

# **Source Water Protection Plan**

## **TOWN OF GRANTSVILLE**

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PWSID WV3300701

CALHOUN COUNTY

6/30/2016

Prepared by:



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**Preparer's Name:**

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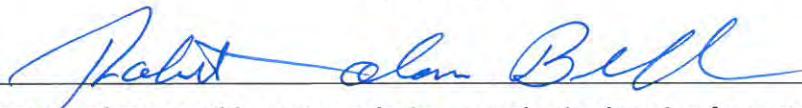
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Triad Engineering, Inc.

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**Name of Contractor(s)/Consultant(s) (if used):**

I certify the information in the source water protection plan is complete and accurate to the best of my knowledge.



**Signature of responsible party or designee authorized to sign for water utility:**

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Robert Alan Bell

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**Print Name of Authorizing Signatory (see instructions):**

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Chief Operator

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**Title of Authorizing Signatory:**

05/31/2016

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**Date of Submission (mm/dd/yyyy):**

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## SOURCE WATER PROGRAM ACRONYMS

AST	Aboveground Storage Tank
BMP	Best Management Practices
ERP	Emergency Response Plan
GWUDI	Ground Water Under the Direct Influence of Surface Water
LEPC	Local Emergency Planning Committee
OEHS/EED	Office of Environmental Health Services/Environmental Engineering Division
PE	Professional Engineer
PSSCs	Potential Source of Significant Contamination
PWSU	Public Water System Utility
RAIN	River Alert Information Network

RPDC	Regional Planning and Development Council
SDWA	Safe Drinking Water Act
SWAP	Source Water Assessment and Protection
SWAPP	Source Water Assessment and Protection Program
SWP	Source Water Protection
SWPP	Source Water Protection Plan
WARN	Water/Wastewater Agency Response Network
WHPA	Wellhead Protection Area
WHPP	Wellhead Protection Program
WSDA	Watershed Delineation Area
WVBPH	West Virginia Bureau for Public Health
WVDEP	West Virginia Department of Environmental Protection
WVDHHR	West Virginia Department of Health and Human Resources
WVDHSEM	Division of Homeland Security and Emergency Management
ZCC	Zone of Critical Concern
ZPC	Zone of Peripheral Concern

## Purpose

The goal of the West Virginia Bureau of Public Health (WVBPH) source water assessment and protection (SWAP) program is to prevent degradation of source waters which may preclude present and future uses of drinking water supplies to provide safe water in sufficient quantity to users. The most efficient way to accomplish this goal is to encourage and oversee source water protection on a local level. Many aspects of source water protection may be best addressed by engaging local stakeholders.

The intent of this document is to describe what Grantsville Water Department has done, is currently doing, and plans to do to protect its source of drinking water. Although this water system treats the water to meet federal and state drinking water standards, conventional treatment does not fully eradicate all potential contaminants and treatment that goes beyond conventional methods is often very expensive. By completing this plan, Grantsville Water Department acknowledges that implementing measures to minimize and mitigate contamination can be a relatively economical way to help ensure the safety of the drinking water.

### What are the benefits of preparing a Source Water Protection Plan?

- Fulfills the requirement for the public water utilities to complete or update their source water protection plan.
- Identifying and prioritizing potential threats to the source of drinking water; and establishing strategies to minimize the threats.
- Planning for emergency response to incidents that compromise the water supply by contamination or depletion, including how the public, state, and local agencies will be informed.
- Planning for future expansion and development, including establishing secondary sources of water.
- Ensuring conditions to provide the safest and highest quality drinking water to customers at the lowest possible cost.
- Providing more opportunities for funding to improve infrastructure, purchase land in the protection area, and other improvements to the intake or source water protection areas.

