

Request for Bid

Fixed-Price Bid to Result

for

Remedial System Installation & Operation/Maintenance, Quarterly Surface Water & Groundwater Monitoring/Reporting, and Site Closure via Site-Specific Standard

Solicitor

**Speedy Meedy's, Inc.
Speedy Meedy's Facility
101 Indian Creek Valley Road
Normalville, Springfield Township, Fayette County, Pennsylvania 15469**

PADEP Facility ID #: 26-81079 PAUSTIF Claim #: 2005-0213(S)

Date of Issuance

September 15, 2014

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The Pennsylvania Underground Storage Tank Indemnification Fund (PAUSTIF), on behalf of the claimant who hereafter is referred to as the Client or Solicitor, is providing this Request for Bid (RFB) to prepare and submit a bid to complete the Scope of Work (SOW) for the referenced site. The Solicitor is the current owner and operator of the site. PAUSTIF has determined that the claim reported by the Solicitor is eligible for coverage from the PAUSTIF subject to the applicable statutes and regulations. Reimbursement of Solicitor-approved, reasonable and necessary costs, not to exceed the claim aggregate limit, for the corrective action work described in this RFB will be provided by PAUSTIF. The claim is not prorated and the deductible has been met for this claim.

Each bid response will be considered individually and consistent with the evaluation process described in the PAUSTIF Competitive Bidding Fact Sheet, which can be downloaded from the PAUSTIF website <http://www.insurance.pa.gov>.

Calendar of Events

Activity	Date and Time
Notification of Intent to Attend Site Visit	September 30, 2014 by 5 p.m.
Mandatory Pre-Bid Site Visit	October 1, 2014 at 11:00 AM
Deadline to Submit Questions	November 18, 2014 by 5 p.m.
Bid Due Date and Time	November 25, 2014 by 3 p.m.

Contact Information

Technical Contact
David L. Reusswig, P.G. Groundwater Sciences Corporation 2601 Market Place Street Suite 310 Harrisburg, PA 17110 dreusswig@groundwatersciences.com

All questions regarding this Request for Bid (RFB) and the subject site conditions must be directed via e-mail to the Technical Contact identified above with the understanding that all questions and answers will be provided to all bidders. The email subject line must be “**Speedy Meedy’s 2005-0213(S) – RFB QUESTION**”. Bidders must neither contact nor discuss this RFB with the Solicitor, PAUSTIF, the Pennsylvania Department of Environmental Protection (PADEP), or ICF International (ICF) unless approved by the Technical Contact. Bidders may discuss this RFB with subcontractors and vendors to the extent required for preparing the bid response.

Requirements

Mandatory Pre-Bid Site Meeting

The Solicitor, the Technical Contact, or their designee will hold a mandatory pre-bid site meeting on the date and time listed in the calendar of events to conduct a site tour for one participant per bidding company. The Technical Contact may answer questions at the site meeting or may collect questions and respond via email. All questions and answers will be provided via email to all attendees. This meeting is mandatory for all bidders, no exceptions. This meeting will allow each bidding company to inspect the site and evaluate site conditions. **A notice of the bidder's intent to attend this meeting is requested to be provided to the Technical Contact via email by the date listed in the calendar of events with the subject "Speedy Meedy's 2005-0213(S) – SITE MEETING ATTENDANCE NOTIFICATION".** The name and contact information of the company participant should be included in the body of the e-mail. Notification of intent to attend is appreciated, however, is not required. Attendance at the pre-bid site meeting is mandatory for your bid to be eligible for review.

Submission of Bids

To be considered for selection, **one hard copy of the signed bid package and one electronic copy (one PDF file on a compact disk (CD) included with the hard copy) must be provided directly to the PAUSTIF's third party administrator, ICF, to the attention of the Contracts Administrator.** The Contracts Administrator will be responsible for opening the bids and providing copies to the Technical Contact and the Solicitor. Bid responses will only be accepted from those companies that attended the mandatory pre-bid site meeting. **The ground address for overnight/next-day deliveries is ICF International, 4000 Vine Street, Middletown, PA 17057, Attention: Contracts Administrator. The outside of the shipping package containing the bid must be clearly marked and labeled with "Bid – Claim # 2005-0213(S)".** Please note that the use of U.S. Mail, FedEx, UPS, or other delivery method does not guarantee delivery to this address by the due date and time listed in the Calendar of Events for submission. Companies mailing bids should allow adequate delivery time to ensure timely receipt of their bid.

The bid must be received by 3 p.m., on the due date shown in the Calendar of Events. Bids will be opened immediately after the 3 p.m. deadline on the due date. Any

bids received after this due date and time will be time-stamped and returned. If, due to inclement weather, natural disaster, or any other cause, the PAUSTIF's third party administrator, ICF's office is closed on the bid due date, the deadline for submission will automatically be extended to the next business day on which the office is open. The PAUSTIF's third party administrator, ICF, may notify all companies that attended the mandatory pre-bid site meeting of an extended due date. The hour for submission of bids shall remain the same. Submitted bid responses are subject to the Pennsylvania Right-to-Know Law.

Bid Requirements

The Solicitor wishes to execute a mutually agreeable contract with the selected consultant ("Remediation Agreement"). A draft of the Remediation Agreement is included as Attachment 1 to this RFB. The bidder must identify and document in their bid any modifications that they wish to propose to the Remediation Agreement language in Attachment 1 other than obvious modifications to fit this RFB (e.g., names, dates, estimated completion months). The number and scope of any modifications to the standard agreement language will be one of the criteria used to evaluate the bid. **Any bid that does not clearly and unambiguously state whether the bidder accepts the Remediation Agreement language in Attachment 1 "as is", or that does not provide a cross-referenced list of requested changes to this agreement, will be considered non-responsive.** This statement should be made in a Section in the bid entitled "Remediation Agreement". Any proposed changes to the agreement should be specified in the bid; however, these changes will need to be reviewed and agreed upon by both the Solicitor and the PAUSTIF.

The selected consultant will be provided an electronic copy (template) of the draft Remediation Agreement in Microsoft Word format to allow agreement-specific information to be added. The selected consultant shall complete the agreement-specific portions of the draft Remediation Agreement and return the document to the Technical Contact within 10 business days from date of receipt.

The Remediation Agreement fixed costs shall be based on unit prices for labor, equipment, materials, subcontractors/vendors and other direct costs. The total cost quoted in the bid by the selected consultant will be the maximum amount to be paid by the Solicitor unless a change in scope is authorized and determined to be reasonable and necessary. There may be deviations from and modifications to this Scope of Work (SOW) during the project. The Remediation Agreement states that any significant changes to the SOW will require approval by the Solicitor, PAUSTIF, and PADEP.

NOTE: Any request for PAUSTIF reimbursement of the reasonable costs to repair or replace a well will be considered on a case-by-case basis.

The bidder shall provide its bid cost using the Bid Cost Spreadsheet (included as Attachment 2) with descriptions for each task provided in the body of the bid document. Please note if costs are provided within the text of the submitted bid and there is a discrepancy between costs listed in the Bid Cost Spreadsheet and in the text, the costs listed within the Bid Cost Spreadsheet will be used in the evaluation of the bid and in the Remediation Agreement with the selected consultant. Bidders are responsible to ensure spreadsheet calculations are accurate. The technical score for bids will be based solely on those tasks represented as milestones included in the Bid Cost Spreadsheet and the total bid cost. Any optional bidder-defined tasks, milestones, or cost adders that are not requested as part of this RFB will not be considered by the Bid Evaluation Committee in the technical review and technical score for the bid.

In addition, the bidder shall provide:

1. The bidder's proposed unit cost rates for each expected labor category, subcontractors, other direct costs, and equipment;
2. The bidder's proposed markup on other direct costs and subcontractors (if any);
3. The bidder's estimated total cost by task consistent with the proposed SOW identifying all level-of-effort and costing assumptions; and
4. A unit rate schedule that will be used for any out-of-scope work on this project.

Each bid will be assumed to be valid for a period of up to 120 days after receipt unless otherwise noted. The costs quoted in the Bid Cost Spreadsheet will be assumed to be valid for the duration of the Remediation Agreement.

Please note that the total fixed-price bid must include all costs, including those cost items that the bidder may regard as "variable". These variable cost items will not be handled outside of the total fixed price quoted for the SOW unless the RFB requests costing alternatives for specific items or services. Any bid that disregards this requirement will be considered non-responsive to the bid requirements and, as a result, will be rejected and will not be evaluated.

The RFB is requesting a total fixed-price bid (unless the RFB requests costing alternatives for specific items or services). PAUSTIF will not agree to assumptions (in bids or the selected bidders executed Remediation Agreement) referencing a level of effort and/or hours. Costs provided in your bid should be developed using your

professional opinion, experience, and the data provided. PAUSTIF will not reimburse costs for additional hours to complete activities included as part of the base bid/contract price.

Each bid response document must include at least the following:

1. Demonstration of the bidder's understanding of the site information provided in this RFB, standard industry practices, and objectives of the project.
2. A clear description, specific details, and original language of how the proposed work scope will be completed for each milestone. The bid should specifically discuss all tasks that will be completed under the Remediation Agreement and what is included (e.g., explain groundwater purging/sampling methods, which guidance documents will be followed, what will be completed as part of the site-specific work scope/SCR/RAP implementation). Recommendations for changes/additions to the SOW included in this RFB shall be discussed, quantified, and priced separately; however, failure to bid the SOW "as is" may result in a bid not being considered.
3. A copy of an insurance certificate that shows the bidder's level of insurance consistent with the requirements of the Remediation Agreement. Note: The selected consultant shall submit evidence to the Solicitor before beginning work that they have procured and will maintain Workers Compensation; commercial general and contractual liability; commercial automobile liability; and professional liability insurance commensurate with the level stated in the Remediation Agreement and for the work to be performed.
4. The names and brief resumes/qualifications of the proposed project team including the proposed Professional Geologist and Professional Engineer (if applicable) who will be responsible for overseeing the work and applying a professional seal to the project deliverables (including any major subcontractor(s)).
5. Responses to the following specific questions:
 - a. Does your company employ a Pennsylvania-licensed Professional Geologist that is designated as the proposed project manager? How many years of experience does this person have?
 - b. How many Pennsylvania Chapter 245 projects is your company currently the consultant for in the PADEP Region where the site is located? Please list up to ten.
 - c. How many Pennsylvania Chapter 245 Corrective Action projects involving an approved SCR, RAP and RACR has your company and/or the

Pennsylvania-licensed Professional Geologist closed (i.e., obtained Relief from Liability from the PADEP) using any standard?

- d. How many Pennsylvania Chapter 245 Corrective Action projects has your company and/or the Pennsylvania-licensed Professional Geologist closed using the Site-Specific Standard with an environmental covenant?
 - e. Has your firm ever been a party to a terminated PAUSTIF-funded Fixed-Price (FP) or Pay-for-Performance (PFP) contract without attaining all of the Milestones? If so, please explain.
6. A description of subcontractor involvement by task. Identify and describe the involvement and provide actual cost quotations/bids/proposals from all significant specialized subcontracted service (e.g., drilling/well installations, laboratory, etc.). If a bidder chooses to prepare its bid without securing bids for specialty subcontract services, it does so at its own risk. Added costs resulting from bid errors, omissions, or faulty assumptions will not be considered for PAUSTIF reimbursement.
 7. A detailed schedule of activities for completing the proposed SOW including reasonable assumptions regarding the timing and duration of Solicitor reviews (if any) needed to complete the SOW. Each bid must provide a schedule that begins with execution of the Remediation Agreement with the Solicitor and ends with completion of the final Milestone presented in this RFB. Schedules must also indicate the approximate start and end date of each of the tasks/milestones specified in the SOW, and indicate the timing of all proposed key milestone activities (i.e., within 30 days of the contract being executed).
 8. A description of how the Solicitor, ICF and the PAUSTIF will be kept informed as to project progress and developments, and how the Solicitor (or designee) will be informed of and participate in evaluating technical issues that may arise during this project.
 9. A description of your approach to working with the PADEP. Describe how the PADEP would be involved proactively in the resolution of technical issues and how the PADEP case team will be kept informed of activities at the site.
 10. Key exceptions, assumptions, or special conditions applicable to the proposed SOW and/or used in formulating the proposed cost estimate. Please note that referencing extremely narrow or unreasonable assumptions, special conditions and exceptions may result in the bid response being deemed “unresponsive”.

General Site Description and Background

Each bidder should carefully review the existing information and documentation provided in Attachment 3. The information and documentation has not been independently verified. Bidders may wish to seek out other appropriate sources of information and documentation specific to this site. If there is any conflict between the general site background and description provided herein and the source documents within Attachment 3, then the bidder should defer to the source documents.

Site Description

The site is located at the intersection of Routes 381 and 711 in Normalville, Springfield Township, Fayette County, Pennsylvania. The site is located at an elevation of approximately 1,664 feet above mean sea level. The Latitude and Longitude of the center of the site is 39° 59' 50.83" N and 79° 26' 52.14" W, respectively. A site location map is provided as Figure 1.

The site is immediately surrounded by a mix of commercial and residential properties. The site property is bordered to the north by residential properties, to the east by Indian Creek Valley Road (State Routes 381/711 Northbound) and beyond that by residential properties, to the south by Springfield Pike (State Routes 381/711 Southbound) and beyond that by commercial properties, and to the west by Springfield Pike and beyond that by commercial and residential properties. A surrounding land use map is provided as Figure 2.

Site features include a one-story block building that currently functions as a convenience store. UST areas exist on the southern portion of the site property just north of the intersection of Springfield Pike and Indian Creek Valley Road. There are currently four on-site groundwater monitoring wells (MW-3A, MW-16, MW-17, MW-17A), 21 off-site groundwater monitoring wells (fourteen of which are located within the PennDOT Right-of-Way (ROW)), four on-site piezometers (PZ-1 through PZ-4), three on-site soil vapor monitoring points (VP-1 through VP-3), and three recovery wells (RW-1, RW-2, and RW-3 (off-site)).

There are currently six UST systems located at the site, as follows:

<u>Tank #</u>	<u>Substance</u>	<u>Capacity (gallons)</u>	<u>Date Installed</u>
001	Gasoline	3,000	1968
002	Gasoline	3,000	1968
003	Gasoline	3,000	1968

009	Gasoline	10,000	2005
010	Diesel Fuel	4,000	2005
011	Kerosene	4,000	2005

In November of 2005, Tank #s 009, 010 and 011 were installed within a completely new excavation area of the site. Tank #s 010 and 011 are kerosene and diesel fuel compartments within a single 8,000-gallon UST.

Underground public water lines enter the building on the southeastern side. Overhead electric and telephone lines extend along Springfield Pike and Indian Creek Valley Road and enter the southeastern side of the site building. A private septic system reportedly is located behind the site building but its exact location is unknown. Storm sewers and catch basins/storm water inlets extend along the site property's western and eastern boundaries. A catch basin/storm water inlet is also located on-site in front of the southwestern corner of the site building, and canopy drains tie into the storm sewer system that crosses Indian Creek Valley Road and Springfield Pike. Storm water from the site drains beneath Indian Creek Valley Road and flows generally south-southwest across Springfield Pike and discharges into a small tributary located south of the site. All known utilities are illustrated on the Surrounding Land Use/Utility Map provided as Figure 2. A site map showing the site structures, property boundaries, well locations, and all former and current UST systems is provided as Figure 3.

Physiography, Topography, and Regional Geology/Hydrogeology

The site is located in the Allegheny Mountain Section of the Allegheny Plateau Physiographic Province. The ground surface at the site slopes gently and surface water flow is directed towards storm water catch basins located along the southwest and southeast property boundaries, discharging to a swale located approximately 70 feet south of the site.

Structurally, the bedrock under the Allegheny Mountain Section exhibits large amplitude folds. The site is located approximately ¾-mile west of the northeast to southwest trending Ligonier Syncline which separates the Chestnut Ridge Anticline (to the west) from the Laurel Hill Anticline (to the east). Based on this information, the regional bedrock in this area slopes gently to the southeast. Pennsylvania Department of Conservation and Natural Resources (PA DCNR) Topographic and Geologic Survey's Map 61 is provided as Figure 4 for reference.

According to the Geologic Map of Pennsylvania (Berg, 1980), the uppermost bedrock beneath the site is part of the Pennsylvanian-Aged Glenshaw Formation (also see

Figure 4), which consists of cyclic sequences of sandstone, siltstone and shale with lesser amounts of conglomerate, limestone and coal.

Site Geology/Hydrogeology

Based on the information obtained during previous drilling activities, soil on- and off-site consists of brown silty clay. Bedrock was encountered on- and off-site at depths ranging from four to fourteen feet below grade (fbg) and consists of fine-grained sandstone. With the exception of a laterally consistent, one-foot thick layer of shale at a depth of approximately 16 fbg, sandstone was present to a total drilling depth of approximately 23 fbg.

Based on historical groundwater gauging data, the depth to groundwater within the soil groundwater monitoring wells has ranged from approximately one to eleven feet below top of casing (fbtoc), and depth to groundwater within the bedrock groundwater monitoring wells has ranged from approximately three to 21 fbtoc. The general direction of groundwater flow in soil and bedrock is to the south. Groundwater elevation contour maps for the most recent gauging events are provided in Environmental Compliance Services, Inc.'s (ECS') Site Characterization Report/Remedial Action Plan (SCR/RAP) included in Attachment 3a.

Nature of Confirmed Release and Subsequent Corrective Action Activities

ECS' SCR/RAP (Attachment 3a) presents detailed information regarding the nature of the confirmed release at the site, as well as details of interim remedial actions (IRAs) and site characterization activities conducted to date. A summary of the corrective action history for this site is provided below.

- On March 9, 1999, USTs #004 (1,000-gallon kerosene) and #005 (1,500-gallon diesel fuel) (see Figure 3) were removed by Shelving Installation Services, Inc. (SIS). Confirmatory soil samples indicated impacted soils surrounding the kerosene UST. Approximately 16.7 tons of petroleum-impacted soils were reportedly removed from the UST #004 cavity as an IRA. No soil impacts were reported in the area of UST #005. Copies of the UST Closure Report submitted by SIS to the PADEP in September of 1999, and the revised closure report submitted by SIS to the PADEP in February of 2000 (stating that obvious and localized contamination was detected around the fill of UST #004, most likely due to overfills), are included in Attachment 3a. Following the removal of USTs #004 and #005, USTs #006 (2,000-gallon diesel fuel), #007 (2,000-gallon kerosene) and #008 (1,000-gallon diesel fuel) were installed in the same location.

- On December 8, 2005, all piping and dispensers associated with the gasoline USTs (#001, #002 and #003) were upgraded, and USTs #006, #007 and #008 were removed. Confirmatory soil sample results indicated that no soil impacts were identified in the kerosene and diesel fuel excavation. These removed USTs were installed within the excavation created following the removal of former UST #004 in 1999. A release was discovered during the upgrade activities for USTs #001, #002 and #003 and reported to the PADEP on December 8, 2005. The cause of the release was reportedly from a leaking valve fitting directly beneath gasoline dispenser “P3” located in the southeastern portion of the site (see figures in UST closure report in Attachment 3c, and also Figure 3). Approximately 415 tons of petroleum-impacted soil was excavated (generally to bedrock) in the area of former dispenser “P3” as an IRA in January of 2006 (Figure 3). Impacted soils in this area were removed to the extent practical, however, additional excavation of impacted soils that remained to the south, beneath the roadway, was not feasible (Figures 6A and 6B).
- A written reportable release of unleaded gasoline during the December 2005 UST upgrade activities was prepared by Groundwater Environmental Services, Inc. (GES) and submitted to the site property owner on January 3, 2006 (included in Attachment 3b). However, the site property owner did not submit the written reportable release to the PADEP until June 26, 2006 (see copy of correspondence in Attachment 3b). The PADEP received a copy of the UST Closure Report for the December 2005 UST upgrade activities (prepared by GES and dated March 17, 2006; included in Attachment 3b) on April 6, 2006. A Notice of Violation (NOV) was issued by the PADEP on June 28, 2006 (Attachment 3b) requiring Chapter 245 corrective action as a result of the release of unleaded gasoline from the regulated UST system.
- Site characterization activities were conducted by GES, Freedom Environmental Services, Inc. (FES) and ECS from 2006 to 2013. Site characterization activities have included the installation of 53 soil borings and 23 groundwater monitoring wells (both on- and off-site) to complete soil and groundwater delineation, aquifer testing, installation of three soil vapor monitoring points, a receptor evaluation which included surface water sampling of the nearby downgradient tributary, and a fate and transport analysis. A Site Characterization Report (SCR) was submitted by FES to the PADEP on September 15, 2008 (Attachment 3c) that included a recommendation to conduct additional soil and groundwater characterization to complete delineation of soil and groundwater impacts on- and off-site. A SCR/Remedial Action Plan (RAP) was submitted by ECS to the PADEP on September 27, 2013 (Attachment 3a). The SCR/RAP was approved by the PADEP in correspondence dated January 8, 2014 (Attachment 3b). The

RAP specified dual-phase extraction (DPE) as the remedial approach to eliminate the exposure pathway to surface water and to obtain relief from liability using the Site-Specific Standard (SSS) for soil and groundwater at the site. As explained in ECS's SCR/RAP, the water and storm sewer utility trenches intercept the water table under natural conditions and, therefore, have acted as a preferential pathway from groundwater to surface water, resulting in impacts to surface water at the downgradient tributary outfall location (Figure 2). The primary purpose of implementing DPE at the site as an IRA is to eliminate this exposure pathway by lowering the water table to below the bottom of the utility trenches.

- DPE was initiated at the site as an IRA in late 2011 in order to establish hydraulic control to 1) remove the immediate exposure pathway to surface water due to benzene concentrations in the downgradient tributary exceeding surface water criteria, 2) inhibit migration of the groundwater contaminant plume, 3) assist in reducing concentrations of petroleum constituents within the source area, and 4) to conduct pilot testing to determine the effectiveness of DPE as a long-term remedial approach. Treated groundwater is discharged to a canopy drain that is tied into the storm sewer at catch basin/storm water inlet SW-2 (Figure 9) under a PAG-05 permit issued in 2010 (Attachment 3e) and a renewed permit in 2014 (pending). Several pilot tests were conducted by FES from late 2011 through 2013 (details provided in Attachment 3a) to determine whether the existing on-site DPE system was effective in eliminating the exposure pathway to surface water, and to evaluate on-site and off-site DPE as a long-term remedial approach to address remaining on- and off-site soil and groundwater impacts. The PADEP has required that operation of the on-site DPE system continue as an IRA so that the exposure pathway to surface water continues to be eliminated until a long-term remedial approach is implemented at the site. ECS continues to collect DPE system operation/maintenance, surface water, and groundwater monitoring data. Additional site data, including updated system data, cross-sections, and laboratory reports/data from a recent comprehensive baseline surface water and groundwater monitoring event, is provided in Attachment 3d.

Scope of Work (SOW)

This RFB seeks competitive bids from qualified contractors to perform the activities in the SOW specified herein. The Technical Contact has discussed the SOW with the PADEP. The PADEP has reviewed the SOW presented in this RFB and the PADEP had no suggested edits or comments related to this SOW.

The PADEP-approved RAP specifies the continuation of DPE on-site, and the expansion of DPE to impacted areas off-site, for the primary purpose of eliminating the exposure pathway to surface water, but also to assist in contaminant mass removal to the extent that COCs display a statistically significant declining trend in groundwater concentrations and that there continues to be no exceedances of surface water criteria following system deactivation. The remedial standard to be achieved for the site is the SSS for soil and groundwater by way of pathway elimination using engineering and institutional controls. However, the PADEP has indicated that the general remedial approach for this site should be some form of vacuum-enhanced remediation with groundwater depression in order to continue to address the impacts to surface water and to assist in achieving the SSS for soil and groundwater at this site. Furthermore, the PADEP, the Technical Contact, and the PAUSTIF have agreed that dual-phase extraction (DPE), AS/SVE combined with groundwater depression, or vacuum-enhanced groundwater extraction (VEGE) will likely be the most technically effective remedial approaches that meet the PADEP's requirements to bring this site to the stated goal of elimination of the surface water exposure pathway and source reduction (both soil and groundwater) for SSS site closure. Therefore, bidders shall propose one of these three specific remedial technologies/options in their bid response.

Objective

This solicitation requests a fixed price for achieving the SSS goals by using the bidder's recommended course of action through the completion of the specific milestones defined in this RFB. For the Speedy Meedy's site, the desired result or project goal is to "close" the Speedy Meedy's site under Chapter 245 and other applicable statutes and regulations, and obtain an associated release of liability from the PADEP by demonstrating attainment of the SSS for soil and groundwater using some form of vacuum extraction technology combined with groundwater depression technology. Bidders may propose to achieve this goal by 1) implementing DPE using components not included in ECS' proposed system design, and/or incorporating components of ECS' proposed system design as specified in the PADEP-approved RAP to the extent the bidder deems it necessary; 2) implementing AS/SVE combined with groundwater

depression; or, 3) VEGE. The existing on- and off-site recovery wells/piping are available to the selected bidder to the extent they choose to use them.

The current on-site DPE remediation system for IRA activities utilizes two recovery wells (RW-1 and RW-2). The total depths of RW-1 and RW-2 are 20 feet and 8 feet, respectively. Recovery well RW-1 is screened in bedrock from 10-20 fbg and the screen intercepts a highly fractured zone in the sandstone at 11 fbg. Recovery well RW-2 is screened from about five to seven fbg and the screen mostly intercepts the soil above the bedrock. RW-1 was installed in June of 2009 to initiate IRA activities and RW-2 was installed in November of 2011 to ensure that the soil groundwater was effectively depressed to ensure that the exposure pathway to surface water was eliminated. The two recovery wells have been operating as an IRA since November of 2011. The system discharge is permitted through a PAG-05 permit. Groundwater is treated by granular activated carbon (GAC) and is discharged to a canopy drain that discharges to the catch basin/stormwater inlet location SW-2 (Figure 9). Discharge monitoring data has been provided in Discharge Monitoring Reports (DMRs) submitted by FES and ECS to the PADEP. A copy of the PAG-05 discharge permit and application, as well as the facts sheet for the new requirements under the new PAG-05 permit are provided in Attachment 3e. A summary table of the current on-site DPE system O & M data is included in Attachment summarized 3d.

