 mg/kg.

5.0 MONITORING WELL INSTALLATION

A monitoring well (designated as MW-116) was installed to the west of Building 41 on April 14-17, 2008 (see Figure 3 for the location of MW-116). The well was installed to investigate the groundwater quality to the west (and presumably downgradient) of Building 41. An air-rotary drill rig was used to install the well to a depth of 50.8 feet below ground surface. During drilling, the soil type, color, PID response, and other relevant information were recorded on the drilling log which is included in Appendix D.

MW-116 was sampled on May 21, 2008, and September 3, 2008, as part of the Supplemental Remedial Investigation (RI) first and second rounds of water sampling. Sampling logs for MW-116 are provided in Appendix E. The samples were submitted to TestAmerica for analysis of VOCs, SVOCs, dissolved and total hexavalent chromium, dissolved and total metals, free cyanide, and total cyanide.

6.0 WATER SAMPLING RESULTS

Upon receipt of the laboratory analytical data package from TestAmerica, the results were tabulated to be compared to the MSCs for used and non-used aquifers. The results were also compared to the maximum contaminant levels (MCLs) for drinking water.

The analytical results for the samples collected from MW-116 were compared with the selected criteria in Table 2 and exceedances are summarized below:

- During both sampling events, the concentrations of 1,1-dichloroethene (46 micrograms per liter [μg/L] and 40 μg/L) exceeded the MSC of 7 μg/L.
- The concentrations of cis-1,2-dichloroethene (1,200 μg/L and 1,100 μg/L) exceeded the MSC of 70 μg/L.
- The concentrations of methylene chloride (140 μg/L and 50 μg/L) exceeded the MSC of 5 μg/L.
- The concentrations of tetrachloroethene (310 μg/L and 201 μg/L) exceeded the MSC of 5 μg/L.
- The concentrations of trichloroethene (570 μg/L and 1,480 μg/L) exceeded the MSC of 5 μg/L.
- The concentrations of vinyl chloride (37 μg/L and 27 μg/L) exceeded the MSC of 2 μg/L.

The analytical results for the black aqueous sample collected from the gravel layer at soil boring 009 also are included on Table 2. This water is believed to represent perched water conditions since the local groundwater elevation in the vicinity of Building 41 are known to range from 15 to 20 below ground surface (bgs). The black aqueous water sample was collected from directly under the basin in a gravel layer that was above a clay lens at approximately 6 feet bgs. The analytical results for the perched water samples were compared with the selected criteria in Table 2, and exceedances are summarized below (refer to Table 2 for the MSC values):

- The detected concentration for cyanide (4,500 μg/L).
- The concentration of antimony (40.2 μg/L) was above its MSC.

- The concentration of arsenic (26 μg/L) was greater than its MSC.
- Concentrations of cadmium (1,210 μg/L) exceeded its MSC.
- The chromium concentration (9,190 μg/L) was above its MSC.
- The concentration of lead (67.6 μg/L) was above its MSC.
- The detected concentration of nickel (3,530 μg/L) was above its MSC.
- The concentration of zinc (4,640 μg/L).
- Concentrations of bis(2-ethylhexyl)phthalate (140 μg/L).
- Vinyl chloride was detected at a concentration (15 μg/L) that was greater than its MSC value.

7.0 SUMMARY

The subsurface conditions at the south and eastern settling basins in Building 41 were characterized in accordance with the approved work plan. Based on the results obtained, it is likely that compounds detected in the shallow (up to 6 feet deep) soil samples from borings 004 and 007 were related to the black perched water under the basin and from other sources. Organic compounds n-nitrosodi-n-propylamine, vinyl chloride, 1,2-dichloroethene, tetrachloroethene, and trichloroethane were detected at concentrations greater than their respective MSCs in these shallow soil samples.

The black perched liquid that was sampled in boring 009 was also observed in boring 011. The black perched water contained concentrations of cyanide, various plating metals, bis(2-ethylhexyl)phthalate, and vinyl chloride that exceeded groundwater MSCs. In addition, the pH of this water was high (above 10). Due to the pH and metals present, these liquids may have leaked from adjacent wastewater treatment basins. From the water sample results discussed above, it is evident that this perched liquid may have contributed to the impacted soils beneath the southern and eastern basins.

The compounds detected in the deeper soil samples (8 to 16 feet deep) which exceeded respective MSCs for tetrachloroethene and trichloroethene were found in borings 007, 014, and S7N. These soils are impacted by chlorinated solvents which might be associated with a deeper VOC source or possibly from migration of groundwater from an upgradient source. It is also possible that some of the chlorinated solvent impacts observed in these soil samples could have been related to historic releases of solvents in the pipe trench along the eastern side of the eastern basins. For these reasons, the work plan to mitigate the black liquid from under the basins (March 2008) also includes a plan to excavate and investigate the former pipe trench along the eastern side of the basins.

Compounds that were detected in groundwater samples above the MSCs in the samples collected from MW-116 were tetrachloroethene, perchloroethene, 1,2-dichloroethene, 1,1-dichloroethene, vinyl chloride, and methylene chloride. Most of these compounds are the same as those that

were detected in the soil samples or the sample of the black perched liquid found under the south and eastern basins. However, these are also the same compounds that are found elsewhere across the fYNOP facility.

8.0 REMEDIAL ALTERNATIVES AND CONCLUSIONS

SAIC considered numerous remedial alternatives for the impacted soil and perched water observed under the southern and eastern basins. Since any of the soil remedial alternatives would be impeded by the layer of perched black water under the basins, it was decided to first remove the perched water. On May 13, 2008, SAIC removed approximately 1,320 gallons of this liquid from open boreholes 009 and 011 using a vacuum truck. That liquid was disposed of off-site at Clean Harbors as a hazardous waste. Appendix F shows the waste manifest for this waste. All of the perched water could not be removed from the gravel layer using this technique; consequently, a separate work plan dated August 14, 2008, and approved on September 8, 2008, was prepared to install a sump along the east side of these basins to drain the black water layer (see Building 41 East Trench report).

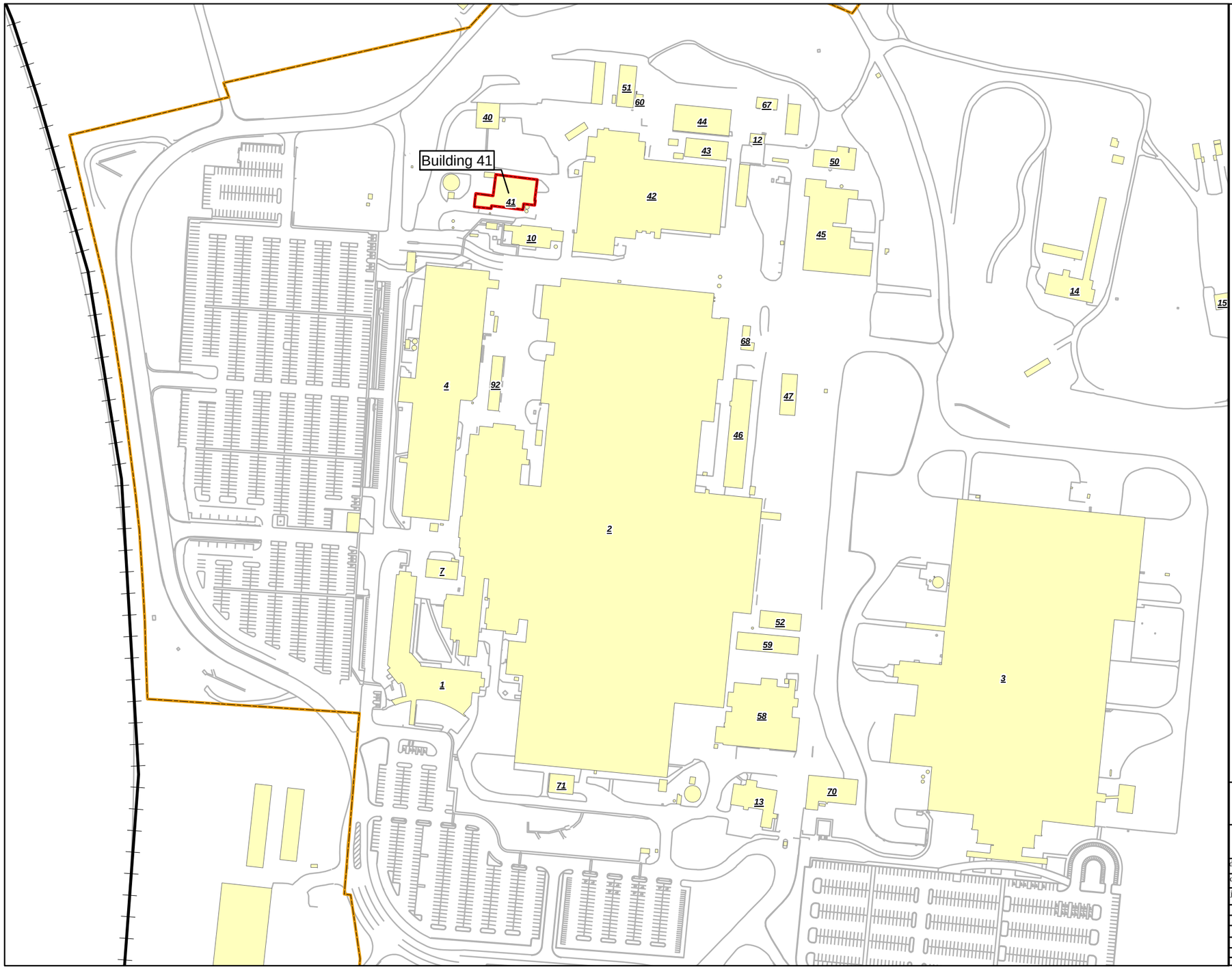
The excavation and removal of impacted soils observed beneath the southern and eastern basins would be nearly impossible due to the proximity of the adjacent active wastewater treatment units. A second alternative for these impacted soils would be soil vapor extraction (SVE). This alternative could potentially be hampered by the clay residuum and pinnacled rock formations beneath the site. The presence of pinnacled bedrock indicates that the top of the limestone bedrock surface is highly irregular. These conditions typically limit the thickness of the unconsolidated, unsaturated zone that is present. The low concentrations and scattered location of these contaminants also would make SVE a difficult remedy for these soils. Additionally, these impacted soils are already protected from exposure to humans or further leaching by an impervious concrete cap (the existing basins) and the roof of Building 41.

Impacted soils observed at soil boring 014 would be similarly difficult to remove due to its proximity to the building footer and column support nearby. However, if the contaminants found in soil boring 014 were associated with a previous release from the eastern pipe trench, it might be possible to remove the source using a limited excavation of soils from beneath the former pipe trench. This was proposed in a separate work plan (see pipe trench soil removal discussion in the Building 41 East Trench report). Additional investigation and remediation activities that can be conducted at the present time are limited by the active wastewater treatment plant. The former

South Settling Basin will be considered as part of the Site-Wide Risk Assessment and Feasibility Study. If the status of the wastewater treatment plant changes to inactive in the future, closure activities will be more feasible and can then be recommended.

Since contaminants related to the impacted soil and perched water were found in the downgradient well (MW-116), an additional upgradient well along the east side of Building 41 will be needed to determine if the source of these groundwater contaminants might be coming from inside Building 41. The work scope for draining the black water and investigating the eastern pipe trench also includes a recommendation to drill a new groundwater well on the eastern side of Building 41 (see well MW-117 information in the Building 41 East Trench report).

FIGURES



N
W E
S

Legend

- Codorus Creek
- Railroad
- Buildings
- Harley-Davidson Property Boundary
- Roads and Curb Boundary

250 125 0 250 Feet

1 inch = 250 feet

FORMER YORK NAVAL ORDNANCE PLANT
1425 EDEN ROAD, YORK, PA 17402

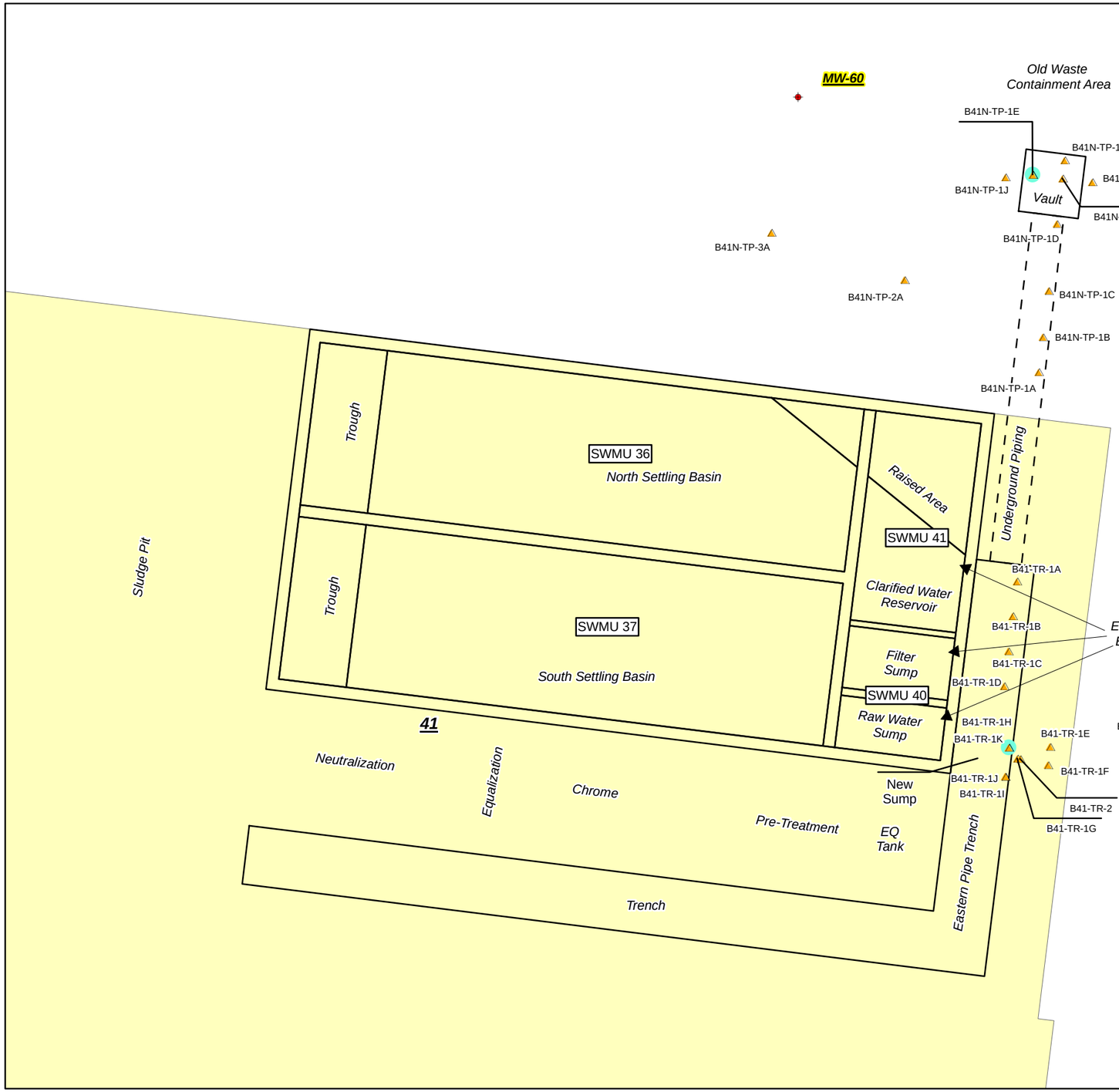
SITE LOCATION MAP

drawn AGM	checked RDM	approved SMS	figure no. 1
date 5/4/09	date 7/7/09	date 7/7/09	
job no. 01-1633-00-5127-518		file no. Fig_1_Site_Area.mxd	

initials	date	revision

SAIC From Science to Solutions

K:\GIS_Data\Harley\Projects\B41_B45_B51_AOC Report\B41S\Fig_1_Site_Area.mxd



N
W E
S

Legend

- Soil Samples Prior to 1/1/2007
- Soil Samples Post 1/1/07
- Abandoned Wells
- Monitoring and Collection Wells
- Exceeds Direct Contact and Soil to Groundwater Screens
- Results >or = Direct Contact Standard (0-2' and 2'-15')
- Results > or = Soil to Groundwater
- Building 41 Feature Boundary
- Underground Piping
- Buildings

10 5 0 10 Feet

1 inch = 10 feet

FORMER YORK NAVAL ORDNANCE PLANT
1425 EDEN ROAD, YORK, PA 17402

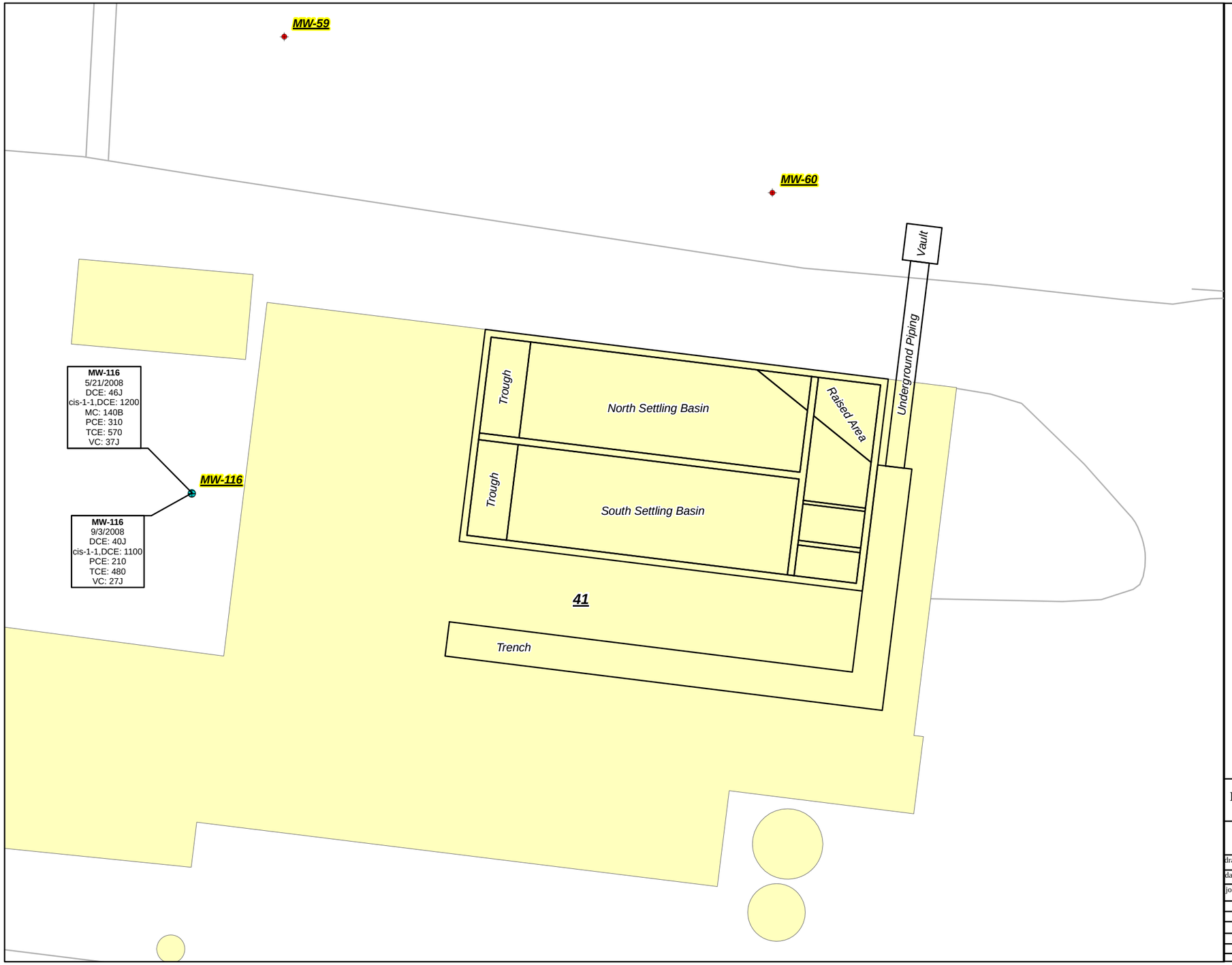
Building 41 East Trench/Sump

drawn AGM	checked	approved	figure no. 2
date 5/4/09	date	date	
job no. 01-1633-00-1365-518		file no. Fig_2 SMP_LOCS.mxd	

initials	date	revision

SAIC From Science to Solutions

K:\GIS_Data\Harley\Projects\B41_B45_B51_AOC Report\B41 Sump\Fig_2 SMP_LOCS.mxd



N
W E
S

Legend

- Abandoned Wells
- Monitoring and Collection Wells
- Building 41 Basin Boundary
- Buildings
- Roads and Curb Boundary

NOTE:
Results given are for exceedances of the Pa DEP MSC Used Aquifer TDS <2,500 Non Residential.