### Background: WV Source Water Assessment and Protection Program

Since 1974 the federal Safe Drinking Water Act (SDWA) has set minimum standards on the construction, operation, and quality of water provided by public water systems. In 1986, Congress amended the SDWA. A portion of those amendments were designed to protect the source water contribution areas around ground water supply wells. This program eventually became known as the Wellhead Protection Program (WHPP). The purpose of the WHPP is to prevent pollution of the source water supplying the wells.

The Safe Drinking Water Act Amendments of 1996 expanded the concept of wellhead protection to include surface water sources under the umbrella term of Source Water Protection. The amendments encourage states to establish SWAP programs to protect all public drinking water supplies. As part of this initiative states must explain how protection areas for each public water system will be delineated, how potential contaminant sources will be inventoried, and how susceptibility ratings will be established.

In 1999, the WVBPH published the West Virginia Source Water Assessment and Protection Program, which was endorsed by the United States Environmental Protection Agency. Over the next few years, WVBPH staff

completed an assessment (i.e., delineation, inventory and susceptibility analysis) for all of West Virginia's public water systems. Each public water system was sent a copy of its assessment report. Information regarding assessment reports for Grantsville Water Department can be found in **Table 1**.

## State Regulatory Requirements

On June 6, 2014, §16 1 2 and §16 1 9a of the Code of West Virginia, 1931, was reenacted and amended by adding three new sections, designated §16 1 9c, §16 1 9d and §16-1-9e. The changes to the code outlines specific requirements for public water utilities that draw water from a surface water source or a surface water influenced groundwater source.

Under the amended and new codes each existing public water utility using surface water or ground water influenced by surface water as a source must have completed or updated a source water protection plan by July 1, 2016, and must continue to update their plan every three years. Existing source water protection plans have been developed for many public water utilities in the past. If available, these plans were reviewed and considered in the development of this updated plan. Any new water system established after July 1, 2016 must submit a source water protection plan before they start to operate. A new plan is also required when there is a significant change in the potential sources of significant contamination (PSSC) within the zone of critical concern (ZCC).

The code also requires that public water utilities include details regarding PSSCs, protection measures, system capacities, contingency plans, and communication plans. Before a plan can be approved, the local health department and public will be invited to contribute information for consideration. In some instances, public water utilities may be asked to conduct independent studies of the source water protection area and specific threats to gain additional information.

## System Information

Grantsville Water Department is classified as a state regulated public utility and operates a community public water system. A community public water system is a system that regularly supplies drinking water from its own sources to at least 15 service connections used by year round residents of the area or regularly serves 25 or more people throughout the entire year. For purposes of this source water protection plan, community public water systems are also referred to as public water utilities. Information on the population served by this utility is presented in **Table 1** below.

**Table 1. Population Served by Grantsville Water Department**

<b>Administrative office location:</b>		229 Court Street	
<b>Is the system a public utility, according to the Public Service Commission rule?</b>		Grantsville, WV 26147	
<b>Date of Most Recent Source Water Assessment Report:</b>		April, 2002	
<b>Date of Most Recent Source Water Protection Plan:</b>		February, 2011	
<b>Population served directly:</b>		773	
<b>Bulk Water Purchaser Systems:</b>	<b>System Name</b>	<b>PWSID Number</b>	<b>Population</b>
	Pleasant Hill PSD	WV3300703	1392
	Mt. Zion PSD	WV3300702	1392
<b>Total Population Served by the Utility:</b>		3557	
<b>Does the utility have multiple source water protection areas (SWPAs)?</b>		no	
<b>How many SWPAs does the utility have?</b>		1	

## Water Treatment and Storage

As required, Grantsville Water Department has assessed their system (e.g., treatment capacity, storage capacity, unaccounted for water, contingency plans) to evaluate their ability to provide drinking water and protect public health. **Table 2** contains information on the water treatment methods and capacity of the utility. Information about the surface sources from which Grantsville Water Department draws water can be found in **Table 3**. If the utility draws water from any groundwater sources to blend with the surface water the information about these ground water sources can be found in **Table 4**.