Specifically, the work to be completed to obtain relief from liability using the selected SSS for soil and groundwater is: 1) continued operation and maintenance (O & M) of the existing on-site DPE system as an IRA, sampling of surface water and key groundwater monitoring wells, and submittal of quarterly RAPRs up to the installation/activation of the bidder's proposed remedial system; 2) preparation/submittal of a Revised RAP if necessary; 3) installation, start-up and O & M of the bidder's proposed remedial system; 4) quarterly sampling of surface water and key on- and off-site groundwater monitoring wells, and submittal of quarterly RAPRs while bidder's proposed remedial system is in operation; 5) quarterly sampling of surface water and key on- and off-site groundwater monitoring wells, for fate and transport and attainment purposes following the deactivation of the bidder's proposed remedial system, along with the submittal of quarterly RAPRs; 6) preparation and submittal of a Remedial Action Completion Report (RACR); and, 7) preparation and submittal of an environmental covenant for the site property and Unified Environmental Covenants Act (UECA) waiver request letters for affected off-site properties.

This is a Fixed-Price "Bid to Result" RFB. "Bid to Result" RFBs identify task goals and rely on the bidders to provide a high level of project-specific detail on how they will achieve the goal. Each bid must detail the approach and specific methods for achieving the milestone objectives. In evaluating the quality of bids submitted under "Bid to Result" solicitations, there is an increased emphasis placed on technical approach and reduced emphasis on cost (as compared to bids for "Defined Scope of Work" RFBs).

The specific remedial technologies previously mentioned shall be the basis for preparing a SOW and presenting a competitive fixed-price bid. The selected bidder shall perform pilot testing to confirm that the remedial technology proposed in their bid would be feasible to meet the milestone objectives and remedial goal for this site.

Constituents of Concern (COCs)

The COCs for this site are the constituents included in the PADEP's Old Shortlist of Unleaded Gasoline constituents (i.e., benzene, toluene, ethylbenzene, total xylenes, cumene, naphthalene, and methyl tertiary-butyl ether (MTBE)). Maps showing the distribution of COCs in soil and groundwater are provided in ECS' SCR/RAP (Attachment 3a) and on Figures 6a, 6b, 8a and 8b.

General SOW Requirements

The bidder's approach to completing the SOW shall be in accordance with generally accepted industry standards/practices and all applicable federal, state, and local rules, regulations, guidance, and directives. The latter include, but are not limited to, meeting the applicable requirements of the following:

- The Storage Tank and Spill Prevention Act (Act 32 of 1989, as amended);
- Pennsylvania Code, Title 25, Chapter 245 - Administration of the Storage Tank Spill and Prevention Program;
- The Land Recycling and Environmental Remediation Standards Act of 1995 (Act 2), as amended);
- Pennsylvania Code, Chapter 250 - Administration of Land Recycling Program; and,
- Pennsylvania's Underground Utility Line Protection Law, Act 287 of 1974, as amended by Act 121 of 2008.

During completion of the milestone objectives specified below and throughout implementation of the project, the selected consultant shall:¹

- Conduct necessary, reasonable, and appropriate project planning and management activities until the project (i.e., Remediation Agreement) is completed. Such activities may include Solicitor communications/updates, meetings, record keeping, subcontracting, personnel and subcontractor management, quality assurance/quality control, scheduling, and other activities

¹ As such, all bids shall include the costs of these activities and associated functions within the quote for applicable tasks/milestones.

(e.g., utility location). Project planning and management activities will also include preparing and implementing plans for Health and Safety, Waste Management, Field Sampling/Analysis, and/or other plans that are necessary and appropriate to complete the SOW, and shall also include activities related to establishing any necessary access agreements. Project planning and management shall include identifying and taking appropriate safety precautions to not disturb site utilities; including but not limited to, contacting Pennsylvania One-Call as required prior to any ground-invasive work. As appropriate, project management costs shall be included in each bidder's pricing to complete the milestones specified below.

- Be responsible for coordinating, managing, and completing the proper management, characterization, handling, treatment, and/or disposal of all impacted soils, water, and derivative wastes generated during the implementation of this SOW.
- The investigation-derived wastes, including purge water shall be disposed of in accordance with standard industry practices and applicable laws, regulations, guidance, and PADEP directives. Waste characterization and disposal documentation (e.g., manifests) shall be maintained and provided to the Solicitor and the PAUSTIF upon request.
- **The Speedy Meedy's site is located in the PADEP Southwest Region:** All investigation-derived wastes shall be handled and disposed of per PADEP's Southwest Regional Office guidance. Investigation-derived wastes include personal protective equipment, disposable equipment, soil and drill cuttings and groundwater obtained through monitoring well development and purging, as well as equipment decontamination fluids. Investigation-derived wastes must be containerized in DOT-approved drums and staged on-site in a pre-determined location, pending results of laboratory analyses and selection of final disposal method(s). Each container must be labeled to indicate contents, site location and date of generation. It is the selected consultant's responsibility to conform to current PADEP Southwest Regional Office guidance requirements.
- Be responsible for providing the Solicitor and facility operator with adequate advance notice prior to each visit to the property. The purpose of this notification is to coordinate with the Solicitor and facility operator to ensure that appropriate areas of the property are accessible. Return visits to the site will not constitute a change in the selected consultant's SOW or result in additional compensation under the Remediation Agreement.

Site –Specific Guidelines

As part of this RFB, the selected consultant will need to consider the following site-specific guidelines:

- **Field Activities:** All on- and off-site work should be conducted during the normal business days and hours of 8:00 AM to 5:00 PM from Monday through Friday, unless work outside of these normal business days and hours is authorized by the respective property owner.
- **Responsibility:** The selected consultant will be the consultant of record for the site. They will be required to take ownership of the project and will be responsible for representing the interests of the Solicitor and ICF/PAUSTIF with respect to the project. This includes utilizing their professional judgment to ensure reasonable, necessary and appropriate actions are recommended and undertaken to protect sensitive receptors, adequately characterize the site, and carry out adequate remedial actions in order to move the site towards closure.
- **Field Instrumentation:** Each bidder should state in their bid response the appropriate field instrumentation (e.g., pumps, meters, photoionization detectors, etc.) to be used during the completion of the SOW. Specifically, the product associated with the regulated release at this site is unleaded gasoline. As such, any field-screening instrumentation used at the site should be able to detect the presence of hydrocarbons associated with that type of product.
- **Safety Measures:** Each bidder should determine the safety measures necessary to appropriately complete the milestones. Specifically, if a consultant feels that it is appropriate and necessary to complete utility clearance using an air knife, the cost should be included in their fixed-price cost. If a bidder includes costs to conduct specific safety measures or activities, the bidder should specify it in the bid response and discuss why it is appropriate and necessary and indicate which methods will be utilized and to what extent. As discussed in the RFB, cost is not the only factor when evaluating bid responses and other factors are taken into consideration during the bid evaluation process, including appropriate safety measures.
- **Waste Disposal:** The IDW waste (including, but not limited to, soil/rock cuttings, used carbon, well development/purging liquids, and liquids generated during well installation and aquifer testing) shall be disposed of per the instructions included in the “General SOW Requirements” section of the RFB. Bidders will be responsible for arranging any off-site waste disposal (if required) and including costs in their bid response to cover the disposal of all potential waste related to

the milestones included in the SOW. Containerized soil and groundwater may be temporarily stored on-site, but should be removed from the site in a timely manner. Bidders will be responsible for including costs in their bid response to cover the disposal of all potential waste related to the milestones included in the SOW. Bidders should estimate the volume of waste using your professional opinion, experience and the data provided. **ICF and PAUSTIF will not entertain any assumptions from the selected bidder in the Remediation Agreement with regards to a volume of waste. Invoices submitted by the selected bidder to cover additional waste disposal costs as part of activities included under the fixed-price Remediation Agreement for this site will not be paid.**

Site –Specific Milestones

Milestones A1–A4: Continued Operation and Maintenance (O & M) of the existing On-Site DPE System as a IRA, Monthly Sampling of Surface Water, Quarterly Gauging/Sampling of Four (4) Key Groundwater Monitoring Wells, and submittal of quarterly RAPRs up to the Activation of the Long-Term Remedial System

ECS will continue to operate and maintain the current DPE system until the selected bidder receives the fully executed Remediation Agreement from the Solicitor. The selected bidder shall continue to operate and conduct O & M on the current on-site DPE system for four quarters following execution of the Remediation Agreement. This should allow sufficient time for the selected bidder to complete Milestones B through F. Bidders should assume that fresh carbon units will be in place at the time the Remediation Agreement is fully executed.

The selected bidder shall provide a quarterly fixed-price cost to conduct bi-weekly O & M and monthly NPDES sampling of the current on-site DPE system, prepare/submit monthly electronic Discharge Monitoring Reports (eDMRs) to the PADEP, conduct monthly surface water sampling, conduct quarterly gauging/sampling of four key groundwater monitoring wells (MW-10, MW-10A, MW-14 and MW-14A; Figure 3), and prepare/submit quarterly RAPRs until the long-term remedial system is installed and operating. All data collected from these activities shall be presented in the RAPR for the respective quarter.

Please note that during this Milestone, all monthly surface water sampling and well gauging as part of system O & M shall be collected while the system is in operation. Quarterly groundwater gauging and sampling shall be conducted following remedial system shutdown to the extent necessary for sufficient well

recovery to ensure that a representative groundwater sample can be collected from each well (particularly the two soil wells).

During each quarterly groundwater monitoring event, the selected bidder shall conduct gauging and sampling of the four key monitoring wells mentioned above. Depth-to-water measurements shall be completed using a water level meter capable of measuring depth to water to the nearest 0.01 feet. The depth to water shall be recorded and then used to determine the water level elevation within the new well. Depth-to-water data (measured from the top of casing) shall then be subtracted from respective casing elevations to determine water level elevations relative to the arbitrary benchmark such that the groundwater elevation within the well can be determined.

Groundwater sampling and analysis shall be conducted in accordance with generally accepted practices as outlined in the PADEP's Groundwater Monitoring Guidance Manual (dated December 1, 2001 (Document # 383-3000-001)). Sampling equipment shall be decontaminated prior to sample collection in accordance with generally accepted industry practices. All wells shall be purged using hand bailing techniques with dedicated disposable bailers, as this is consistent with the purging method employed during previous sampling events, thus, assuring that future sampling results reflect historical purging methods. All development water and purge water shall be handled and disposed of in accordance with applicable regulations or guidance. All groundwater samples shall be collected directly into laboratory-supplied sample containers and kept chilled (i.e., < 4° C) through delivery to the analytical laboratory.

All system, surface water and groundwater samples collected during the system O & M milestones shall be analyzed in accordance with the PADEP's Old Shortlist of unleaded gasoline parameters (i.e., benzene, toluene, ethylbenzene, total xylenes, cumene, naphthalene and MTBE) using the approved laboratory methods capable of reporting to the PADEP-established Practical Quantitation Limits.

The selected bidder shall present remedial system O & M, surface water data, and groundwater monitoring/sampling data obtained during each quarter in the form of a quarterly RAPR. The RAPR shall be submitted to the PADEP within thirty days following the end of each quarter. In addition to a written description of quarterly activities and a detailed written evaluation of remedial progress, each quarterly RAPR under this Milestone shall include:

- A USGS Quadrangle map showing site location;
- Site map showing site boundaries, pertinent site features and monitoring/recovery well locations;

- Updated remedial system O & M data;
- Updated historical depth-to-water and groundwater elevation data;
- Updated historical groundwater analytical data;
- Copies of all monthly NPDES reports submitted to the PADEP during the respective quarter;
- Groundwater concentration maps posting all constituents found to be above the RUA MSCs in any sample during the respective quarter; and,
- Laboratory analytical reports with supporting chains of custody for all samples collected during the respective quarter.

Milestone B: Obtain Off-Site Access

Prior to conducting any necessary off-site activities under the proposed milestones in their bid response, the selected bidder shall obtain off-site access from the appropriate property owner(s). Because the proposed approach and/or system design, proposed supplemental site characterization and pilot testing tasks proposed by each bidder may vary, the particular off-site property(ies), the number of property owners, and the identity of property owners for which access would be required may differ. A site vicinity map, showing approximate property boundaries and the owners' names for those properties located in the immediate vicinity of the site, is provided as Figure 17. The Solicitor owns the site property and the Subway property across Springfield Pike and the Technical Contact has made him aware that an off-site component of a long-term remedial system is likely. The Solicitor has granted access to these two properties as necessary. However, the Technical Contact has not been in contact with the other property owners, or discussed any possible future activities with these property owners. Therefore, bidders shall state clearly in their bid response the specific properties to which they would require access to carry out their proposed corrective action activities. Bidders shall provide a fixed-price cost to negotiate and execute an off-site access agreement with the property owner(s) of those properties that their proposed remedial approach would require. For the purposes of this bid, bidders should assume that off-site access to conduct the necessary corrective action activities proposed in their bid response will be granted without extended negotiation with the property owner(s).

The selected bidder shall contact the off-site property owner(s) and discuss the details and schedule of the activities to be conducted on the off-site owner's property, and also execute an access agreement, to the extent necessary, at a fixed price. The selected bidder will also be required to execute a new Right of Entry (ROE) agreement with the Pennsylvania Department of Transportation (PennDOT). A copy of the current ROE agreement between ECS and PennDOT is provided as Attachment 3f for reference. Upon execution of the ROE and access agreements, the selected bidder shall provide adequate notification to the

property owner(s) who will be affected by the corrective action activities. For the purposes of this bid, bidders should assume that the ROE fees will be waived pursuant to the agreement between the PAUSTIF and PennDOT. Therefore, the associated costs for ROE fees should not be included in bidders' fixed-price costs for this milestone.

Milestone C: Supplemental Site Characterization Activities and Reporting

This milestone provides bidders the opportunity to identify which additional site characterization work will be completed in advance of finalizing the remedial approach design and moving forward with its implementation. Conducting supplemental investigative activities under this milestone is mandatory. PAUSTIF will reimburse up to \$10,000 for supplemental site characterization and reporting costs under this milestone. Bidders are to describe what supplemental site characterization will be completed, the rationale for the work and how the derived data will be used. For purposes of bidding, and to ensure consistent cost scoring of bids, each bidder shall enter exactly \$10,000 as the bid price for Milestone C in the Standard Bid Cost Spreadsheet. PAUSTIF will only reimburse up to \$10,000 of reasonable and necessary costs for those tasks actually performed. The selected bidder must provide time and material documentation in addition to supporting documentation required (in Exhibit B of the executed Remediation Agreement) to support the requested reimbursement and completion of this milestone.

Bidders may use this opportunity to: 1) confirm any elements of the site characterization completed by a previous consultant; 2) address any perceived data gaps in the existing site characterization work; 3) assist in the evaluation and determination of remedial technologies and system design; and 4) assist with refining the cleanup timeframe estimate.

Milestone D – Pilot Testing and Reporting

Bidders shall prepare a conceptual remedial action plan including the conceptual design of a remedial system in their response to this RFB. It is industry practice to perform a pilot test and provide the results of this testing to support the feasibility of the proposed remedial technology and approach. More specifically, the purpose of the pilot test is to:

- Confirm that the proposed technology is technically feasible;
- Confirm that the proposed technology is cost-effective;

- Confirm that the proposed technology will provide a timely closure; and,
- Determine design criteria.

The bidder shall provide a detailed description of the proposed pilot testing including rationale, the use of existing or installation of new data monitoring/collection points, proposed equipment to be used, and the data that is proposed to be collected. Additionally, the bidder shall specify up to five basic, objective criteria that would be evaluated to determine whether the remedial action proposed in the bid response document is feasible. The criteria shall be listed with an upper and lower limit that will define the range of acceptable results. These criteria must be tightly-controlled measurements or calculations that could be independently measured or verified by others during the pilot test.

Please note that all bidders shall perform a pilot test, even if the bidder is proposing to use exactly the same remedial technology and design as specified by ECS in the PADEP-approved RAP. In the event a bidder is proposing to use exactly the same remedial technology and design as specified by ECS in the PADEP-approved RAP, the bidder shall perform pilot testing to confirm the data and conclusions presented by ECS and to confirm that the proposed remedial system and design as proposed in the bid response is feasible.

Pilot Test “Off-Ramp” / Changed Condition

The selected consultant and the Solicitor are protected from being obligated to move forward with a remedial action under Milestones F and G if the Milestones F and G proposed remedial approach is not optimal or is expected to fail based on new site characterization or pilot test data from Milestones C or D. While the selected bidder will be under no obligation to cancel the Remediation Agreement if the pilot test results are outside the criteria or range specified in the bidder’s RFB Solicitation response, one of the following conditions will apply:

1. With advanced Solicitor and PAUSTIF approval, the selected bidder may elect to modify the Milestone F and G remediation plan and continue with the project at no additional cost; that is, for the same total fixed price found in the RFB Solicitation response, based on the remaining fixed description and price for the remaining tasks.
2. If the Solicitor or PAUSTIF choose not to approve the selected bidder’s revised plan adjusting to the new Milestone D data, the Remediation Agreement for the project will terminate.

3. If the selected bidder adequately demonstrates the site conditions revealed by Milestone D activities are significant and could not have reasonably been expected prior to conducting the Milestone D activities, the selected bidder may elect to not proceed and to withdraw from/ terminate the Remediation Agreement for the project.

Bidders shall, therefore, specify within their bids the critical criteria that will be used by the Solicitor and the selected bidder to evaluate the significance of data obtained through Milestone D activities. These critical criteria shall be used to assess if the new data changes the feasibility of the Milestone G proposed remedial approach. As such, and as applicable, bids shall list an upper and lower limit for each critical criterion that will define the range of acceptable results (i.e., pilot testing results) relevant to the proposed Milestone G remedial approach. These criteria must be measurements or calculations that could be independently measured or verified by others during testing. Based on these criteria, Exhibit A of the Remediation Agreement (Attachment 1) will contain a provision allowing cancellation of the Remediation Agreement should test results (i.e., the data obtained during the implementation of Milestone D) not meet certain bidder-defined criteria bounds (ranges). Each bidder, therefore, shall explicitly specify any and all critical criteria and their associated acceptable ranges for key design elements on which the Milestones F and G proposed remedy depends (i.e., the critical criteria and quantified ranges of values that will make the proposed conceptual remedial action plan technically feasible, cost-effective, and timely).

For example, bids shall include language such as, “For our Milestone G proposed remedial action approach to be successful and for the technology(ies) used thereby to operate as planned and meet our proposed cleanup schedule, the Milestone D testing must show:

1. A hydraulic conductivity greater than X;
2. A pumping rate exceeding XX gpm at the end of YY hours of vacuum-enhanced pumping;
3. The capacity to generate a soil vapor extraction vacuum of at least Y in the native soil while not exceeding a soil flow rate of Z; and,
4. Iron and manganese hardness within groundwater at or below XX milligrams per liter (mg/L).”

This is only an example. Actual bid language, if any, and the associated critical criteria will vary by bidder. Please note that the Changed Condition criteria only applies to data from the Milestone D activities. Should it eventually be found once the Milestone G proposed remedial solution is implemented that the site, in fact, does exceed the critical criteria ranges, this will **not** constitute a

Changed Condition since the selected bidder was given the opportunity under Milestones C and D to finish establishing site conditions.

The critical criteria identified in each bid and their associated acceptable range of testing results will be evaluated by the bid evaluation committee as part of the technical review. **Unrealistic criteria or criteria that are unreasonably narrow will reduce the favorability of the bid as viewed by the bid evaluation committee.**

The selected bidder will prepare a Pilot Test Report and submit it to the Solicitor with a copy to the Technical Contact. The Pilot Test Report shall show that the pilot test was conducted according to their bid and shall constitute documentation for payment on Milestone D regardless of the result. If the results of the pilot testing show that the proposed remedial action is feasible based on the specified criteria and ranges, the selected consultant shall move forward on the project. However, if the results of the pilot testing show that the proposed remedial action is not feasible based on the specified criteria, either the selected consultant or the Solicitor may elect to cancel the Remediation Agreement (See Provisions in Exhibit A of the Draft Remediation Agreement provided as Attachment 1). This stage of the project is referred to as the “Pilot Test Off-Ramp” and is intended to protect the selected consultant and the Solicitor from being obligated to move forward with a remedial action that is expected to be far from optimal or expected to fail. The selected bidder is under no obligation to cancel the contract if the pilot test results are outside the criteria or range specified in the RFB Solicitation response, and may proceed with a system designed to remediate the site using the criteria defined in the pilot test even if that system varies from that which was proposed in the RFB solicitation if the Solicitor agrees and elects not to cancel the contract.

If either party elects to cancel the contract, the PAUSTIF will have complete discretion with regard to the use of the information in the Pilot Test Report. The PAUSTIF may use it as the basis for rebidding the project or may provide it to one or more of the previously unsuccessful bidders and request revised bid responses to the RFB Solicitation. However, it will be specified that any use that a third party makes of the pilot Test Report will be at the sole risk of the Third Party.

For consistency, bidders shall budget a maximum of 10% of the total bid cost for this Milestone, with a maximum of \$50,000. For example, if the total proposed cost for Milestones A through L (excluding D) is determined to be \$300,000, the fixed-price cost of Milestone D specified in the bid shall be up to \$30,000. However, if the total proposed cost for Milestones A through L (excluding D) is determined to be \$550,000, the fixed-price cost of Milestone D specified in the

bid response shall be up to but no more than \$50,000. The selected bidder must provide the supporting documentation required (in Exhibit B of the executed Remediation Agreement) to support the requested reimbursement and completion of this milestone.

Milestone E – Preparation, Submittal and PADEP Approval of a Revised RAP

The selected bidder shall prepare a Revised RAP in accordance with 25 Pa Code §245.311.

Please note that if the selected bidder proposed the exact same remedial technology and system design (with no proposed modifications) as specified in the PADEP-approved RAP, and the bidder’s pilot test results confirmed the feasibility of the remedial system presented in the PADEP-approved RAP, then preparation/submittal of a Revised RAP is not necessary because the RAP “as is” has already been approved by the PADEP. Therefore, in this case, the bidder shall specify \$0.00 as the cost under Milestone E and in the Bid Cost Spreadsheet provided as Attachment 2.

The Revised RAP, if required, shall document and discuss the data obtained and the conclusions drawn from the completion of Milestones C and D, include an updated conceptual RAP for the site, and include all tables, figures and other documents that support the Revised RAP text. Tables, figures, and other attachments that support the text shall include the following:

- Updated comprehensive historical groundwater elevation data;
- Updated comprehensive historical groundwater analytical data;
- Site map(s) showing site boundaries, pertinent site features, and existing/new soil boring/sampling and monitoring/recovery well locations;
- Groundwater elevation contour map for the most recent comprehensive gauging round;
- Groundwater concentration contour maps for all constituents found to be above the RUA MSCs in any sample during the most recent comprehensive sampling round;
- Laboratory analytical reports, chains of custody, and relevant field sampling documentation for all samples collected since the submittal of the SCR/RAP;

- Soil boring logs and well construction logs for new groundwater monitoring wells and/or remedial wells;
- Pilot test data;
- Site map showing plan view of remedial system trenching/layout and trailer location(s); and,
- Remedial system schematic diagrams including trench cross-sections, process and flow diagram, and piping and instrumentation diagram (P & ID).

The selected bidder shall prepare the Revised RAP in draft form for review and comment by the Solicitor and the PAUSTIF. The Revised RAP shall contain information required under 25 PA Code 245.311 and other applicable statutes, regulations and guidance, and shall be signed and sealed by a Professional Geologist and a Professional Engineer registered in the Commonwealth of Pennsylvania. Each bidder's project schedule shall provide two weeks for the Solicitor and PAUSTIF review of the draft document. The final Revised RAP shall address comments received from the Solicitor and the PAUSTIF on the draft report before it is submitted to the PADEP for review and approval. The Revised RAP shall be consistent (with regard to approach and level of effort) with the conceptual RAP provided in the selected consultant's bid response. Upon approval of the Revised RAP by the PADEP, the selected bidder will be paid the fixed-price amount specified for this Milestone in the Remediation Agreement and can then proceed with design, permitting and installation of the remedial system.

Milestone F – Remedial System Design, Permitting, Installation and Startup

This Milestone shall include all costs associated with the purchase and installation of the remedial system up to the point in time that it has been installed and daily operation is implemented as described in the current PADEP-approved RAP or the selected bidder's PADEP-approved Revised RAP. The Solicitor and the PAUSTIF shall have the opportunity to inspect and confirm that the system has been installed as described in the Remediation Agreement and that it is in daily operation as described in the current PADEP-approved RAP or the selected bidder's PADEP-approved Revised RAP.

Bidders shall describe in their bid response the specific operation, maintenance and monitoring procedures proposed to ensure optimal performance and to evaluate the performance of the proposed remediation system and how the system may be adjusted during the implementation of the remediation. The

bidder must be specific with regard to parameters to be monitored and how this data will be used.

The proposed remedial system design, including but not limited to, mechanical equipment in trailers or other enclosures, conveyance systems, extraction wells and points, instrumentation, and on-site and remote controls should be described and be shown on diagrams provided in as much detail as practical. The bidder shall provide final Process and Flow Diagrams and Piping and Instrumentation Diagrams.

The bidder shall describe the principal source/vendors of the remedial equipment system and installation.

The bidder shall describe the routine maintenance activities and schedule.

The bidder shall describe what permits are anticipated and include any costs for permitting in the fixed-price cost for this Milestone. Bidders should be aware that preparation/submittal of a new PAG-05 permit application would be required and that the PADEP has modified the PAG-05 requirements, as detailed in Attachment 3e.

The bidder shall present calculated estimates on carbon usage and on the duration of system operation based on an estimate of mass in place and mass removal rates.

The bidder shall present other relevant information that would assist in the evaluation of the bid.