Location ID
Date
DCE: 1,1-Dichloroethene
cis-1-1,DCE: cis-1,2-Dichloroethene
MC: Methylene chloride
PCE: Tetrachloroethene
TCE: Trichloroethene
VC: Vinyl Chloride

7.5 3.75 0 7.5 15 Feet

1 inch = 15 feet

FORMER YORK NAVAL ORDNANCE PLANT
1425 EDEN ROAD, YORK, PA 17402

Building 41 South Basin Groundwater Chemistry Summary

drawn AGM	checked RDM	approved SMS	figure no. 3
date 5/4/09	date 7/7/09	date 7/7/09	
job no. 01-1633-00-5127-518		file no. Fig_3_MW_116.mxd	

initials	date	revision

SAIC From Science to Solutions

K:\GIS_Data\Harley\Projects\B41_B45_B51_AOC Report\B41S\Fig_3_MW_116.mxd

TABLES

Table 1
Soils Data Summary - Building 41 - South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Depth (ft.) Sample Date Parameter	MSC Soil to GW Used Aquifer (mg/kg)	MSC Direct Contact 0 - 2 ft (mg/kg)	MSC Direct Contact 2 - 15 ft (mg/kg)	EPA RBC[1] Industrial Soil (mg/kg)	B41S-SB-001 2 - 4 2/7/2008 (mg/kg)	B41S-SB-002 1 - 3 2/7/2008 (mg/kg)	B41S-SB-003 2 - 4 2/7/2008 (mg/kg)	B41S-SB-003 5 - 7 2/7/2008 (mg/kg)	B41S-SB-004 1 - 3 2/8/2008 (mg/kg)	B41S-SB-005 1 - 3 2/8/2008 (mg/kg)	B41S-SB-005 4 - 6 2/8/2008 (mg/kg)	B41S-SB-005 4 - 6 2/8/2008 (mg/kg)	B41S-SB-006 1 - 3 2/7/2008 (mg/kg)	B41S-SB-006 4 - 6 2/7/2008 (mg/kg)	B41S-SB-006 4 - 6 2/7/2008 (mg/kg)	B41S-SB-007 1 - 3 2/7/2008 (mg/kg)	B41S-SB-007 4 - 6 2/7/2008 (mg/kg)	B41S-SB-007 8 - 10 2/7/2008 (mg/kg)	B41S-SB-008 1 - 3 2/7/2008 (mg/kg)
Cyanide, Free																				
Cyanide, Free	200	56000	190000	20000	0.56 U	0.56 U	0.65 U	0.64 U	0.6 U	0.63 U	0.62 U	0.62 U	0.62 U	0.63 U	0.63 U	0.65 U	0.66 U	0.62 U	0.62 U
Cyanide, Total																				
Cyanide, Total	200	56000	190000		**1.5 J**	**0.28 B J**	**0.36 B J**	**0.74 J**	**0.2 B**	**0.14 B**	0.62 U	**0.12 B**	**0.39 B J**	0.63 U	0.63 U	**0.22 B J**	0.66 U	0.62 U	**0.18 B J**
Hexavalent Chromium																				
Hexavalent Chromium	190	420	190000	200	0.45 U	0.44 U	**0.34 B**	0.51 U	0.5 U	0.52 U	0.51 U	0.49 U	0.5 U	**0.4 B**	**0.67**	**0.28 B**	0.52 U	**0.2 B**	**0.33 B**
Mercury																				
Mercury	10	840	190000	24	**0.02 B**	**0.026 B**	**0.099**	**0.044**	**0.071 J**	**0.051 J**	**0.033 B J**	**0.074 J**	**0.02 B**	**0.019 B**	**0.015 B**	**0.037 B**	**0.031 B**	**0.058**	**0.047**
Metal																				
Antimony	27	1100	190000	410	1.1 U	**0.11 B J**	**0.16 B J**	1.3 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	1.3 U	**0.15 B J**	2.5 U	**0.14 B J**
Arsenic	150	53	190000	1.6	**1.4**	**0.45 B**	**9.8 Z**	**2.6 Z**	**4 Z**	**2 Z**	**1.6**	**1.9**	**1.3**	**0.89 B**	**1.1 B**	**2.6 Z**	**4.3 Z**	**3.9 Z**	**2.6 Z**
Barium	8200	190000	190000	190000	**22.7**	**21.4 B**	**38.6**	**47.5**	**40 J**	**27.4 J**	**41.3 J**	**83.2 J**	**60.8**	**62.4**	**62.1**	**49.6**	**25.6 B**	**34.8 B**	**53.2**
Beryllium	320	5600	190000	2000	**0.36 B J**	**0.27 B J**	**0.83 J**	**1 J**	**0.53**	**0.59**	**0.41 B**	**0.35 B**	**0.53 J**	**0.43 B J**	**0.41 B J**	**0.93 J**	**0.96 J**	**1.8 J**	**0.5 J**
Cadmium	38	210	190000	800	**0.61**	**0.24 B**	**1.1**	**1.5**	**0.3 B**	0.63 U	0.62 U	**1.2**	**0.16 B**	0.63 U	**0.072 B**	**0.79**	**0.071 B**	1.2 U	**1.8**
Chromium				1500000	**10.6**	**7.8**	**12.7**	**16.2**	**23.7 J**	**11.8 J**	**9.3 J**	**18 J**	**19.3**	**14.3**	**14.9**	**18**	**6.1**	**10.7**	**19.5**
Copper	36000	100000	190000	41000	**4.5 J**	**5.6 J**	**16.9 J**	**14.3 J**	**6.4**	**9.4**	**5.3**	**2.8 B**	**8.8 J**	**7.7 J**	**9.6 J**	**17.8 J**	**21.5 J**	**19.7 J**	**3.9 J**
Lead	450	1000	190000	800	**5.2**	**4.5**	**18.2**	**27.1**	**8.6**	**11.8**	**9.4**	**10.4**	**10**	**8.5**	**8**	**12.5**	**17.7**	**23.6**	**9.4**
Nickel	650	56000	190000	20000	**5**	**6**	**7.8**	**18.2**	**23.5**	**7.9**	**6.2**	**8.8**	**9.5**	**7.7**	**7.6**	**14.3**	**8.8**	**21.4**	**8.6**
Selenium	26	14000	190000	5100	0.56 U	0.56 U	**0.58 B**	0.64 U	**0.7**	0.63 U	0.62 U	0.62 U	**0.91**	**0.58 B**	**0.44 B**	**0.88**	0.66 U	1.2 U	**0.64**
Silver	84	14000	190000	5100	0.56 U	0.56 U	0.65 U	0.64 U	**0.067 B**	**0.12 B**	0.62 U	**0.11 B**	0.62 U	0.63 U	0.63 U	**0.072 B**	0.66 U	1.2 U	0.62 U
Thallium	14	200	190000	66	1.1 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U	2.5 U	1.2 U
Vanadium	72000	20000	190000	5200	**9.5**	**8.4**	**10.2**	**11.3**	**22.1**	**16.8**	**13**	**9.4**	**20.5**	**15**	**15.7**	**17.3**	**10.1**	**13.9**	**19.2**
Zinc	12000	190000	190000	310000	**13.8 J**	**10 J**	**18.6 J**	**28.1 J**	**16.4 J**	**19.4 J**	**14.1 J**	**31.6 J**	**22.9 J**	**19.8 J**	**19.2 J**	**24.7 J**	**15 J**	**46.5 J**	**16.1 J**
PCB																				
Arochlor-1016	200	200	10000	21	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
Arochlor-1221	2.5	160	10000	0.62	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
Arochlor-1232	2	160	10000	0.62	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
Arochlor-1242	62	160	10000	0.74	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
Arochlor-1248	67	44	10000	0.74	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
Arochlor-1254	280	44	10000	0.74	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
Arochlor-1260	1900	130	190000	0.74	0.019 U	0.018 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.022 U	0.022 U	0.021 U	0.02 U
SVOC																				
1,2,4-Trichlorobenzene	27	10000	10000	400	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
1,2-Dichlorobenzene	60	10000	10000	10000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
1,3-Dichlorobenzene	61	10000	10000	3066	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
1,4-Dichlorobenzene	10	3300	190000	13	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2,4,5-Trichlorophenol	6100	190000	190000	62000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2,4,6-Trichlorophenol	8.9	840	190000	160	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2,4-Dichlorophenol	2	8400	190000	1800	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2,4-Dimethylphenol	200	10000	10000	12000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2,4-Dinitrophenol	4.1	5600	190000	1200	1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
2,4-Dinitrotoluene	0.84	260	190000	2044	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2,6-Dinitrotoluene	10	2800	190000	620	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2-Chloronaphthalene	18000	190000	190000	82000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2-Chlorophenol	4.4	920	1100	5100	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2-Methylnaphthalene	8000	10000	10000	4100	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2-Methylphenol	510	10000	10000	51100	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
2-Nitroaniline	0.58	160	190000	1800	1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
2-Nitrophenol	82	22000	190000		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
3,3'-Dichlorobenzidine	32	180	190000	6.35911	1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
3/4-Methylphenol				5100	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
3-Nitroaniline	0.58	160	190000		1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
4,6-Dinitro-2-Methylphenol					1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
4-Bromophenyl phenyl ether					0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
4-Chloro-3-Methyl-Phenol	110	14000	190000		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
4-Chloroaniline	52	11000	190000	4088	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
4-Chlorodiphenyl Ether					0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
4-Nitroaniline	0.58	160	190000	86	1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
4-Nitrophenol	6	22000	190000		1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
Acenaphthene	4700	170000	190000	33000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Acenaphthylene	6900	170000	190000		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Anthracene	350	190000	190000	170000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Benzo (A) Anthracene	320	110	190000	2.1	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Benzo (a) Pyrene	46	11	190000	0.21	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Benzo (b) Fluoranthene	170	110	190000	2.1	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Benzo (g,h,i) Perylene	180	170000	190000		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Benzo (k) Fluoranthene	610	1100	190000	21	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Bis(2-Chloroethoxy) Methane				1800	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Bis(2-Chloroethyl) Ether	0.055	5	5.7	0.9	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Bis(2-Chloroisopropyl) Ether	30	160	190		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Bis(2-Ethylhexyl) Phthalate	130	5700	10000	120	0.37 U	**0.5**	**0.15 J**	**0.43**	**1.2**	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	**1.9**	**0.14 J**	0.41 U	**0.29 J**
Butylbenzylphthalate	10000	10000	10000	910	0.37 U	0.37 U	0.43 U	**0.045 J**	**0.083 J**	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	**0.2 J**	0.43 U	0.41 U	0.41 U
Carbazole	83	4000	190000		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Chrysene	230	11000	190000	210	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Dibenzo (a,h) Anthracene	160	11	190000	0.21	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Dibenzofuran					0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Diethylphthalate	500	10000	10000	490000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Dimethylphthalate					0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Di-n-Butylphthalate	4100	10000	10000		0.37 U	0.37 U	0.43 U	0.42 U	**0.095 J**	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	**0.17 J**	0.43 U	0.41 U	0.41 U
Di-n-octylphthalate	10000	10000	10000		0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Fluoranthene	3200	110000	190000	22000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Fluorene	3800	110000	190000	22000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Hexachlorobenzene	0.96	50	190000	1.1	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Hexachlorobutadiene	1.2	560	10000	22	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Hexachlorocyclopentadiene	91	10000	10000	3700	1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
Hexachloroethane	0.56	2800	190000	120	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Indeno (1,2,3-cd) Pyrene	28000	110	190000	2.1	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Isophorone	10	10000	10000	1800	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Naphthalene	25	56000	190000	20	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Nitrobenzene	5.1	1400	10000	22	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
N-Nitrosodi-N-Propylamine	0.037	11	10000	0.25	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	**0.075 J W**	0.43 U	0.41 U	0.41 U
N-Nitrosodiphenylamine	83	16000	190000	350	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Pentachlorophenol	5	660	190000	9	1.8 U	1.8 U	2.1 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
Phenanthrene	10000	190000	190000		0.37 U	0.37 U	0.43 U	0.42 U	**0.03 J**	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Phenol	400	190000	190000	180000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Pyrene	2200	84000	190000	17000	0.37 U	0.37 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.43 U	0.43 U	0.41 U	0.41 U
Total Solids																				
Percent Solids																				

Table 1
Soils Data Summary - Building 41 - South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Depth (ft.) Sample Date Parameter	MSC Soil to GW Used Aquifer (mg/kg)	MSC Direct Contact 0 - 2 ft (mg/kg)	MSC Direct Contact 2 - 15 ft (mg/kg)	EPA RBC[1] Industrial Soil (mg/kg)	B41S-SB-001 2 - 4 2/7/2008 (mg/kg)	B41S-SB-002 1 - 3 2/7/2008 (mg/kg)	B41S-SB-003 2 - 4 2/7/2008 (mg/kg)	B41S-SB-003 5 - 7 2/7/2008 (mg/kg)	B41S-SB-004 1 - 3 2/8/2008 (mg/kg)	B41S-SB-005 1 - 3 2/8/2008 (mg/kg)	B41S-SB-005 4 - 6 2/8/2008 (mg/kg)	B41S-SB-005 4 - 6 2/8/2008 (mg/kg)	B41S-SB-006 1 - 3 2/7/2008 (mg/kg)	B41S-SB-006 4 - 6 2/7/2008 (mg/kg)	B41S-SB-006 4 - 6 2/7/2008 (mg/kg)	B41S-SB-007 1 - 3 2/7/2008 (mg/kg)	B41S-SB-007 4 - 6 2/7/2008 (mg/kg)	B41S-SB-007 8 - 10 2/7/2008 (mg/kg)	B41S-SB-008 1 - 3 2/7/2008 (mg/kg)
VOC																				
1,1,1,2-Tetrachloroethane	**18**	**3100**	**190000**	**9.8**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,1,1-Trichloroethane	**20**	**10000**	**10000**	**39000**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,1,2,2-Tetrachloroethane	**0.03**	**28**	**33**	**2.9**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,1,2-Trichloroethane	**0.5**	**100**	**120**	**5.5**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,1-Dichloroethane	**11**	**1000**	**1200**	**17**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0023 J	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,1-Dichloroethene	**0.7**	**33**	**38**		0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,2-Dibromoethane	**0.005**	**0.93**	**8.6**	**0.17**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,2-Dichloroethane	**0.5**	**63**	**73**	**2.2**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,2-Dichloropropane	**0.5**	**160**	**180**	**4.7**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
1,4-Dioxane	**2.4**	**210**	**240**	**160**	0.93 U	0.92 U	1.1 U	1.1 U	1 U	1.1 U	1 U	0.99 U	1 U	1.1 U	1.1 U	1.2 U	59 U	56 U	0.99 U
2-Butanone	**580**	**10000**	**10000**	**190000**	0.019 U	0.018 U	0.022 U	0.022 U	**0.0059 J**	0.023 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.024 U	**0.21 J**	1.1 U	0.02 U
2-Hexanone					0.019 U	0.018 U	0.022 U	0.022 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.024 U	1.2 U	1.1 U	0.02 U
4-Methyl-2-Pentanone	**41**	**4300**	**4900**	**52000**	0.019 U	0.018 U	0.022 U	0.022 U	0.021 U	0.023 U	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.024 U	1.2 U	1.1 U	0.02 U
Acetone	**1000**	**10000**	**10000**	**610000**	**0.006 J**	0.018 U	**0.0089 J**	**0.0065 J**	**0.052**	0.023 U	**0.011 J**	0.02 U	0.021 U	**0.0071 J**	**0.0055 J**	**0.014 J**	**0.078 J**	1.1 U	**0.0076 J**
Acrylonitrile	**0.27**	**24**	**28**	**1.2**	0.093 U	0.092 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.099 U	0.1 U	0.11 U	0.11 U	0.12 U	5.9 U	5.6 U	0.099 U
Benzene	**0.5**	**210**	**240**	**5.6**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Bromochloromethane	**9**	**10000**	**10000**		0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Bromodichloromethane	**10**	**45**	**51**	**1.4**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Bromoform	**10**	**1500**	**1700**	**220**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Bromomethane	**1**	**270**	**300**	**35**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Carbon Disulfide	**410**	**10000**	**10000**	**3000**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	**0.0042 J**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Carbon Tetrachloride	**0.5**	**110**	**120**	**1.3**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Chlorobenzene	**10**	**10000**	**10000**	**1500**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	**0.0013 J**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	**0.0026 J**	0.3 U	0.28 U	0.005 U
Chlorodibromomethane	**10**	**61**	**70**		0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Chloroethane	**90**	**10000**	**10000**		0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Chloroform	**10**	**17**	**19**	**1.5**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Chloromethane	**0.3**	**920**	**1000**	**510**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
cis-1,2-Dichloroethene	**7**	**1900**	**2100**		**0.0019 J**	0.0046 U	**0.0016 J**	**0.035**	**0.12**	**0.0031 J**	**0.0033 J**	**0.0026 J**	0.0052 U	0.0053 U	0.0053 U	**0.1**	**13 W**	**5.5**	**0.18**
cis-1,3-Dichloropropene	**2.6**	**410**	**470**		0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Ethylbenzene	**70**	**10000**	**10000**	**29**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	**0.0028 J**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	**0.0058 J**	**0.7**	0.28 U	0.005 U
Methyl tert-butyl ether	**2**	**3200**	**3700**	**190**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Methylene chloride	**0.5**	**3500**	**4000**	**54**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	**0.0017 J**	**0.0024 J B**	**0.0016 J**	**0.0017 J B**	**0.0013 J**	0.0053 U	0.0053 U	0.0059 U	**0.055 J B**	0.28 U	**0.001 J**
Styrene	**24**	**10000**	**10000**	**38000**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Tetrachloroethene	**0.5**	**1500**	**3300**	**27**	0.0046 U	0.0046 U	**0.0024 J**	**0.015**	**0.0064**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	**0.017**	**51 WZ**	**4.1 W**	**0.019**
Toluene	**100**	**10000**	**10000**	**46000**	0.0046 U	0.0046 U	0.0055 U	0.0055 U	**0.011**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	**0.004 J**	**0.06 J**	0.28 U	0.005 U
trans-1,2-Dichloroethene	**10**	**3700**	**4300**		0.0046 U	0.0046 U	**0.0014 J**	0.0055 U	**0.012**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	**0.0027 J**	0.3 U	0.28 U	**0.0074**
trans-1,3-Dichloropropene	**2.6**	**410**	**470**		0.0046 U	0.0046 U	0.0055 U	0.0055 U	0.0052 U	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	0.3 U	0.28 U	0.005 U
Trichloroethene	**0.5**	**970**	**1100**	**14**	0.0046 U	0.0046 U	**0.0012 J**	**0.0047 J**	**0.0038 J**	0.0056 U	0.0052 U	0.0049 U	0.0052 U	0.0053 U	0.0053 U	0.0059 U	**8.9 WZ**	**1.1 W**	**0.015**
Vinyl Chloride	**0.2**	**53**	**220**	**1.7**	**0.012**	0.0046 U	**0.0042 J**	**0.024**	**0.63 W**	**0.003 J**	**0.0019 J**	0.0049 U	0.0052 U	0.0053 U	0.0053 U	**0.027**	0.3 U	0.28 U	**0.0071**
Xylenes (Total)	**1000**	**10000**	**10000**	**2600**	0.014 U	0.014 U	0.016 U	0.016 U	**0.0097 J**	0.017 U	0.016 U	0.015 U	0.015 U	0.016 U	0.016 U	**0.014 J**	**1.5**	0.84 U	0.015 U

Laboratory Qualifiers

Qualifier	Explanation
	Organic Data Qualifiers
J	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
B	Analyte is found in the associated blank, as well as in the sample.
U	Indicates sample was analyzed for, but not detected. Report with the detection limit value.
	Inorganic Data Qualifiers
J	Analyte is found in the associated blank, as well as in the sample.
B	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
E	Matrix Interference
U	Indicates sample was analyzed for, but not detected. Report with the detection limit value.