**Table 2. Grantsville Water Department Water Treatment Information**

<b>Water Treatment Processes (List All Processes in Order)</b>	Coagulation Flocculation Filtering Disinfection
<b>Current Treatment Capacity (gal/day)</b>	1 MGD
<b>Current Average Production (gal/day)</b>	300000
<b>Maximum Quantity Treated and Produced (gal)</b>	480000
<b>Minimum Quantity Treated and Produced (gal)</b>	186000
<b>Average Hours of Operation</b>	10
<b>Maximum Hours of Operation in One Day</b>	15
<b>Minimum Hours of Operation in One Day</b>	6
<b>Number of Storage Tanks Maintained</b>	2
<b>Total Gallons of Treated Water Storage (gal)</b>	800,000
<b>Total Gallons of Raw Water Storage (gal)</b>	0

**Table 3. Grantsville Water Department Surface Water Sources**

Intake Name	SDWIS #	Local Name	Describe Intake	Name of Water Source	Date Constructed/Modified	Frequency of Use (Primary/ Backup/ Emergency)	Activity Status (Active/ Inactive)
Little Kanawha River	IN001	River intake	Screened intake	Little Kanawha River	9-1-99	Primary	Active

**Table 4. Grantsville Water Department Groundwater Sources**

Does the utility blend with groundwater?					NO				
Well/Spring Name	SDWIS #	Local Name	Date Constructed/Modified	Completion Report Available (Yes/No)	Well Depth (ft)	Casing Depth (ft)	Grout (Yes/No)	Frequency of Use (Primary/ Backup/ Emergency)	Activity Status (Active/ Inactive)
NA									

## Delineations

For surface water systems, delineation is the process used to identify and map the drainage basin that supplies water to a surface water intake. This area is generally referred to as the source water protection area (SWPA). All surface waters are susceptible to contamination because they are exposed at the surface and lack a protective barrier from contamination. Accidental spills, releases, sudden precipitation events that result in overland runoff, or storm sewer discharges can allow pollutants to readily enter the source water and potentially contaminate the drinking water at the intake. The SWPA for surface water is distinguished as a Watershed Delineation Area (WSDA) for planning purposes; and the Zone of Peripheral Concern (ZPC) and Zone of Critical Concern (ZCC) are defined for regulatory purposes.

The WSDA includes the entire watershed area upstream of the intake to the boundary of the State of West Virginia border or a topographic boundary. The ZCC for a public surface water supply is a corridor along streams within the watershed that warrants more detailed scrutiny due to its proximity to the surface water intake and the intake's susceptibility to potential contaminants within that corridor. The ZCC is determined using a mathematical model that accounts for stream flows, gradient and area topography. The length of the ZCC is based on a five-hour time-of-travel of water in the streams to the water intake, plus an additional one-quarter mile below the water intake. The width of the zone of critical concern is 1,000 feet measured horizontally from each bank of the principal stream and five hundred feet measured horizontally from each bank of the tributaries draining into the principal stream. Ohio River ZCC delineations are based on ORSANCO guidance and extend 25 miles above the intake and one-quarter mile below the intake. The Ohio River ZCC delineations include 1,320 feet (one-quarter mile) measured from the bank of the main stem of the Ohio River and 500 feet on tributary.

The ZPC for a public surface water supply source and for a public surface water influenced groundwater supply source is a corridor along streams within a watershed that warrants scrutiny due to its proximity to the surface water intake and the intake's susceptibility to potential contaminants within that corridor. The ZPC is determined using a mathematical model that accounts for stream flows, gradient and area topography. The length of the zone of peripheral concern is based on an additional five-hour time-of-travel of water in the streams beyond the perimeter of the zone of critical concern, which creates a protection zone of ten hours above the water intake. The width of the zone of peripheral concern is one thousand feet measured horizontally from each bank of the principal stream and five hundred feet measured horizontally from each bank of the tributaries draining into the principal stream.