Critical Remedial System Design Elements

The successful bidder shall show that their remedial system would be effective in eliminating the exposure pathway to surface water and in reducing dissolved-phase contaminants so that attainment of the SSS can be demonstrated for soil and groundwater. The conceptual RAP accepted by the PADEP includes three generally acceptable remedial technologies: DPE, AS/SVE in combination with groundwater depression, and VEGE. Bidders must propose one of these three alternatives as their proposed remedial approach, and it is critical that the bidder show that their proposed technology and system design is feasible on a conceptual level before pilot testing, and perform a thorough demonstration of the feasibility and practicality during pilot testing. It is also critical that any proposed alternatives do not exacerbate site impacts.

The proposed system must have separate on-site and off-site (located across Springfield Pike) components that operate independently from each other. The

system shed or trailer for both the on-site and off-site long-term systems shall be completely outside of the PennDOT ROW and trenching and recovery wells should be located outside of the PennDOT ROW and contained within the site property and the off-site Subway property, which are both owned by the claimant, to the extent practical. In the event the bidder's proposed system design includes additional wells and/or trenching with the PennDOT ROW and/or another off-site property, the appropriate access agreements from the respective property owners to install a portion of the system on their property shall be obtained as part of the requirements under Milestone B. The trailer or shed for each system shall be located as close to the building on each property as possible.

Milestones G1-Gn – Remedial System Operation and Maintenance (O & M), NPDES Sampling/Reporting, Quarterly Surface Water Sampling, and Groundwater Gauging Monitoring/Sampling, and Preparation/Submittal of Quarterly RAPRs

Following system activation and Solicitor and ICF confirmation that the system has been installed as described in the Remediation Agreement and is in daily operation as described in the RAP or Revised RAP, the selected bidder shall operate and maintain the system, conduct quarterly groundwater monitoring/sampling and prepare/submit quarterly RAPRs until Milestone Gn is achieved, which is the final quarter of system operation that the selected bidder has specified in their bid response, the RAP or Revised RAP, and the Remediation Agreement. These are quarterly milestones, and the bidder's proposed fixed-price cost for each quarterly milestone should include all costs associated with the operation and maintenance of the proposed remedial system, NPDES sampling/reporting, quarterly groundwater gauging/sampling and surface water sampling, and preparation/submission of a RAPR that presents all data collected during the respective quarter, in accordance with 25 PA Code 245.312, until Milestone H is initiated, as described in Exhibit A of the Draft Remediation Agreement (Attachment 1).

Following the activation of the full-scale remedial system, the selected bidder shall operate and maintain the system for the duration proposed in their bid and specified in the Remediation Agreement (Attachment 1). The successful bidder shall conduct monthly NPDES sampling in accordance with the new approved PAG-05 Permit for the site, and provide monthly NPDES Discharge Monitoring Reports (DMRs) electronically to the PADEP via the PADEP's eDMR system, pursuant to the PAG-05 permitting requirements included in Attachment 3e.

All system, surface water and groundwater samples collected during the system O & M milestones shall be analyzed in accordance with the PADEP's Old Shortlist of unleaded gasoline parameters (i.e., benzene, toluene, ethylbenzene, total xylenes, cumene, naphthalene and MTBE) using the approved laboratory methods capable of reporting to the PADEP-established Practical Quantitation Limits. During each quarterly sampling event, a surface water sample from the tributary at location SW-6 and a sample from catch basin/storm water inlet SW-5 shall be collected prior to system shutdown. Quarterly groundwater monitoring shall include gauging and sampling of all on-site and off-site monitoring wells and recovery wells and shall be conducted following one week of system shutdown to allow for groundwater conditions to return to equilibrium prior to sampling. Groundwater gauging and sampling shall be conducted in the same manner as described under Milestone A.

Each quarterly RAPR shall be submitted to the PADEP within thirty days following the end of each quarter. In addition to a written description of quarterly activities and a detailed written evaluation of remedial progress, each quarterly RAPR prepared and submitted to the PADEP under this Milestone shall include:

- A USGS Quadrangle map showing site location;
- Site map showing site boundaries, pertinent site features and monitoring/recovery well locations;
- Updated remedial system O & M data;
- Updated historical depth-to-water and groundwater elevation data;
- Updated historical groundwater analytical data;
- Copies of all monthly NPDES reports submitted to the PADEP during the respective quarter;
- Groundwater elevation contour maps for the quarterly gauging round showing direction of groundwater flow;
- Groundwater concentration contour maps for all constituents found to be above the RUA MSCs in any sample during the respective quarter; and,
- Laboratory analytical reports with supporting chains of custody for all samples collected during the respective quarter.

Please note that, because this is a Bid-to-Result RFB, there is a performance-based component to this milestone in that the bidder shall specify how many quarters their proposed remedial technology is expected to operate to remediate soil and groundwater to the point that the attainment demonstration can be initiated, based on the bidder's professional experience, evaluation of the most recent baseline groundwater concentrations (included in the First Quarter 2014 RAPR included in Attachment 3_) and calculated estimate of mass removal necessary, and their proposed system design. As such, in the event that, after full, diligent and appropriate application of the remedial system for the

entire time specified in the bid response, the selected bidder believes that groundwater has not been remediated to the extent at which the groundwater attainment demonstration for the SSS as described in Milestone H can be initiated, then the selected bidder must continue to operate the system at no cost to the Solicitor for an additional two quarters (i.e., six months) or until the groundwater attainment demonstration is initiated, whichever is sooner. Following the additional two quarters of system operation (Optional Milestones G1A and G2A) , the selected bidder or the Solicitor would have the option to terminate or modify the Remediation Agreement. On the other hand, in the event that the selected bidder believes that the groundwater attainment demonstration for the SSS (as described in Milestone H below) can be initiated, and the selected bidder chooses to shut down the remedial system and initiate the groundwater attainment demonstration for the SSS, prior to completing the final performance milestone specified in Milestone G (i.e., Milestone G_n described in Exhibit A of the Draft Remediation Agreement (Attachment 1)), then the selected bidder will be paid for all completed and uncompleted submilestones/quarters but will not be paid for the uncompleted submilestones/quarters until attainment has been demonstrated under Milestone G (i.e., G1 through G_n). However, in the event that attainment of the SSS for groundwater cannot be demonstrated (as described below in Milestone H) following a premature shutdown of the remedial system, the selected bidder shall restart the system within seven days following the receipt of the analytical results indicating that attainment was not met and operate the system for the remaining number of quarters specified in Milestone G during which the system was not operating.

If there is an unscheduled shutdown of the system, the selected bidder must notify the Solicitor and Technical Contact within 48 hours after knowledge of the shutdown. If there is a scheduled shutdown of the system that will last greater than seven days, the selected bidder must notify the Solicitor and Technical Contact at least 30 days prior to the planned system shutdown.

Milestones H1-H8: Quarterly Groundwater Fate and Transport Monitoring for SSS Attainment Demonstration, and Preparation/Submittal of Quarterly RAPRs

Under this Milestone, bidders shall provide a fixed price to complete eight quarters of groundwater fate and transport monitoring and sampling following the completion of Milestone F. Each monitoring event shall include gauging of all on- and off-site monitoring wells (recovery wells are not required to be gauged or sampled during this milestone).

Surface water sampling, water level measurements, and groundwater purging/sampling/analyses shall be conducted in the same manner as described for Milestone A. Preparation and submittal of quarterly RAPRs under this Milestone shall be conducted in the same manner as described for Milestone G.

The detailed plan to demonstrate attainment of the SSS for groundwater without the use of an engineering control shall use criteria approved by the PADEP relating to mass removal and showing that 1) groundwater flowing off the Speedy Meedy site does not result in benzene concentrations in surface water at concentrations greater than Chapter 93 Surface Water Criteria following system shutdown, and 2) concentrations of all constituents that have had concentrations greater than the RUA MSCs during any of the attainment sampling events show a stable or decreasing trend (that is, all plumes are shown to be shrinking or stable through statistical analysis) and no constituent shows a statistically significant increasing trend at a 95% confidence level following the eighth quarterly attainment sampling event (Milestone H8). The statistical analysis shall be conducted using ProUCL or another PADEP-approved statistical program. This level of detail should be reflected in this section of the response to the RFB solicitation.

This Milestone also has a performance-based component to it. In the event that the remedial system operated for the entire time specified in the selected bidder's bid response, and the criteria for demonstrating attainment of the SSS as described above is not met during any of the eight quarters of the initial attainment demonstration following system shutdown, then the system must be restarted within seven days following the receipt of the analytical results and operated for an additional two quarters (Milestones G1A and G2A) at no additional cost to the Solicitor.

If, following system shut down and restart, attainment of the SSS can be reinitiated, PAUSTIF will reimburse (assuming all conditions have been met) remaining Milestone H series (H1 through H8). Selected consultant will be responsible to complete up to two additional quarters of attainment demonstration (Optional Milestones H9 and H10) at no cost to the Client. The remediation agreement contains a site specific assumption that no more than 10 quarterly attainment demonstration events will be required. If it is determined that attainment of the SSS cannot be demonstrated during any of the eight subsequent consecutive quarterly attainment sampling events, then this will be considered a New Condition. See site specific assumption in the Draft Remediation Agreement (Attachment 1). The PAUSTIF will evaluate funding for any Remediation Agreement modifications.

Milestone I: Vapor Intrusion Assessment

The selected bidder shall conduct a vapor intrusion assessment to adequately assess the vapor intrusion risk for any current or future on- and off-site occupied buildings located within 100 feet of the soil and/or groundwater plume(s). It is presumed that the vapor intrusion assessment will include soil vapor sampling and calculation of using site-specific data to show that there is no unacceptable risk associated with inhalation of vapors from petroleum-impacted soil and groundwater. The bid should describe in detail how this will be accomplished. A responsive bid will provide detail with regard to the number and location of soil vapor sampling points, the calculation of a site-specific exposure point concentration, hazard index and hazard quotient for evaluation of the exposure risk with respect to vapor inhalation. The proposed method to assess vapor intrusion on- and off-site should be discussed in detail, particularly the regulatory rationale. Engineering controls are not desirable for this purpose. All data and documentation collected as part of the vapor intrusion assessment shall be included in respective quarterly RAPRs and in the RACR.

Milestone J – Preparation, Submittal and PADEP Approval of RACR

When the selected bidder is convinced that demonstration of attainment of the SSS can be made for groundwater, a RACR shall be prepared and submitted to the PADEP. The objective of the RACR is to obtain Relief from Liability for soil and groundwater with respect to the petroleum release at the site using the SSS with activity and use limitations as specified in an environmental covenant for the site. The RACR shall contain the information required under 25 PA Code 245.313 and other applicable statutes, regulations, and guidance, including being signed and sealed by a Professional Geologist and/or a Professional Engineer registered in the Commonwealth of Pennsylvania as required by applicable PADEP regulations. Each bidder's project schedule shall provide two weeks for Solicitor and PAUSTIF review of the draft document. The final RACR shall address comments received from the Solicitor and PAUSTIF on the draft before it is submitted to the PADEP. The RACR shall request Relief from Liability for the 2005 petroleum release by demonstrating compliance with the SSS using activity and use limitations/institutional controls in the form of an environmental covenant, but without engineering controls.

Please note that post-remediation care activities (if specified in the RACR), well decommissioning, remedial system removal and site restoration

activities are not part of the SOW for this RFB and will be addressed following PADEP approval of the RACR.

Milestone K: Preparation/Submittal of UECA Waiver Request Letters to the PADEP; Preparation/Filing of Environmental Covenant for Site Property

On- and off-site soil and groundwater currently exceeds the RUA MSCs. Preparation and filing of an environmental covenant for the site property will be necessary, and preparation/submittal of UECA request letters to the PADEP will be necessary for off-site properties where concentrations exceed the RUA MSCs at the time of the RACR submittal and institutional controls are implemented to attain the SSS. The site property owner has agreed to file an environmental covenant for the site property.

Under this task, the bidder shall describe and provide a fixed-price bid for finalizing and filing the EC(s) associated with the PAUSTIF eligible release. The fixed-price shall include all reasonable and necessary activities and required fees to finalize and file the EC(s) for the subject property with the local court house and other required entities. The successful bidder will be responsible for coordinating this work with the site property owner and their legal counsel(s). Legal fees are not to be included in bid costs. PAUSTIF reimbursement of Client and/or third party legal fees will be considered outside of the executed Remediation Agreement. The fixed-price cost for this task shall also include the work necessary in petitioning PADEP for any relevant EC waivers.

Additional Information

In order to facilitate PAUSTIF's review and reimbursement of invoices submitted under this claim, the Solicitor requires that project costs be invoiced by the Milestone identified in the executed Remediation Agreement. Actual milestone payments will occur only after successful and documented completion of the work defined for each milestone. The selected consultant will perform only those tasks/milestones that are necessary to reach the Objective identified in this RFB. The selected consultant will not perform, invoice, or be reimbursed for any unnecessary work completed under a Milestone.

Any "new conditions", as defined in Attachment 1, arising during the execution of the SOW for any of the milestones may result in termination of or amendments to the Remediation Agreement. Modifications to the executed Remediation Agreement will

require the written approval of the Solicitor and the PAUSTIF. PADEP approval may also be required.

List of Attachments

1. Draft Remediation Agreement
2. Bid Cost Spreadsheet
3. Site Information/Historic Documents
 - a. Site Characterization Report/Remedial Action Plan (ECS; September 27, 2013)
 - b. PADEP Correspondence
 - c. Site Characterization Report (FES, September 15, 2008)
 - d. Additional Site Data
 - e. PAG-05 Permitting Information
 - f. Executed ROE Agreement with PennDOT

Tables

Table 1
Soil Sample Analytical Results

Speedy Meedy's Inc.
PADEP Fac ID # 26-81079
PAUSTIF Claim# 05-0213(F)

Parameter	SB/MW-3A	SB/MW-4A	SB/MW-5A	SB/MW-8A	SB/MW-9A	SB/MW-10A	SB/MW-13A	SB/MW-14A	SB/MW-18A	SHS MSCs
	3' - 5' 11/5/2009	3' - 5' 10/28/2009	5' - 7' 10/27/2009	3' - 5' 11/2/2009	3' - 5' 11/2/2009	5' - 7' 10/29/2009	8' - 10' 4/21/2011	4' - 6' 4/21/2011	4' - 6' 4/21/2011	
Benzene	6.5	3,500	ND	9.6	ND	10,600	1,010	427	ND	500
Toluene	12.7	1,020	ND	ND	ND	2,780	ND	245	ND	100,000
Ethylbenzene	94.7	22,700	ND	ND	ND	61,000	16,600	7,260	ND	70,000
Xylenes (Total)	65.7	33,700	ND	17.5	ND	206,000	2,850	9,340	ND	1,000,000
Cumene	93.4	12,800	ND	21.0	ND	48,400	5,480	9,540	ND	780,000
MTBE	ND	ND	ND	57.5	ND	ND	ND	ND	ND	2,000
Naphthalene	48.7	6,660	ND	66.8	ND	30,300	7,150	5,030	ND	25,000
Fluorene	ND	ND	ND	ND	ND	ND	NA	NA	NA	3,000,000
Phenanthrene	ND	ND	ND	ND	ND	ND	NA	NA	NA	10,000,000

Notes:
All results reported in micrograms per kilogram (ug/kg)
SHS Denotes Statewide Health Standards, Medium Specific Concentrations (MSC's), within a residential setting.
ND Not detected above method detection limits.
NA Not analyzed.

Table 1
Soil Sample Analytical Results

Speedy Meedy's Inc.
PADEP Fac ID # 26-81079
PAUSTIF Claim# 05-0213(F)

Sample Name	PZ-1 (SB-1)	PZ-2 (SB-2)	PZ-3 (SB-3)	PZ-4 (SB-4)	SB-5	SB-6	SB-7	SB-8	
Collection Interval	3' - 5'	1' - 3'	3' - 5'	1' - 3'	3' - 5'	3' - 5'	3' - 5'	1' - 3'	
Headspace Reading (PPM)	200	143	1351	24	1711	1865	48	2000	
Date Collected	5/23/2012	5/22/2012	5/22/2012	5/22/2012	5/23/2012	5/23/2012	5/23/2012	5/22/2012	
Parameter									SHS
Benzene	ND	ND	7,130	166	751	327	ND	863	MSCs
Toluene	ND	ND	40,500	20.5	2,820	ND	547	ND	500
Ethylbenzene	ND	2.180	23,100	44	14,300	2,590	11,200	664	100,000
Xylenes (Total)	ND	10,600	43,400	158	61,400	7,350	34,700	1,550	70,000
Cumene	ND	2,210	3,670	22.0	4,790	836	6,870	1,220	1,000,000
MTBE	ND	ND	ND	ND	ND	ND	ND	1,310	780,000
Naphthalene	ND	4,980	10,500	47.7	6,150	534	5,990	ND	2,000
									25,000

Notes:

All results reported in micrograms per kilogram (ug/kg)

SHS Denotes Statewide Health Standards, Medium Specific Concentrations (MSC's), within a residential setting.

ND Not detected above method detection limits.

NA Not analyzed.

Table 1
Soil Sample Analytical Results

Speedy Meedy's Inc.
PADEP Fac ID # 26-81079
PAUSTIF Claim# 05-0213(F)

Sample Name	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	
Collection Interval	5' - 7'	5' - 7'	5' - 7'	1' - 3'	3' - 5'	3' - 5'	3' - 5'	3' - 5'	
Headspace Reading (PPM)	52	0.5	1	5	110	585	1257	1749	
Date Collected	5/23/2012	5/23/2012	5/23/2012	5/23/2012	5/23/2012	6/12/2012	6/12/2012	6/12/2012	
Parameter									SHS
Benzene	7.8	ND	ND	15.1	ND	1,240	1,880	ND	MSCs
Toluene	ND	272	ND	29.1	ND	776	9,600	ND	500
Ethylbenzene	30.4	452	ND	ND	ND	10,400	4,900	10,200	100,000
Xylenes (Total)	58.9	ND	ND	ND	ND	13,200	27,200	1,230	70,000
Cumene	13.2	ND	ND	ND	ND	3,170	3,550	10,400	1,000,000
MTBE	103	ND	ND	91.7	ND	ND	ND	308	780,000
Naphthalene	9	354	ND	ND	ND	3,490	3,420	5,150	2,000
									25,000

Notes:
 All results reported in micrograms per kilogram (ug/kg)
 SHS Denotes Statewide Health Standards, Medium Specific Concentrations (MSC's), within a residential setting.
 ND Not detected above method detection limits.
 NA Not analyzed.

Table 2
 Historical Groundwater Gauging Data
 Speedy Meedy's
 PADEP Facility ID No. 26-81079
 101 Indian Creek Valley Road
 Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)	
MW-1	12/18/08	99.09	-	-	NA	NA	21.8	
	03/19/09		-	-	4.32	94.77		
	06/10/09		-	-	4.15	94.94		
	09/21/09	999.99	-	-	5.52	93.57		
	12/21/09		-	-	4.08	995.91		
	03/22/10		-	-	3.78	996.21		
	06/21/10		-	-	5.06	994.93		
	09/22/10		-	-	6.18	993.81		
	12/28/10		-	-	4.42	995.57		
	06/22/11		-	-	4.83	995.16		
	09/21/11	-	-	5.15	994.84			
	MW-1 Abandoned							
	MW-2	12/18/08	99.31	-	-	4.83	94.48	20
03/19/09		-		-	5.45	93.86		
06/10/09		-		-	5.40	93.91		
09/21/09		1000.25	-	-	3.51	93.71		
12/21/09			-	-	6.04	994.21		
03/22/10			-	-	5.01	995.24		
06/21/10			-	-	6.72	993.53		
09/22/10			-	-	8.01	992.24		
12/28/10			-	-	6.29	993.96		
06/23/11			-	-	6.29	993.96		
09/21/11		-	-	6.81	993.44			
MW-2 Abandoned								
MW-3		12/18/08	97.22	-	-	2.52	94.70	20.13
	03/19/09	-		-	2.60	94.62		
	06/10/09	-		-	2.68	94.54		
	09/21/09	1000.25	-	-	3.51	93.71		
	12/21/09		-	-	6.04	994.21		
	03/22/10		-	-	2.25	998.00		
	06/21/10		-	-	3.01	997.24		
	09/22/10		-	-	4.43	993.53		
	12/28/10		-	-	3.19	994.77		
	06/22/11		-	-	3.18	994.78		
	09/21/11	-	-	3.68	994.28			
	11/16/11	-	-	-	-	-		
	MW-3 Abandoned							
MW-3A	12/21/09	997.96	-	-	2.62	995.34	4.38	
	03/22/10		-	-	1.06	996.90		
	06/21/10		-	-	2.89	995.07		
	09/22/10		-	-	3.96	994.00		
	12/28/10		-	-	3.14	994.82		
	06/23/11		-	-	3.38	994.58		
	09/21/11		-	-	3.59	994.37		
	03/07/12		-	-	3.39	994.57		
	03/29/12		-	-	3.30	994.66		
	04/05/12		-	-	3.48	994.48		
	05/24/12		-	-	3.40	994.56		
	06/11/12		-	-	3.60	994.36		
	07/27/12		-	-	1.76	996.20		
	slug test		08/21/12	-	-	2.85	995.11	

Table 2
Historical Groundwater Gauging Data
Speedy Meedy's
PADEP Facility ID No. 26-81079
101 Indian Creek Valley Road
Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
MW-4	12/18/08	96.83	-	-	2.03	94.80	20.5
	03/19/09		-	-	2.45	94.38	
	06/10/09		-	-	2.40	94.43	
	09/21/09		-	-	3.11	93.72	
	12/21/09	997.60	-	-	2.45	995.15	
	03/22/10		-	-	2.22	995.38	
	06/21/10		-	-	2.58	995.02	
	09/22/10		-	-	3.68	993.92	
	12/28/10		-	-	3.18	994.42	
	06/23/11		-	-	3.18	994.42	
	09/21/11		-	-	3.47	994.13	
11/16/11	MW-4 Abandoned						
MW-4A	12/21/09	998.07	-	-	3.49	994.58	6.13
	03/22/10		-	-	3.19	994.88	
	06/21/10		-	-	3.59	994.48	
	09/22/10		-	-	4.44	993.63	
	12/28/10		-	-	3.79	994.28	
	06/23/11		-	-	3.73	994.34	
	09/21/11		-	-	3.92	994.15	
	11/28/11		-	-	3.66	994.41	
	04/05/12		-	-	4.65	993.42	
	07/03/12		-	-	3.75	994.32	
07/27/12	-	-	3.53	994.54			
MW-5	12/18/08	97.64	-	-	4.37	93.27	20.5
	3/19/09		-	-	2.57	95.07	
	6/10/09		-	-	3.70		
	9/21/09		-	-	4.74	92.90	
	12/21/09	998.45	-	-	4.17	994.28	
	3/22/10		-	-	3.22	995.23	
	6/21/10		-	-	3.98	994.47	
	9/22/10		-	-	5.19	993.26	
	12/28/10		-	-	4.82	993.63	
	6/23/11		-	-	3.83	994.62	
	9/21/11		-	-	5.01	993.44	
11/16/11	MW-5 Abandoned						
MW-5A	12/21/09	998.46	-	-	3.72	994.74	7.6
	3/22/10		-	-	3.37	995.09	
	6/21/10		-	-	3.65	994.81	
	9/22/10		-	-	4.19	994.27	
	12/28/10		-	-	3.73	994.73	
	6/23/11		-	-	3.57	994.89	
	9/21/11		-	-	3.79	994.67	
	11/28/11		-	-	3.62	994.84	

Table 2
 Historical Groundwater Gauging Data
 Speedy Meedy's
 PADEP Facility ID No. 26-81079
 101 Indian Creek Valley Road
 Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
MW-6	12/18/08	96.76	-	-	3.59	93.17	18.7
	3/19/09		-	-	3.98	92.78	
	6/10/09		-	-	3.68	93.08	
	9/21/09		-	-	4.61	92.15	
	12/21/09	998.56	-	-	4.11	994.45	
	3/22/10		-	-	3.46	995.10	
	6/21/10		-	-	3.56	995.00	
	9/22/10		-	-	4.35	994.21	
	12/28/10		-	-	4.29	994.27	
	6/23/11		-	-	3.52	995.04	
	9/21/11		-	-	3.90	994.66	
7/27/12	-	-	3.52	995.04			
MW-6A	12/18/08	96.74	-	-	2.64	94.10	7.3
	3/19/09		-	-	3.75	92.99	
	6/10/09		-	-	3.62	93.12	
	9/21/09		-	-	4.39	92.35	
	12/21/09	998.27	-	-	3.63	994.64	
	3/22/10		-	-	3.30	994.97	
	6/21/10		-	-	3.26	995.01	
	9/22/10		-	-	4.33	993.94	
	12/28/10		-	-	3.65	994.62	
	6/23/11		-	-	3.36	994.91	
	9/21/11		-	-	3.20	995.07	
	7/30/12		-	-	3.19	995.08	
	3/7/12		-	-	18.30	984.85	
	6/6/12		-	-	20.61	982.54	
	9/25/12		-	-	12.40	984.69	
3/4/13	-	-	19.49	983.66			
MW-7	12/18/08	96.20	-	-	3.66	92.54	18.6
	3/19/09		-	-	3.89	92.31	
	6/10/09		-	-	3.66	18.60	
	9/21/09		-	-	4.23	91.97	
	12/21/09	997.32	-	-	3.85	993.47	
	3/22/10		-	-	3.59	993.73	
	6/21/10		-	-	3.81	993.51	
	9/22/10		-	-	4.52	992.80	
	12/28/10		-	-	4.05	993.27	
	6/23/11		-	-	3.87	993.45	
	9/21/11		-	-	3.92	993.40	
	4/5/12		-	-	5.61	991.71	
	7/30/12		-	-	3.66	993.66	