Screening Value Comparison Qualifiers

Qualifier	Explanation
	Soils
W	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Soil to Groundwater (are the greater of the "100 X GW MSC" and "Generic" regulation values).
X	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Direct Contact 0' to 2' below ground surface.
Y	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Direct Contact 2' to 15' below ground surface.
Z	Excedence of the United States EPA Region 3 Risked Based Concentrations for Industrial soil. Per EPA, for certain low-toxicity chemicals, the screening levels exceed possible concentrations at the target risks.

NOTES:

RBCs - Risk Based Concentrations from:
United States Environmental Protection Agency (EPA), May 19, 2009; Regional Screening Level Table.

MSCs - Medium Specific Concentrations from:
Pennsylvania Department of Environmental Protection (DEP), November 24, 2001; from Chapter 250, Appendix A.

1 - EPA has indicated that for certain low-toxicity chemicals, the screening levels exceed possible concentrations at the target risks.

Table 1
Soils Data Summary - Building 41 - South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Depth (ft.) Sample Date Parameter	MSC Soil to GW Used Aquifer (mg/kg)	MSC Direct Contact 0 - 2 ft (mg/kg)	MSC Direct Contact 2 - 15 ft (mg/kg)	EPA RBC[1] Industrial Soil (mg/kg)	B41S-SB-009 0 - 2 2/8/2008 (mg/kg)	B41S-SB-010 0 - 2 2/8/2008 (mg/kg)	B41S-SB-012 0 - 2 2/8/2008 (mg/kg)	B41S-SB-013 0 - 2 2/8/2008 (mg/kg)	B41S-SB-014 3 - 5 5/13/2008 (mg/kg)	B41S-SB-014 8 - 10 5/13/2008 (mg/kg)	B41S-SB-014 11 - 13 5/13/2008 (mg/kg)	B41S-SB-014 14 - 16 5/13/2008 (mg/kg)	B41S-SB-015 4 - 6 5/13/2008 (mg/kg)	B41S-SB-S4N-06 3 - 6 4/2/2008 (mg/kg)	B41S-SB-S4N-07 6 - 7 4/2/2008 (mg/kg)	B41S-SB-S7N-11 10 - 12 4/2/2008 (mg/kg)	B41S-SB-S7N-14 13 - 14 4/2/2008 (mg/kg)	B41S-SB-S7N-16 15 - 16 4/2/2008 (mg/kg)
Cyanide, Free																		
Cyanide, Free	**200**	**56000**	**190000**	**20000**	**1**	0.63 U	0.6 U	0.65 U	**0.16 B J**	**0.18 B J**	**0.18 B J**	**0.24 B J**	**0.26 B J**	0.64 U	0.61 U	0.62 U	0.62 U	0.63 U
Cyanide, Total																		
Cyanide, Total	**200**	**56000**	**190000**		**15.3**	**0.66**	**0.53 B**	**0.77**	0.63 U	0.58 U	0.63 U	**0.13 B**	**1.9**	0.64 U	**0.78**	0.62 U	0.62 U	0.63 U
Hexavalent Chromium																		
Hexavalent Chromium	**190**	**420**	**190000**	**200**	0.49 U	**122**	0.46 U	0.51 U	0.5 U	0.45 U	0.5 U	0.49 U	**0.62**	**0.5 B**	**0.22 B**	**0.16 B**	0.51 U	**0.29 B**
Mercury																		
Mercury	**10**	**840**	**190000**	**24**	**0.039 B J**	**0.04 B J**	**0.037 B J**	**0.056 J**	**0.031 B**	**0.032 B**	**0.017 B**	**0.033 B**	**0.035 B**	**0.044**	**0.045**	**0.043**	**0.02 B**	**0.033 B**
Metal																		
Antimony	**27**	**1100**	**190000**	**410**	**0.14 B**	1.3 U	1.2 U	1.3 U	1.3 U	1.2 U	1.3 U	**0.11 B**	1.2 U	1.3 U	1.2 U	1.2 U	2.5 U	2.5 U
Arsenic	**150**	**53**	**190000**	**1.6**	**2.4 Z**	**1.4**	**1.3**	**1.3**	**4.7 Z**	**4.7 Z**	**11.1 Z**	**4.9 Z**	**11.1 Z**	**4.8 Z**	**3.1 Z**	**2.1 Z**	**5.3 Z**	**5.3 Z**
Barium	**8200**	**190000**	**190000**	**190000**	**39.1 J**	**39.6 J**	**25.8 J**	**31.5 J**	**45.4**	**31**	**25.3**	**34**	**41.5**	**108**	**66.5**	**34.1**	**56.7**	**50.4 B**
Beryllium	**320**	**5600**	**190000**	**2000**	**0.38 B**	**0.32 B**	**0.33 B**	**0.29 B**	**0.82**	**0.84**	**1.7**	**1.3**	**0.61**	**0.56**	**0.39 B**	**0.52**	**2.5**	**2.1**
Cadmium	**38**	**210**	**190000**	**800**	0.61 U	**2.8**	**8.9**	**14.7**	**0.48 B**	**0.85**	**0.44 B**	**0.92**	**10.1**	**0.74**	**0.64**	**0.18 B**	**0.63 B**	**0.87 B**
Chromium				**1500000**	**12.3 J**	**20.6 J**	**51.5 J**	**82.7 J**	**9 J**	**13.5 J**	**10.7 J**	**12.8 J**	**24.2 J**	**15.1 J**	**10.1 J**	**6.4 J**	**13 J**	**13.3 J**
Copper	**36000**	**100000**	**190000**	**41000**	**5.4**	**5.3**	**5.6**	**7.7**	**9.8**	**11.8**	**21.1**	**10.3**	**6.4**	**2.4 B**	**1.4 B**	**6.7**	**19.6**	**16.5**
Lead	**450**	**1000**	**190000**	**800**	**8.4**	**7.1**	**9.6**	**8.3**	**15.6**	**13.9**	**27**	**16.4**	**12.1**	**14.3**	**7.5**	**14.2**	**30.2**	**29.9**
Nickel	**650**	**56000**	**190000**	**20000**	**5.5**	**36.2**	**21.4**	**29.8**	**10.6 J**	**11.3 J**	**16.4 J**	**15.5 J**	**22.2 J**	**4.8 B**	**3.2 B**	**7.3**	**34.6**	**26.8**
Selenium	**26**	**14000**	**190000**	**5100**	0.61 U	0.63 U	0.6 U	0.65 U	0.63 U	**0.47 B**	**0.4 B**	**0.36 B**	**0.59 B**	0.64 U	0.61 U	0.62 U	1.2 U	1.3 U
Silver	**84**	**14000**	**190000**	**5100**	0.61 U	0.63 U	0.6 U	0.65 U	0.63 U	0.58 U	0.63 U	0.61 U	0.61 U	**0.17 B J**	0.61 U	0.62 U	1.2 U	1.3 U
Thallium	**14**	**200**	**190000**	**66**	1.2 U	1.3 U	1.2 U	1.3 U	**0.4 B**	**0.5 B**	**0.42 B**	**0.57 B**	1.2 U	1.3 U	1.2 U	1.2 U	**0.87 B**	2.5 U
Vanadium	**72000**	**20000**	**190000**	**5200**	**15.9**	**15.4**	**15**	**13.9**	**14.5**	**18.3**	**19**	**14.5**	**19.7**	**24**	**18.9**	**7.2**	**18.3**	**15.6**
Zinc	**12000**	**190000**	**190000**	**310000**	**14.9 J**	**21.2 J**	**33.4 J**	**52.2 J**	**19**	**25**	**44.3**	**51.2**	**129**	**13.8**	**10.7**	**15.2**	**108**	**62.1**
PCB																		
Arochlor-1016	**200**	**200**	**10000**	**21**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
Arochlor-1221	**2.5**	**160**	**10000**	**0.62**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
Arochlor-1232	**2**	**160**	**10000**	**0.62**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
Arochlor-1242	**62**	**160**	**10000**	**0.74**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
Arochlor-1248	**67**	**44**	**10000**	**0.74**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
Arochlor-1254	**280**	**44**	**10000**	**0.74**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
Arochlor-1260	**1900**	**130**	**190000**	**0.74**	0.02 U	0.021 U	0.02 U	0.022 U	0.021 U	0.019 U	0.021 U	0.02 U	0.02 U					
SVOC																		
1,2,4-Trichlorobenzene	**27**	**10000**	**10000**	**400**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
1,2-Dichlorobenzene	**60**	**10000**	**10000**	**10000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
1,3-Dichlorobenzene	**61**	**10000**	**10000**	**3066**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
1,4-Dichlorobenzene	**10**	**3300**	**190000**	**13**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2,4,5-Trichlorophenol	**6100**	**190000**	**190000**	**62000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2,4,6-Trichlorophenol	**8.9**	**840**	**190000**	**160**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2,4-Dichlorophenol	**2**	**8400**	**190000**	**1800**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2,4-Dimethylphenol	**200**	**10000**	**10000**	**12000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.055 J**	0.41 U	**0.052 J**
2,4-Dinitrophenol	**4.1**	**5600**	**190000**	**1200**	2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
2,4-Dinitrotoluene	**0.84**	**260**	**190000**	**2044**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2,6-Dinitrotoluene	**10**	**2800**	**190000**	**620**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2-Chloronaphthalene	**18000**	**190000**	**190000**	**82000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2-Chlorophenol	**4.4**	**920**	**1100**	**5100**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
2-Methylnaphthalene	**8000**	**10000**	**10000**	**4100**	0.4 U	0.42 U	0.4 U	0.43 U	**0.11 J**	0.38 U	0.41 U	0.4 U	0.4 U	**0.038 J**	**0.037 J**	**0.53**	**0.038 J**	**0.6**
2-Methylphenol	**510**	**10000**	**10000**	**51100**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.034 J**	0.41 U	**0.032 J**
2-Nitroaniline	**0.58**	**160**	**190000**	**1800**	2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol	**82**	**22000**	**190000**		0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
3,3'-Dichlorobenzidine	**32**	**180**	**190000**	**6.35911**	2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
3/4-Methylphenol				**5100**	**0.12 J**	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.052 J**	0.41 U	**0.052 J**
3-Nitroaniline	**0.58**	**160**	**190000**		2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
4,6-Dinitro-2-Methylphenol					2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
4-Bromophenyl phenyl ether					0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
4-Chloro-3-Methyl-Phenol	**110**	**14000**	**190000**		0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
4-Chloroaniline	**52**	**11000**	**190000**	**4088**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
4-Chlorodiphenyl Ether					0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
4-Nitroaniline	**0.58**	**160**	**190000**	**86**	2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
4-Nitrophenol	**6**	**22000**	**190000**		2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
Acenaphthene	**4700**	**170000**	**190000**	**33000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	**0.03 J**
Acenaphthylene	**6900**	**170000**	**190000**		0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Anthracene	**350**	**190000**	**190000**	**170000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Benzo (A) Anthracene	**320**	**110**	**190000**	**2.1**	0.4 U	0.42 U	0.4 U	0.43 U	**0.064 J**	**0.046 J**	**0.044 J**	**0.043 J**	**0.056 J**	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Benzo (a) Pyrene	**46**	**11**	**190000**	**0.21**	0.4 U	0.42 U	0.4 U	0.43 U	**0.059 J**	**0.039 J**	**0.029 J**	**0.034 J**	**0.059 J**	0.42 U	0.4 U	**0.035 J**	0.41 U	**0.014 J**
Benzo (b) Fluoranthene	**170**	**110**	**190000**	**2.1**	0.4 U	0.42 U	0.4 U	0.43 U	**0.042 J**	**0.025 J**	**0.053 J**	**0.055 J**	**0.076 J**	0.42 U	0.4 U	**0.018 J**	0.41 U	0.42 U
Benzo (g,h,i) Perylene	**180**	**170000**	**190000**		0.4 U	0.42 U	0.4 U	0.43 U	**0.032 J**	**0.041 J**	**0.034 J**	**0.019 J**	**0.054 J**	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Benzo (k) Fluoranthene	**610**	**1100**	**190000**	**21**	0.4 U	0.42 U	0.4 U	0.43 U	**0.044 J**	**0.028 J**	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.014 J**	0.41 U	0.42 U
Bis(2-Chloroethoxy) Methane				**1800**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Bis(2-Chloroethyl) Ether	**0.055**	**5**	**5.7**	**0.9**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Bis(2-Chloroisopropyl) Ether	**30**	**160**	**190**		0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Bis(2-Ethylhexyl) Phthalate	**130**	**5700**	**10000**	**120**	**0.99**	**0.18 J**	**0.26 J**	0.43 U	0.4 U	**0.038 J**	0.41 U	**0.061 J**	**0.068 J**	**1.2**	**1.3**	**2.3**	**1.1**	**1.6**
Butylbenzylphthalate	**10000**	**10000**	**10000**	**910**	**0.066 J**	0.42 U	0.4 U	0.43 U	**0.038 J**	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.087 J**	0.41 U	**0.044 J**
Carbazole	**83**	**4000**	**190000**		0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.028 J**	0.41 U	0.42 U
Chrysene	**230**	**11000**	**190000**	**210**	0.4 U	0.42 U	0.4 U	0.43 U	**0.076 J**	**0.043 J**	**0.041 J**	**0.044 J**	**0.066 J**	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Dibenzo (a,h) Anthracene	**160**	**11**	**190000**	**0.21**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	**0.029 J**	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Dibenzofuran					0.4 U	0.42 U	0.4 U	0.43 U	**0.029 J**	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Diethylphthalate	**500**	**10000**	**10000**	**490000**	0.4 U	0.42 U	**0.041 J**	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Dimethylphthalate					0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Di-n-Butylphthalate	**4100**	**10000**	**10000**		**0.088 J**	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Di-n-octylphthalate	**10000**	**10000**	**10000**		0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.042 J**	0.41 U	0.42 U
Fluoranthene	**3200**	**110000**	**190000**	**22000**	0.4 U	0.42 U	0.4 U	0.43 U	**0.1 J**	**0.059 J**	**0.052 J**	**0.05 J**	**0.087 J**	0.42 U	0.4 U	**0.033 J**	0.41 U	0.42 U
Fluorene	**3800**	**110000**	**190000**	**22000**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	**0.026 J**	0.41 U	0.42 U
Hexachlorobenzene	**0.96**	**50**	**190000**	**1.1**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Hexachlorobutadiene	**1.2**	**560**	**10000**	**22**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Hexachlorocyclopentadiene	**91**	**10000**	**10000**	**3700**	2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
Hexachloroethane	**0.56**	**2800**	**190000**	**120**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Indeno (1,2,3-cd) Pyrene	**28000**	**110**	**190000**	**2.1**	0.4 U	0.42 U	0.4 U	0.43 U	**0.041 J**	**0.03 J**	**0.029 J**	**0.03 J**	**0.044 J**	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Isophorone	**10**	**10000**	**10000**	**1800**	0.4 U	0.42 U	0.4 U	0.43 U	**0.11 J**	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Naphthalene	**25**	**56000**	**190000**	**20**	0.4 U	0.42 U	0.4 U	0.43 U	**0.056 J**	0.38 U	0.41 U	0.4 U	0.4 U	**0.12 J**	**0.12 J**	**0.57**	**0.13 J**	**0.66**
Nitrobenzene	**5.1**	**1400**	**10000**	**22**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
N-Nitrosodi-N-Propylamine	**0.037**	**11**	**10000**	**0.25**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
N-Nitrosodiphenylamine	**83**	**16000**	**190000**	**350**	0.4 U	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Pentachlorophenol	**5**	**660**	**190000**	**9**	2 U	2 U	1.9 U	2.1 U	1.9 U	1.9 U	2 U	2 U	1.9 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene	**10000**	**190000**	**190000**		**0.038 J**	0.42 U	0.4 U	0.43 U	**0.078 J**	**0.018 J**	0.41 U	**0.027 J**	**0.031 J**	0.42 U	0.4 U	**0.031 J**	0.41 U	**0.032 J**
Phenol	**400**	**190000**	**190000**	**180000**	**0.15 J**	0.42 U	0.4 U	0.43 U	0.4 U	0.38 U	0.41 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.41 U	0.42 U
Pyrene	**2200**	**84000**	**190000**	**17000**	0.4 U	0.42 U	0.4 U	0.43 U	**0.074 J**	**0.033 J**	**0.035 J**	**0.034 J**	**0.058 J**	0.42 U	0.4 U	**0.027 J**	0.41 U	0.42 U
Total Solids																		
Percent Solids																		