For groundwater supplies there are two types of SWPA delineations: 1) wellhead delineations and 2) conjunctive delineations, which are developed for supplies identified as groundwater under the direct influence of surface water, or GWUDIs. A wellhead protection area is determined to be the area contributing to the recharge of the groundwater source (well or spring), within a five year time of travel. A conjunctive delineation combines a wellhead protection area for the hydrogeologic recharge and a connected surface area contributing to the wellhead.

Information and maps of the WSDA, ZCC, ZPC and Wellhead Protection Area for this public water supply were provided to the utility and are attached to this report. See **Appendix A. Figures**. Other information about the WSDA is shown in **Table 5**.

**Table 5. Watershed Delineation Information**

<b>Size of WSDA (Indicate units)</b>	901 Square Miles
<b>River Watershed Name (8-digit HUC)</b>	05030203
<b>Size of Zone of Critical Concern (Acres)</b>	7928 Acres
<b>Size of Zone of Peripheral Concern (Acres) (Include ZCC area)</b>	47,532 Acres
<b>Method of Delineation for Groundwater Sources</b>	N/A
<b>Area of Wellhead Protection Area (Acres)</b>	N/A

## Protection Team

One important step in preparing a source water protection plan is to organize a source water protection team who will help develop and implement the plan. The legislative rule requires that water utilities make every effort to inform and engage the public, local government, local emergency planners, the local health department and affected residents at all levels of the development of the protection plan. WVBPH recommends that the water utility invite representatives from these organizations to join the protection team, which will ensure that they are given an opportunity to contribute in all aspects of source water protection plan development. Public water utilities should document their efforts to engage representatives and provide an explanation if any local stakeholder is unable to participate. In addition, other local stakeholders may be invited to participate on the team or contribute information to be considered. These individuals may be emergency response personnel, local decision makers, business and industry representatives, land owners (of land in the protection area), and additional concerned citizens.

The administrative contact for Grantsville Water Department is responsible for assembling the protection team and ensuring that members are provided the opportunity to contribute to the development of the plan. The acting members of the Protection Team are listed in **Table 6**.

The role of the protection team members will be to contribute information to the development of the source water protection plan, review draft plans and make recommendations to ensure accuracy and completeness, and when possible contribute to implementation and maintenance of the protection plan. The protection team members are chosen as trusted representatives of the community served by the water utility and may be designated to access confidential data that contains details about the local PSSCs. The input of the protection team will be carefully considered by the water utility when making final decisions relative to the documentation and implementation of the source water protection plan.

Grantsville Water Department will be responsible for updating the source water protection plan and rely upon input from the protection team and the public to better inform their decisions. To find out how you can become involved as a participant or contributor, visit the utility website or call the utility phone number, which are provided in **Table 6**.

**Table 6. Protection Team Member and Contact Information**

Name	Representing	Title	Phone Number	Email
Linda Jarvis	Town of Grantsville	Town Council	304.354.6398	Lpjjarvis#frontier.com
Dale Cunningham	Pleasant Hill PSD	Pres. Of Pleasant Hill PSD	304.354.7752	
Patty Cottrell	Mt. Zion PSD	Sec. of Mt. Zion PSD	304.354.7799	
Rod Godfrey	Retired Army Sgm	resident	304.786.4128	godfreyrk@aol.com
Steve Whited	BD. Of Ed. Admin. MHHS	BD. Of Ed. Admin. MHHS	304.354.9244	Stephen.whited@mhhcc.com
Kathy Wood	911 Director	County Emergency Manager	304.354.9637	calhounoes@frontiernet.net
Alan Bell	Town of Grantsville	Chief Operator	304-532-3364	grantsvillewaterplant@yahoo.com
Mike Mills	Retired DEP	Retired DEP	304.354.6816	
<b>Date of first protection Team Meeting</b>		April 5, 2016		
<b>Efforts made to inform and engage local stakeholders (public, local government, local emergency planners, local health department, and affected residents) and explain absence of recommended stakeholders:</b>		Personal visits to key individuals. Public notice posted on public buildings and in the newspaper. Added to Facebook page.		