Table 2
Historical Groundwater Gauging Data
Speedy Meedy's
PADEP Facility ID No. 26-81079
101 Indian Creek Valley Road
Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
MW-8	12/18/08	96.15	-	-	4.02	92.13	19.9
	3/19/09		-	-	4.13	92.02	
	6/10/09		-	-	3.95		
	9/21/09	996.62	-	-	4.27	91.88	
	12/21/09		-	-	3.90	992.72	
	3/22/10		-	-	3.46	993.16	
	6/22/10		-	-	3.86	992.76	
	9/22/10		-	-	4.63	991.99	
	12/28/10		-	-	4.00	992.62	
	6/23/11		-	-	3.92	992.70	
	9/21/11		-	-	3.98	992.64	
	4/5/12		-	-	5.22	991.40	
	5/24/12		-	-	4.40	992.22	
	7/30/12				3.83	992.79	
MW-8A	12/21/09	996.63	-	-	3.56	993.07	7.0
	3/22/10		-	-	3.32	993.31	
	6/22/10		-	-	3.23	993.40	
	9/22/10		-	-	3.95	992.68	
	12/28/10		-	-	3.55	993.08	
	6/23/11		-	-	3.25	993.38	
	9/21/11		-	-	3.40	993.23	
	4/5/12		-	-	4.05	992.58	
	5/24/12		-	-	3.68	992.95	
	7/3/12					3.44	993.19
7/30/12				3.23	993.40		
MW-9	12/21/09	996.70	-	-	8.82	987.88	24.0
	3/22/10		-	-	7.79	988.91	
	6/22/10		-	-	9.25	987.45	
	9/22/10		-	-	9.95	986.75	
	12/28/10		-	-	9.62	987.08	
	6/23/11		-	-	9.17	987.53	
	9/21/11		-	-	9.49	987.21	
	4/5/12		-	-	11.50	985.20	
	5/24/12		-	-	9.65	987.05	
7/30/12				9.42	987.28		
MW-9A	12/21/09	996.61	-	-	4.00	992.61	7.5
	3/22/10		-	-	3.90	992.71	
	6/22/10		-	-	4.17	992.44	
	9/22/10		-	-	5.13	991.48	
	12/28/10		-	-	3.81	992.80	
	6/22/11		-	-	4.01	992.60	
	9/21/11		-	-	3.92	987.21	
	4/5/12		-	-	4.03	992.58	
5/24/12	-	-	4.32	992.29			
7/30/12				3.86	992.75		

Table 2
 Historical Groundwater Gauging Data
 Speedy Meedy's
 PADEP Facility ID No. 26-81079
 101 Indian Creek Valley Road
 Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
MW-10	12/21/09	996.76	-	-	10.85	985.91	26.0
	3/22/10		-	-	6.45	990.31	
	6/22/10				6.72	990.04	
	9/22/10				7.52	989.24	
	12/28/10				7.22	989.54	
	6/22/11				6.55	990.21	
	9/21/11				6.09	990.67	
	11/28/11				12.91	983.85	
	4/5/12				7.85	988.91	
7/27/12			7.86	988.90			
MW-10A	12/21/09	997.05	-	-	5.90	991.15	10.5
	3/22/10		-	-	5.41	991.64	
	6/22/10				5.54	991.51	
	9/22/10				6.22	990.83	
	12/28/10				6.05	991.00	
	6/22/11				5.61	991.44	
	9/21/11				5.97	991.08	
	11/28/11				5.78	991.27	
	4/5/12				5.96	991.09	
7/3/12			5.95	991.10			
7/27/12			5.89	991.16			
MW-11	5/3/11	995.92	-	-	14.30	981.62	14.1
	5/24/11		-	-	14.06	981.56	
	6/22/11		-	-	14.52	981.40	
	9/21/11		-	-	14.18	981.74	
	7/27/12		-	-	14.80	981.12	
MW-11A	5/3/11	995.60	-	-	1.50	994.10	3.5
	5/24/11		-	-	1.73	993.87	
	6/22/11		-	-	2.22	993.38	
	9/21/11		-	-	2.34	993.26	
	7/30/12		-	-	2.64	992.96	
MW-12	5/3/11	996.26			8.70	987.56	22.3
	5/24/11				9.22	987.04	
	6/23/11				10.03	96.23	
	9/22/11				11.05	985.21	
	7/30/12				12.27	983.99	
MW-13	5/3/11	995.77	-	-	16.27	979.50	24.0
	5/24/11		-	-	18.38	977.39	
	6/22/11		-	-	17.11	978.66	
	9/22/11		-	-	12.08	983.69	
	7/27/12		-	-	17.64	978.13	
slug test	8/21/12				13.63	982.14	

Table 2
 Historical Groundwater Gauging Data
 Speedy Meedy's
 PADEP Facility ID No. 26-81079
 101 Indian Creek Valley Road
 Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
MW-13A	5/3/11	995.92	-	-	9.47	986.45	14.0
	5/24/11		-	-	9.49	986.43	
	6/22/11		-	-	9.38	986.54	
	9/21/11		-	-	9.93	985.99	
	7/3/12		-	-	10.55	985.37	
	7/27/12		-	-	9.65	986.27	
	8/21/12		-	-	10.48	985.44	
MW-14	5/3/11	997.71	-	-	9.81	987.90	22.0
	5/24/11		-	-	10.30	987.41	
	6/22/11		-	-	11.72	985.99	
	9/21/11		-	-	12.25	985.46	
	11/28/11		-	-	14.71	983.00	
	4/5/12		-	-	11.66	986.05	
	7/30/12		-	-	11.92	985.79	
MW-14A	5/3/11	997.41	-	-	3.55	993.86	8.0
	5/24/11		-	-	3.65	993.76	
	6/22/11		-	-	3.72	993.69	
	9/21/11		-	-	3.70	993.71	
	11/28/11		-	-	3.55	993.86	
	4/5/12		-	-	4.19	993.22	
	6/12/12		-	-	4.37	993.04	
	7/3/12		-	-	3.96	993.45	
	7/27/12		-	-	3.61	993.80	
MW-15	5/3/11	994.43	-	-	7.43	987.00	26.9
	5/24/11		-	-	9.45	984.98	
	6/22/11		-	-	19.13	975.30	
	9/22/11		-	-	20.58	973.85	
	9/27/12		-	-	19.31	975.12	
			-	-			
MW-16 slug test O & M Data	3/7/2012	997.95	-	-	5.45	992.5	20.4
	3/9/2012		-	-	4.33	993.62	
	3/29/12		-	-	5.97	991.98	
	4/5/12		-	-	5.97	991.98	
	5/24/12		-	-	5.09	992.86	
	6/11/12		-	-	5.24	992.71	
	6/12/12		-	-	5.20	992.75	
	7/27/12		-	-	5.05	992.90	
	8/21/12		-	-	4.13	993.82	
	1/31/13		-	-	5.18	992.77	
	2/18/13		-	-	4.51	993.44	
	2/27/13		-	-	4.75	993.20	
	3/22/13		-	-	5.03	992.92	
	5/2/13		-	-	5.38	992.57	
	5/15/13		-	-	5.60	992.35	
	5/31/13		-	-	5.79	992.16	
	6/19/13		-	-	6.00	991.95	
	7/2/13		-	-	6.57	991.38	
	7/17/13		-	-	6.36	991.59	

Table 2
 Historical Groundwater Gauging Data
 Speedy Meedy's
 PADEP Facility ID No. 26-81079
 101 Indian Creek Valley Road
 Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
MW-17 slug test	3/7/12	997.91	-	-	4.61	993.30	19.7
	3/9/12		-	-	4.51	993.40	
	3/29/12		-	-	4.84	993.07	
	4/5/12		-	-	4.92	992.99	
	5/24/12		-	-	4.95	992.96	
	6/11/12		-	-	4.99	992.92	
	6/12/12		-	-	4.90	993.01	
	7/27/12		-	-	4.68	993.23	
	8/21/12		-	-	3.49	994.42	
	1/31/13		-	-	3.68	994.23	
	2/18/13		-	-	3.78	994.13	
	2/27/13		-	-	3.94	993.97	
	3/22/13		-	-	4.06	993.85	
	5/2/13		-	-	4.41	993.50	
	5/15/13		-	-	4.57	993.34	
	5/31/13		-	-	4.71	993.20	
6/19/13	-	-	4.85	993.06			
7/2/13	-	-	4.94	992.97			
7/17/13	-	-	5.05	992.86			
MW-17A slug test O & M Data	3/7/12	997.95	-	-	3.11	994.84	7.2
	3/9/12		-	-	3.06	994.89	
	3/29/12		-	-	3.30	994.65	
	4/5/12		-	-	3.35	994.60	
	5/24/12		-	-	3.21	994.74	
	6/11/12		-	-	3.39	994.56	
	6/12/12		-	-	3.30	994.65	
	8/21/12		-	-	2.80	995.15	
	1/31/13		-	-	3.30	994.65	
	2/18/13		-	-	3.61	994.34	
	2/27/13		-	-	3.41	994.54	
	3/22/13		-	-	3.47	994.48	
	5/2/13		-	-	5.45	992.50	
	5/15/13		-	-	5.50	992.45	
	5/31/13		-	-	3.92	994.03	
	6/19/13		-	-	4.24	993.71	
7/2/13	-	-	3.99	993.96			
7/17/13	-	-	4.05	993.90			
MW-18	7/3/12	995.61	-	-	15.90	979.71	20.4
	7/30/12		-	-	13.10	982.51	
MW-18A	7/3/12	995.76	-	-	dry	dry	4.9
	7/30/12		-	-	dry	dry	
RW-1	3/7/2012	996.96	-	-	4.79	991.97	20.0
	3/9/2012		-	-	4.23	992.73	
	4/5/2012		-	-	17.55	979.41	
	5/24/2012		-	-	5.20	991.76	
	7/27/12		-	-	3.40	993.56	
RW-2	3/7/12	997.01	-	-	3.55	993.46	7.2
	3/9/12		-	-	3.54	993.47	
	4/5/12		-	-	5.35	991.66	
	5/24/12		-	-	3.06	993.95	
	7/27/2012		-	-	3.01	993.91	

Table 2
 Historical Groundwater Gauging Data
 Speedy Meedy's
 PADEP Facility ID No. 26-81079
 101 Indian Creek Valley Road
 Normalville, PA

Monitoring Well	Date	Top of Casing Elevation (feet)*	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet below toc)	Groundwater Elevation (feet)	Total Depth (feet)
PZ-1 O & M Data	5/24/2012		-	-	4.11		5.50
	6/11/2012		-	-	4.09		
	6/12/2012		-	-	4.02		
	1/31/2013		-	-	3.33		
	2/18/2013		-	-	4.25		
	2/27/2013		-	-	4.27		
	3/22/2013		-	-	NM		
	5/2/2013		-	-	4.85		
	5/15/2013		-	-	4.89		
	5/31/2013		-	-	4.95		
	6/19/2013		-	-	5.28		
	7/2/2013		-	-	4.88		
	7/17/2013		-	-	4.93		
PZ-2	5/24/2012		-	-	4.57		7.30
	6/11/12		-	-	4.70		
	6/12/12		-	-	4.46		
	1/31/13		-	-	3.31		
	2/18/13		-	-	3.93		
	2/27/13		-	-	3.80		
	3/22/13		-	-	NM		
	5/2/13		-	-	NM		
	5/15/13		-	-	NM		
	5/31/13		-	-	NM		
	6/19/13		-	-	2.81		
	7/2/13		-	-	2.91		
	PZ-3 O & M Data		5/24/2012		-	-	4.35
6/11/2012		-	-		4.51		
6/12/2012		-	-		4.27		
1/31/2013		-	-		4.20		
2/18/2013		-	-		4.54		
2/27/2013		-	-		4.14		
3/22/2013		-	-		4.21		
5/2/2013		-	-		4.15		
5/15/2013		-	-		4.20		
5/31/2013		-	-		4.16		
6/19/2013		-	-		4.50		
7/2/2013		-	-		4.51		
7/17/2013		-	-		4.75		
PZ-4 O & M Data	5/24/2012		-	-	2.73		7.11
	6/11/12		-	-	2.74		
	6/12/12		-	-	2.70		
	1/31/13		-	-	2.65		
	2/18/13		-	-	2.83		
	2/27/13		-	-	2.75		
	3/22/13		-	-	2.85		
	5/2/13		-	-	2.95		
	5/15/13		-	-	NM		
	5/31/13		-	-	NM		
	6/19/13		-	-	3.00		
	7/2/13		-	-	2.97		
	7/17/13		-	-	2.79		

Table 3
Groundwater Gauging Data July 2012
Speedy Meedy's
101 Indian Creek Valley Road
Normalville, PA
Facility I.D. #26-81079
USTIF Claim 05-213(F)

Well	Date	Top of Casing Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-3A	7/27/2012	997.96	-	0.00	1.76	996.20
MW-4A	7/27/2012	998.07	-	0.00	3.53	994.54
MW-5A	7/27/2012	998.46	-	0.00	3.38	995.08
MW-6	7/30/2012	998.56	-	0.00	3.52	995.04
MW-6A	7/30/2012	998.27	-	0.00	3.19	995.08
MW-7	7/30/2012	997.32	-	0.00	3.66	993.66
MW-8	7/30/2012	996.62	-	0.00	3.83	992.79
MW-8A	7/30/2012	996.63	-	0.00	3.23	993.40
MW-9	7/30/2012	996.70	-	0.00	9.42	987.28
MW-9A	7/30/2012	996.61	-	0.00	3.86	992.75
MW-10	7/27/2012	996.76	-	0.00	7.86	988.90
MW-10A	7/27/2012	997.05	-	0.00	5.89	991.16
MW-11	7/27/2012	995.92	-	0.00	14.80	981.12
MW-11A	7/27/2012	995.60	-	0.00	2.64	992.96
MW-12	7/30/2012	996.26	-	0.00	12.27	983.99
MW-13	7/27/2012	995.77	-	0.00	17.64	978.13
MW-13A	7/27/2012	995.92	-	0.00	9.65	986.27
MW-14	7/30/2012	997.71	-	0.00	11.92	985.79
MW-14A	7/30/2012	997.41	-	0.00	3.61	993.80

Table 3
Groundwater Gauging Data July 2012
Speedy Meedy's
101 Indian Creek Valley Road
Normalville, PA
Facility I.D. #26-81079
USTIF Claim 05-213(F)

Well	Date	Top of Casing Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-15	7/27/2012	994.43	-	0.00	19.31	975.12
MW-16	7/27/2012	997.95	-	0.00	5.05	992.90
MW-17	7/27/2012	997.91	-	0.00	4.68	993.23
MW-17A	7/27/2012	997.95	-	0.00	2.83	995.12
MW-18	7/30/2012	995.61	-	0.00	13.10	982.51
MW-18A	7/30/2012	995.76	-	0.00	Dry	-
RW-1	7/27/2012	996.96	-	0.00	3.40	993.56
RW-2	7/27/2012	997.01	-	0.00	3.10	993.91

Note: Elevations are relative to a local benchmark established on-site and are not tied to the United States Geological Survey System (USGS).

* Monitoring wells MW-3A, MW-4A, MW-5A, MW-6A, MW-8A, MW-9A, MW-10A, MW-11A, MW-13A, MW-14A, MW-17A, and MW-18A were installed at a depth above the shallow bedrock encountered.

Table 4
 Groundwater Analytical Data
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 Facility I.D. #26-81079
 USTIF Claim 05-213(F)

Monitoring Well	Date	Benzene	Cumene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes	Phenanthrene	Fluorene
SHS MSCgw		5	840	700	20	100	1,000	10,000	1,100	1,500
Monitoring Well SHS MSCgw MW-3A	Date	Benzene	Cumene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes	Phenanthrene	Fluorene
		5	1,100	700	20	100	1,000	10,000	1,100	1,500
	07/27/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
	09/21/11	<5	10.5	1.7	<5	6.5	<5	<5	NS	NS
	06/22/11	<5	8.4	18.3	<5	<5	<5	<5	NS	NS
	12/28/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	09/22/10	<5	10.5	28.7	<5	<5	<5	<5	NS	NS
	06/21/10	<5	2.4	4.3	<5	2.5	<5	<5	NS	NS
	03/22/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	12/21/09	<5	4.9	15.5	<5	6.9	<5	<5	NS	NS
MW-4A	07/27/12	1720	159	547	271	163	49.4	398	NS	NS
	07/03/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/12	2090	175	649	330	203	66	513	NS	NS
	03/09/12	1580	133	596	338	146	55.7	455	NS	NS
	01/12/12	2020	152	666	445	150	87.1	714	NS	NS
	09/21/11	2260	227	875	416	233	78.3	593	NS	NS
	06/23/11	2250	194	911	473	201	70.9	514	NS	NS
	12/28/10	2990	221	1100	560	183	75.1	749	NS	NS
	09/22/10	2150	213	1010	592	291	56.4	1060	NS	NS
	06/21/10	1740	189	935	540	241	35.4	559	NS	NS
MW-5A	03/22/10	1210	197	1040	667	152	67.6	2280	NS	NS
	12/21/09	2390	356	1740	637	292	223	4230	NS	NS
	07/27/12	<5	<5	<5	1.1	<5	<5	<5	NS	NS
	09/21/11	<5	<5	<5	1.6	2.2	<5	<5	NS	NS
	06/23/11	<5	<5	<5	1.5	<5	<5	<5	NS	NS
	12/28/10	<5	<5	<5	1.8	<5	<5	<5	NS	NS
	09/22/10	<5	<5	<5	2.3	<5	<5	<5	NS	NS
	06/21/10	<5	<5	<5	2.3	<5	<5	<5	NS	NS
	03/22/10	<5	<5	<5	3.5	<5	<5	<5	NS	NS
	12/21/09	<5	<5	<5	2.9	2.3	<5	<5	NS	NS
MW-6	7/30/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
	9/21/11	<5	<5	<5	1.2	<5	<5	<5	NS	NS
	6/23/11	<5	<5	<5	1.0	<5	<5	<5	NS	NS
	12/28/10	<5	<5	<5	1.2	<5	<5	<5	NS	NS
	9/22/10	<5	<5	<5	1.3	<5	<5	<5	NS	NS
	6/21/10	<5	<5	<5	1.3	<5	<5	<5	NS	NS
	3/22/10	<5	<5	<5	1.8	<5	<5	<5	NS	NS
	12/21/09	<5	<5	<5	1.5	<5	<5	<5	NS	NS
	9/21/09	<5	<5	<5	<5	<5	<5	<5	<10	<10
	6/10/09	<5	<5	<5	<5	<5	<5	<5	<10	<10
3/19/09	<5	<5	<5	2.2	<5	<5	<5	<10	<10	
12/18/08	<5	<5	<5	2.4	<5	<5	<5	<10	<10	
08/21/08	<5	<5	<5	<5	<5	<5	<5	<10	<10	

Table 4
 Groundwater Analytical Data
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 Facility I.D. #26-81079
 USTIF Claim 05-213(F)

Monitoring Well	Date	Benzene	Cumene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes	Phenanthrene	Fluorene
		5	840	700	20	100	1,000	10,000	1,100	1,500
MW-6A	7/30/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
	9/21/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	6/23/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	12/28/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	9/22/10	<5	<5	<5	1.0	<5	<5	<5	NS	NS
	6/21/10	<5	<5	<5	1.1	<5	<5	<5	NS	NS
	3/22/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	12/21/09	<5	<5	<5	<5	<5	<5	<5	NS	NS
	9/21/09	<5	<5	<5	<5	<5	<5	<5	<10	<10
	6/10/09	<5	<5	<5	1.6	<5	<5	<5	<10	<10
	3/19/09	<5	<5	<5	1.5	<5	<5	<5	<10	<10
	12/18/08	<5	<5	<5	<5	<5	<5	<5	<10	<10
	08/21/08	<5	<5	<5	<5	<5	<5	<5	<10	<10
MW-7	7/30/12	260	35.7	41.0	85.7	15.6	9.1	74.7	NS	NS
	9/21/11	217	10.9	14.2	164	6.3	3.6	13.9	NS	NS
	6/23/11	273	35.0	85.4	280	12.6	12.1	81.8	NS	NS
	12/28/10	242	12.6	25.6	467	3.3	4.7	28.0	NS	NS
	9/22/10	68.2	7.2	3.7	366	<5	1.0	5.6	NS	NS
	6/21/10	303	33	69	991	13.4	9.8	74.1	NS	NS
	3/22/10	499	77	360	555	71.6	102	873	NS	NS
	12/21/09	393	105	561	777	150	148.0	1260	NS	NS
	9/21/09	348	88	469	828	102	82.5	651	<10	<10
	6/10/09	461	121	598	724	158	101	821	<10	<10
	3/19/09	601	96.5	474	933	68.4	144	879	<10	<10
	12/18/08	179	23.0	28.4	1600	3.1	3.0	13.9	<10	<10
	08/21/08	320	63	96	2200	43	14	230	<10	<10
MW-8	7/30/12	19.6	<5	<5	265	<5	<5	<5	NS	NS
	9/22/11	1.6	<5	<5	503	<5	<5	<5	NS	NS
	6/23/11	6.4	<5	<5	505	<5	<5	<5	NS	NS
	12/28/10	2.8	<5	<5	620	<5	<5	<5	NS	NS
	9/22/10	3.6	1.3	<5	899	<5	<5	<5	NS	NS
	6/21/10	6.2	<5	<5	609	<5	<5	<5	NS	NS
	3/22/10	5.7	<5	<5	602	<5	<5	<5	NS	NS
	12/21/09	6.7	<5	<5	520	<5	<5	<5	NS	NS
	9/21/09	7.5	<5	<5	597	<5	<5	<5	<10	<10
	6/10/09	7.3	<5	<5	762	<5	<5	<5	<10	<10
	3/19/09	16.5	2.0	3.4	961	<5	<5	<5	<10	<10
	12/18/08	28.3	1.7	2.2	775	<5	<5	<5	<10	<10
	08/21/08	86	<5	7.1	1300	28	<5	<5	<10	<10

Table 4
 Groundwater Analytical Data
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 Facility I.D. #26-81079
 USTIF Claim 05-213(F)

Monitoring Well	Date	Benzene	Cumene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes	Phenanthrene	Fluorene
		5	840	700	20	100	1,000	10,000	1,100	1,500
SHS MW-8A	07/30/12	1280	57.5	43.5	343	31.4	17.1	53.0	NS	NS
	07/03/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/12	146	5.9	<5	315	<5	1.5	<5	NS	NS
	03/09/12	235	7.1	5.2	239	2.3	3.2	8.8	NS	NS
	01/12/12	493	11.1	8	381	5.4	7.1	20.7	NS	NS
	09/22/11	1130	42.1	38.7	457	10.5	13.5	45.6	NS	NS
	06/23/11	1330	72.1	182	314	55.5	32.2	142	NS	NS
	12/28/10	495	4.7	4.8	506	<5	2.2	4.4	NS	NS
	09/22/10	1480	37.7	86.8	393	12.9	20.2	51.2	NS	NS
	06/21/10	2030	75.6	244	378	70.3	54.4	160	NS	NS
	03/22/10	1560	36.4	97.6	685	34.0	30.2	112	NS	NS
	12/21/09	526	10.5	9.1	820	6.6	6.3	33.2	NS	NS
MW-9	7/30/12	<5	<5	<5	223	<5	<5	<5	NS	NS
	9/22/11	<5	<5	<5	259	<5	<5	<5	NS	NS
	6/23/11	<5	<5	<5	207	<5	<5	<5	NS	NS
	12/28/10	<5	<5	<5	227	<5	<5	<5	NS	NS
	9/22/10	<5	<5	<5	227	<5	<5	<5	NS	NS
	6/21/10	<5	<5	<5	254	<5	<5	<5	NS	NS
	3/22/10	<5	<5	<5	222	<5	<5	<5	NS	NS
	12/21/10	<5	<5	<5	249	<5	<5	<5	NS	NS
MW-9A	07/30/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
	09/22/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	06/23/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	12/28/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	09/22/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	06/21/10	<5	<5	<5	<5	<5	<5	<5	NS	NS
	03/22/10	1.1	<5	<5	<5	<5	<5	<5	NS	NS
	12/21/09	<5	<5	<5	2.0	<5	<5	<5	NS	NS
	7/27/12	462	92.1	94.5	29.9	26.9	16.7	69	NS	NS
	9/21/11	508	118	134	34.7	27.3	18.6	136	NS	NS
MW-10	6/22/11	176	106	66	40.1	15.7	7.7	67.5	NS	NS
	12/28/10	617	134	181	33.6	36.8	22.6	290	NS	NS
	9/22/10	316	81.7	95.5	28.7	34.6	12.0	157	NS	NS
	6/21/10	173	90.9	57.3	28.9	18.1	8.1	47.5	NS	NS
	3/22/10	144	38	19.1	61.4	6.8	4.8	24.7	NS	NS
	12/21/09	156	29	7.5	60.9	6.2	4.1	31.0	NS	NS

Table 4
 Groundwater Analytical Data
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 Facility I.D. #26-81079
 USTIF Claim 05-213(F)

Monitoring Well	Date	Benzene	Cumene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes	Phenanthrene	Fluorene
		5	840	700	20	100	1,000	10,000	1,100	1,500
MW-10A	07/27/12	2190	2150	<5	796	101.0	1820	NS	NS	NS
	07/03/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/12	2490	1250	1380	6.6	380	81.0	1030	NS	NS
	09/21/11	2260	1410	1520	8.2	970	104	1490	NS	NS
	06/22/11	942	687	399	5.3	215	26.2	420	NS	NS
	12/28/10	1840	886	1510	8.3	290	77.6	1950	NS	NS
	09/22/10	2590	1250	1530	12.8	303	104	2270	NS	NS
	06/21/10	744	7250	3240	4.9	71.8	35.1	753	NS	NS
	03/22/10	742	330	552	10.2	106	38.6	800	NS	NS
	12/21/09	2100	711	1370	17.4	373	96.7	2140	NS	NS
MW-11	7/27/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
	9/21/11	<5	<5	<5	4.0	4.1	<5	<5	NS	NS
	6/22/11	<5	<5	<5	2.7	6.7	<5	<5	NS	NS
	5/24/11	<5	<5	<5	2.5	<5	<5	<5	NS	NS
MW-11A	7/27/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
	9/21/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	6/22/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	5/24/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	7/30/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
MW-12	9/22/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	6/23/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	5/24/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
	7/27/12	5.5	<5	<5	5.1	<5	<5	<5	NS	NS
	9/21/11	142	12.0	40.0	7.0	7.7	1.6	3.2	NS	NS
MW-13	6/22/11	8.3	<5	1.6	7.7	<5	<5	<5	NS	NS
	5/24/11	18.3	2.0	14.8	8.3	<5	<5	5.3	NS	NS
	7/27/12	619	67.3	137	4.9	84.8	9.9	34.0	NS	NS
	7/3/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/12/12	625	74.3	129	4.8	97.0	10.5	37.7	NS	NS
MW-13A	9/21/11	1080	88.7	375	7.3	133	16.4	72.7	NS	NS
	6/22/11	927	71.7	268	7.6	104	10.3	74.9	NS	NS
	5/24/11	642	65.9	299	7.7	97.2	9.3	65.2	NS	NS
	7/30/12	5.7	6.0	1.9	142	<5	<5	<5	NS	NS
	9/21/11	38.4	17.7	7.7	170	2.1	1.6	<5	NS	NS
MW-14	6/22/11	10.6	8.6	5.3	165	10.1	1.1	<5	NS	NS
	5/24/11	151	532.0	1140	2.4	362	80.1	3240	NS	NS

Table 4
 Groundwater Analytical Data
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 Facility I.D. #26-81079
 USTIF Claim 05-213(F)

Monitoring Well	Date	Benzene	Toluene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes	Phenanthrene	Fluorene
		5	840	700	20	100	1,000	10,000	1,100	1,500
SHS	7/30/12	216	339	1040	2.2	142	30.6	712	NS	NS
	7/3/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/12/12	161	447	945	1.5	334	22.7	987	NS	NS
	9/21/11	301	566	1270	2.8	903	67.5	2690	NS	NS
	6/22/11	163	651	1360	2.8	366	53.0	2630	NS	NS
	5/24/11	151	532	1140	2.4	362	80.1	3240	NS	NS
MW-15	7/27/12	<5	<5	<5	<5	4.0	<5	<5	NS	NS
	9/22/11	<5	<5	1.3	<5	4.0	<5	<5	NS	NS
	6/22/11	2.4	<5	1.3	1	<5	<5	5.2	NS	NS
	5/24/11	<5	<5	<5	<5	<5	<5	<5	NS	NS
MW-16	7/27/12	4.2	4.6	36.4	9.4	2.9	3.9	3.5	NS	NS
	7/27/12	<5	<5	<5	16	<5	<5	<5	NS	NS
MW-17A	7/27/12	339	75.7	264.0	448	48.0	91.7	515	NS	NS
	7/30/12	<5	<5	<5	<5	<5	<5	<5	NS	NS
MW-18A	7/30/12	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/27/12	63.7	89.1	468.0	5.7	89.7	24	258	NS	NS
RW-1	7/3/12	33.1	46.6	233.0	13.8	6.8	7	37.7	NS	NS
	6/12/12	3.0	<5	2.6	80.3	<5	<5	3.9	NS	NS
	3/9/12	117	37.3	392.0	43.3	27.0	78	292	NS	NS
	1/12/12	10	2.6	18.9	39.3	<5	2.8	3.1	NS	NS
	7/27/12	1.1	4.0	6.2	<5	<5	<5	5.4	NS	NS
RW-2	7/3/12	<5	2.0	4.6	1.1	<5	<5	6.6	NS	NS
	6/12/12	3.4	4.5	12.0	2.7	2.7	1.7	17.0	NS	NS
	3/9/12	<5	<5	2.8	4.1	4.0	<5	102	NS	NS
	1/12/12	8.1	16.8	16.8	5.9	13.5	7	275	NS	NS

All results reported in ug/l (parts per billion).