Table 1
Soils Data Summary - Building 41 - South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Depth (ft.) Sample Date Parameter	MSC Soil to GW Used Aquifer (mg/kg)	MSC Direct Contact 0 - 2 ft (mg/kg)	MSC Direct Contact 2 - 15 ft (mg/kg)	EPA RBC[1] Industrial Soil (mg/kg)	B41S-SB-009 0 - 2 2/8/2008 (mg/kg)	B41S-SB-010 0 - 2 2/8/2008 (mg/kg)	B41S-SB-012 0 - 2 2/8/2008 (mg/kg)	B41S-SB-013 0 - 2 2/8/2008 (mg/kg)	B41S-SB-014 3 - 5 5/13/2008 (mg/kg)	B41S-SB-014 8 - 10 5/13/2008 (mg/kg)	B41S-SB-014 11 - 13 5/13/2008 (mg/kg)	B41S-SB-014 14 - 16 5/13/2008 (mg/kg)	B41S-SB-015 4 - 6 5/13/2008 (mg/kg)	B41S-SB-S4N-06 3 - 6 4/2/2008 (mg/kg)	B41S-SB-S4N-07 6 - 7 4/2/2008 (mg/kg)	B41S-SB-S7N-11 10 - 12 4/2/2008 (mg/kg)	B41S-SB-S7N-14 13 - 14 4/22/2008 (mg/kg)	B41S-SB-S7N-16 15 - 16 4/2/2008 (mg/kg)
VOC																			
1,1,1,2-Tetrachloroethane	18	3100	190000	9.8	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,1,1-Trichloroethane	20	10000	10000	39000	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,1,2,2-Tetrachloroethane	0.03	28	33	2.9	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,1,2-Trichloroethane	0.5	100	120	5.5	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,1-Dichloroethane	11	1000	1200	17	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,1-Dichloroethene	0.7	33	38		0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0036 J	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,2-Dibromoethane	0.005	0.93	8.6	0.17	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,2-Dichloroethane	0.5	63	73	2.2	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,2-Dichloropropane	0.5	160	180	4.7	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
1,4-Dioxane	2.4	210	240	160	1.1 U	1.2 U	1 U	1.2 U	1 U	0.9 U	1.1 U	310 U	0.93 U	54 U	55 U	61 U	53 U	60 U
2-Butanone	580	10000	10000	190000	0.021 U	0.024 U	**0.015 J**	**0.0044 J**	0.021 U	0.018 U	0.022 U	**0.52 J**	0.019 U	**0.31 J**	**0.28 J**	**0.36 J**	**0.31 J**	**0.39 J**
2-Hexanone					0.021 U	0.024 U	0.02 U	0.024 U	0.021 U	0.018 U	0.022 U	6.1 U	0.019 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U
4-Methyl-2-Pentanone	41	4300	4900	52000	0.021 U	0.024 U	0.02 U	0.024 U	0.021 U	0.018 U	0.022 U	6.1 U	0.019 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U
Acetone	1000	10000	10000	610000	**0.037**	**0.019 J**	**0.098**	**0.049**	**0.013 J**	0.018 U	**0.0093 J**	**1.4 J**	**0.0047 J**	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U
Acrylonitrile	0.27	24	28	1.2	0.11 U	0.12 U	0.1 U	0.12 U	0.1 U	0.09 U	0.11 U	31 U	0.093 U	5.4 U	5.5 U	6.1 U	5.3 U	6 U
Benzene	0.5	210	240	5.6	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Bromochloromethane	9	10000	10000		0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Bromodichloromethane	10	45	51	1.4	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Bromoform	10	1500	1700	220	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Bromomethane	1	270	300	35	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Carbon Disulfide	410	10000	10000	3000	**0.0048 J**	0.0059 U	**0.0072**	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Carbon Tetrachloride	0.5	110	120	1.3	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Chlorobenzene	10	10000	10000	1500	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	**0.45 J**	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Chlorodibromomethane	10	61	70		0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Chloroethane	90	10000	10000		0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Chloroform	10	17	19	1.5	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Chloromethane	0.3	920	1000	510	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
cis-1,2-Dichloroethene	7	1900	2100		**0.0021 J**	**0.061**	**0.0028 J**	0.0059 U	**0.034**	**0.067**	**0.25**	1.5 U	**0.0062**	**0.45**	**0.46**	**1.6**	**2.6**	**5.1**
cis-1,3-Dichloropropene	2.6	410	470		0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Ethylbenzene	70	10000	10000	29	**0.013**	**0.07**	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	**13**	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Methyl tert-butyl ether	2	3200	3700	190	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Methylene chloride	0.5	3500	4000	54	**0.0012 J**	**0.0019 J**	**0.0015 J**	**0.0015 J**	**0.0016 J B**	**0.0014 J B**	**0.0018 J B**	**0.42 J**	**0.00077 J**	0.27 U	0.27 U	**0.1 J**	0.27 U	0.3 U
Styrene	24	10000	10000	38000	0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Tetrachloroethene	0.5	1500	3300	27	0.0053 U	**0.0084**	**0.0028 J**	0.0059 U	0.0052 U	**0.12**	**0.25**	**2.1 W**	0.0047 U	**0.13 J**	**0.14 J**	**8.1 WZ**	**0.92 W**	**4.3 W**
Toluene	100	10000	10000	46000	0.0053 U	**0.0097**	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	**3**	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
trans-1,2-Dichloroethene	10	3700	4300		0.0053 U	**0.0035 J**	0.0051 U	0.0059 U	0.0052 U	0.0045 U	**0.0035 J**	1.5 U	**0.0011 J**	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
trans-1,3-Dichloropropene	2.6	410	470		0.0053 U	0.0059 U	0.0051 U	0.0059 U	0.0052 U	0.0045 U	0.0055 U	1.5 U	0.0047 U	0.27 U	0.27 U	0.31 U	0.27 U	0.3 U
Trichloroethene	0.5	970	1100	14	0.0053 U	**0.0018 J**	**0.0023 J**	0.0059 U	0.0052 U	**0.05**	**0.18**	1.5 U	0.0047 U	**0.091 J**	**0.13 J**	**0.96 W**	**0.54 W**	**1.5 W**
Vinyl Chloride	0.2	53	220	1.7	**0.0014 J**	**0.013**	**0.0017 J**	0.0059 U	**0.026**	**0.0043 J**	**0.029**	1.5 U	0.0047 U	**0.088 J**	0.27 U	0.31 U	0.27 U	**0.068 J**
Xylenes (Total)	1000	10000	10000	2600	0.016 U	**0.043**	0.015 U	0.018 U	0.016 U	0.013 U	0.017 U	**88**	0.014 U	0.81 U	0.82 U	0.92 U	0.8 U	0.9 U

Laboratory Qualifiers

Qualifier	Explanation
	Organic Data Qualifiers
J	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
B	Analyte is found in the associated blank, as well as in the sample.
U	Indicates sample was analyzed for, but not detected. Report with the detection limit value.
	Inorganic Data Qualifiers
J	Analyte is found in the associated blank, as well as in the sample.
B	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
E	Matrix Interference
U	Indicates sample was analyzed for, but not detected. Report with the detection limit value.

Screening Value Comparison Qualifiers

Qualifier	Explanation
	Soils
W	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Soil to Groundwater (are the greater of the "100 X GW MSC" and "Generic" regulation values).
X	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Direct Contact 0' to 2' below ground surface.
Y	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Direct Contact 2' to 15' below ground surface.
Z	Excedence of the United States EPA Region 3 Risked Based Concentrations for Industrial soil. Per EPA, for certain low-toxicity chemicals, the screening levels exceed possible concentrations at the target risks.

NOTES:

RBCs - Risk Based Concentrations from:
United States Environmental Protection Agency (EPA),
MSCs - Medium Specific Concentrations from:
Pennsylvania Department of Environmental Protection
1 - EPA has indicated that for certain low-toxicity chemicals

Table 2
Water Data Summary - Building 41 (B41) South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	MSC Used Aquifer (ug/L)	MSC Non-Used Aquifer (ug/L)	Federal MCL (ug/L)	EPA RBC Tap Water (ug/L)	B41S-SW-009 2/8/2008 (ug/L)	MW-116 5/21/2008 (ug/L)	MW-116 5/21/2008 (ug/L)	MW-116 6/10/2008 (ug/L)	MW-116 9/3/2008 (ug/L)	MW-116 9/3/2008 (ug/L)
Cyanide, Free										
Cyanide, Free	200	200000	200	730	23	10 U			10 U	
Cyanide, Total										
Cyanide, Total	200	200000			4500 W	3.6 B J			10 U	
Dioxane										
1,4-Dioxane	24	240		6.1				22 Z		
Hexavalent Chromium										
Hexavalent Chromium	100	100000		110		50 U			0 U	
Hexavalent Chromium-Diss										
Hexavalent Chromium	100	100000		110			50 U			0 U
Mercury										
Mercury	2	2000	2	0.57	0.24	0.2 U			0.2 U	
Mercury-Diss										
Mercury	2	2000	2	0.57			0.2 U			0.2 U
Metal										
Antimony	6	6000	6	15	40.2 WYZ	10 U			0.076 B	
Arsenic	10	10000	10	0.045	26 WYZ	10 U			1 U	
Barium	2000	2000000	2000	7300	213	26.8 B J			26.2	
Beryllium	4	4000	4	73	0.58 B	0.49 B J			1 U	
Cadmium	5	5000	5	18	1210 WYZ	0.51 B			0.44 B	
Chromium	100	100000	100		9190 WY	2.9 B			8.9 J	
Copper	1000	1000000	1300	1500	238 J	25 U			0.9 B	
Lead	5	5000	15		67.6 WY	3 U			0.28 B	
Nickel	100	100000		730	3530 WZ	19.4 B			18.6	
Selenium	50	50000	50	180	8	5 U			0.39 B	
Silver	100	100000		180	0.83 B	1.4 B			1 U	
Thallium	2	2000	2	2.4	10 U	10 U			0.099 B	
Vanadium	720	720000		180	129 Z	2.2 B			1.4 J	
Zinc	2000	2000000		10950	4640 J W	20.2 J			15.8	
Metal-Diss										
Antimony	6	6000	6	15			10 U			0.091 B J
Arsenic	10	10000	10	0.045			10 U			1 U
Barium	2000	2000000	2000	7300			25.7 B			25.1
Beryllium	4	4000	4	73			0.41 B J			1 U
Cadmium	5	5000	5	18			0.64 B			0.48 B
Chromium	100	100000	100				2.9 B			7.3 J E
Copper	1000	1000000	1300	1500			25 U			0.86 B
Lead	5	5000	15				3 U			0.12 B J
Nickel	100	100000		730			18.6 B			17.6
Selenium	50	50000	50	180			5 U			0.59 B
Silver	100	100000		180			1.5 B			1 U
Thallium	2	2000	2	2.4			10 U			0.092 B J
Vanadium	720	720000		180			3 B			0.58 B
Zinc	2000	2000000		10950			15.8 B J			16.3
PCB										
Arochlor-1016	7.2	7.2	0.5	0.96	0.38 U					
Arochlor-1221	5.2	5.2	0.5	0.0068	0.38 U					
Arochlor-1232	5.2	5.2	0.5	0.0068	0.38 U					
Arochlor-1242	5.2	5.2	0.5	0.034	0.38 U					
Arochlor-1248	1.4	1.4	0.5	0.034	0.38 U					
Arochlor-1254	1.4	1.4	0.5	0.034	0.38 U					
Arochlor-1260	4.3	4.3	0.5	0.034	0.38 U					

Table 2
Water Data Summary - Building 41 (B41) South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	MSC Used Aquifer (ug/L)	MSC Non-Used Aquifer (ug/L)	Federal MCL (ug/L)	EPA RBC Tap Water (ug/L)	B41S-SW-009 2/8/2008 (ug/L)	MW-116 5/21/2008 (ug/L)	MW-116 5/21/2008 (ug/L)	MW-116 6/10/2008 (ug/L)	MW-116 9/3/2008 (ug/L)	MW-116 9/3/2008 (ug/L)
SVOC										
1,2,4-Trichlorobenzene	**70**	**7000**	**70**	**8.2**	100 U			9.5 U	9.6 U	
1,2-Dichlorobenzene	**600**	**60000**	**600**	**370**	**28 J**			9.5 U	9.6 U	
1,3-Dichlorobenzene	**600**	**60000**			100 U			9.5 U	9.6 U	
1,4-Dichlorobenzene	**75**	**7500**	**75**	**0.43**	100 U			9.5 U	9.6 U	
2,4,5-Trichlorophenol	**10000**	**1000000**		**3700**	100 U			9.5 U	9.6 U	
2,4,6-Trichlorophenol	**31**	**31000**		**6.1**	100 U			9.5 U	9.6 U	
2,4-Dichlorophenol	**20**	**2000**		**110**	100 U			9.5 U	9.6 U	
2,4-Dimethylphenol	**2000**	**2000000**		**730**	100 U			9.5 U	9.6 U	
2,4-Dinitrophenol	**41**	**410**		**73**	500 U			48 U	48 U	
2,4-Dinitrotoluene	**8.4**	**8400**		**73**	100 U			9.5 U	9.6 U	
2,6-Dinitrotoluene	**100**	**100000**		**37**	100 U			9.5 U	9.6 U	
2-Chloronaphthalene	**8200**	**8200**		**2900**	100 U			9.5 U	9.6 U	
2-Chlorophenol	**40**	**40**		**180**	100 U			9.5 U	9.6 U	
2-Methylnaphthalene	**2000**	**2000**		**2.3**	100 U			9.5 U	9.6 U	
2-Methylphenol	**5100**	**510000**			100 U			9.5 U	9.6 U	
2-Nitroaniline	**5.8**	**5.8**		**110**	500 U			48 U	48 U	
2-Nitrophenol	**820**	**820000**			100 U			9.5 U	9.6 U	
3,3'-Dichlorobenzidine	**5.8**	**3100**		**0.15**	500 U			48 U	48 U	
3/4-Methylphenol					**150**			9.5 U	9.6 U	
3-Nitroaniline	**5.8**	**5.8**			500 U			48 U	48 U	
4,6-Dinitro-2-Methylphenol					500 U			48 U	48 U	
4-Bromophenyl phenyl ether					100 U			9.5 U	9.6 U	
4-Chloro-3-Methyl-Phenol	**510**	**510**			**12 J**			9.5 U	9.6 U	
4-Chloroaniline	**410**	**410**		**0.34**	100 U			9.5 U	**0.53 J**	
4-Chlorodiphenyl Ether					100 U			9.5 U	9.6 U	
4-Nitroaniline	**5.8**	**5.8**		**3.4**	500 U			48 U	48 U	
4-Nitrophenol	**60**	**60000**			500 U			48 U	48 U	
Acenaphthene	**3800**	**3800**		**2200**	100 U			9.5 U	9.6 U	
Acenaphthylene	**6100**	**16000**			100 U			9.5 U	9.6 U	
Anthracene	**66**	**66**		**11000**	100 U			9.5 U	9.6 U	
Benzo (A) Anthracene	**3.6**	**11**	**0.2**	**0.029**	100 U			9.5 U	9.6 U	
Benzo (a) Pyrene	**0.2**	**3.8**	**0.2**	**0.0029**	100 U			9.5 U	9.6 U	
Benzo (b) Fluoranthene	**1.2**	**1.2**		**0.029**	100 U			9.5 U	9.6 U	
Benzo (g,h,i) Perylene	**0.26**	**0.26**			100 U			9.5 U	9.6 U	
Benzo (k) Fluoranthene	**0.55**	**0.55**		**0.29**	100 U			9.5 U	9.6 U	
Bis(2-Chloroethoxy) Methane				**110**	100 U			9.5 U	9.6 U	
Bis(2-Chloroethyl) Ether	**0.55**	**55**		**0.012**	100 U			9.5 U	9.6 U	
Bis(2-Chloroisopropyl) Ether	**300**	**30000**			100 U			9.5 U	9.6 U	
Bis(2-Ethylhexyl) Phthalate	**6**	**290**	**6**	**4.8**	**140 WYZ**			**2.1 J**	9.6 U	
Butylbenzylphthalate	**2700**	**2700**			100 U			9.5 U	9.6 U	
Carbazole	**130**	**1200**			100 U			9.5 U	9.6 U	
Chrysene	**1.9**	**1.9**		**2.9**	100 U			9.5 U	9.6 U	
Dibenzo (a,h) Anthracene	**0.36**	**0.6**		**0.0029**	100 U			9.5 U	9.6 U	
Dibenzofuran					100 U			9.5 U	9.6 U	
Diethylphthalate	**5000**	**1100000**		**29000**	100 U			9.5 U	9.6 U	
Dimethylphthalate					100 U			9.5 U	9.6 U	
Di-n-Butylphthalate	**10000**	**400000**			**11 J**			9.5 U	9.6 U	
Di-n-octylphthalate	**2000**	**3000**			100 U			9.5 U	9.6 U	
Fluoranthene	**260**	**260**		**1500**	100 U			9.5 U	9.6 U	
Fluorene	**1900**	**1900**		**1500**	100 U			9.5 U	9.6 U	
Hexachlorobenzene	**1**	**6**	**1**		100 U			9.5 U	9.6 U	
Hexachlorobutadiene	**1**	**1000**			100 U			9.5 U	9.6 U	
Hexachlorocyclopentadiene	**50**	**1800**	**50**		500 U			48 U	48 U	
Hexachloroethane	**1**	**100**			100 U			9.5 U	9.6 U	
Indeno (1,2,3-cd) Pyrene	**3.6**	**62**		**0.029**	100 U			9.5 U	9.6 U	
Isophorone	**100**	**100000**		**71**	100 U			9.5 U	9.6 U	
Naphthalene	**100**	**10000**		**0.14**	100 U			9.5 U	9.6 U	
Nitrobenzene	**51**	**51000**		**0.12**	100 U			9.5 U	9.6 U	
N-Nitrosodi-N-Propylamine	**0.37**	**370**		**0.0096**	100 U			9.5 U	9.6 U	
N-Nitrosodiphenylamine	**530**	**35000**		**14**	100 U			9.5 U	9.6 U	
Pentachlorophenol	**1**	**1000**	**1**	**0.56**	500 U			48 U	48 U	
Phenanthrene	**1100**	**1100**			100 U			9.5 U	9.6 U	
Phenol	**4000**	**400000**		**11000**	**940**			9.5 U	9.6 U	
Pyrene	**130**	**130**		**1100**	100 U			9.5 U	9.6 U	

Table 2
Water Data Summary - Building 41 (B41) South Settling Basin
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	MSC Used Aquifer (ug/L)	MSC Non-Used Aquifer (ug/L)	Federal MCL (ug/L)	EPA RBC Tap Water (ug/L)	B41S-SW-009 2/8/2008 (ug/L)	MW-116 5/21/2008 (ug/L)	MW-116 5/21/2008 (ug/L)	MW-116 6/10/2008 (ug/L)	MW-116 9/3/2008 (ug/L)	MW-116 9/3/2008 (ug/L)
VOC										
1,1,1,2-Tetrachloroethane	**70**	**7000**		**0.52**	5 U	50 U			50 U	
1,1,1-Trichloroethane	**200**	**2000**	**200**	**200**	5 U	50 U			50 U	
1,1,2,2-Tetrachloroethane	**0.3**	**30**		**0.067**	5 U	50 U			50 U	
1,1,2-Trichloroethane	**5**	**50**	**5**	**5**	5 U	50 U			50 U	
1,1-Dichloroethane	**110**	**1100**		**2.4**	**1.2 J**	**14 J**			**17 J**	
1,1-Dichloroethene	**7**	**70**	**7**		5 U	**46 J WY**			**40 J WY**	
1,2-Dibromoethane	**0.05**	**5**	**0.05**	**0.0065**	5 U	50 U			50 U	
1,2-Dichloroethane	**5**	**50**	**5**	**0.15**	5 U	50 U			50 U	
1,2-Dichloropropane	**5**	**50**	**5**	**0.39**	5 U	50 U			50 U	
1,4-Dioxane	**24**	**240**		**6.1**	1000 U	10000 U			10000 U	
2-Butanone	**4000**	**400000**			**13 J**	500 U			500 U	
2-Hexanone					50 U	500 U			500 U	
4-Methyl-2-Pentanone	**410**	**41000**		**2000**	50 U	500 U			500 U	
Acetone	**10000**	**100000**		**22000**	**120**	500 U			500 U	
Acrylonitrile	**2.7**	**270**		**0.045**	100 U	1000 U			1000 U	
Benzene	**5**	**500**	**5**	**0.41**	5 U	50 U			50 U	
Bromochloromethane	**90**	**90**			5 U	50 U			50 U	
Bromodichloromethane	**100**	**100**		**0.12**	5 U	50 U			50 U	
Bromoform	**80**	**8000**		**8.5**	5 U	50 U			50 U	
Bromomethane	**10**	**1000**		**8.7**	5 U	50 U			50 U	
Carbon Disulfide	**4100**	**4100**		**1000**	**31**	50 U			50 U	
Carbon Tetrachloride	**5**	**50**	**5**	**0.2**	5 U	50 U			50 U	
Chlorobenzene	**100**	**10000**	**100**	**91**	5 U	50 U			50 U	
Chlorodibromomethane	**80**	**8000**			5 U	50 U			50 U	
Chloroethane	**900**	**90000**			5 U	50 U			50 U	
Chloroform	**80**	**800**		**0.19**	5 U	50 U			50 U	
Chloromethane	**30**	**3000**		**190**	5 U	50 U			50 U	
cis-1,2-Dichloroethene	**70**	**700**	**70**		**8.4**	**1200 WXYZ**			**1100 WXYZ**	
cis-1,3-Dichloropropene	**26**	**2600**			5 U	50 U			50 U	
Ethylbenzene	**700**	**70000**	**700**	**1.5**	**11**	50 U			50 U	
Methyl tert-butyl ether	**20**	**200**		**12**	5 U	50 U			50 U	
Methylene chloride	**5**	**500**		**4.8**	**1.4 J**	**140 B WZ**			50 U	
Styrene	**100**	**10000**	**100**	**1600**	5 U	50 U			50 U	
Tetrachloroethene	**5**	**50**	**5**		**0.47 J Z**	**310 WXYZ**			**210 WXYZ**	
Toluene	**1000**	**100000**	**1000**	**2300**	5 U	50 U			50 U	
trans-1,2-Dichloroethene	**100**	**1000**	**100**		**2.2 J**	50 U			50 U	
trans-1,3-Dichloropropene	**26**	**2600**			5 U	50 U			50 U	
Trichloroethene	**5**	**50**	**5**		**1.1 J Z**	**570 WXYZ**			**480 WXYZ**	
Vinyl Chloride	**2**	**20**	**2**	**0.016**	**15 WYZ**	**37 J WXYZ**			**27 J WXYZ**	
Xylenes (Total)	**10000**	**180000**	**10000**	**200**	**1.4 J**	150 U			150 U	

Laboratory Qualifiers

Qualifier	Explanation
	Organic Data Qualifiers
J	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
B	Analyte is found in the associated blank, as well as in the sample.
U	Indicates sample was analyzed for, but not detected. Report with the detection limit value.
	Inorganic Data Qualifiers
J	Analyte is found in the associated blank, as well as in the sample.
B	Indicates an estimated value. This flag is used when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
E	Matrix Interference
U	Indicates sample was analyzed for, but not detected. Report with the detection limit value.