## Potential Sources of Significant Contamination

Source water protection plans should provide a complete and comprehensive list of the PSSC contained within the ZCC based upon information obtained from the WVBPH, working in cooperation with the Department of Environmental Protection (WVDEP) and the Division of Homeland Security and Emergency Management (WVDHSEM). A facility or activity is listed as a PSSC if it has the potential to release a contaminant that could potentially impact a nearby public water supply, and it does not necessarily indicate that any release has occurred.

The list of PSSCs located in the SWPA is organized into two types: 1) SWAP PSSCs, and 2) Regulated Data. SWAP PSSCs are those that have been collected and verified by the WVBPH SWAP program during previous field investigations to form the source water assessment reports and source water protection plans. Regulated PSSCs are derived from federal and state regulated databases, and may include data from WVDEP, US Environmental Protection Agency, WVDHSEM, and from state data sources.

### Confidentiality of PSSCs

A list of the PSSCs contained within the ZCC should be included in the source water protection plan. However, the exact location, characteristics and approximate quantities of contaminants shall only be made known to one or more designees of the public water utility and maintained in a confidential manner. In the event of a chemical spill, release or other related emergency, information pertaining to the contaminant shall be immediately disseminated to any emergency responders reporting to the site. The designees for Grantsville Water Department are identified in the communication planning section of the source water protection plan.

PSSC data from some agencies (ex. (WVDHSEM), WVDEP, etc.) may be restricted due to the sensitive nature of the data. Locational data will be provided to the public water utility. However, to obtain specific details regarding contaminants, (such as information included in Tier II reports), water utilities should contact the local emergency planning commission (LEPC) or agencies, directly. While the maps and lists of the PSSCs and regulated sites are to be maintained in a confidential manner, these data are provided in **Appendix A. Figures** for internal review and planning uses only.

### Local and Regional PSSCs

For the purposes of this source water protection plan, local PSSCs are those that are identified by the water utility and local stakeholders not included in the PSSCs lists distributed by the WVBPH and other agencies. Local stakeholders may identify local PSSCs for two main reasons. The first is that it is possible that threats exist from unregulated sources and land uses that have not already been inventoried and do not appear in regulated databases. For this reason each public water utility should investigate their protection area for local PSSCs. A PSSC inventory should identify all contaminant sources and land uses in the delineated ZCC. The second reason local PSSCs are identified is because public water utilities may consider expanding the PSSC inventory effort outside of the ZCC into the ZPC and WSDA if necessary to properly identify all threats that could impact the drinking water source. As the utility considers threats in the watershed they may consider collaborating with upstream communities to identify and manage regional PSSCs.

When conducting local and regional PSSC inventories, utilities should consider that some sources may be obvious like above ground storage tanks, landfills, livestock confinement areas, highway or railroad right of ways, and sewage treatment facilities. Others are harder to locate like abandoned cesspools, underground tanks, French drains, dry wells, or old dumps and mines.

Grantsville Water Department reviewed intake locations and the delineated SWPAs to verify the existence of PSSCs provided by the WVBPH and identify new PSSCs. If possible, locations of regulated sites within the SWPA were confirmed. Information on any new or updated PSSCs identified by Grantsville Water Department that do not already appear in datasets from the WVBPH can be found in **Table 7**.