NS - Well not sampled.

SHS - Densities Medium Specific Concentration, Statwide Health Standard

Bolded values exceed their respective Statewide Health Standard (Residential, TDS < 2500)

Table 5
Historical Surface Water Analytical Data
Speedy Meedy's
101 Indian Creek Valley Road
Normalville, PA
Facility I.D. #26-81079
USTIF Claim 05-213(F)

Surface Water Number	Operation Status	Date	Benzene ug/l	Cumene ug/l	Ethylbenzene ug/l	MTBE ug/l	Naphthalene ug/l	Toluene ug/l	Total Xylenes ug/l	Phenanthrene ug/l	Flourene ug/l
SW-1	System Off	7/3/12	<1	<1	<1	<1	<2	<1	<3	0.27	<10
	RW-1/RW-2	6/11/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-1	2/20/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-2	12/27/11	<1	<1	<1	<1	<2	<1	<3	<11	<11
	Base Line	11/7/11	<1	<1	<1	<1	<2	<1	<3	<10	<10
SW-2	Base Line	5/24/11	<5	<5	<5	2.5	<5	<5	<5	<10	<10
	Interim System	6/19/13	<1	<1	<1	<1	<2	<1	<3	<10	<10
	System Off	7/3/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-1/RW-2	6/11/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-1	2/20/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
SW-3	RW-2	12/27/11	<1	<1	<1	<1	<2	<1	<3	<11	0.15
	Base Line	11/7/11	<1	<1	<1	<1	<2	1.1	<3	<10	<10
	System Off	7/3/12	<1	<1	<1	<1	<2	1.8	<3	<10	<10
	RW-1/RW-2	6/11/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-1	2/20/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
SW-4	RW-2	12/27/11	<1	<1	<1	<1	<2	2.4	<3	0.32	0.60
	Base Line	11/7/11	<1	<1	<1	<1	<2	<1	<3	<10	<10
	System Off	7/3/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-1/RW-2	6/11/12	<1	<1	<1	<1	<2	<1	<3	<10	<10
	RW-1	2/20/12	1.0	<1	<1	1.2	<2	<1	<3	<10	<10
SW-5	RW-2	12/27/11	<1	<1	<1	<1	<2	<1	<3	0.34	0.95
	Base Line	11/7/11	1.3	<1	<1	5.8	<2	1.0	<3	0.27	<10
	Interim System	8/15/13	<1	<1	<1	<1	<2	<1	<3	<11	<11
	Interim System	7/17/13	<1	<1	<1	<1	<2	<1	<3	<11	<11
	Interim System	6/19/13	<1	<1	<1	<1	<2	<1	<3	<11	<11
Interim System	5/15/13	84.5	7.4	27.9	3.3	10.1	8.5	80.5	<11	<11	
Interim System	4/18/13	25.2	1.9	8.9	1.8	4.9	3.5	25.1	<10	<10	

Table 5
Historical Surface Water Analytical Data
Speedy Meedy's
101 Indian Creek Valley Road
Normalville, PA
Facility I.D. #26-81079
USTIF Claim 05-213(F)

Surface Water Number	Operation Status	Date	Benzene ug/l	Cumene ug/l	Ethylbenzene ug/l	MTBE ug/l	Naphthalene ug/l	Toluene ug/l	Total Xylenes ug/l	Phenanthrene ug/l	Flourene ug/l
SW-5	Interim System	3/22/13	31.0	2.4	10.2	1.1	<2	3.3	25	<10	<10
	Interim System	2/27/13	5.1	<1	2.4	<1	<2	1.5	5	<10	<10
	Interim System	1/31/13	4.0	<1	<1	<1	<2	<1	<1	<10	<10
	System Off	7/3/12	5.5	<1	2.1	<1	<2	<1	6.2	<10	<10
	RW-1/RW-2	6/11/12	3.1	<1	1.2	<1	<2	<1	3.1	<10	<10
	RW-1	2/20/12	9.5	<1	3.0	<1	2.0	1.6	<3	<10	<10
	RW-2	12/27/11	<1	<1	<1	<1	<2	<1	<3	0.75	1.9
	Base Line	11/7/11	23.0	2.1	8.2	1.6	2.6	25.6	25.6	0.22	<10
		5/24/11	41.8	2.9	12.1	6.2	2.8	4.6	42.9	<10	<10
		8/15/13	<1	<1	<1	<1	<2	<1	<1	<3	<11
		7/17/13	<1	<1	<1	<1	<2	<1	<1	<3	<11
		6/19/13	<1	<1	<1	<1	<2	<1	<1	<3	<11
	SW-6	Interim System	5/15/13	21.5	2.3	7.9	2.1	3.4	2.7	23.4	<11
Interim System		4/18/13	16.0	1.7	6.5	1.2	4.6	1.8	18.3	<11	<11
Interim System		3/22/13	16.6	1.5	5.6	1.1	<2	1.7	12.9	<11	<11
Interim System		2/27/13	4.5	<1	2.2	<1	<2	<1	4.5	0.15	<10
Interim System		1/31/13	3.0	<1	<1	<1	<2	<1	<3	<10	<10
System Off		7/27/12	1.5	<1	<1	<1	<2	<1	<3	<10	<10
System Off		7/3/12	1.3	<1	<1	<1	<2	<1	<3	<10	<10
RW-1/RW-2		6/11/12	1.7	<1	1.1	<1	<2	<1	<3	<10	<10
		5/24/11	23.8	2.4	8.4	5.8	2.7	4.1	30.2	<10	<10
Surface Water Criteria*			1.2	N/A	530.0	N/A	43.0	330.0	210.0	1.0	1100.0

* - 25 PA Code § 93.8c Table 5 (concentration is lower of human health or fish and aquatic life criteria)

Notes :

- Base Line - Sample collected prior to pilot/interim remedial testing with DP vacuum extraction system.
- RW-2 - Sample collected during operation of Interim Remedial System on shallow recovery well.
- RW-1 - Sample collected during operation of Interim Remedial System on deep recovery well.
- System On (RW-1/RW-2) - Sample collected during operation of Interim Remedial System on shallow & deep recovery wells.

Bolded values exceed 25 PA Code § 93 Surface Water Criteria

Table 6
 Interim Remedial Action Groundwater Analytical Results
 (Select Monitoring Wells)
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 Facility I.D. #26-81079
 USTIF Claim 05-213(F)

Monitoring Well	Activity	Date	Benzene	Cumene	Ethyl-benzene	MTBE	Naphthalene	Toluene	Total Xylenes
			5	840	700	20	100	1,000	10,000
MW-10	August 2013 Monthly Sample.	08/15/13	242	40.9	17.2	16.1	7.8	6.8	39.8
	July 2013 Monthly Sample.	07/17/13	239	50.8	24.3	14.9	11.2	7.3	41.4
	June 2013 Monthly Sample.	06/19/13	222	66.6	26.0	12.3	10.6	6.7	34.4
	May 2013 Monthly Sample.	05/15/13	220	65.7	32.5	9.2	11.6	9.9	33.8
	April 2013 Monthly Sample.	04/18/13	436	112	78.0	10.2	26.8	11.7	52.8
	March 2013 Monthly Sample.	03/22/13	513	123	68.3	13.7	33.5	11.7	46
	February 2013 Monthly Sample.	02/27/13	479	100	66.0	17.7	21.1	10.8	44.6
	January 2013 Monthly Sample.	02/06/13	390	68	39.6	30.3	14	8.8	30.5
	August 2013 Monthly Sample.	08/15/13	1840	605	682	6.2	305	31.2	183
	July 2013 Monthly Sample.	07/17/13	2000	1150	1060	5.5	314	54.8	461
MW-10A	June 2013 Monthly Sample.	06/19/13	1300	1180	859	5.8	306	27.0	187
	May 2013 Monthly Sample.	05/15/13	1330	529	596	4.6	151	31.8	188
	April 2013 Monthly Sample.	04/18/13	1480	687	369	5.0	300	35.1	253
	March 2013 Monthly Sample.	03/22/13	1910	680	752	5.1	249	41.4	357
	February 2013 Monthly Sample.	02/27/13	1350	491	637	6.0	212	35.2	284
	January 2013 Monthly Sample.	02/06/13	1660	552	700	<5	220	37.3	251
	August 2013 Monthly Sample.	8/15/13	16.6	33.0	6.8	11.4	<5	<5	<5
	July 2013 Monthly Sample.	7/17/13	27.6	43.6	9.9	15.1	<5	<5	<5
	June 2013 Monthly Sample.	6/19/13	13.1	9.7	<5	12.0	<5	<5	<5
	May 2013 Monthly Sample.	5/15/13	45.6	56.3	31.2	24.9	<5	1.1	<5
MW-14	April 2013 Monthly Sample.	4/18/13	62.0	68.9	84.0	28.1	6.5	2.1	5.4
	March 2013 Monthly Sample.	3/22/13	32.0	17.9	10.4	107	<5	<5	<5
	February 2013 Monthly Sample.	2/27/13	18.1	9.2	3.8	125	9.5	<5	<5
	January 2013 Monthly Sample.	2/6/13	11.5	7.5	<5	129	<5	<5	<5
	August 2013 Monthly Sample.	08/15/13	88	143	195	<5	59.3	8.3	159
	July 2013 Monthly Sample.	07/17/13	96.8	154	260	<5	48.6	8.7	217
	June 2013 Monthly Sample.	06/19/13	62.2	100	114	<5	29.9	4.1	83.9
	May 2013 Monthly Sample.	05/15/13	55.7	64.8	97.2	<5	24.9	3.8	122
	April 2013 Monthly Sample.	04/18/13	37.7	53.3	97.7	<5	50.1	5	200
	March 2013 Monthly Sample.	03/22/13	24.2	17.4	51.7	<5	34.2	4.4	247
MW-14A	February 2013 Monthly Sample.	02/27/13	12.9	19.1	54.2	<5	24.2	3	166
	January 2013 Monthly Sample.	02/06/13	54.1	93.6	252	<5	111	14.2	678

All results reported in ug/l (parts per billion).
 NS - Well not sampled.
 SHS - Denotes Medium Specific Concentration, Statwide Health Standard
Bolded values exceed their respective Statewide Health Standard (Residential, TDS < 2500)

Table 7
Interim Remedial Action System Performance Monitoring Data
Speedy Meedys
101 Indian Valley Road
Normalville, PA
Facility I.D. #26-81079
USTIF Claim #05-213(F)

Date	Days	Hours	RW-1 (inHg)	RW-2 (inHg)	P-1 (psi)	T-1 (°F)	P-2 (psi)	OVA Reading (ppm)	Air Flow (ft/min)	Water Flow (Gallons)	Period Duration (Hours)	Gallons Treated (Gallons)	Avg Rate (Gal/Min)	Comments
1/3/2013	0	2853	19	19	0	200	0	0	623	426,216	na	na	na	system start
1/14/2013	11	2900	20	20	0	200	0	0	620	427,693	47	1,477	0.52	system ran continuous
1/18/2013	15	2993	19	19	0	200	0	0	625	429,970	140	3,754	0.45	system ran continuous
1/31/2013	28	3067	19	19	0	210	0	0	628	431,834	214	5,618	0.44	system ran continuous
2/13/2013	41	3348	20	20	0	200	0	0	620	433,333	496	9,117	0.31	system ran continuous
2/18/2013	45	3470	19	19	0	200	0	0	625	437,478	618	11,262	0.30	system ran continuous
2/27/2013	54	3657	21	17	0	200	0	0	630	440,356	805	14,140	0.29	Hi-Hi : vapor carbon back pressure
3/14/2013	69	4010	19	19	0	200	0	0	620	443,835	1158	19,619	0.28	system ran continuous
3/22/2013	77	4205	19	18	0	210	0	0	635	448,636	1352	22,420	0.28	system ran continuous
4/4/2013	90	4519	19	19	0	210	0	0	625	453,851	1666	27,635	0.28	system ran continuous
4/12/2013	98	4709	19	19	0	200	0	0	620	456,891	1856	30,675	0.28	system ran continuous
4/18/2013	104	4853	19	19	0	215	0	0	615	459,258	2001	33,042	0.28	system ran continuous
5/2/2013	118	5188	18.5	19	0	200	0	0	620	461,556	2147	35,340	0.27	system ran continuous
5/17/2013	123	5312	18.5	19.5	0	210	0	0	635	464,524	2335	38,308	0.27	system ran continuous
5/15/2013	131	5499	19	20	0	200	0	0	647	466,396	2459	40,180	0.27	system ran continuous
5/23/2013	139	5695	18	19	0	210	0	0	620	469,348	2646	43,132	0.27	system ran continuous
5/31/2013	147	5880	18.5	18.5	0	215	0	0	642	472,978	3027	46,762	0.26	system ran continuous
6/3/2013	150	5955	18.5	18.5	0	210	0	0	635	474,189	3102	47,973	0.26	system ran continuous
6/12/2013	156	6175	21	19	0	210	0	0	640	477,506	3522	51,290	0.26	system ran continuous
6/19/2013	163	6338	18	18	0	210	0	0	625	479,901	3485	53,685	0.26	system ran continuous
7/2/2013	176	6648	19	20	0	215	0	0	620	484,568	3796	58,352	0.26	system ran continuous
7/17/2013	191	7012	22	23	0	225	0	0	620	489,490	4159	63,274	0.25	system ran continuous
7/14/2013	198	7182	18	18	0	210	0	0	610	491,258	4330	65,042	0.25	system ran continuous
8/1/2013	206	7369	19	20	0	210	0	0	615	493,374	4516	67,158	0.25	system ran continuous
8/7/2013	212	7519	20	22	0	220	0	0	620	495,001	4666	68,785	0.25	system ran continuous
8/15/2013	220	7704	18	20	0	220	0	0	610	497,249	4851	71,033	0.24	system ran continuous
8/22/2013	227	7874	20	23	0	220	0	0	620	499,384	5021	73,168	0.24	system ran continuous
8/28/2013	233	8015	19	20	0	215	0	0	625	501,035	5163	74,819	0.24	system ran continuous
9/3/2013	239	8158	19	19	0	210	0	0	630	503,259	5305	77,043	0.24	system ran continuous
Total											Hours	Gallons Treated		shut system off

Hour meter, system run time
 RW-1 Vacuum gauge located on recovery well 1 (applied vacuum)
 RW-2 Vacuum gauge located on recovery well 2 (applied vacuum)
 P-1 Pressure gauge located on vacuum pump coalescing filter
 T-1 Temperature gauge located on vacuum pump
 Flow Treated discharge water flow meter
 P-2 Pressure gauge located on treated water carbon vessel

Table 7
Interim Remedial Action System Performance Monitoring Data
Speedy Meedys
101 Indian Valley Road
Normalville, PA
Facility I.D. #26-81079
USTIF Claim #05-213(F)

Date	Days	Hours	RW-1 (inHg)	RW-2 (inHg)	P-1 (psi)	T-1 (°F)	P-2 (psi)	OVA Reading (ppm)	Air Flow (ft/min)	Water Flow (Gallons)	Period Duration (Hours)	Gallons Treated (Gallons)	Avg Rate (Gal/Min)	Comments
1/3/2013	0	2853	19	19	0	200	0	0	623	426,216	na	na	na	system start
1/14/2013	11	2900	20	20	0	200	0	0	620	427,693	47	1,477	0.52	system ran continuous
1/18/2013	15	2993	19	19	0	200	0	0	625	429,970	140	3,754	0.45	system ran continuous
1/31/2013	28	3067	19	19	0	210	0	0	628	431,834	214	5,618	0.44	system ran continuous
2/13/2013	41	3348	20	20	0	200	0	0	620	435,333	496	9,117	0.31	system ran continuous
2/18/2013	45	3470	19	19	0	210	0	0	625	437,478	618	11,262	0.30	system ran continuous
2/27/2013	54	3657	21	17	0	200	0	0	630	440,356	805	14,140	0.29	Hi-Hi : vapor carbon back pressure
3/14/2013	69	4010	19	19	0	200	0	0	620	445,835	1158	19,619	0.28	system ran continuous
3/22/2013	77	4205	19	18	0	210	0	0	635	448,636	1352	22,420	0.28	system ran continuous
4/4/2013	90	4519	19	19	0	210	0	0	625	453,851	1666	27,635	0.28	system ran continuous
4/12/2013	98	4709	19	19	0	200	0	0	620	456,891	1856	30,675	0.28	system ran continuous
4/18/2013	104	4853	19	19	0	215	0	0	615	459,258	2001	33,042	0.28	system ran continuous
4/24/2013	110	5000	18.5	18.5	0	200	0	0	620	461,556	2147	35,340	0.27	system ran continuous
5/2/2013	118	5188	18.5	19.5	0	210	0	0	635	464,524	2335	38,308	0.27	system ran continuous
5/7/2013	123	5312	18.5	19.5	0	215	0	0	647	466,396	2459	40,180	0.27	system ran continuous
5/15/2013	131	5499	19	20	0	200	0	0	620	469,348	2646	43,132	0.27	system ran continuous
5/23/2013	139	5695	18	19	0	210	0	0	630	471,176	2842	44,960	0.26	system ran continuous
5/31/2013	147	5880	18.5	18.5	0	215	0	0	642	472,978	3027	46,762	0.26	system ran continuous
6/3/2013	150	5955	18.5	18.5	0	210	0	0	635	474,189	3102	47,973	0.26	system ran continuous
6/12/2013	156	6175	18	19	0	210	0	0	640	477,506	3322	51,290	0.26	system ran continuous
6/19/2013	163	6338	18	18	0	210	0	0	625	479,901	3485	53,685	0.26	system ran continuous
7/2/2013	176	6648	19	20	0	215	0	0	620	484,568	3796	58,352	0.26	system ran continuous
7/17/2013	191	7012	22	23	0	225	0	0	620	489,490	4159	63,274	0.25	system ran continuous
7/24/2013	198	7182	18	18	0	210	0	0	610	491,258	4330	65,042	0.25	system ran continuous
8/1/2013	206	7369	19	20	0	220	0	0	620	493,374	4516	67,158	0.25	system ran continuous
8/7/2013	212	7519	20	22	0	220	0	0	620	495,001	4666	68,785	0.25	system ran continuous
8/15/2013	220	7704	18	20	0	220	0	0	610	497,249	4851	71,033	0.24	system ran continuous
8/22/2013	227	7874	20	23	0	220	0	0	620	499,384	5021	73,168	0.24	system ran continuous
8/28/2013	233	8015	19	20	0	215	0	0	625	501,035	5163	74,819	0.24	system ran continuous
9/3/2013	239	8158	19	19	0	210	0	0	630	503,259	5305	77,043	0.24	system ran continuous shut system off
Total	Days	Hours									Hours	Gallons Treated		

Hour meter, system run time
RW-1 Vacuum gauge located on recovery well 1 (applied vacuum)
RW-2 Vacuum gauge located on recovery well 2 (applied vacuum)
P-1 Pressure gauge located on vacuum pump coalescing filter
T-1 Temperature gauge located on vacuum pump
Flow Treated discharge water flow meter
P-2 Pressure gauge located on treated water carbon vessel

Figures

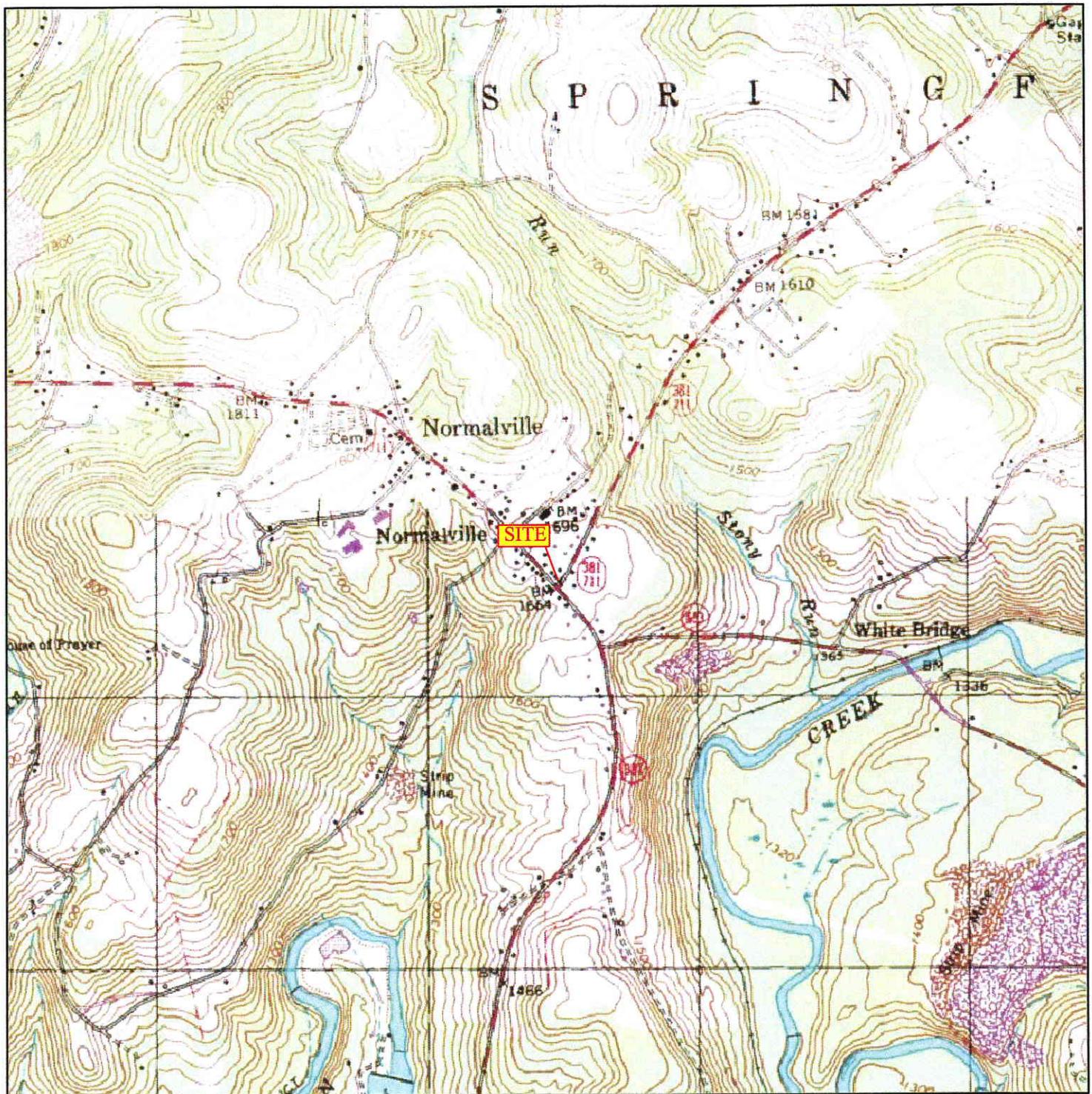
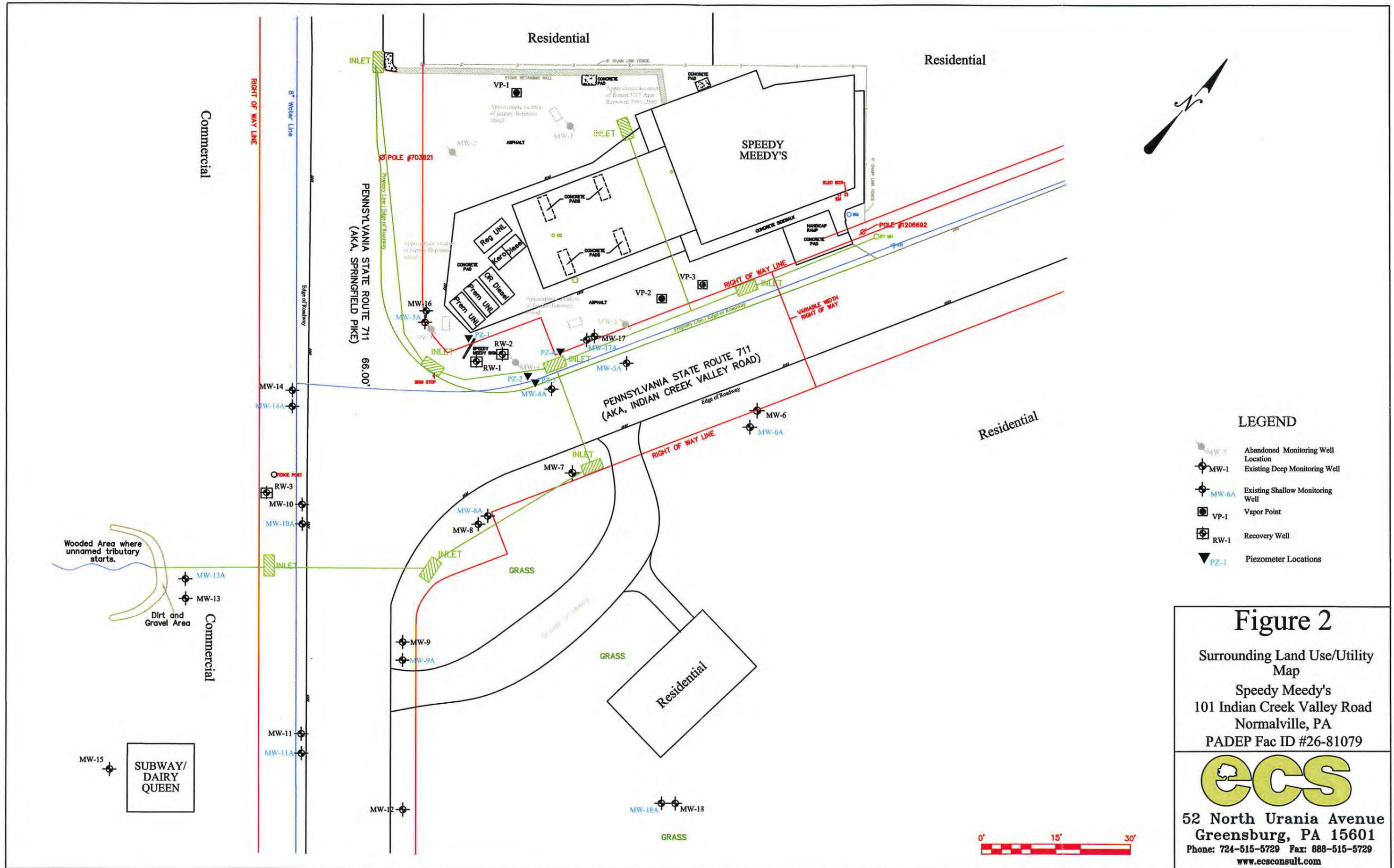