Screening Value Comparison Qualifiers

Qualifier	Explanation
	Water
W	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Non-Residential Used Aquifers.
X	Excedence of the Pennsylvania DEP Act 2 Medium Specific Concentration for Non-Residential Non-Used Aquifers.
Y	Excedence of the United States EPA Maximum Contaminant Level.
Z	Excedence of the United States EPA Region 3 Risked Based Concentrations for tap water. Per EPA, for certain low-toxicity chemicals, the screening levels exceed possible concentrations at the target risks.

APPENDIX A

Photographs

APPENDIX A – Photographs
Building 41 – South Settling Basin

Photo 1 - Building 41, South Settling Basin looking west.

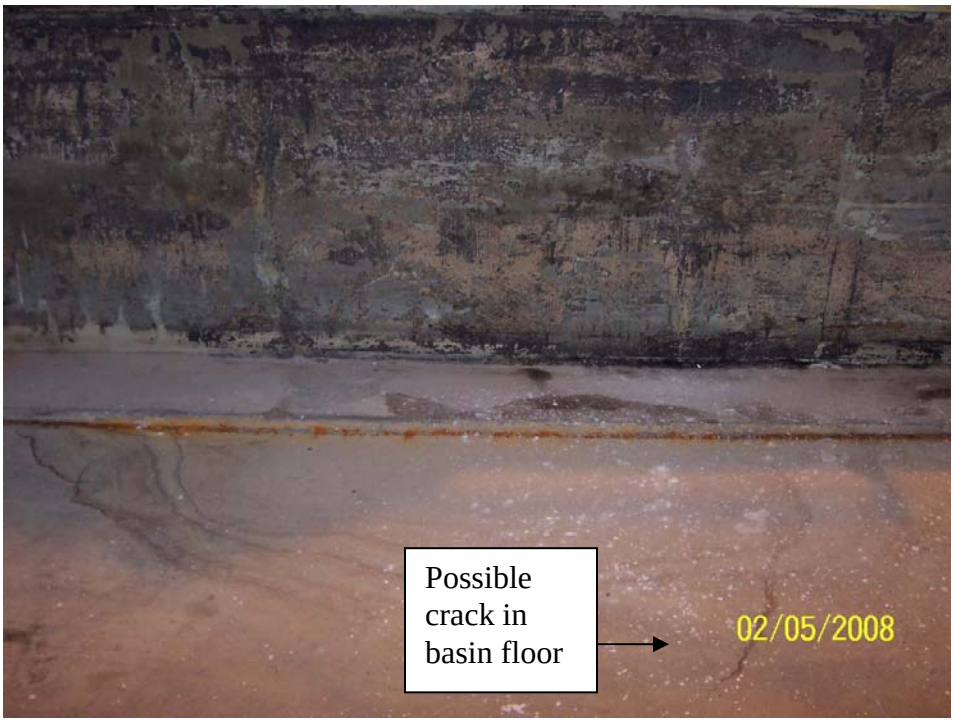


Photo 2 - Building 41, South Settling Basin looking at southern wall, and possible crack in basin floor.

Photo 3 - Building 41, Southern sections of East Basins

Photo 4 - Building 41, South Basin, looking east. Note soil boring locations in white paint on basin floor.

Photo 5 - Building 41, Soil boring 009 with black liquid in crushed stone sub-base.

Photo 6 - Building 41, Soil boring 011 with black liquid in crushed stone sub-base.

APPENDIX B

Historical Photographs and Drawings

Historical Photograph Summary

Photo 1 – Undated, believed to be the originally constructed Building 41 WWTP and open tanks circa early 1969 (following construction); view is looking southeast. Features in Photo 1 are consistent with 12-5-67 AMF Dwg 61-7-60000 (Figure 1). Note only one settling basin is visible and adjacent to a smaller treatment tank (both empty and all concrete, in-ground, open topped tanks).

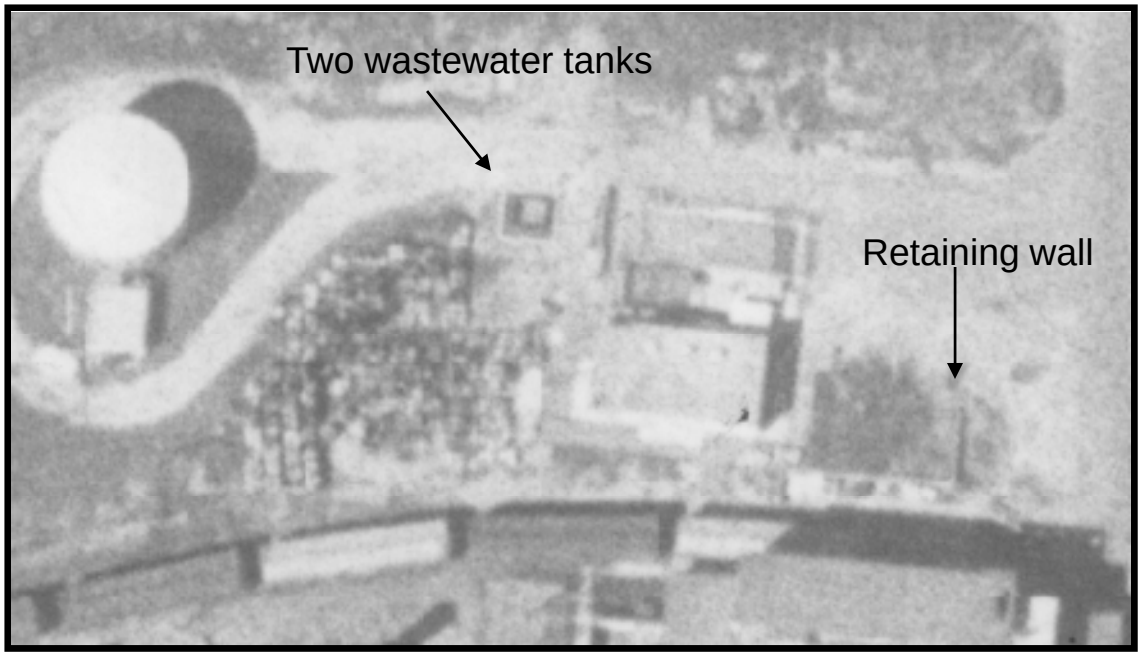


Photo 2 - August 11, 1971 Aerial Photo (north orientation). The active railroad track and Building 10 are visible to the south of Building 41 (at center). A retaining wall is visible to the east of Building 41; and a fire water tank and pump house are visible to the west of Building 41. Two main wastewater tanks are visible to the north of Building 41. The northern-most tank is the main settling tank (now referred to as the South Settling Basin). West of this settling basin is a square tank, which is assumed to be the original sludge holding pit. The tank south of the settling basin is the original equalization (EQ) tank, reported to be approximately 12’ wide x 20 feet long.

Historical Photograph Summary

Photo 3 – February 9, 1972 photo. View looking Southwest toward north side of Bldg 41. Excavation for new EQ tank is shown in the foreground. Note that the two new settling basins have already been constructed and are filled with water.

Photo 4 - February 9, 1972 photo. View looking west, east of new settling basins. Note fire protection tank in background and absence of EQ tank.

Historical Photograph Summary

Photo 5 – February 9, 1972 photo. View looking southwest along east side of new settling basins. Note large 30" diameter stormwater pipe in foreground.

Photo 6 - February 9, 1972 photo. View looking northeast from near north mandoor of WWTP building. Note former sump pad and excavation for new EQ tank.

Historical Photograph Summary

Photo 7 – February 1972 photo. View looking west from east side of WWTP tanks. Note both former (original 4'x4') sump pads and excavation for new EQ tank. Original EQ tank is visible in background.

Photo 8 - February 1972 photo. View looking south from northeast corner of new Settling tanks. Note 30" diameter underground stormwater pipe and smaller sanitary pipe. Workers are standing on new base for pH adjustment tank.

Historical Photograph Summary

Photo 9 – February 1972 photo. View looking southwest from northeast corner of new Settling tanks. Note western WWTP building extension.

Photo 10 - March 1, 1972 photo. View looking west from east side of new EQ tank (inside of south settling tank appears to be asphalt coated).

Historical Photograph Summary

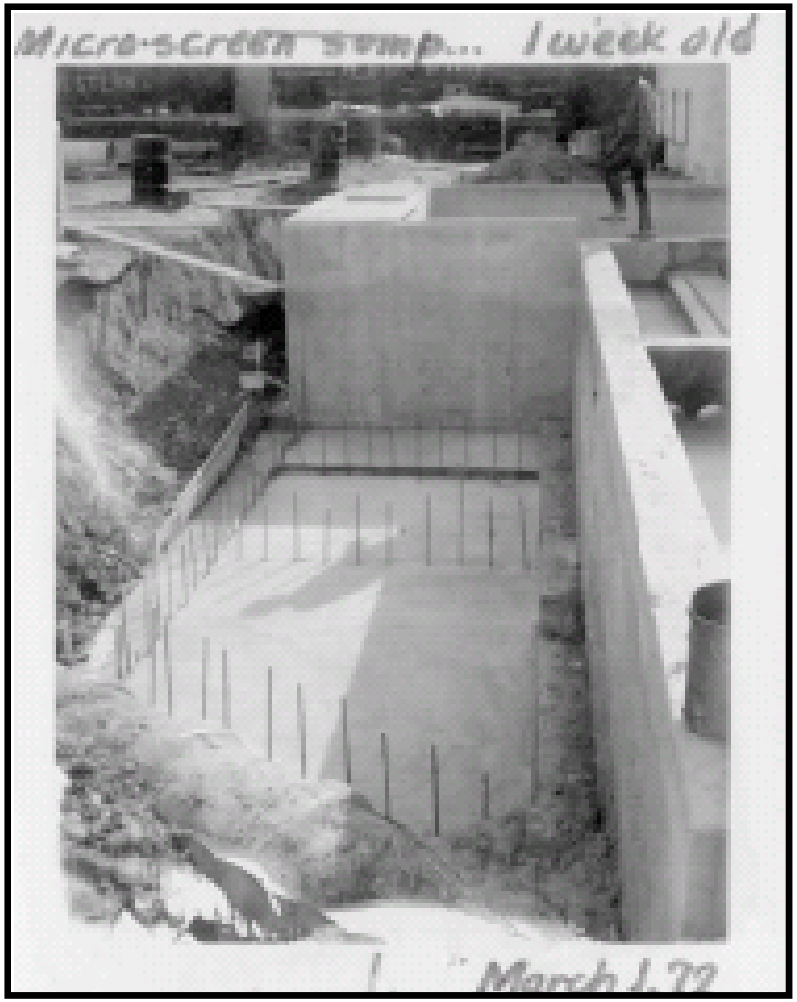


Photo 11 – March 4, 1972 photo. View looking south from northeast corner of new settling basins.

Photo 12 - March 6, 1972 photo. View looking southwest toward the northeast corner of the EQ tank. The three pipes are presumed to be from Bldg 2 WW tank area. Rebar from Neutralization tank wall construction in background.

Historical Photograph Summary

Photo 13 – April 3, 1972 photo. View looking west, east of new WW tanks for Bldg 41. Apparent sump/cover at northeast corner of WWTP building.

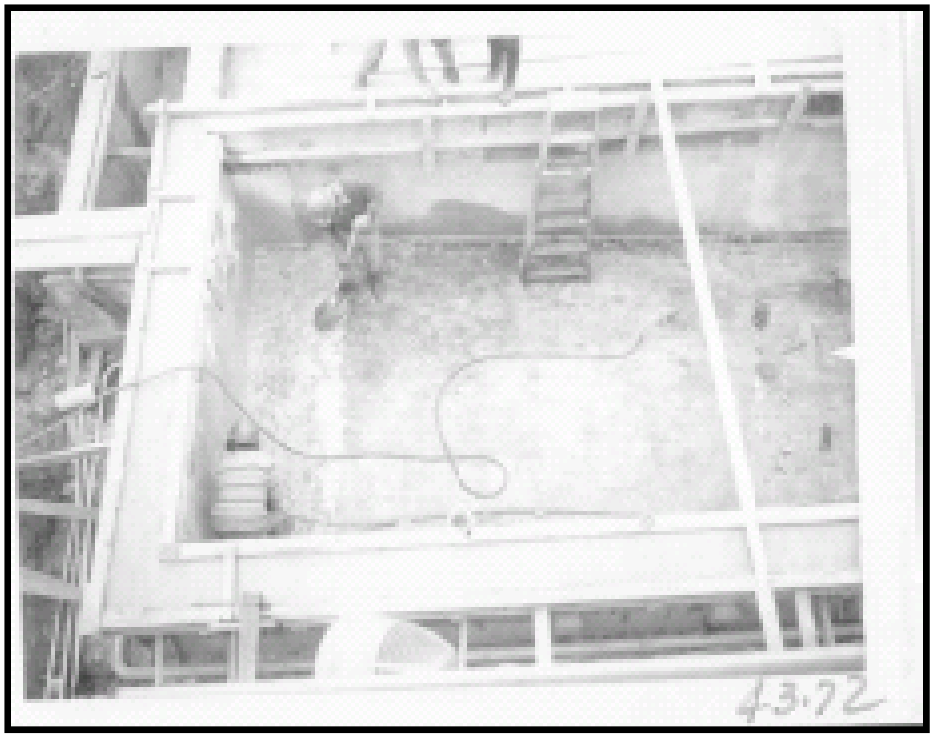


Photo 14 - April 3, 1972 photo. View looking north from WWTP roof at west side of new Flocculation tank.

Historical Photograph Summary

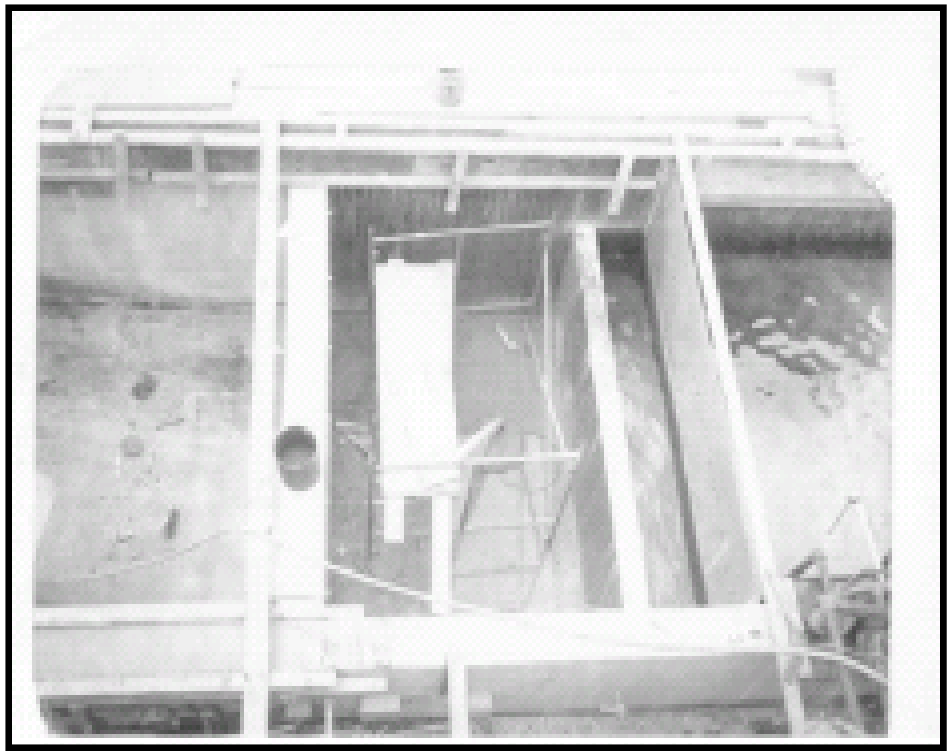


Photo 15 – View looking north from WWTP roof at new Precipitation tank.

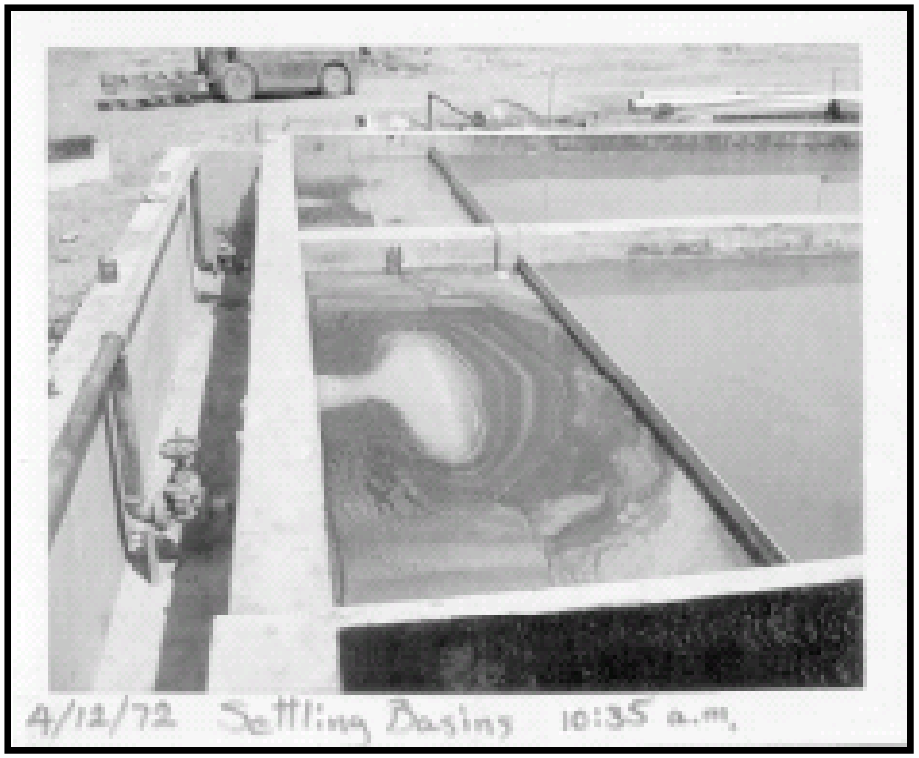


Photo 16 - April 12, 1972 photo. View looking north at west side of new settling basins.

Historical Photograph Summary

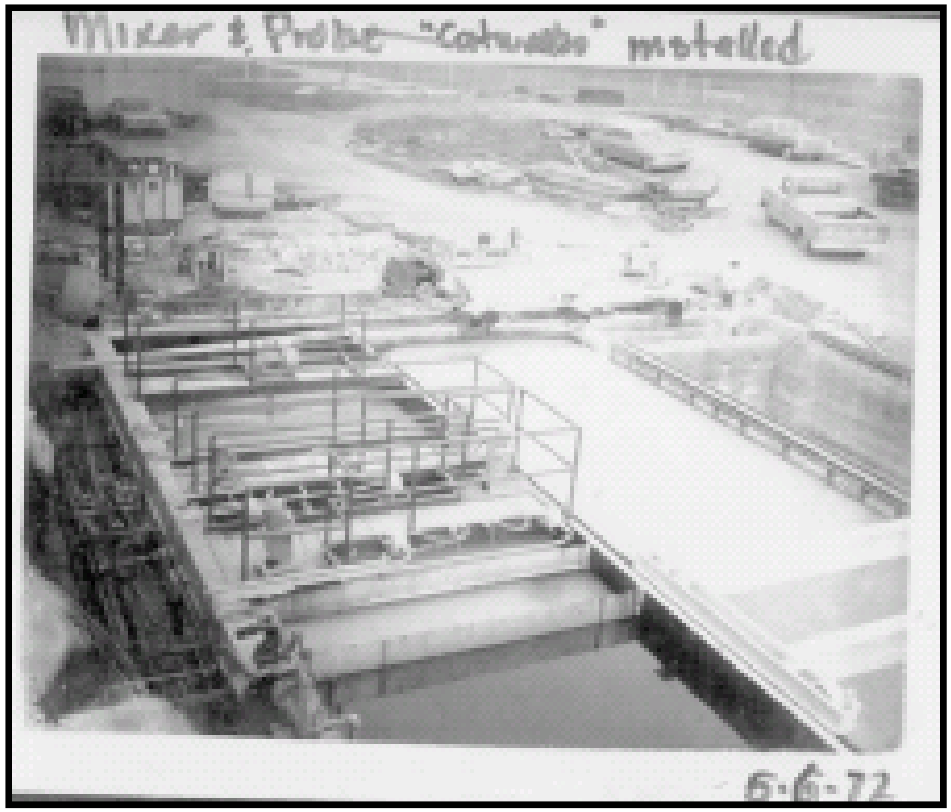


Photo 17 – May 6, 1972 photo. View looking northwest from WWTP roof at new Precipitation and Flocculation tanks and equipment installation. North settling tank was empty.

Photo 18 - May 8, 1972 photo. View looking north from WWTP roof.

Historical Photograph Summary

Photo 19 – May 8, 1972 photo. View looking northwest from WWTP roof at new Micro screen and effluent discharge point (northeast corner of Oxidation tank). Pipe trench is present on the right-hand side.

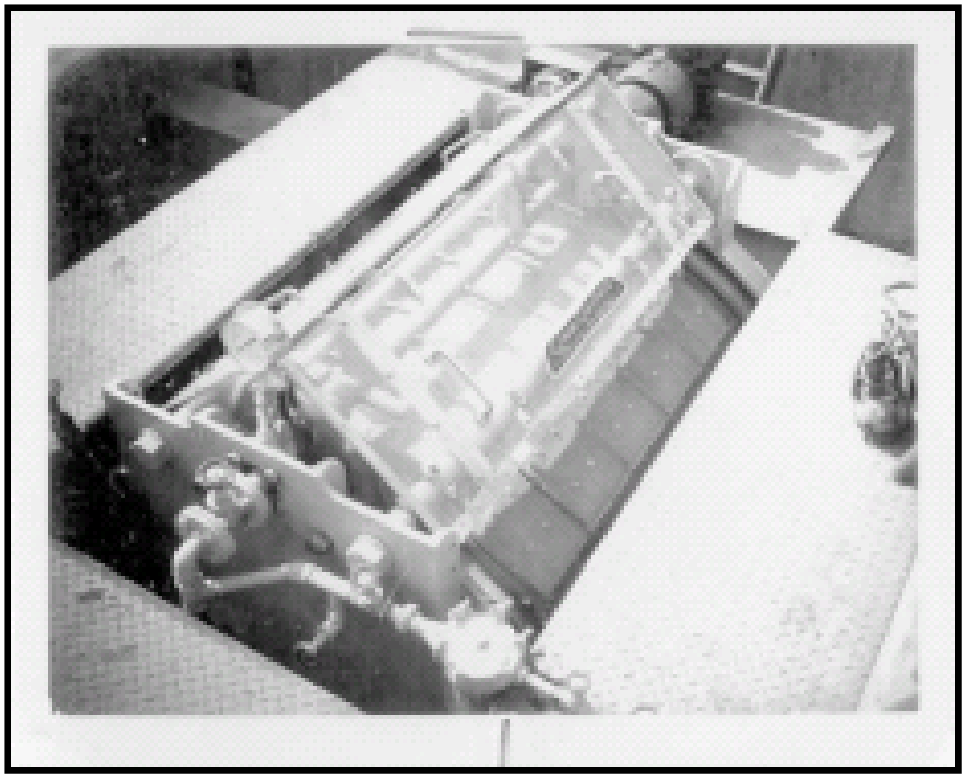


Photo 20 - Close-up of former micro screen equipment .

Historical Photograph Summary

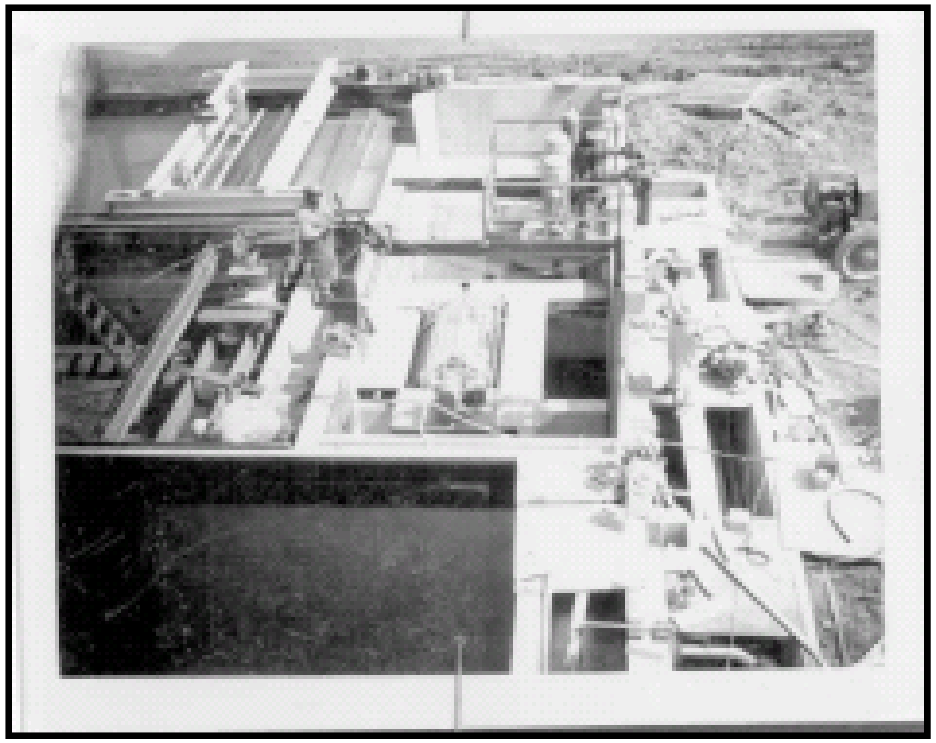


Photo 21 – Undated photo. View looking north from WWTP roof at new Microscreen installation. Pipe trench is present along east side of tanks and is partially covered and north settling basin is full.

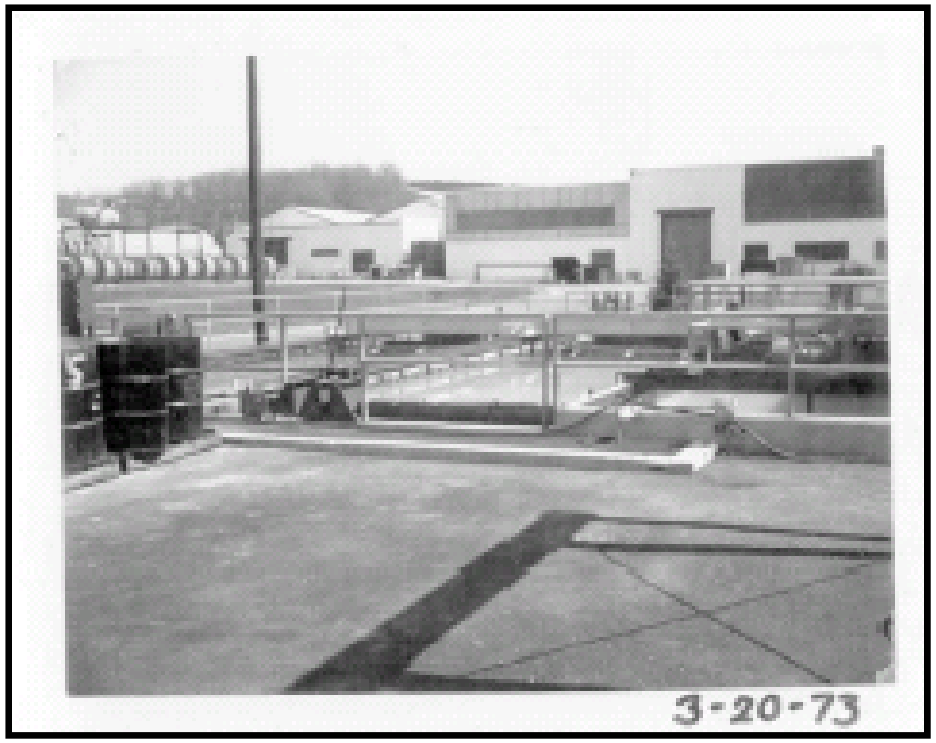


Photo 22 - March 20, 1973 photo. View looking east to northeast from west side of new settling basins. Asphalt pavement is present around tanks.

Historical Photograph Summary

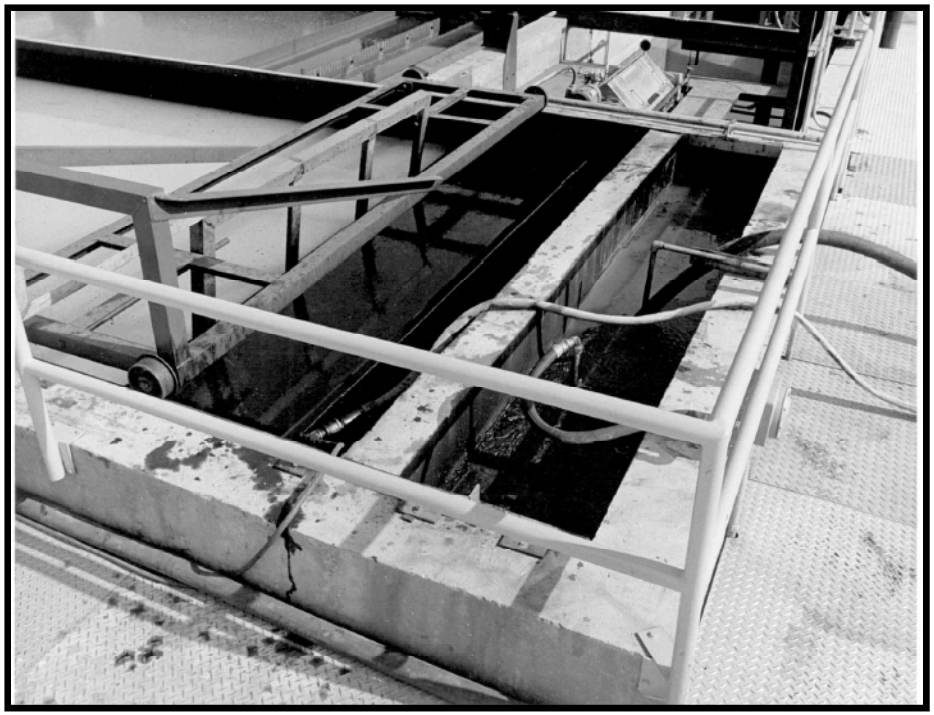


Photo 23 – View of southeast corner of new EQ tank in operation (no date). Metal plates are present over pipe trench on the right side.

Photo 24 - View looking west to southwest from north side of north settling basin (no date).

Historical Photograph Summary

Photo 25 – Undated photo. View looking south from northwest corner of settling basins.

Historical Drawings

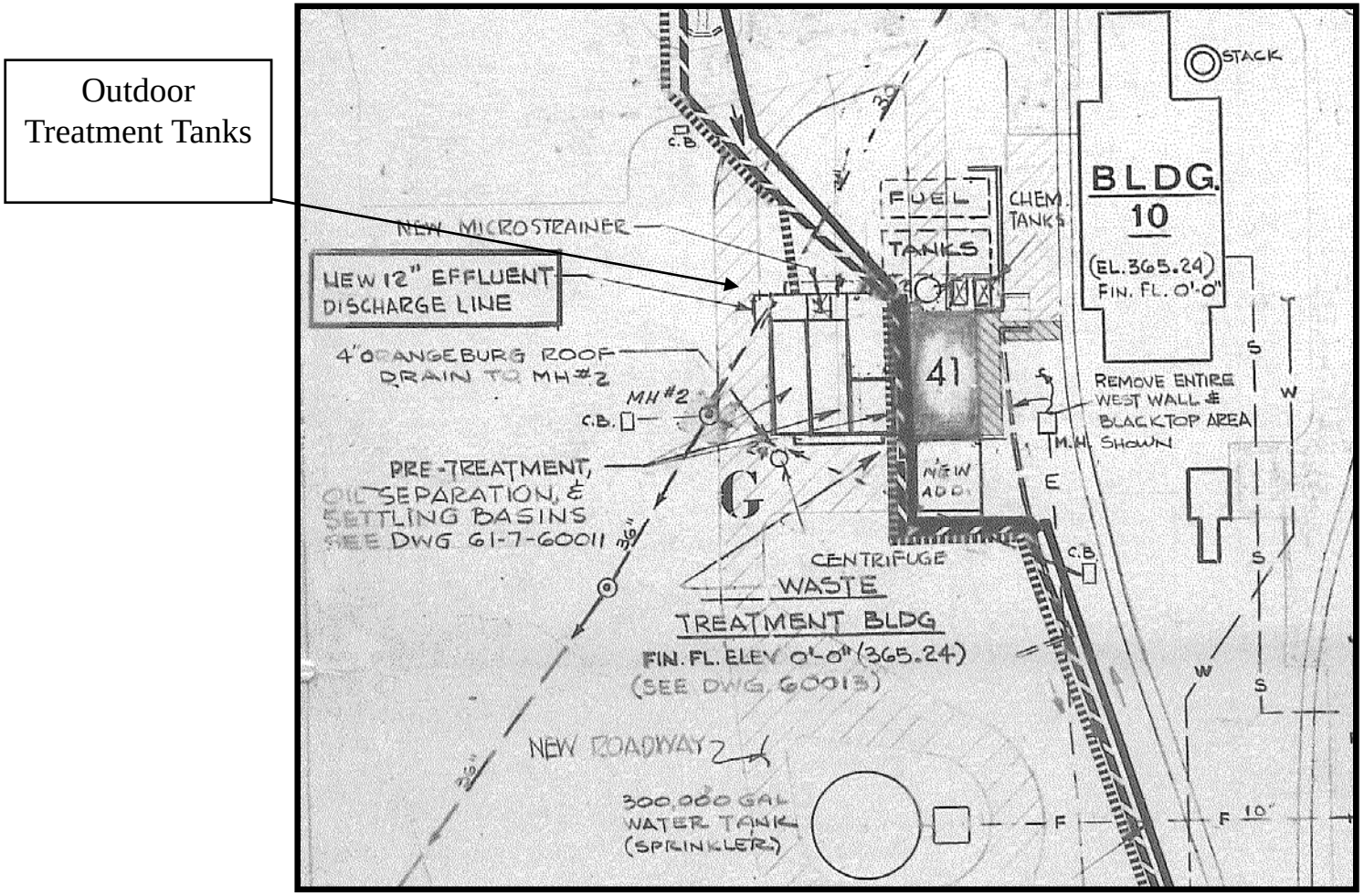


Figure 1 – December 5, 1967 AMF drawing No. 61-7-60000 (Proposed New Waste Treatment Building 41 - east orientation). Note location of original Building 41 structure and outdoor treatment tanks. Sumps located on the northeast and northwest corners of the building connected to piping from Building 2 & 4 wastewater tanks, respectively. Also note discharge to stormwater manhole from northeast corner of lone settling basin. Obscured note on this drawing indicated that the settling basin measured 54' long by 14' wide; the EQ tank measured 20'L x 12'W; and the sumps each measured 4'x 4'.

Historical Drawings

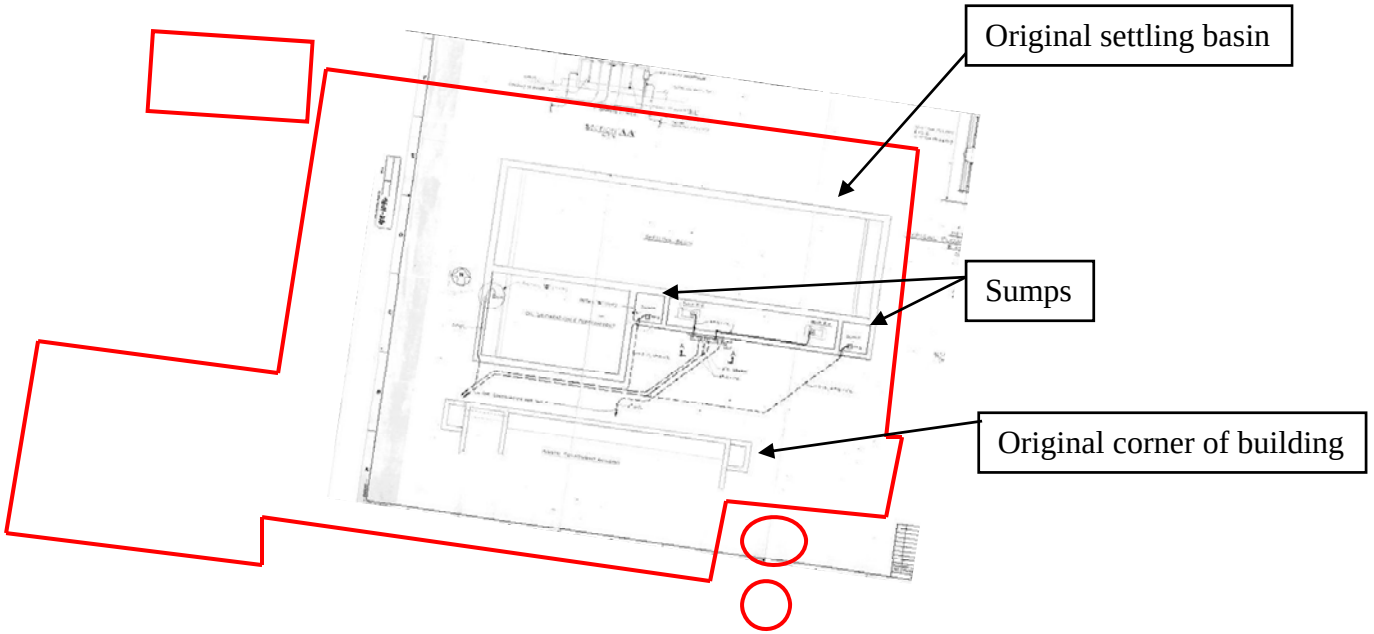


Figure 2 – August 2, 1968 drawing with current WWTP outline shown in red. Note location of original lone settling basin, sumps, and northern corners of original WWTP Building.