Figure 1
 Site Location Map
 Speedy Meedys
 Normalville, PA
 Pa Fac ID#26-81079

Mill Run PA
 7.5 Minute Quad
 US Geological Survey Topo Map

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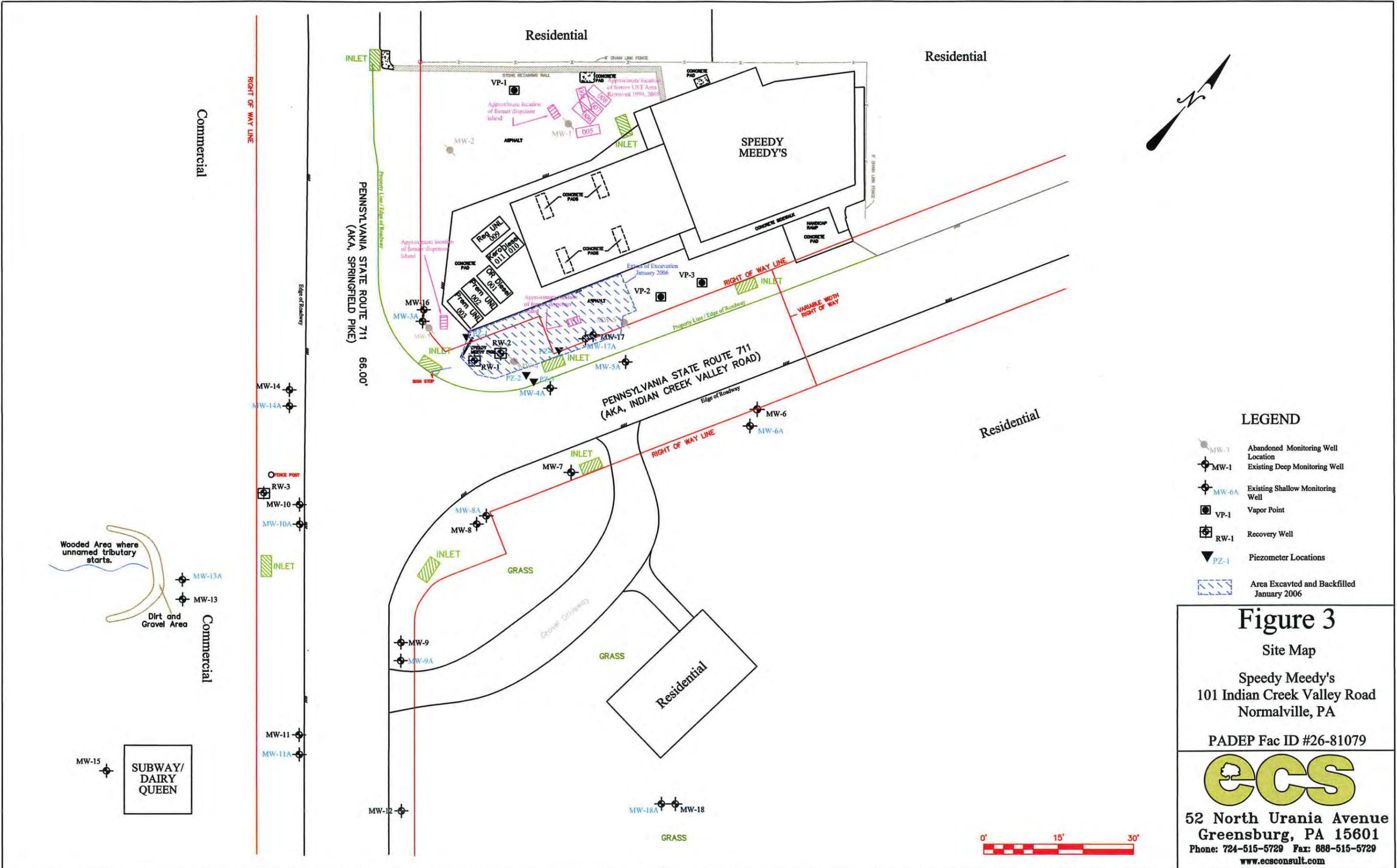
- LEGEND**
- MW-3 Abandoned Monitoring Well Location
 - MW-1 Existing Deep Monitoring Well
 - MW-6A Existing Shallow Monitoring Well
 - VP-1 Vapor Point
 - RW-1 Recovery Well
 - PZ-1 Piezometer Locations

Figure 2

Surrounding Land Use/Utility Map
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 PADEP Fac ID #26-81079

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LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-1 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Recovery Well
- PZ-1 Piezometer Locations
- Area Excavated and Backfilled January 2006

Figure 3

Site Map

Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA

PADEP Fac ID #26-81079



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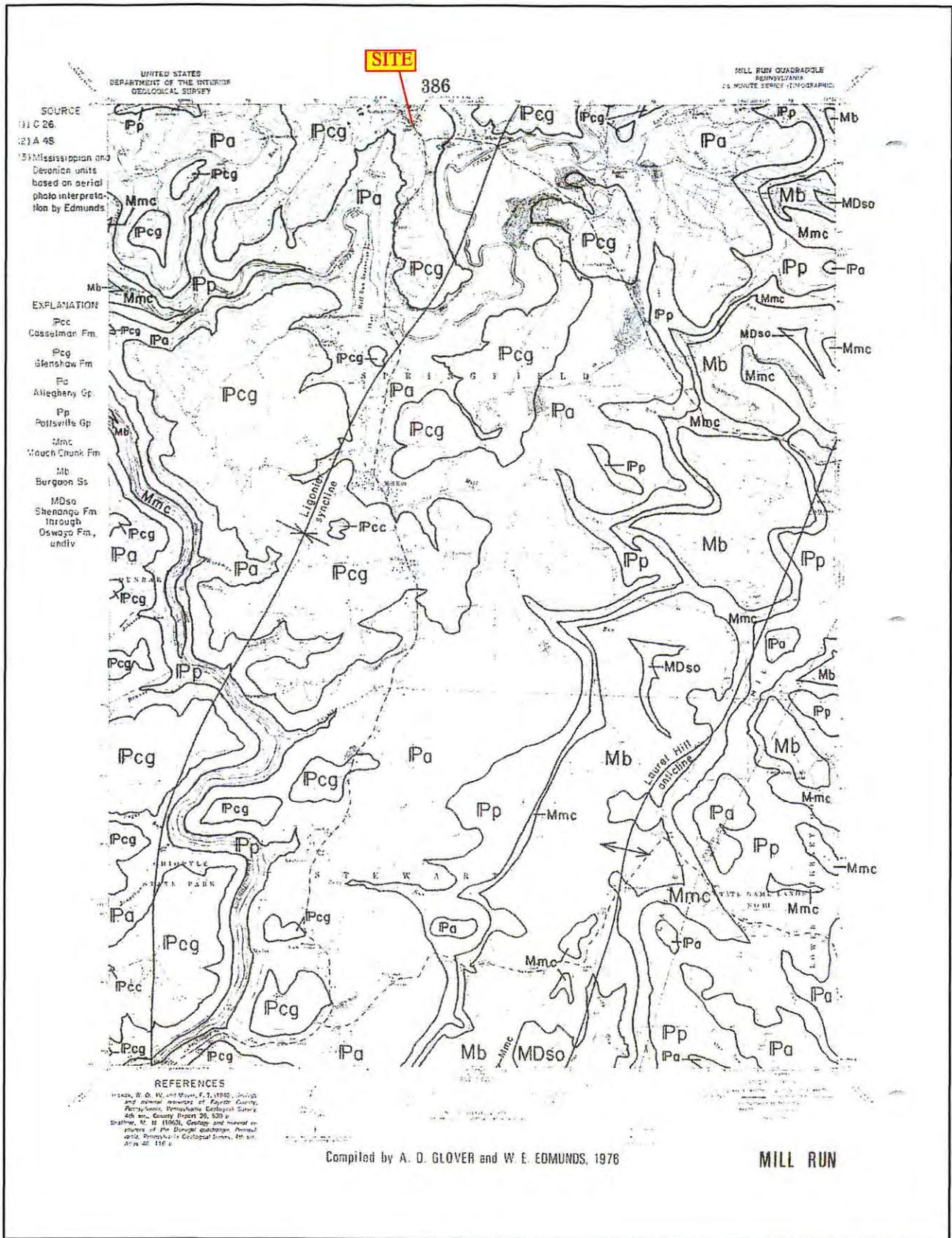


Figure 4
Geologic Map
Speedy Meedys
Normalville, PA
Pa Fac ID#26-81079

source: PA DCNR
Topographic and Geologic
Survey
Map 61



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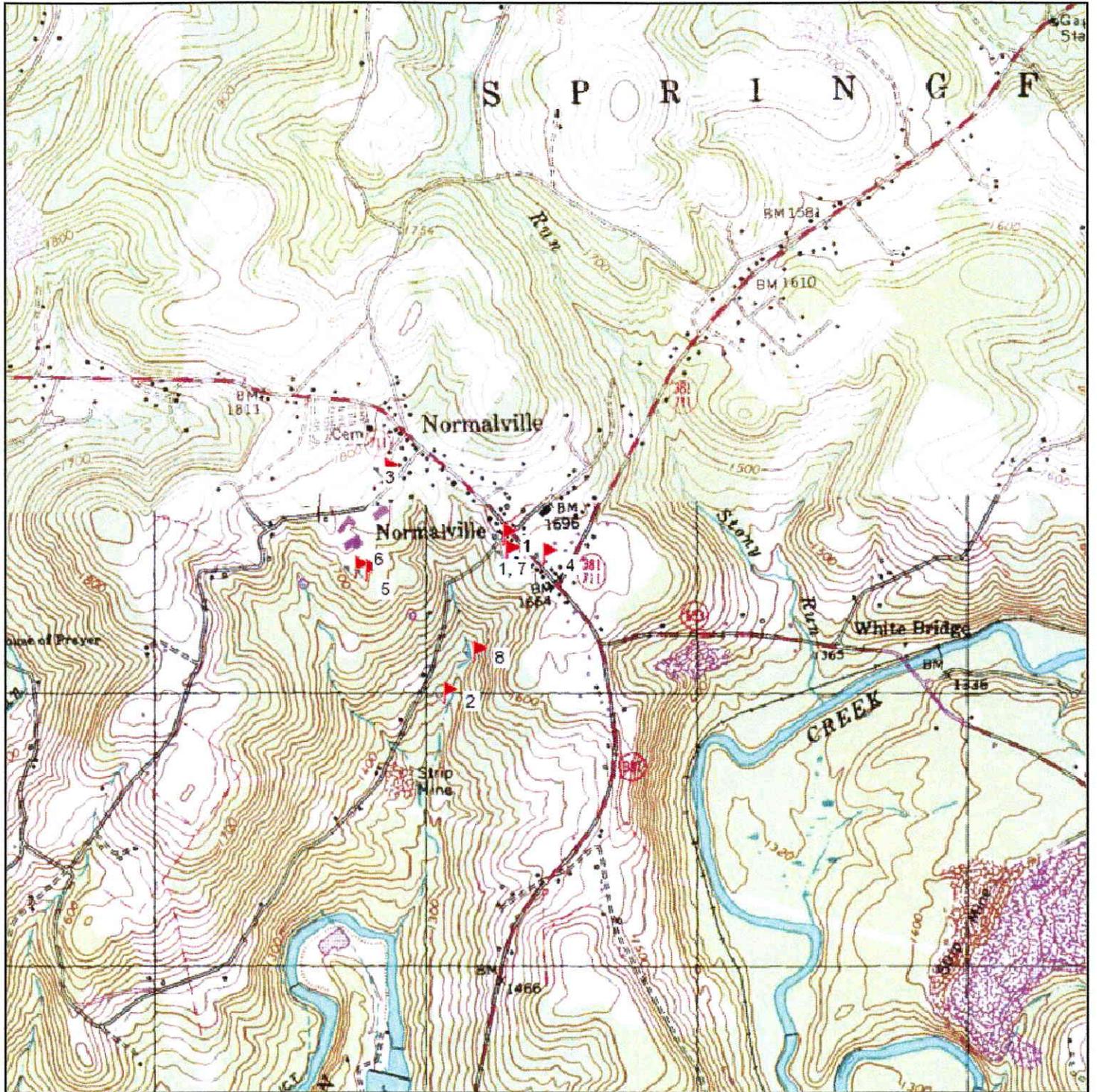


Figure 5

Potable Well Map
 Speedy Meedys
 Normalville, PA
 Pa Fac ID#26-81079

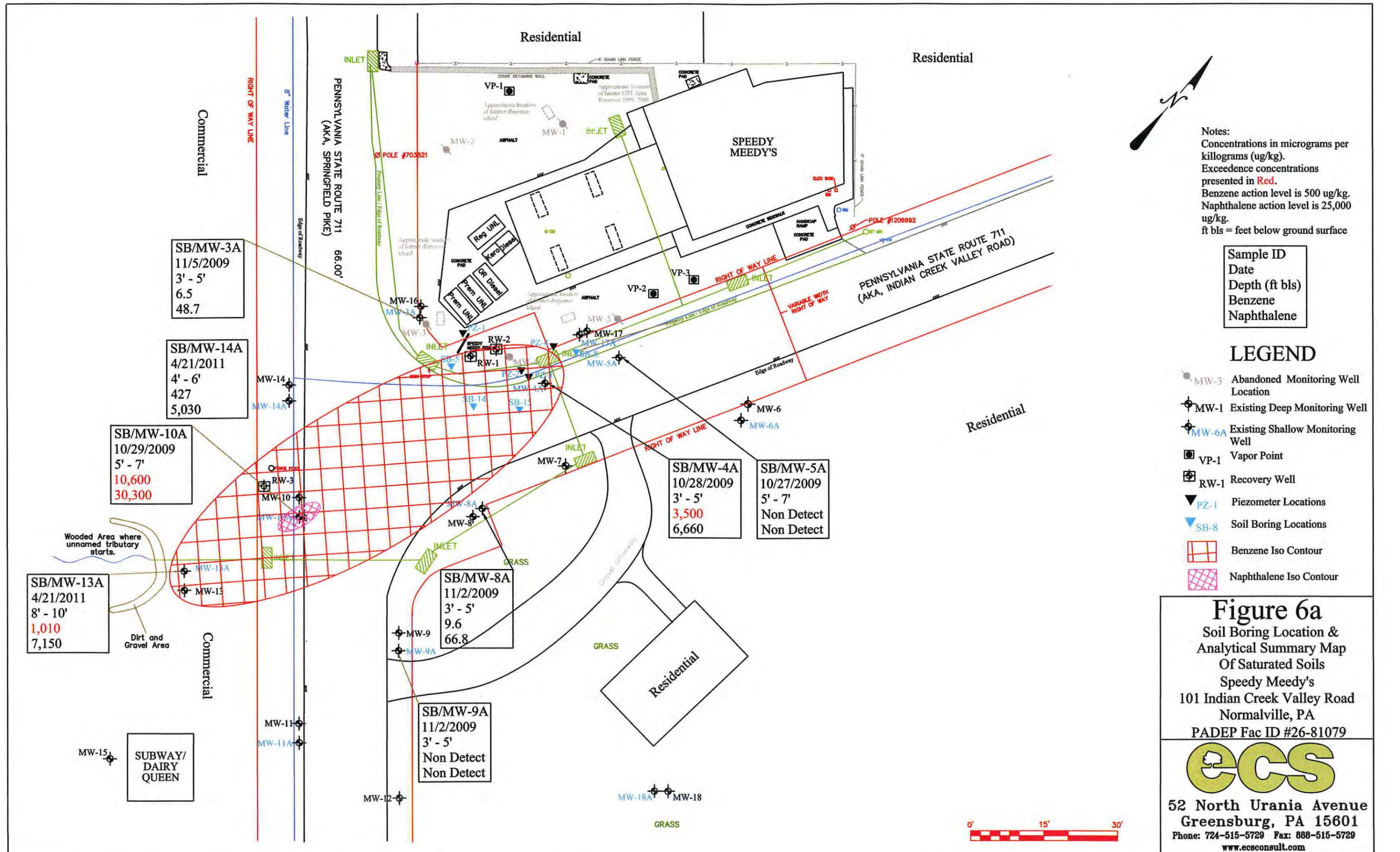
Legend

 Potable Well (record #)

Mill Run PA
 7.5 Minute Quad
 US Geological Survey Topo Map



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Notes:
 Concentrations in micrograms per kilograms (ug/kg).
 Exceedence concentrations presented in Red.
 Benzene action level is 500 ug/kg.
 Naphthalene action level is 25,000 ug/kg.
 ft bls = feet below ground surface

Sample ID	Date	Depth (ft bls)	Benzene	Naphthalene
-----------	------	----------------	---------	-------------

LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-1 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Recovery Well
- PZ-1 Piezometer Locations
- SB-8 Soil Boring Locations
- Benzene Iso Contour
- Naphthalene Iso Contour

Figure 6a

Soil Boring Location & Analytical Summary Map Of Saturated Soils Speedy Meedy's 101 Indian Creek Valley Road Normalville, PA PADEP Fac ID #26-81079



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SB/MW-3A
 11/5/2009
 3' - 5'
 6.5
 48.7

SB/MW-14A
 4/21/2011
 4' - 6'
 427
 5,030

SB/MW-10A
 10/29/2009
 5' - 7'
 10,600
 30,300

SB/MW-13A
 4/21/2011
 8' - 10'
 1,010
 7,150

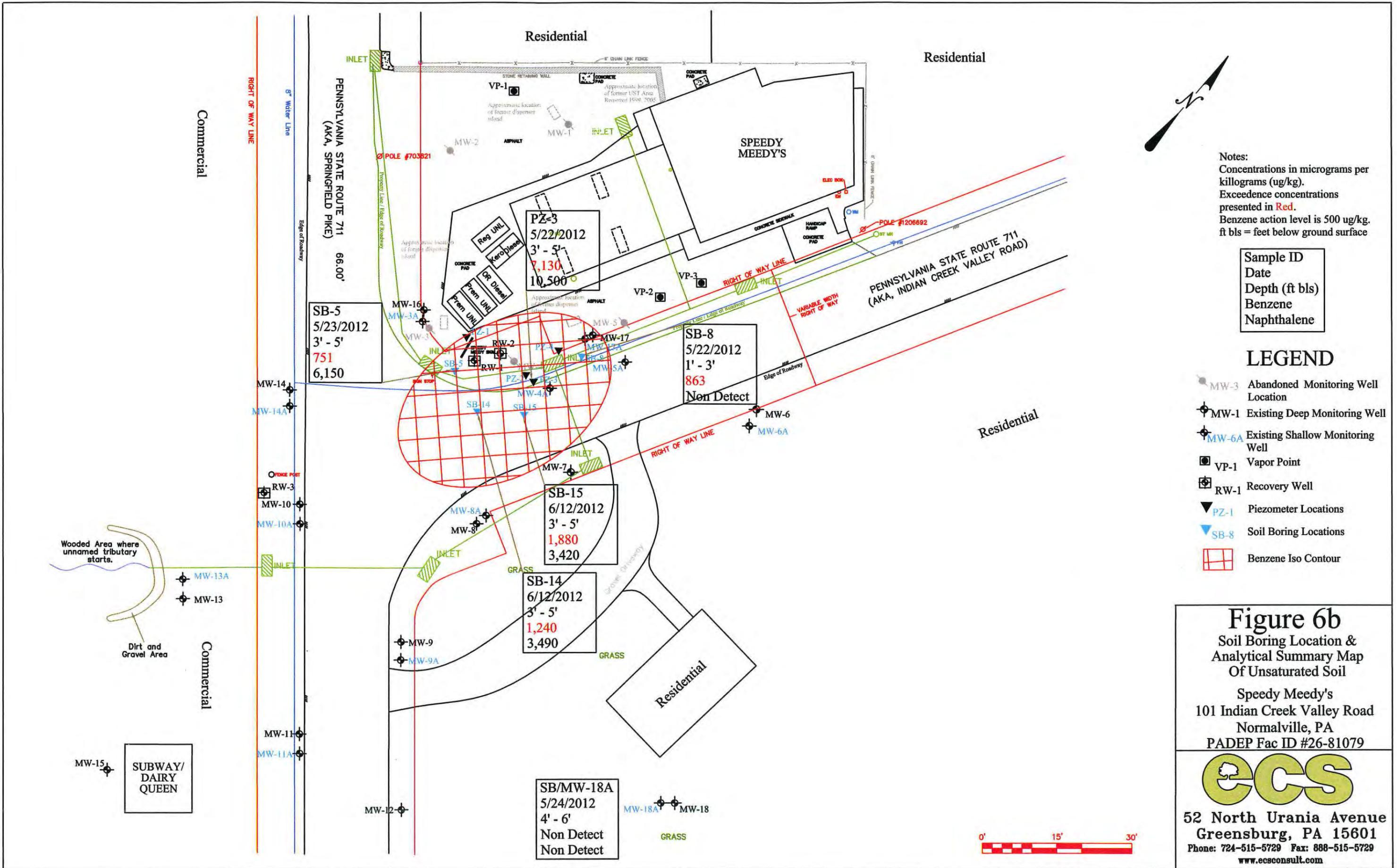
SB/MW-8A
 11/2/2009
 3' - 5'
 9.6
 66.8

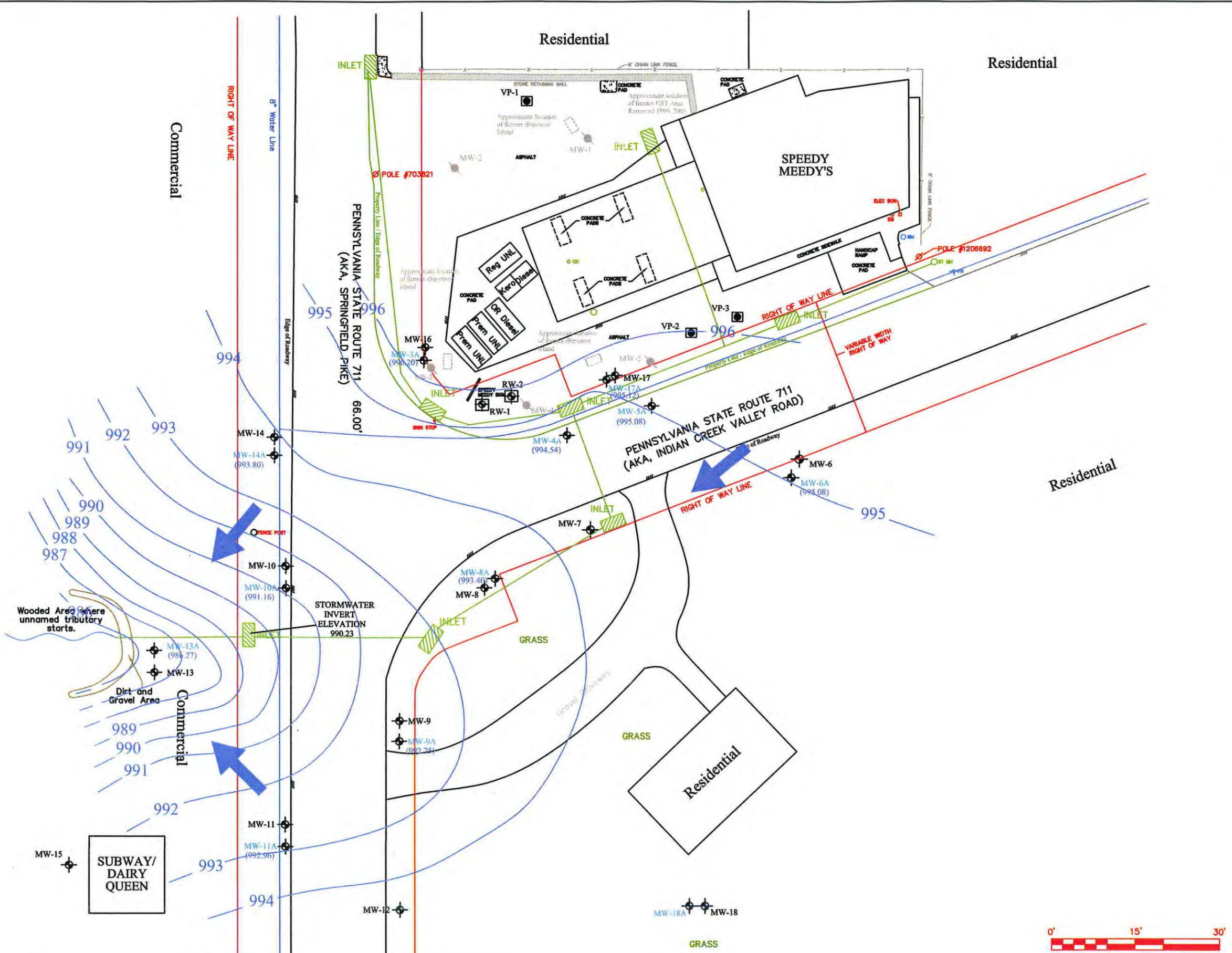
SB/MW-4A
 10/28/2009
 3' - 5'
 3,500
 6,660

SB/MW-5A
 10/27/2009
 5' - 7'
 Non Detect
 Non Detect

SB/MW-9A
 11/2/2009
 3' - 5'
 Non Detect
 Non Detect

SUBWAY/
 DAIRY
 QUEEN





Notes:
 Groundwater elevations calculated based on data collected July 27 & 30, 2012.
 Monitoring well MW-18A was not used to determine the groundwater flow map.

LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-6 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Recovery Well
- MW-6A Groundwater Elevation (feet)
- Groundwater Flow Direction
- 993 Groundwater Elevation with Contour Line

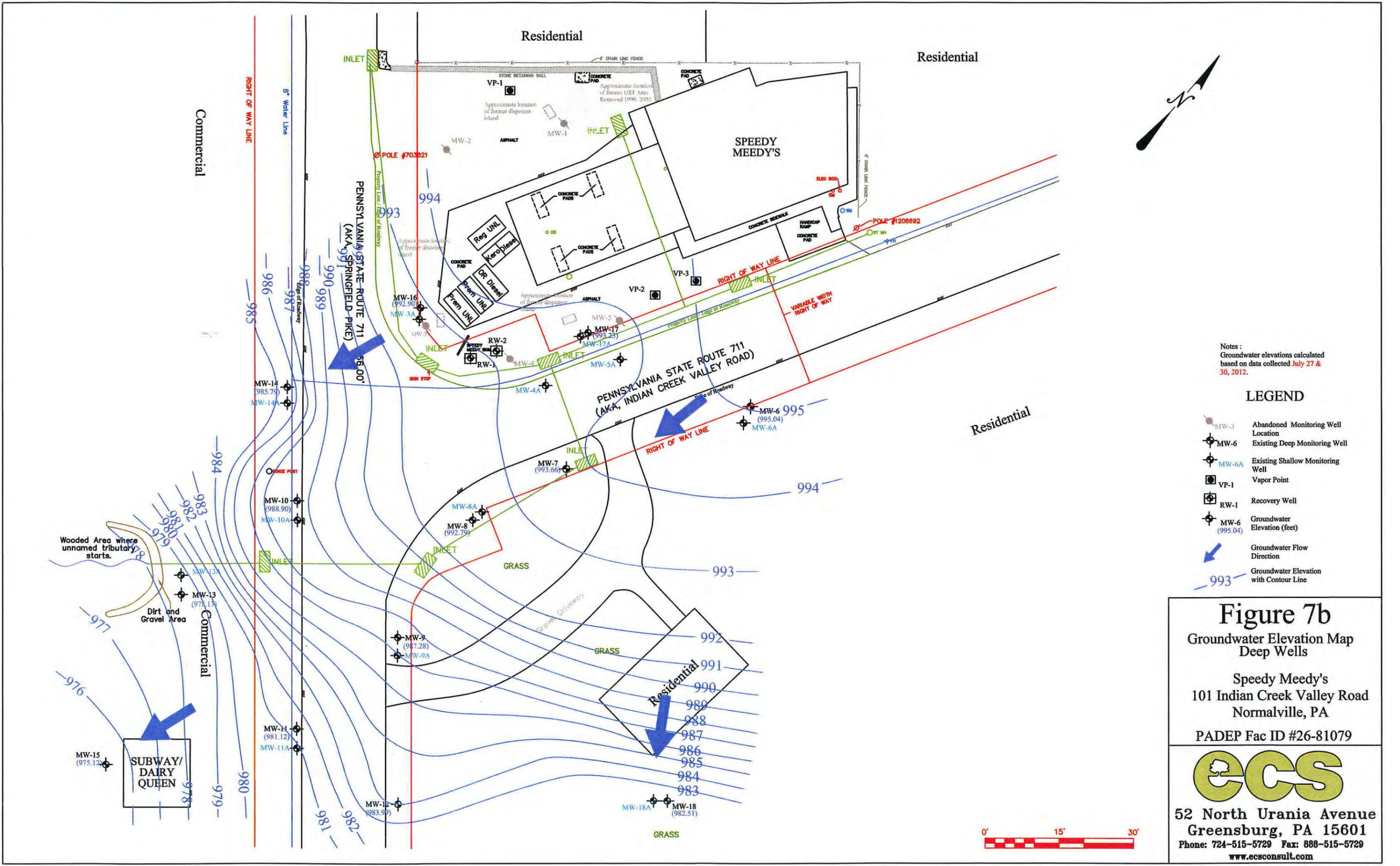
Figure 7a

Groundwater Elevation Map
 Shallow Wells
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 PADEP Fac ID #26-81079



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Notes:
 Groundwater elevations calculated based on data collected July 27 & 30, 2012.

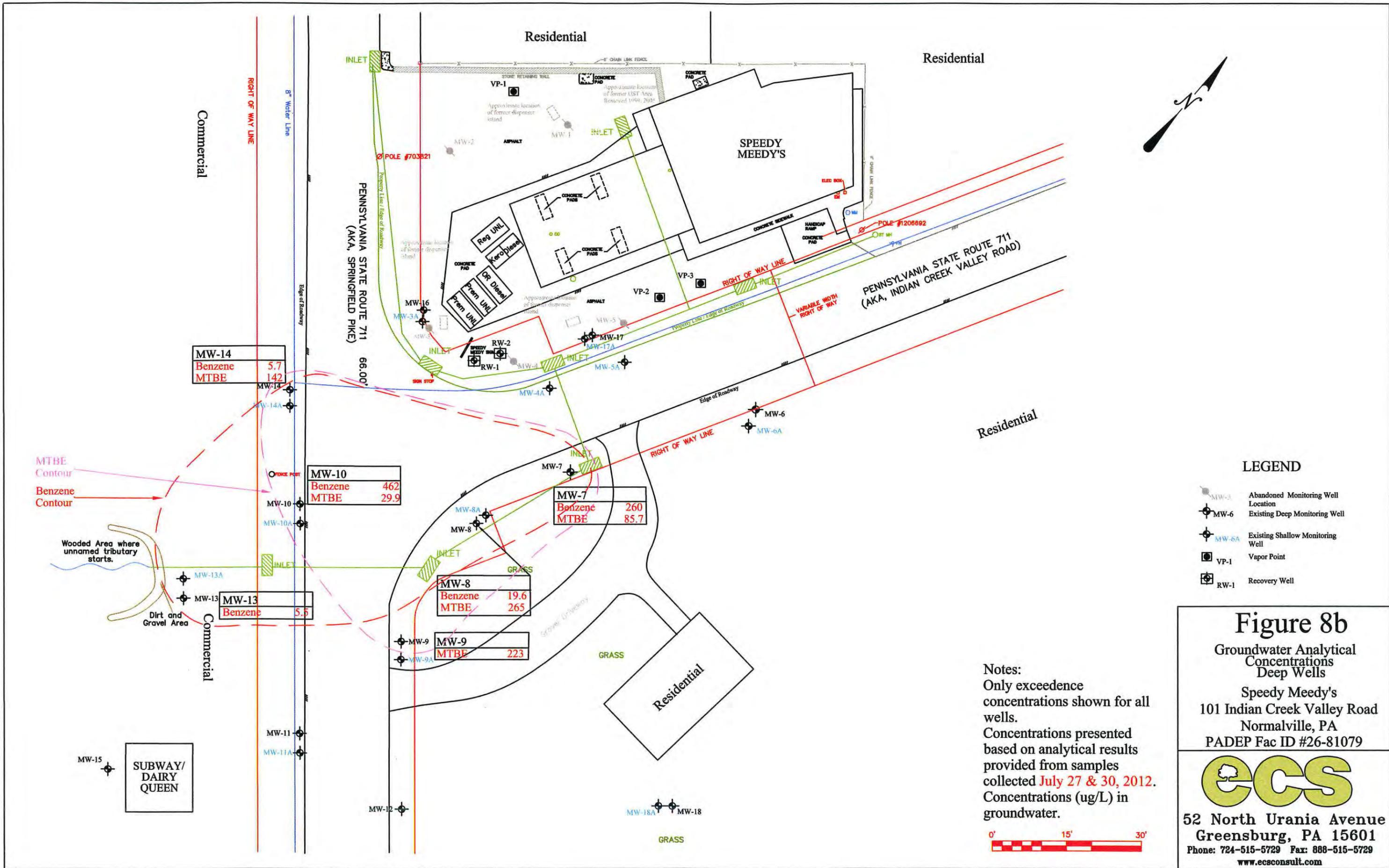
LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-6 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Recovery Well
- MW-6 (995.04) Groundwater Elevation (feet)
- Groundwater Flow Direction
- 993 Groundwater Elevation with Contour Line

Figure 7b
 Groundwater Elevation Map
 Deep Wells
 Speedy Meedy's
 101 Indian Creek Valley Road
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MW-14
Benzene 5.7
MTBE 142

MW-10
Benzene 462
MTBE 29.9

MW-7
Benzene 260
MTBE 85.7

MW-8
Benzene 19.6
MTBE 265

MW-9
MTBE 223

MW-13
Benzene 5.5

Notes:
 Only exceedence concentrations shown for all wells.
 Concentrations presented based on analytical results provided from samples collected July 27 & 30, 2012.
 Concentrations (ug/L) in groundwater.



LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-6 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Recovery Well

Figure 8b

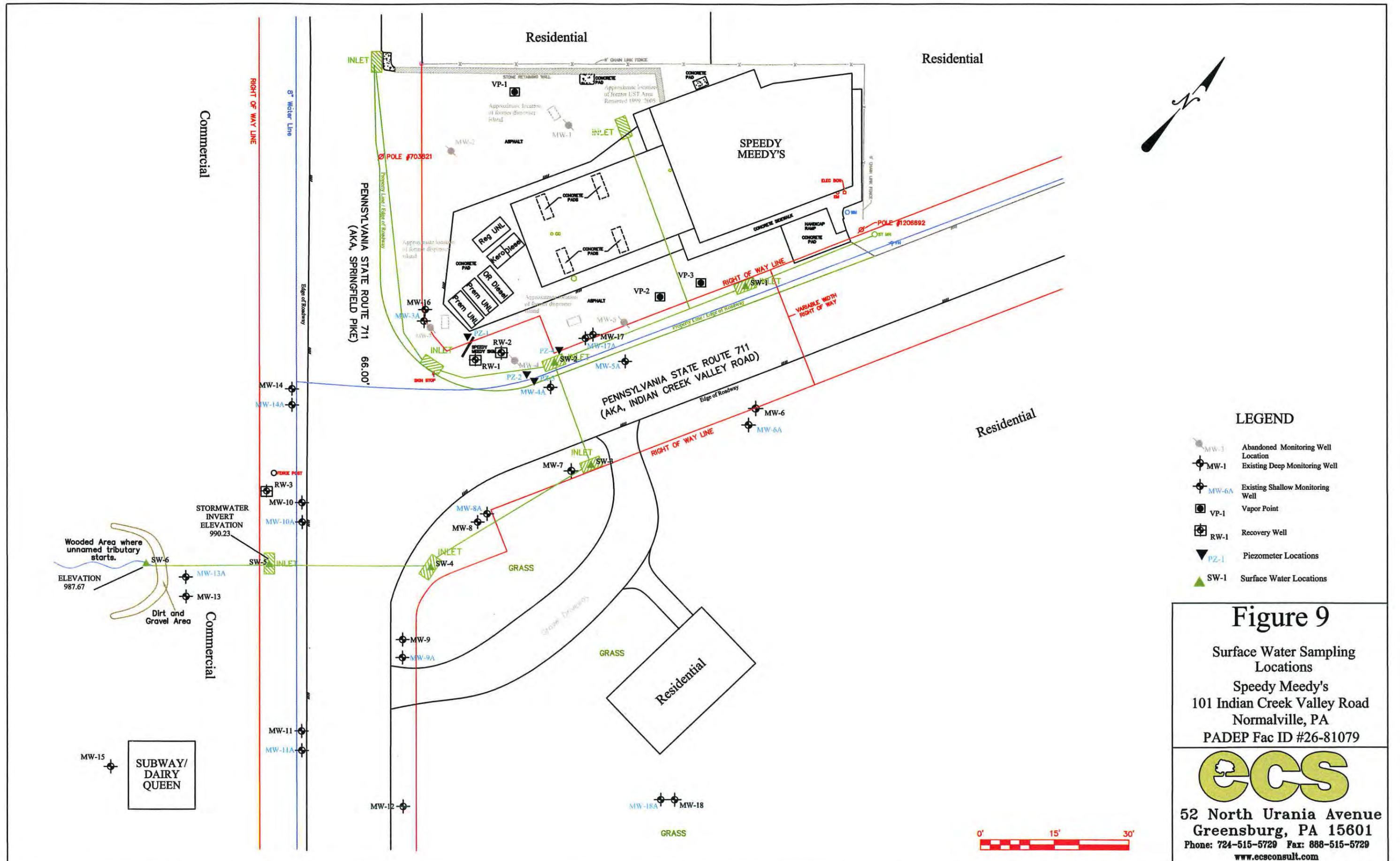
Groundwater Analytical Concentrations Deep Wells

Speedy Meedy's
 101 Indian Creek Valley Road
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LEGEND

- MW-1 Abandoned Monitoring Well Location
- MW-1 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Recovery Well
- PZ-1 Piezometer Locations
- SW-1 Surface Water Locations

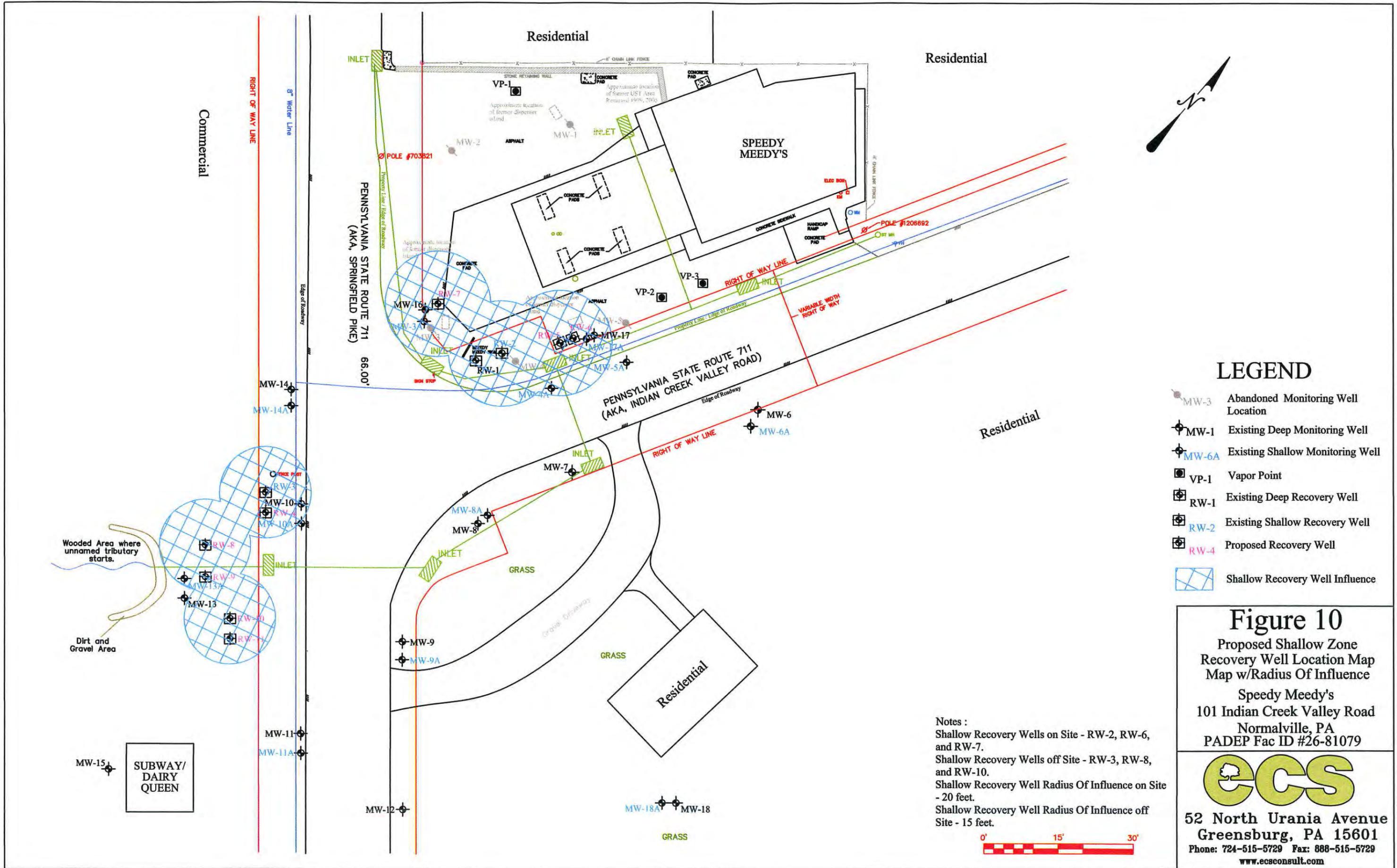
Figure 9

Surface Water Sampling Locations
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
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LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-1 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Existing Deep Recovery Well
- RW-2 Existing Shallow Recovery Well
- RW-4 Proposed Recovery Well
- Shallow Recovery Well Influence

Figure 10

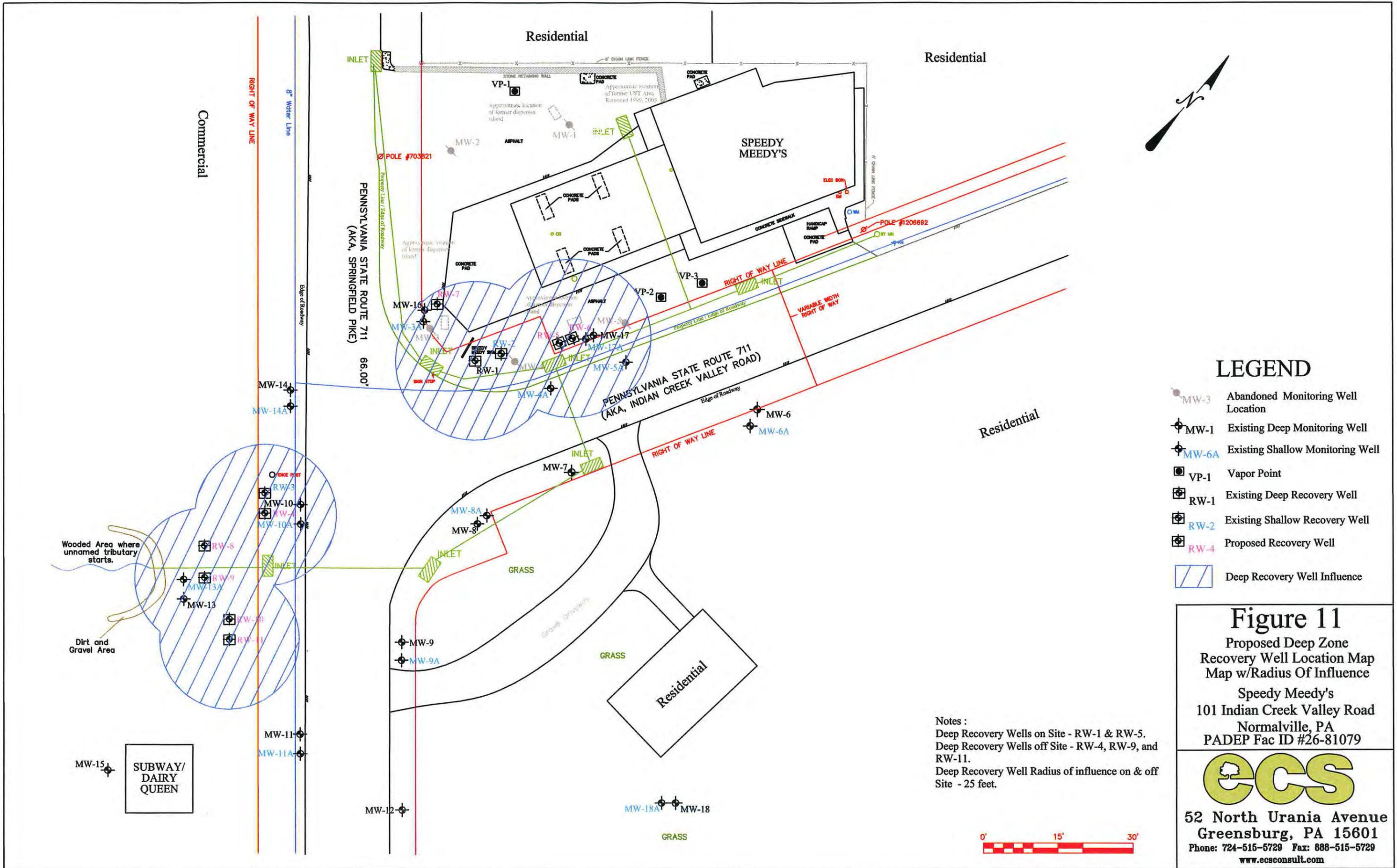
Proposed Shallow Zone
 Recovery Well Location Map
 Map w/Radius Of Influence
 Speedy Meedy's
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 Normalville, PA
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Notes :
 Shallow Recovery Wells on Site - RW-2, RW-6,
 and RW-7.
 Shallow Recovery Wells off Site - RW-3, RW-8,
 and RW-10.
 Shallow Recovery Well Radius Of Influence on Site
 - 20 feet.
 Shallow Recovery Well Radius Of Influence off
 Site - 15 feet.





LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-1 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Existing Deep Recovery Well
- RW-2 Existing Shallow Recovery Well
- RW-4 Proposed Recovery Well
- Deep Recovery Well Influence

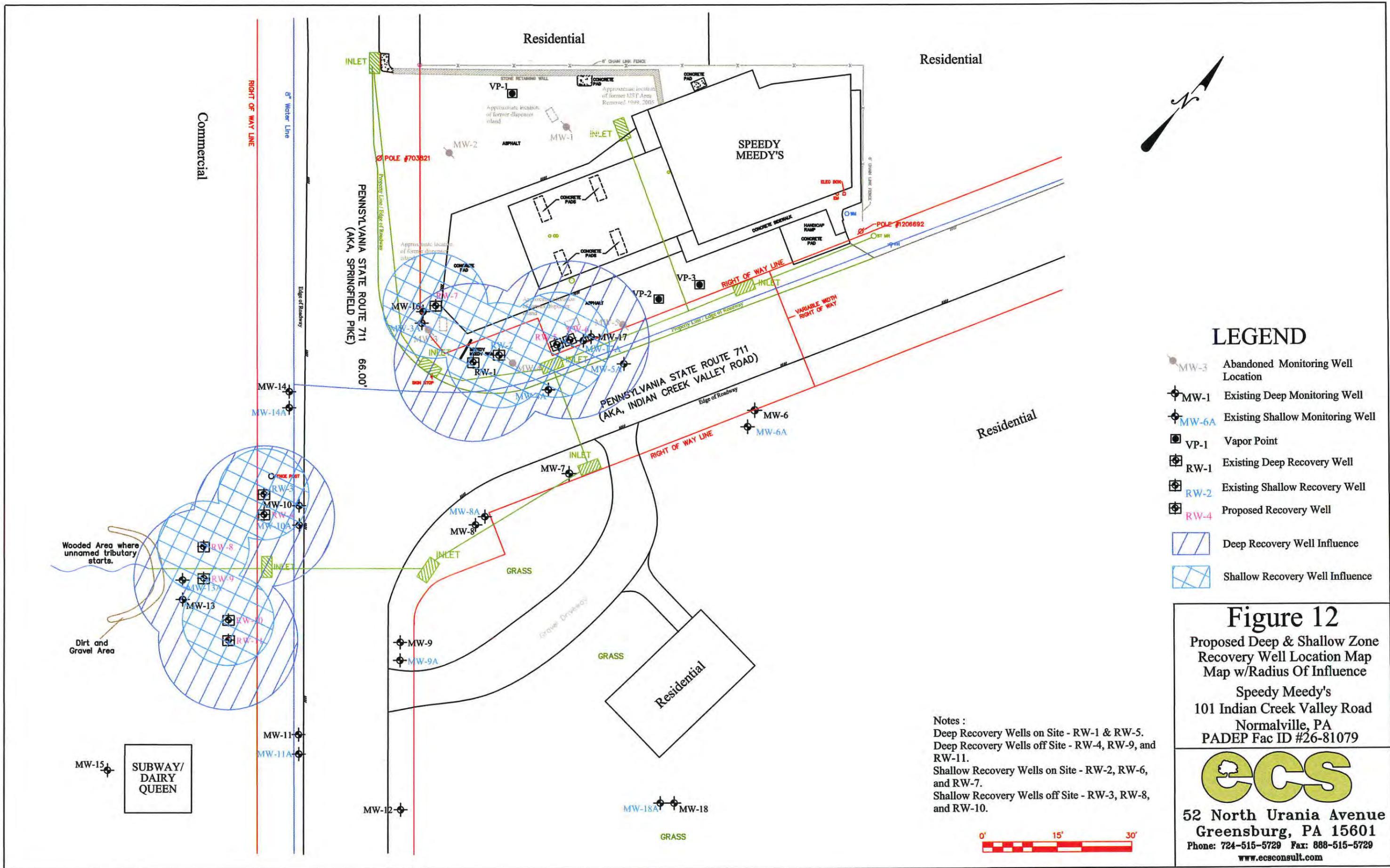
Figure 11
 Proposed Deep Zone Recovery Well Location Map
 Map w/Radius Of Influence
 Speedy Meedy's
 101 Indian Creek Valley Road
 Normalville, PA
 PADEP Fac ID #26-81079

Notes :
 Deep Recovery Wells on Site - RW-1 & RW-5.
 Deep Recovery Wells off Site - RW-4, RW-9, and RW-11.
 Deep Recovery Well Radius of influence on & off Site - 25 feet.