Historical Drawings

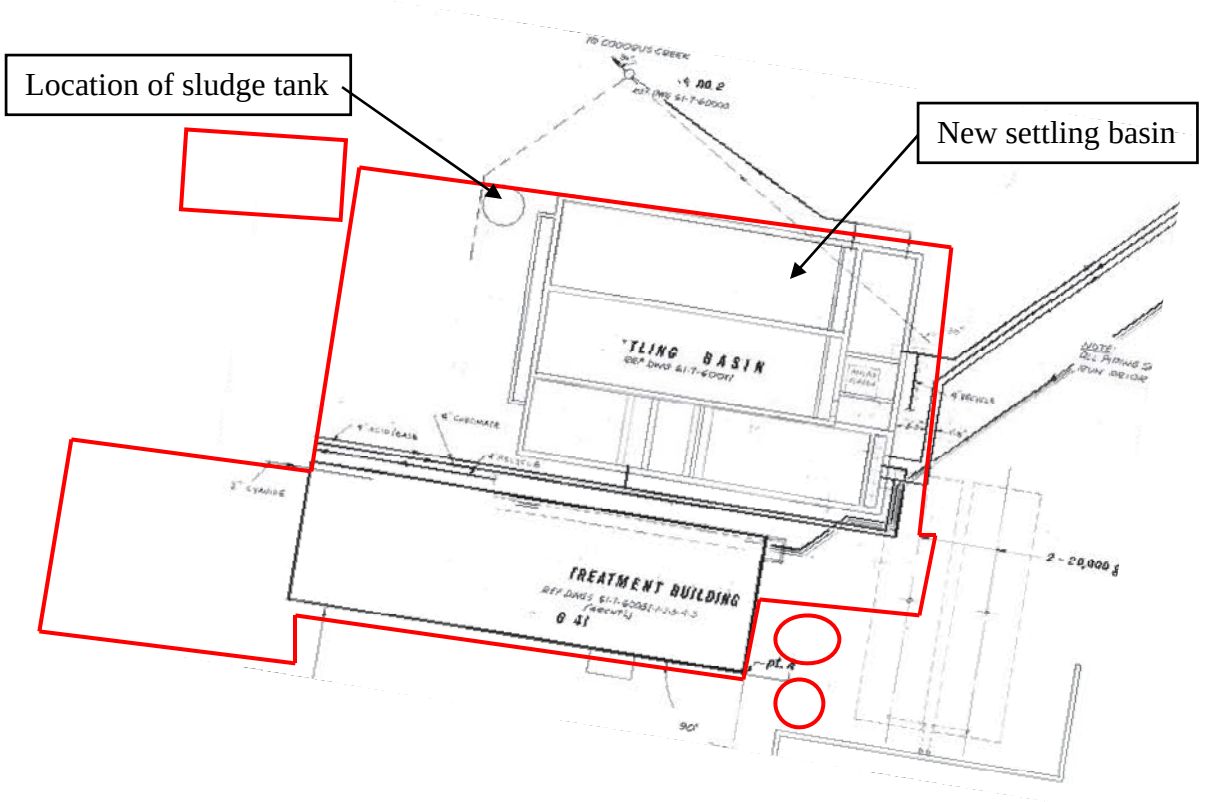


Figure 3 – (1972?) drawing with outline of current WWTP shown in red. Note planned locations of settling basins; pipes from Bldgs 2 (east) & 4 (west); and location of sludge tank (W of North settling basin).

Historical Drawings

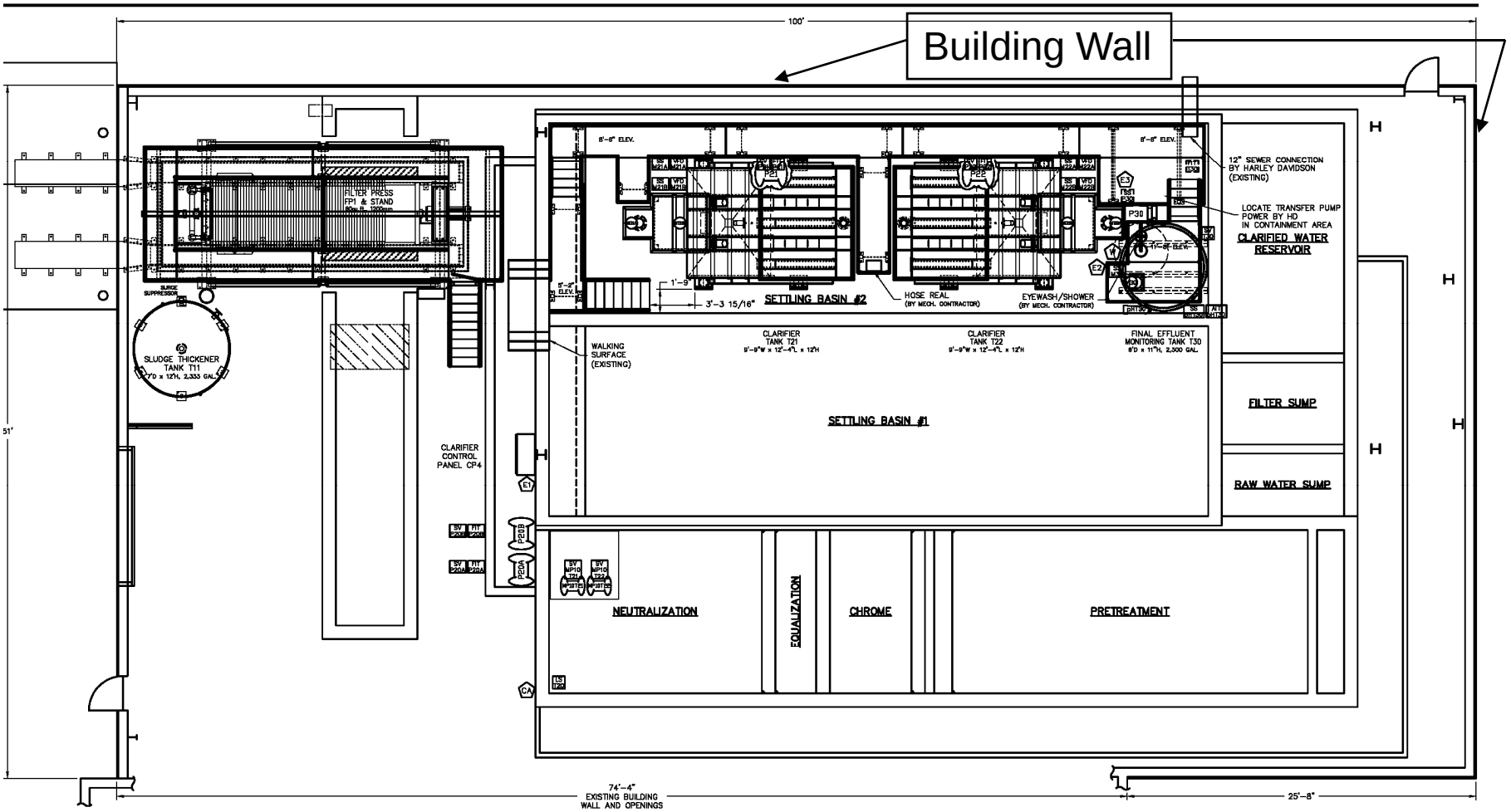


Figure 4 – June 20, 2007 proposed (existing) layout [J. Mark Systems] showing Bldg 41 wastewater tank area only. Note proposed use of northern settling basin with a new lamella clarifier; new location of sludge filter press (indoors); and existing sludge pit (west of settling basins). Building walls and current roof over the WWTP basins was constructed circa 1980, according to other available construction drawings.

APPENDIX C

Soil Boring Logs

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-0001
T.O.C. Elev.:
Location:
Surface Elevation:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0	Concrete			PID (ED KR 305)				
1			Concrete Floor 0-1'					
2		0/3	Gravel Sub-base 1'-1'11"					Sample @ 4 @ 1047
3			NO Recovery					ONLY 1 SAMPLE
4			3-3.3 · 10YR 2/1,	1.6				
			3.3-4.7 10YR 5/6, CL clay, low silt, moist, medium plasticity, semi-dens	1.5				
5		2/3	4.7-5' 10YR 5/6. CL, clay, moist, low plasticity, semi-dense. <5% sub rounded quartzite, <3% fine to coarse sand	2.0				
			Refusal @ 5' bgs					
6								

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Geoprobe 3' rods	Casing Type:	Filter Pack Type: Quantity:	
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/7/08	Screen Type:	Date/Time:	
Drilling Completed: 2/7/08	Slot Size:	Notes: Background PID 0.2	
Well Construction:	Grout Type: Quantity:	Used PVC (4") to keep H2O out of	
Blown/Bailed Yield:		Geoprobe area.	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Setting Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD - B41S - SB-002
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (EDKR) 305				
1			0 - 0.6 Concrete 0.6 - 1.7 Gravel					
2		1.1/3	1.7 - 2.0 Gley 2.5/10 B, saturated, GC gravelly clay, no plasticity, sub rounded gravel, low density, [illegible] odor	18.6		Breathing Zone of C. Homer 1.2 ppm		Sample 0-3 @ 1227
3			2 - 2.8 - 10YR 2/1, GC gravelly clay, saturated, sub rounded gravel, citrus like odor, no plasticity	7.2				
4			Refusal @ 3.3' bgs No Recovery					
5		0/3						
6								

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Geoprobe 3' Rods	Casing Type:	Filter Pack Type: Quantity:	
Logged By: CMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/7/08	Screen Type:	Date/Time:	
Drilling Completed: 2/7/08	Slot Size:	Notes: PVC (4") used to keep H_2O out	
Well Construction:	Grout Type: Quantity:	of Geoprobe hole	
Blown/Bailed Yield:		Backfilled ID 0.5	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-BHIS-SB-0003
Surface Elevation:
T.O.C. Elev.:

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (ED KR 3005)				
1			0-0.5' Concrete 0.5-2' Gravel					
2		0.2/3	2-2.2 10YR 2/1, CL, Black, Saturated, low density, clay, medium plasticity	12.7		C. Homer Breathing Zone 0.9 ppm		
3								
4		3/3	3-3.2 SAME AS ABOVE, moist 3.2-4.9 2.5Y 5/3, CL, clay, low plasticity, dense, damp, citrus like odor, mottling 10YR 2/1	29.3 20.9		C. Homer Breathing Zone 0.8 ppm		Sample 0004 @ 1323
5			4.9-6 10YR 5/6, CL, clay, low plasticity, dense, damp, burning brakes-like odor, 10YR 6/2 mottling					
6				2.4				

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Geoprobe 3' Rods	Casing Type:	Filter Pack Type: Quantity:	
Logged By: Emily Wade	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/7/08	Screen Type:	Date/Time:	
Drilling Completed: 2/7/08	Slot Size:	Notes: Used 4" PVC to keep H_2O out of	
Well Construction:	Grout Type: Quantity:	Geoprobe Area	
Blown/Bailed Yield:		PID Background 0.6 ppm	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 - South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-B41S-SB-003
Surface Elevation:

T.O.C. Elev.:

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
6								
7		3/3	6-9 SAME AS ABOVE	1.2				Sample 07 @ 1337
8				1.6				
9				1.3				
10								
11								
12								

Driller:	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size:	Casing Type:	Filter Pack Type:	Quantity:
Logged By:	Well Screen: Dia. To	Static Water Level:	
Drilling Started:	Screen Type:	Date/Time:	
Drilling Completed:	Slot Size:	Notes:	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-B41S-SB-0004
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (0 ICR 30)				
1		0.9/3	0-0.5' Concrete 0.5-1.7' Gravel layer					
2			1.7-2 10YR 2/1, CL, clay, saturated, med. plasticity, semi-dense <3% sub angular gravel	12.2				Sample 03 @ 0755
3			2-2.6 10YR 5/6, CL, clay, dense, damp, low plasticity <3% sub rounded gravel	11.5				
4		0.7/3	3-3.7 SAME AS ABOVE Refusal @ 3.7' bgs	10.3				
5								
6								

Driller: Chris Homer	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size: Geoprobe 3" Rods	Casing Type:	Filter Pack Type:	Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/8/08	Screen Type:	Date/Time:	
Drilling Completed: 2/8/08	Slot Size:	Notes: Background PID 0.5 ppm	
Well Construction:	Grout Type: Quantity:	4" PVC used to keep H2O out of	
Blown/Bailed Yield:		Geoprobe Location	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - S. Settling Basin - Follow-Up
Project No.:

Boring/Well No.:
Location: HD-B415-SB-54N
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
				PID (ppm) # 14999 0.8 Background				
0		1.1/3	0-0.7 - Concrete 0.7-1.9 - Gravel - Removed 1.9-3 7.5YR4/6, CL, clay, low plasticity, dense, damp	4.2 6.2				
3		3/3	3-6 10YR6/6, CL, clay, low plasticity, dense, hard, damp	9.8 6.0 5.4				Sample @ 6 @ 1050
6		1.2/3	6-6.6 SAME AS ABOVE 6.6-7.2 SAME AS ABOVE - med plasticity Refusal @ 7.2' bgs	20.4 21.9				Sample @ 7 @ 1054
9								
12								
15								
18								

Driller: Bobby Lewis	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size: Geoprobe	Casing Type:	Filter Pack Type:	Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 4/2/08	Screen Type:	Date/Time:	
Drilling Completed: 4/2/08	Slot Size:	Notes:	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-B41S-SB-005
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0								
1		0.9/3	0-0.5 Concrete 0.5-1.5 Gravel					Sample 03 @ 0825
2			1.5-1.8 10YR 2/1, CL, clay, saturated, semi-dense, med to low plasticity, <5% sub rounded gravel	4.6				
3			1.8-2.4 10YR 5/6, CL, clay, damp, dense, low plasticity, <3% sub angular gravel	1.3				
4			3-6 10YR 5/6, CL, clay, damp, dense, low plast., <3% angular gravel, 10YR 6/8, 10YR 7/2 Mottling	1.0				
5		3/3		3.1				
6				5.0				Sample 06 @ 0840 Dup @ 0853 HD-B41S-SB-005-06-1

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Geoprobe 3' Rods	Casing Type:	Filter Pack Type: Quantity:	
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/8/08	Screen Type:	Date/Time:	
Drilling Completed: 2/8/08	Slot Size:	Notes: Background PID 0.3 ppm	
Well Construction:	Grout Type: Quantity:	4" PVC used to keep H2O out	
Blown/Bailed Yield:		of Geoprobe location	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-B41S-SB-0006
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (CO KE) 30%				
1			0-0.6 Concrete 0.6-1.6' Gravel					
2		1.2/3	1.6-1.9 Clay 2 5/10B, CL, clay, moist, low density, high plasticity, <3% sub rounded quartzite	1.4 1.6				Sample 03 @ 1113
3			1.9-2.8' 10YR 5/6, CL, moist, semi-dense clay, med. plasticity, hard	1.7				
4		3/3	3-6 10YR 5/8, CL, clay, medium plasticity, damp, dense, <3% sub rounded quartzite fragments, <3% fine sand, 7.5 YR 5/8 mottling	1.1 1.4				Sample 06 @ 1125 Dup HD B41S-SB-0006-06-1 @ 1126
5								
6				1.6				

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Geoprobe 3' Rods	Casing Type:	Filter Pack Type: Quantity:	
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/7/08	Screen Type:	Date/Time:	
Drilling Completed: 2/7/08	Slot Size:	Notes: Used 4" PVC to keep H_2O out of geoprobe area	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:		0.5 Background PID	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-007
T.O.C. Elev.:
Location:
Surface Elevation:

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID ppm (ED: KR 305)				
1		1/3	0-0.5 Concrete 0.5-1.8' Gravel					
2			1.8-2.6 10YR 2/1, CL, saturated, low density, med plasticity, <3% sub rounded to sub angular gravel, citrus-like odor	73.3		C. Homer Breathing Zone 1.1 ppm		Sample 03 @ 1410
3			2.6-2.8 - 2.5Y 5/4, CL, silty clay, damp, citrus like odor, semi-dense, low plasticity, <3% sub rounded gravel	226				
4		3/3	3-3.4 SAME AS ABOVE 3.4-6 2.5Y 5/4, CL, silty clay, dense, citrus like odor low plasticity, 10YR 7/1 and 7.5YR 5/8 Mottling	146				Sample 06 @ 1425
5				447				
6				118				

Driller: Chris Homer	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size: Geoprobe 3' Rods	Casing Type:	Filter Pack Type:	Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/7/08	Screen Type:	Date/Time:	
Drilling Completed: 2/7/08	Slot Size:	Notes: 4" PVC used to keep H_2O out	
Well Construction:	Grout Type: Quantity:	of Geoprobe bore	
Blown/Bailed Yield:		Background PID 0.6ppm	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 - South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-B41S-SB-0007
Surface Elevation:

T.O.C. Elev.:

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
6								
7		3/3	6-9 SAME AS ABOVE	1101		C. Homer Breathing Zone 1.3 ppm		
8				886				Sample ID @ 1502
9				265				
10		0.7/3	Refusal @ 9.7' bgs	222				
11								
12								

Driller:	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size:	Casing Type:	Filter Pack Type:	Quantity:
Logged By:	Well Screen: Dia. To	Static Water Level:	
Drilling Started:	Screen Type:	Date/Time:	
Drilling Completed:	Slot Size:	Notes:	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - S. Settling Basin Follow-up
Project No.:

Boring/Well No.:
Location: HD-B415-SB-S7N
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (ppm) # 14999 Background 1.0				
3		1.1/3	Concrete Gravel 1.9-2.3 -2.5Y 3/2 - GC - gravelly clay, low plast., damp, semi-dense (Quartzite subAg gravel) 2.3-3 - 10YR 5/4 - Same As Above	11.4 11.6				
6		3/3	3-4.9 - Same as Above 10YR 5/6 4.9-6 - 10YR 5/6, low plasticity, semi-dense, damp, CL Clay, mottling (10YR 5/8, 6/1)	9.4 10.2 13.0				
9		3/3	6-7 Stuff 7-9 10YR 5/3, med plast. semi-dense, moist clay, mottling 10YR 5/8, 6/1	12.8 45.7 9.7 13.5				
12		3/3	9-10 Stuff 10-12 SAME AS ABOVE	37.1 19.4 13.8				Sample 11 @ 1202
15		3/3	12-13.2 13.2-14 10YR 5/4, CL, clay, ↑ moisture, sticky, semi-dense, med plast 14-15 10YR 4/4 SAME AS ABOVE	15.0 18.3 20.4 20.5				Sample 14 @ 1209
18		3/3	15-16 SAME AS ABOVE 16-18 SAME AS ABOVE - SATURATED 18' - END BORING					Sample 16 @ 1214

Driller: Bobby Lewis	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size: Geoprobe	Casing Type:	Filter Pack Type:	Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 4/2/08	Screen Type:	Date/Time:	
Drilling Completed: 4/2/08	Slot Size:	Notes:	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-0008
T.O.C. Elev.:
Location:
Surface Elevation:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0								
1		0.9/3	0-0.5 Concrete 0.5-1.6 Gravel 1.6-1.8 10YR 2/1, CL Clay, Saturated, Semi-dense, <30% Sub angular gravel	2.7				Sample 03 @ 1550
2								
3			1.8-2.5 10YR 5/6, CL, clay, damp, dense, low plasticity, <30% fine sand Recovery was a ribbon of soil, not whole diameter of tube	1.7				
4		0.5/3	3-3.5 SAME AS ABOVE Ribbon of soil Refusal @ 3.5' bgs	2.5				
5								
6								

Driller: Chris Homer	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size: Geoprobe 3' rods	Casing Type:	Filter Pack Type:	Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/7/08	Screen Type:	Date/Time:	
Drilling Completed: 2/7/08	Slot Size:	Notes: Background PID 0.7 ppm	
Well Construction:	Grout Type: Quantity:	4" PVC used to keep H_2O out of	
Blown/Bailed Yield:		Geoprobe Location	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.:
Location: HD-B41S-SB-0009
Surface Elevation:
T.O.C. Elev.:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0								
1			0-0.9 Concrete 0.9 - 1.7 Gravel (sat.)					H2O Sample HD B41S-SW-0009-01-0 @ 1420 Sample 02 @ 1445
2			1.7 - 2.3 10YR 2/1, CL Clay, saturated semi-clay, medium plasticity, <5% angular gravel fill in					
3			2.3 - 2.7 10YR 5/6, CL Clay, semi dense, med plasticity, Septic like odor					
4			Refusal @ 2.7' bgs Hand Auger cannot catch, keeps slipping on hard surface					
5			Could not use Duc to Rec < 6" of sample area saturated gravel Kept casing in					
6								

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:
Drilling Type/Size: Hand Auger	Casing Type:	Filter Pack Type: Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:
Drilling Started: 2/8/08	Screen Type:	Date/Time:
Drilling Completed: 2/8/08	Slot Size:	Notes:
Well Construction:	Grout Type: Quantity:	
Blown/Bailed Yield:		

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 - South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-010
T.O.C. Elev.:
Location:
Surface Elevation:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (ED RR 30s)				
1			0-0.5 Concrete 0.8-1.5 Gravel (saturated)					Sample @2 @ 1352
2			1.5-2.0 10YR 2/1 CL, Clay, saturated, semi-dense medium plasticity, Septic like odor	15.8				
3			2.0 10YR 5/8, Damp, Low plasticity, semi-dense, Clay like w/ septic like odor, 7.5 5/6 mottling Refusal @ 2.7 below concrete	10.1				
4								
5			Note: Could not use PVC to keep out H_2O - saturated gravel kept falling in, could not set PVC past gravel					
6								