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LEGEND

- MW-3 Abandoned Monitoring Well Location
- MW-1 Existing Deep Monitoring Well
- MW-6A Existing Shallow Monitoring Well
- VP-1 Vapor Point
- RW-1 Existing Deep Recovery Well
- RW-2 Existing Shallow Recovery Well
- RW-4 Proposed Recovery Well
- Deep Recovery Well Influence
- Shallow Recovery Well Influence

Figure 12

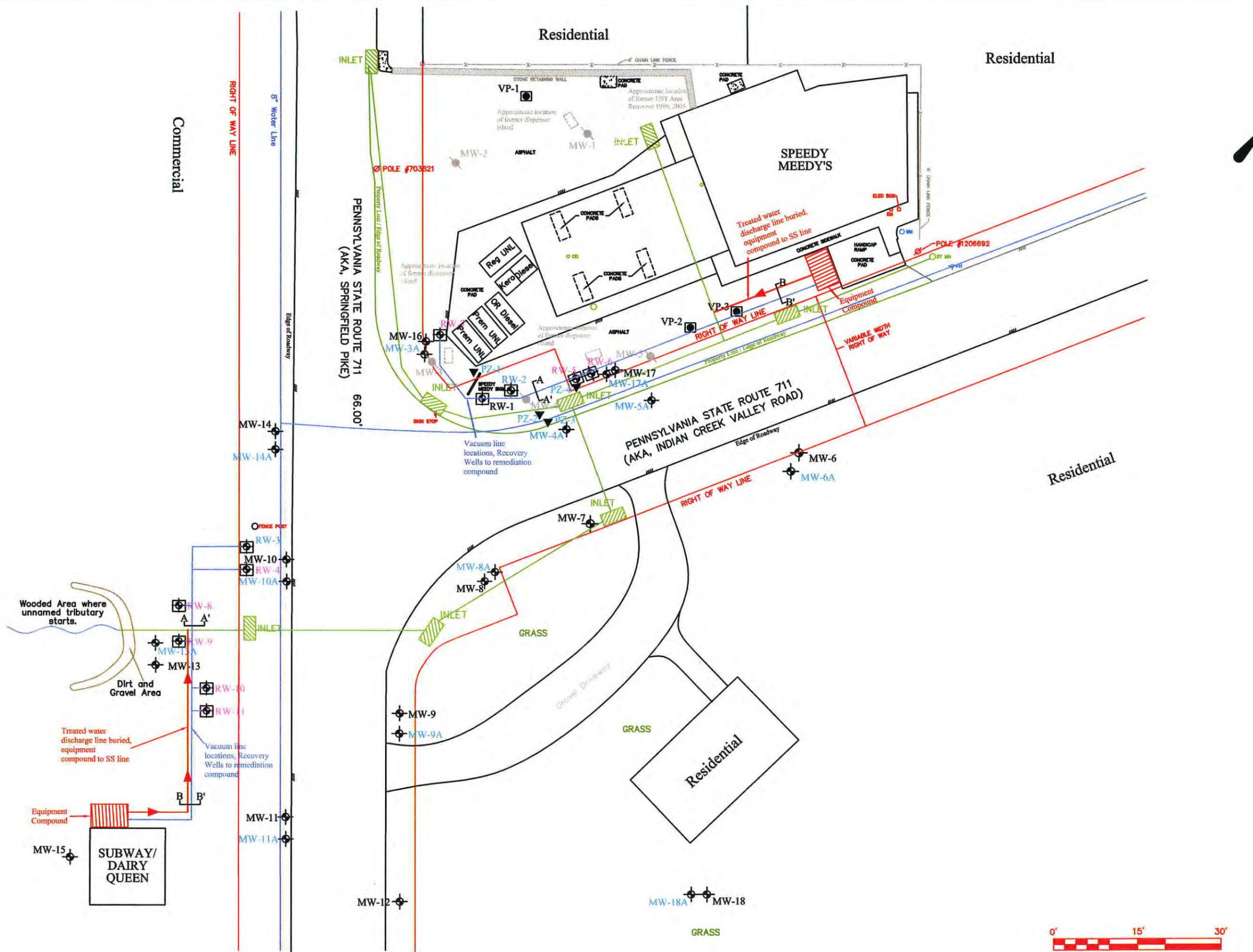
Proposed Deep & Shallow Zone
 Recovery Well Location Map
 Map w/Radius Of Influence
 Speedy Meedy's
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Notes :
 Deep Recovery Wells on Site - RW-1 & RW-5.
 Deep Recovery Wells off Site - RW-4, RW-9, and RW-11.
 Shallow Recovery Wells on Site - RW-2, RW-6, and RW-7.
 Shallow Recovery Wells off Site - RW-3, RW-8, and RW-10.





LEGEND

- Abandoned Monitoring Well Location
- Existing Deep Monitoring Well
- Existing Shallow Monitoring Well
- Vapor Point
- Existing Deep Recovery Well
- Existing Shallow Recovery Well
- Proposed Recovery Well

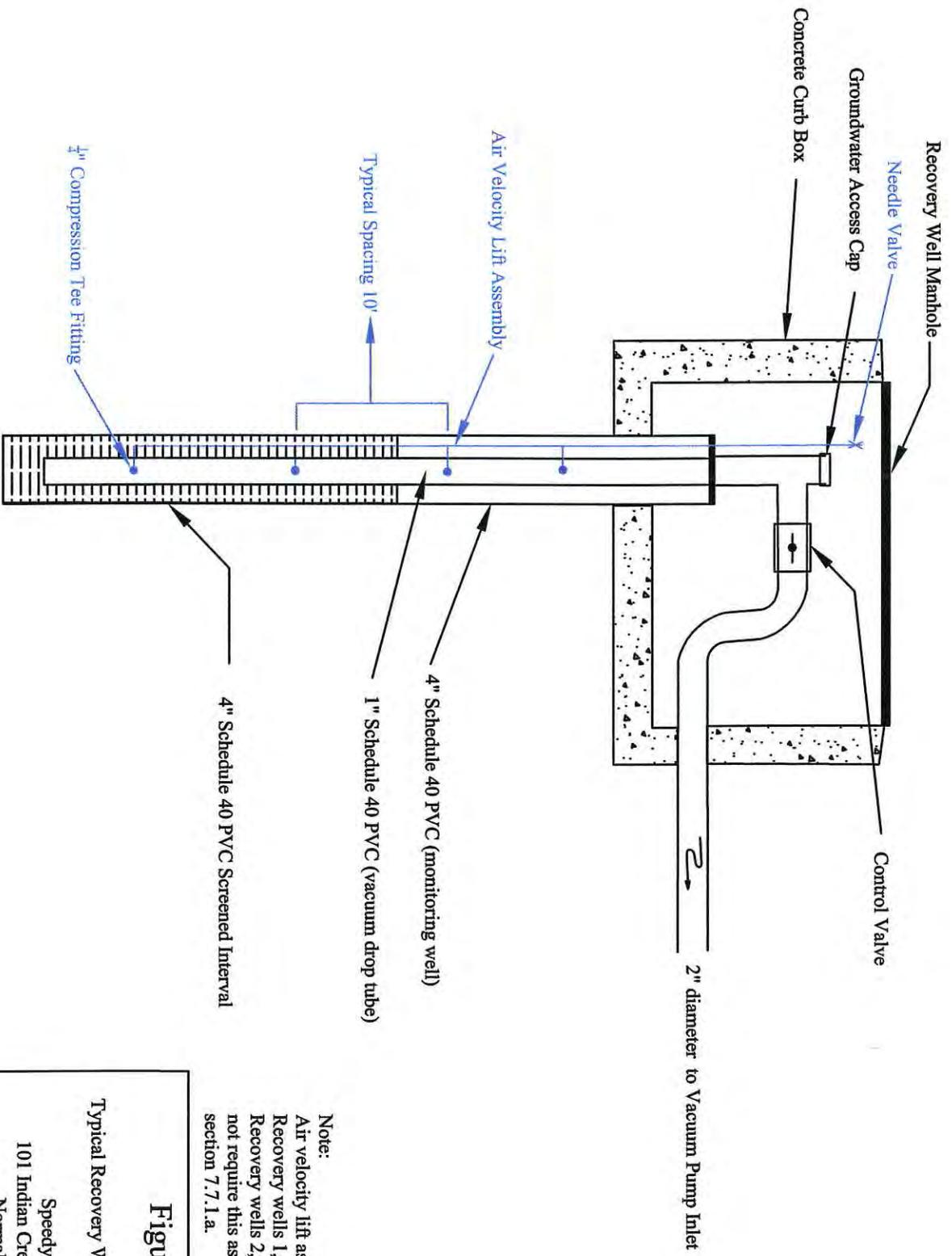
Figure 13

Remediation System
Plan View
Speedy Meedy's
101 Indian Creek Valley Road
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Note:
 Air velocity lift assembly is used on Recovery wells 1, 4, 5, 9, and 11. Recovery wells 2, 3, 6, 7, 8, and 10 will not require this assembly. Refer to section 7.7.1.a.

Figure 14

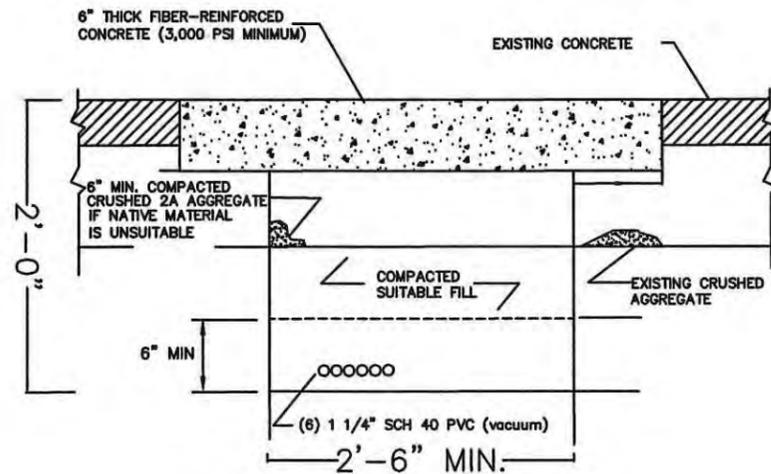
Typical Recovery Well Schematic Detail

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 101 Indian Creek Valley Road
 Normalville, PA
 PADEP Fac ID 26-81079



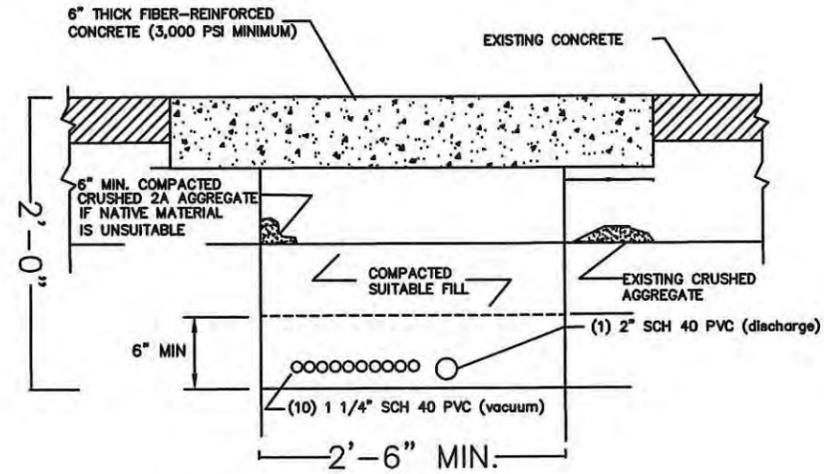
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TRENCH CROSS SECTIONS ON SITE



TRENCH CROSS SECTION A-A'

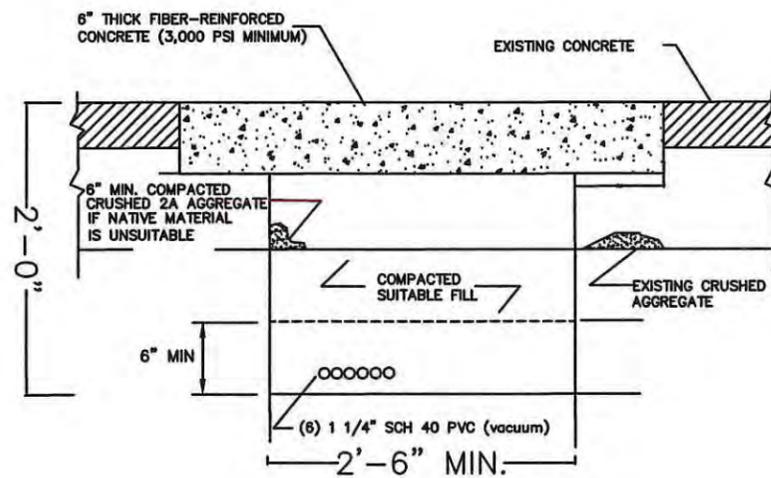
NOT TO SCALE



TRENCH CROSS SECTION B-B'

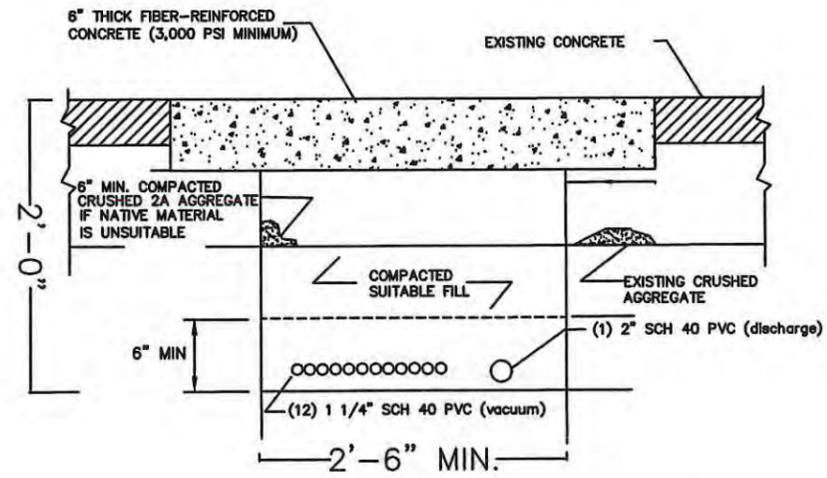
NOT TO SCALE

TRENCH CROSS SECTIONS OFF SITE



TRENCH CROSS SECTION A-A'

NOT TO SCALE



TRENCH CROSS SECTION B-B'

NOT TO SCALE

Figure 15

Trench Details

Speedy Meedy's
101 Indian Creek Valley Road
Normalville, PA

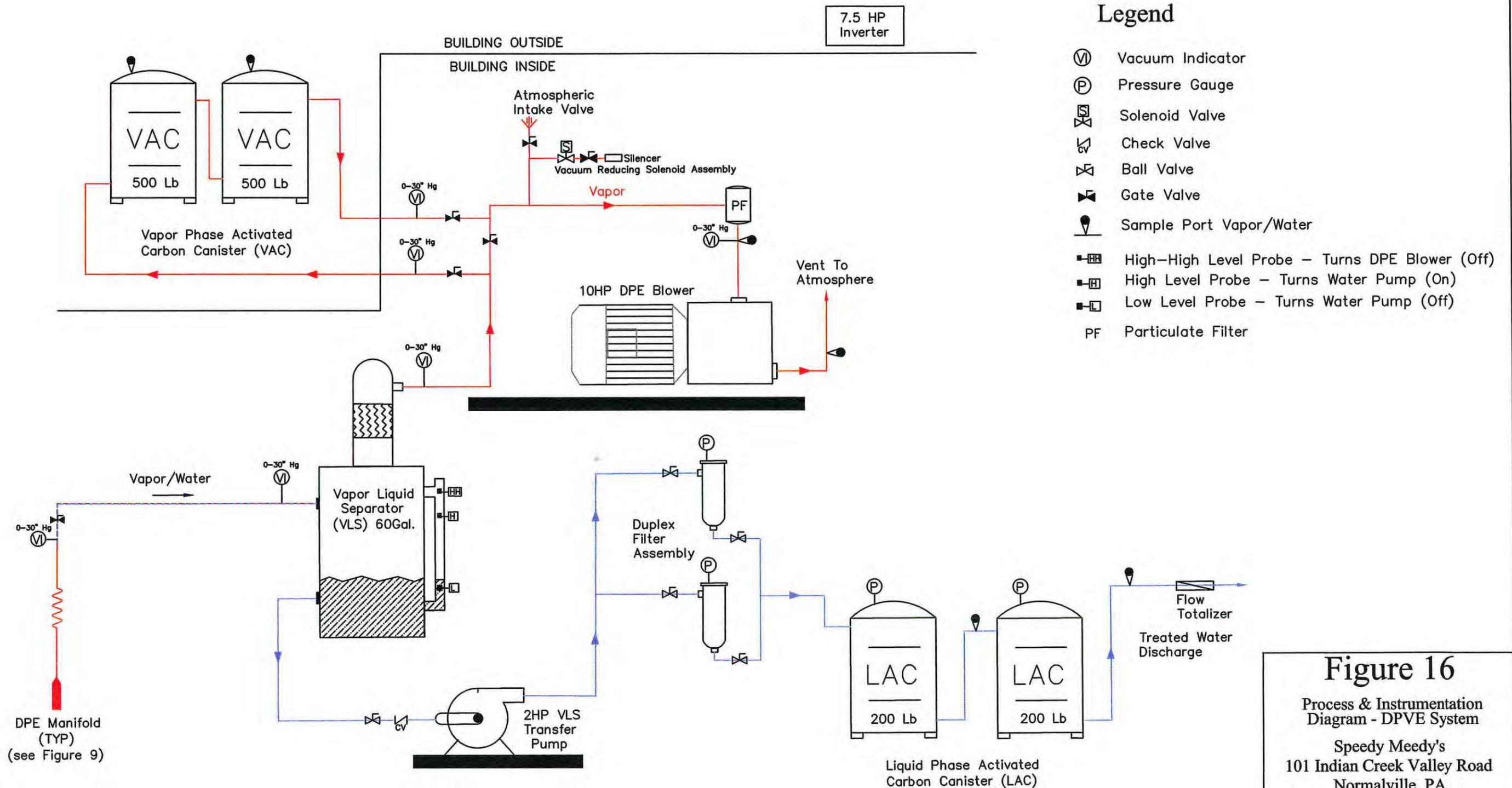
PADEP Fac ID #26-81079



52 North Urania Avenue
Greensburg, PA 15601

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Legend

- Ⓜ Vacuum Indicator
- Ⓟ Pressure Gauge
- Ⓢ Solenoid Valve
- Ⓤ Check Valve
- Ⓥ Ball Valve
- Ⓦ Gate Valve
- Ⓦ Sample Port Vapor/Water
- Ⓦ High-High Level Probe - Turns DPE Blower (Off)
- Ⓦ High Level Probe - Turns Water Pump (On)
- Ⓦ Low Level Probe - Turns Water Pump (Off)
- PF Particulate Filter

(Typical Diagram, on and off site systems.)

Figure 16

Process & Instrumentation
Diagram - DPVE System

Speedy Meedy's
101 Indian Creek Valley Road
Normalville, PA

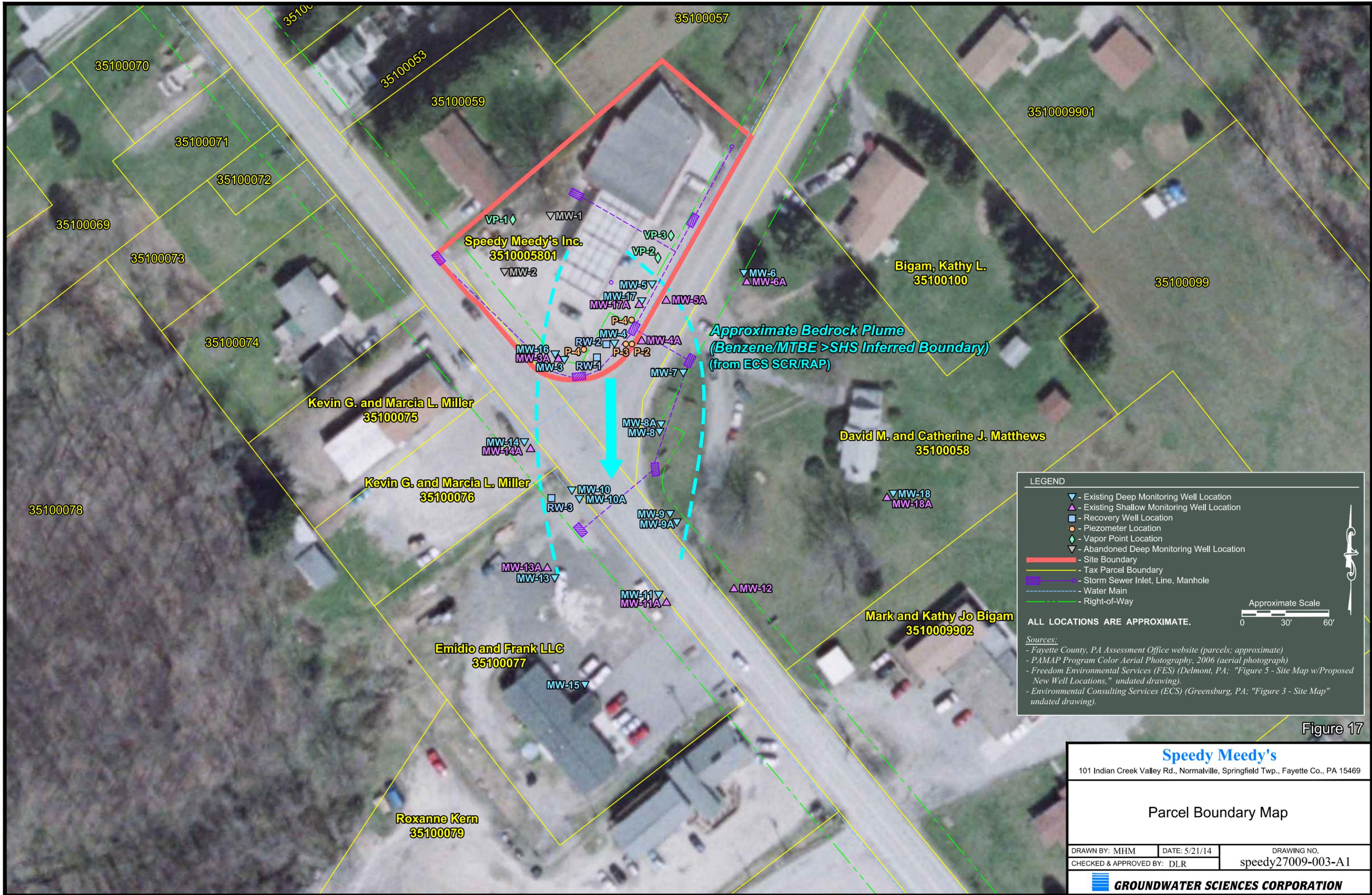
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LEGEND

- ▼ - Existing Deep Monitoring Well Location
- ▲ - Existing Shallow Monitoring Well Location
- - Recovery Well Location
- - Piezometer Location
- ◇ - Vapor Point Location
- ▽ - Abandoned Deep Monitoring Well Location
- Site Boundary
- Tax Parcel Boundary
- - Storm Sewer Inlet, Line, Manhole
- Water Main
- Right-of-Way

ALL LOCATIONS ARE APPROXIMATE.

Sources:

- Fayette County, PA Assessment Office website (parcels; approximate)
- PAMAP Program Color Aerial Photography, 2006 (aerial photograph)
- Freedom Environmental Services (FES) (Delmont, PA; "Figure 5 - Site Map w/Proposed New Well Locations," undated drawing).
- Environmental Consulting Services (ECS) (Greensburg, PA; "Figure 3 - Site Map" undated drawing).

Approximate Scale
0 30' 60'

Figure 17

Speedy Meedy's
101 Indian Creek Valley Rd., Normalville, Springfield Twp., Fayette Co., PA 15469

Parcel Boundary Map

DRAWN BY: MHM	DATE: 5/21/14	DRAWING NO.
CHECKED & APPROVED BY: DLR		speedy27009-003-A1

GROUNDWATER SCIENCES CORPORATION