Driller: Chris Hunter	Well Casing: Dia. To	Seal Type: Quantity:
Drilling Type/Size: Hand Auger	Casing Type:	Filter Pack Type: Quantity:
Logged By: CMW	Well Screen: Dia. To	Static Water Level:
Drilling Started: 2/8/08	Screen Type:	Date/Time:
Drilling Completed: 2/8/08	Slot Size:	Notes:
Well Construction:	Grout Type: Quantity:	
Blown/Bailed Yield:		

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-011
T.O.C. Elev.:
Location:
Surface Elevation:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
				PID (ED KR 305)				
0			Concrete Floor 0-1'					
1			Gravel sub-base 1'-1.7'					
2			No recovery / refusal @ 2.7' bgs					
3			no sample taken at location					
4								
5								
6								

Driller: Chris Home	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Geoprobe 2 1/4" OD	Casing Type:	Filter Pack Type: Quantity:	
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/8/08	Screen Type:	Date/Time:	
Drilling Completed: 2/8/08	Slot Size:	Notes:	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-0102
T.O.C. Elev.:
Location:
Surface Elevation:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID ppm (ED NR 30s)				
1			0-0.5 - Concrete 0.5-1.5 Gravel 1.5 10YR 2/1, CL, saturated, med. plasticity, semi-dense, 15% sub angular gravel, clay	0.8				Sample @ 2 @ 1218
2			2.3 10YR 5/4, CL clay, damp, semi-dense, low plasticity	33	Breathing Zone 0.0 ppm			
3			2.6' Refusal Auger keeps slipping on Rock? Concrete?					
4								
5								
6								

Driller: C. Homer	Well Casing: Dia. To	Seal Type: Quantity:	
Drilling Type/Size: Hand Auger 2 1/4"	Casing Type:	Filter Pack Type: Quantity:	
Logged By: EMW	Well Screen: Dia. To	Static Water Level:	
Drilling Started: 2/8/08	Screen Type:	Date/Time:	
Drilling Completed: 2/8/08	Slot Size:	Notes: PID Background 0.3 ppm	
Well Construction:	Grout Type: Quantity:	4" PVC used to keep [illegible] out of	
Blown/Bailed Yield:		location - use well vac to clear [illegible]	

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson - Bldg 41 South Settling Basin
Project No.: 01-1633-00-5127-127

Boring/Well No.: HD-B41S-SB-013
T.O.C. Elev.:
Location:
Surface Elevation:
Page 1 of 1

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0				PID (ppm) (Background)				
1			0-1.0 Concrete 1-1.3 Gravel 1.3-1.7 10YR 2/1, moist, CL, clay, medium plasticity, firm dense	4.0				Sample 02 @ 1245
2			1.7-1.9 10YR 5/6, CL, clay dense, damp, low plasticity,					
3			1.9-10YR 5/8, CL, clay dense, damp, low plasticity, 10YR 6/8 mottling, citrus like odor	153		Boring Bkg 0.2 ppm		
4			2.1' bgs Refusal - Rock? Auger Keeps Skipping					
5								
6								

Driller: Chris Homer	Well Casing: Dia. To	Seal Type: Quantity:
Drilling Type/Size: Hand Auger 2¼"	Casing Type:	Filter Pack Type: Quantity:
Logged By: EMW	Well Screen: Dia. To	Static Water Level:
Drilling Started: 2/8/05	Screen Type:	Date/Time:
Drilling Completed: 2/8/05	Slot Size:	Notes: 4" PVC used to keep H2O out of Auger hole - cleaned out with wet vac. PID Background 0.2 ppm
Well Construction:	Grout Type: Quantity:	
Blown/Bailed Yield:		

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: Harley Davidson
Project No.:

Boring/Well No.: #D-B41-SB-E14 T.O.C. Elev.:
Location: Bld. 41
Surface Elevation:

Depth Feet	Rec. Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
			concrete (0-.5') gravel sub base & fill (.5-)					
0	H.C. to 26"			0.0				
2				0.0				
	Push 0-4' 0.5/4.0			0.0				
4				0.0				
	2.5' / 4.0'		CL, clay 10yr 5/6, soft, moist, med. plas.	0.0 X				
				2.3				
6				1.0				
			CL, clay, 10yr 5/6, firm, sl. wet, med pl	1.1				
8	2.0' / 4.0'							
			CL, clay w/ gravel (15%) 10yr 5/6, Firm, moist quartz Frags	6.6				
10				7.7 X				
				12.5				
				4.5				
12								

Driller: EE&S Chris Homer	Well Casing: Dia. To		Seal Type: Quantity:
Drilling Type/Size: DT-54	Casing Type:		Filter Pack Type: Quantity:
Logged By: AJS	Well Screen: Dia. To		Static Water Level:
Drilling Started: 1200	Screen Type:		Date/Time:
Drilling Completed: 1300	Slot Size:		Notes:
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

Science Applications International Corporation
An Employee-Owned Company

HD-B41-SB-E14

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: H.D.
Project No.:

Boring/Well No.: SB-14
Location: Bldg 41 S
Surface Elevation:
T.O.C. Elev.:

Depth Feet	Sec. Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
			moist 12-12.3					
12	4/4		CL clay, 10yr 5/6 to 10yr 7/1, mottled, firm, sl. moist, med pl.	7.9 20.5' X 5.5'				
14			- firmer	7.4 6.3 1.4 9.7				
16	4/4		CL, Sandy clay w/ gravel 5y 6/3, wet, soft CL clay w/gravel firm, med pl. 10yr 5/6 moist	57 X 14.8 10.6				
18			CL clay w/ gravel, wet soft, low pl. 10yr 5/6	13.4 5.8 8.0				
20			End @ 20' bgs	8.0				
22								
24								

Driller: EE&S Chris Homer	Well Casing:	Dia.	To	Seal Type:	Quantity:
Drilling Type/Size: DT-54	Casing Type:			Filter Pack Type:	Quantity:
Logged By: AJS	Well Screen:	Dia.	To	Static Water Level:	
Drilling Started: 1200	Screen Type:			Date/Time:	
Drilling Completed: 1300	Slot Size:			Notes:	
Well Construction: N/A	Grout Type:		Quantity:		
Blown/Bailed Yield:					

Science Applications International Corporation
An Employee-Owned Company

L:\WP\FORMS\BORING LOGS.XLS

SOIL BORING LOG

Client: H.D
Project No.:

Boring/Well No.: HD-B41-SB-E15T.O.C. Elev.:
Location: Bldg 41 S
Surface Elevation:

Depth Feet	Blow Counts	Recovery (ft/ft)	Overburden/Lithologic Description	Sample ID/ OVA Screen	Graphic Log	Well Construction Graphic	Depth Feet	Well Construction Details
0			Concrete (0-.5') gravel & Fill (.5-3')					
		Hand Auger to 6'	CL					
2				Range 2.7 ppm to 5.4 ppm				
4								
6			Hand Auger Refusal @ 6' bgs					
8								

Driller:	Well Casing: Dia. To	Seal Type:	Quantity:
Drilling Type/Size:	Casing Type:	Filter Pack Type:	Quantity:
Logged By: AJS	Well Screen: Dia. To	Static Water Level:	
Drilling Started:	Screen Type:	Date/Time:	
Drilling Completed:	Slot Size:	Notes:	
Well Construction:	Grout Type: Quantity:		
Blown/Bailed Yield:			

APPENDIX D

Well Construction Log for MW-116

Log of Monitoring Well MW-116

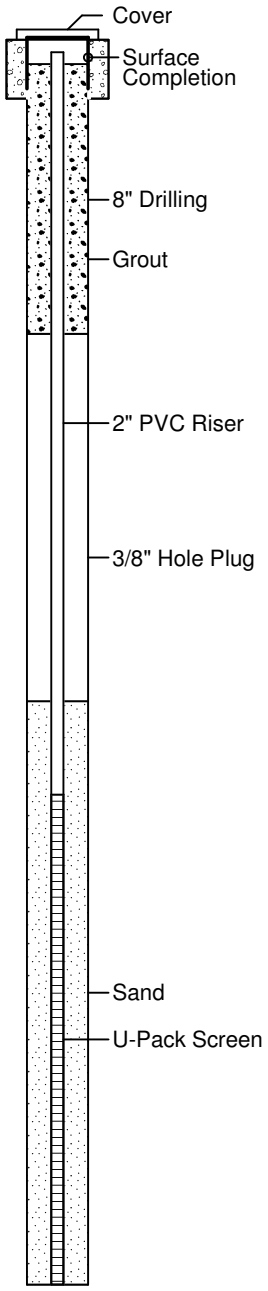
Former York Naval Ordnance Plant
Supplemental RI
1425 Eden Road, York, PA

SAIC Project #01-1633-00-9806-200

Drilling Company	: Eichelbergers, Inc.	Drilling Bit Diameter	: 8" to 50.8' bgs
Drilled By	: Carey Knaub	Drilling Started	: 4/15/08
Logged By	: Steve McFeaters	Final Completion	: 4/17/08
Drilling Method	: Air Rotary	Well Construction	: 2" Schedule 40 PVC
Total Depth of Boring	: 50.8' bgs	Well Development	: 5/6/08

Depth in Feet	DESCRIPTION	GRAPHIC	Fractures	PID ppm
0	Asphalt			0.0
	CL, silty clay, 10YR 4/2 dark grayish brown, moist, medium plasticity			0.0
5	ML, clayey silt, 10YR 6/4 light yellowish brown, moist, low plasticity, some sub rounded gravel			0.0
	CL, silty clay, 10YR 5/4 yellowish brown, moist, medium density, low to medium plasticity			0.0
10	Same As Above, with sub angular quartzite gravel			0.0
15	CL, silty clay, 10YR 5/3 brown, moist, medium density, low to medium plasticity			0.0
20	CL, silty clay, 10YR 5/4 yellowish brown, slightly wet, medium plasticity			0.0
25	Cuttings wet at 22' bgs			0.0
	CL, silty clay, 10YR 5/6 yellowish brown, gravel, wet, medium plasticity			0.0
30	Weathered Phyllite			0.0
35				0.0
	Competent Limestone with quartz		38	0.0
40	WBZ at 38' bgs, >2 gpm			0.0
45				0.0
50	END OF BORING @ 50.8' BGS			
55				

Well: MW-116
Elev. 364.59:



Well Construction Information

WELL CONSTRUCTION

Date Compl. : 4/17/08
Total Depth of Well : 50.8' bgs

WELL CASING

Material : Sch. 40 PVC Riser
Diameter : 2"
From : 0.5' - 30.8' bgs

WELL Screen

Material : U-Pack
Slot Size : 0.010"
Diameter : 2"
From : 30.8' - 50.8' bgs

SAND

Type : #1 Morie Sand
Amount : 10, 50 lb bags

BENTONITE

Type : 3/8" Hole Plug
Amount : 2, 50 lb bags

GROUT

Type : Benseal/
: Portland Cement
Amount : 1, 50 lb bag/
: 8, 94 lb bags

WELL COVER

Type : Locking Flush Mount

Notes:

8" Drilling (0 - 50.8' bgs)

Bentonite Seal (12' - 27' bgs)
2.5, 50 lb bags

MW-116 was constructed with U-Pack well screen and conventional sand pack.

Three attempts were made to construct MW-116, resulting in the final construction as described above.

Static water level 18.65' below top of inside casing on 5/6/08.

APPENDIX E

Groundwater Sampling Log

1 of 1

From Science to Solutions

GROUNDWATER SAMPLE LOG

Project Name: Harley-Davidson - Supplemental RI
Project Number: 01-1633-00-9806-200
Sampled by: SSB &
Checked by: &

Well Identification: MW-116
Project Location: York, PA
Date: 5-21-08
Date:

WELL VOLUME CALCULATION:

Circle diameter and K used below: 1" I.D., K=0.041 gal/ft; 2" I.D., K=0.163 gal/ft; 4" I.D., K=0.653 gal/ft; 5" I.D., K=1.02gal/ft; 6" I.D., K=1.469 gal/ft; 8" I.D., K=2.61 gal/ft; 10" I.D., K=4.08 gal/ft

1 Well Volume:

[Total Depth (_____ft) - Depth to Water (16.09 ft)] x K gal/ft = _____gallons

PURGE INFORMATION:

Time	Temp. °C	pH s.u.	Turb. NTU	Cond. mS/cm	D.O. mg/L	Sal -------	PR gal/min	PV gallons	D.T.W. feet	Comments
0900	17.2	6.15	-5	1.72	7.10	.08	.35	1.75	16.09	107.9 Hz
0905	17.7	6.42	709	1.66	.78	.08	.25	3	16.32	106.7 Hz
0910	18.3	6.51	387	1.65	.75	.08	.25	4.25	16.36	
0915	18.5	6.50	263	1.66	.77	.08	.25	5.50	16.39	
0920	18.5	6.48	277	1.65	.66	.08	.25	6.75	16.40	
0925	18.5	6.48	187	1.64	.59	.08	.25	8	16.41	
0930	18.5	6.49	144	1.64	.57	.08	.25	9.25	16.41	
0935	18.5	6.49	173	1.64	.55	.08	.25	10.50	16.42	
0940	18.5	6.48	139	1.64	.54	.08	.25	11.75	16.42	
0945	18.5	6.48	129	1.64	.54	.08	.25	13	16.41	
0950	18.6	6.48	111.7	1.64	.54	.08	.25	14.25	16.41	
0955	18.6	6.48	89.9	1.64	.53	.08	.25	15.50	16.37	
1000	18.6	6.47	58.5	1.64	.51	.08	.25	16.75	16.40	
1005	18.5	6.48	58.6	1.64	.52	.08	.25	18	16.42	* FLUSHED CELL
1010	18.5	6.48	42.7	1.63	.59	.08	.25	19.25	16.43	
1015	18.4	6.34	0	1.64	.54	.08	.25	20.50	16.44	
1020	18.5	6.34	0	1.64	.50	.08	.25	21.75	16.44	
1025	18.5	6.57	0	1.64	.49	.08	.25	23	16.45	
1030	18.5	6.39	0	1.64	.49	.08	.25	24.25	16.45	
									16.45	

SAMPLING INFORMATION:

Time/Date Started: 1030 | 5-21-08
Sampled by: SSB &
Sampling WL: 16.45 (ft)
Pump Depth: 38 (ft)

Pump Type and ID: 2" Grundfos # 16110
Water Quality Instrument: Horiba U-22 # 16358
Results to be Sent to: Todd Eaby

ADDITIONAL INFORMATION: (i.e. weather conditions, problems encountered, maintenance required, unusual color/odor, etc.)

SAIC®
From Science to Solutions

GROUNDWATER SAMPLE LOG

Project Name: Harley-Davidson - Supplemental RI
Project Number: 01-1633-00-9806-200
Sampled by: MJL &
Checked by: &

Well Identification: MW-116
Project Location: York, PA
Date: 6-10-08
Date:

WELL VOLUME CALCULATION:

Circle diameter and K used below:
1" I.D., K=0.041 gal/ft
(2" I.D., K=0.163 gal/ft)
4" I.D., K=0.653 gal/ft
5" I.D., K=1.02gal/ft
6" I.D., K=1.469 gal/ft
8" I.D., K=2.61 gal/ft
10" I.D., K=4.08 gal/ft

1 Well Volume:

[Total Depth (50 ft) - Depth to Water (17.67 ft)] x K gal/ft = 53 gallons

PURGE INFORMATION:

Top of drive over

Time	Temp. °C	pH s.u.	Turb. NTU	Cond. mS/cm	D.O. mg/L	Sal -------	PR gal/min	PV gallons	D.T.W. feet	Comments
0840	18.8	6.51	-5	2.06	1.39	0.10	0.22			
0845	18.8	6.56	-5	1.59	0.39	0.07			18.34	
0850	18.7	6.39	302	1.50	0.47	0.07			18.36	
0855	18.8	6.35	211	1.48	0.54	0.07			18.36	
0900	18.8	6.35	131	1.46	0.71	0.07			18.37	
0905	19.0	6.35	111	1.48	0.59	0.07			18.36	
0910	18.8	6.37	83.1	1.47	0.61	0.07	0.22		18.37	
0915	19.0	6.37	76.4	1.45	0.50	0.07			18.35	
0920	18.9	6.36	69.2	1.44	0.47	0.07			18.37	
0925	19.1	6.37	56.6	1.43	0.35	0.07			18.38	
0930	19.1	6.38	37.1	1.45	0.42	0.07			18.37	
0935	19.1	6.37	39.3	1.44	0.32	0.07			18.38	
0940	19.0	6.36	39.7	1.44	0.30	0.07			18.37	

SAMPLING INFORMATION:

Time/Date Started: 0940 | 6.10.08
Sampled by: MJL &
Sampling WL: 18.37 (ft)
Pump Depth: 38 (ft)

Pump Type and ID: 2" ~~Grundfos~~ FLUTE # 16361
Water Quality Instrument: Horiba U-22 # 16358
Results to be Sent to: Todd Eaby

ADDITIONAL INFORMATION: (i.e. weather conditions, problems encountered, maintenance required, unusual color/odor, etc.)

Groundwater Sample Log

Sampling Event: HD Sup RI GW Rnd 2 **Well ID:** MW-116
Project NO: 01-1633-00-9806-200 **Project Location:** York, Pa

Purge Information

Purge Date: 9/3/2008 **Pump ID:** 16389
Purged By: Matthew Logan **Water Quality Inst:** Horiba-U22
Purge Technique: Matched Well Yeild **Water Quality Inst ID:** 15073
Purge Method: Fultz Pump **Total Purge Vol (gal):** 12.00

Sample Information

Sampled By: Matthew Logan **Sampled Method:** Fultz Pump
Sample Date: 9 /3 /2008 **Unit ID:** 16389
Sample Time: 11:12 **Duplicate ID:** Not Collected
Sample ID: HD-MW-116-01-0 **MS/MSD ID:** Not Collected

Purge Parameter Information

Time	Temp. °C	pH SU	Turb NTU	Con. mS/cm	DO mg/L	Sal	Pr g/m	Pv gal.	DTW feet	Notes
10:32	19.51	5.66	-5	2.37	1.88	0.11	0.23			
10:37	18.28	6.06	-5	2.14	0.39	0.1			21.72	
10:42	17.98	6.01	163	1.56	0.08	0.07	0.33		21.8	
10:47	18.04	5.96	90.5	1.55	0	0.07			21.75	
10:52	18.06	5.93	72.3	1.53	0	0.07	0.33		21.75	
10:57	18.02	5.93	58.5	1.49	0	0.05			21.76	
11:02	17.99	5.94	42	1.49	0	0.07	0.33		21.77	
11:07	17.96	5.95	34.6	1.47	0	0.07			21.77	
11:12	17.95	5.97	27.1	1.46	0	0.07			21.76	

APPENDIX F

Waste Disposal Documentation

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
PAD001643691	1	(877)-818-0087	000066660 WAS

GENERATOR

5. Generator's Name and Mailing Address
Harley-Davidson Motor Co. Ops., Inc.
1425 Eden Road, York PA 17402
Generator's Phone: (717)-848-1177

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
Envirite of Pennsylvania, Inc.
U.S. EPA ID Number: PAD010154045

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors of Baltimore, Inc.
1910 Russell Street, Baltimore, MD 21230
Facility's Phone: (410)-244-8200
U.S. EPA ID Number: MDD980555189

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
XX	1. RQ,NA3082,Hazarous Waste, Liquid, N.O.S. (Chrome, Lead), 9, PG III	001	TT	1320	G	F001 F002 D007 D008 D027 D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
9a1. Approval Code: CH308162B/B36B, additional waste codes: D006,D009,D028,D029,D039
Truck # PO # 3710=13431 Sales Order #

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Brenda M. Barber
Signature: Brenda M Barber
Month: 05 Day: 13 Year: 08

INTERNATIONAL TRANSPORTER

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Signature: Month: Day: Year:
Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)