**Table 7. Locally Identified Potential Sources of Significant Contamination**

PSSC Number	Map Code	Site Name	Site Description	Comments
38	I-40	HUFFMAN; J. B.	Wells: oil and gas	DRAKE; BONNIE M.
40	I-40	ALAMCO; INC.	Wells: oil and gas	SMITH
44	I-40	CNG TRANSMISSION CORP.	Wells: oil and gas	WARD; J. B.
50	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
54	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
56	I-40	CNG TRANSMISSION CORP.	Wells: oil and gas	HARRIS; L. L.; ETAL
57	I-40	OPERATOR UNKNOWN	Wells: oil and gas	FOWLER; JOHN P.
61	I-40	CNG TRANSMISSION CORP.	Wells: oil and gas	JARVIS; C. A.
64	I-40	CNG TRANSMISSION CORP.	Wells: oil and gas	KERBY; JOHN L.; ETAL
65	I-40	JARVIS; C. A.	Wells: oil and gas	SMITH; WALTER E.
70	I-40	OPERATOR UNKNOWN	Wells: oil and gas	BENNETT; ELLEN R. - HEIR
76	I-40	CRESTON OIL CORPORATION	Wells: oil and gas	HAYES; S. A.
77	I-40	EASTERN STATES OIL & GAS; INC.	Wells: oil and gas	DELONA; EMMA

PSSC Number	Map Code	Site Name	Site Description	Comments
91	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
92	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
101	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
121	I-40	YOAK GAS COMPANY	Wells: oil and gas	BENNETT; O. C.
123	I-40	JOHNSON; WILLARD C.	Wells: oil and gas	CAIN; FRANCIS E.
125	I-40	CNG TRANSMISSION CORP.	Wells: oil and gas	STUMP; SYLVESTER
141	I-40	PETRO HOLDINGS; INC.	Wells: oil and gas	RICE; S. C. B.
149	C-1	Oil Storage Tanks	Above Ground Storage Tanks	Tanks, 124"58"- "60'
150	M-5	Town of Grantsville Municipal Water Treatment Plant	Drinking Water Treatment Plants	Drinking Water Treatment Plant
167	I-40	SMITH; WALTER E.	Wells: oil and gas	ELLIOTT; C.
194	I-40	UNITED PETRO LTD	Wells: oil and gas	BENNETT; A
197	I-40	MRS. M. STUMP HEIRS	Wells: oil and gas	MORRIS; CARL R.
201	I-40	BLAZER ENERGY CORPORATION	Wells: oil and gas	SAMPSON; BRYON DEAN; ETU
202	I-40	MRS. M. STUMP HEIRS	Wells: oil and gas	MORRIS; CARL R.

PSSC Number	Map Code	Site Name	Site Description	Comments
204	I-40	MRS. M. STUMP HEIRS	Wells: oil and gas	MORRIS; CARL R.
231	I-40	LOPEZ; SANTIAGO & DORA	Wells: oil and gas	CAIN; FRANCIS E.
235	I-40	BARR; DAVID	Wells: oil and gas	SMITH; WALTER E.
243	C-30	LITTLE KANAWHA RV - Boat Ramp	Marina/boat docks	Boat Launch-COUNTY RT 7 2.5 MILES UPSTREAM FROM GRANTSVILLE
244	M-29	BRAMBLEWOOD LP	Wastewater Treatment Plant	Sewage Treatment Plant
246	M-29	open area	Wastewater Treatment Plant	OWRNPDES
261	I-40	BARR; DAVID	Wells: oil and gas	SMITH; WALTER E.
264	I-40	HARRIS; LAVERNA	Wells: oil and gas	SMITH; WALTER E.
266	I-40	UNITED PETRO LTD.	Wells: oil and gas	BURROUGHS; M. L.
275	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
277	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
281	I-40	EAST KENTUCKY ENERGY	Wells: oil and gas	DOBBINS; J. F. - HEIRS
291	I-40	HARRIS; MARY E.	Wells: oil and gas	SMITH; WALTER E.
292	I-40	R & A PRODUCTION DBA/R.LYNCH &A.ENGELKE	Wells: oil and gas	WHITE; OLA O.

PSSC Number	Map Code	Site Name	Site Description	Comments
304	I-40	CNG TRANSMISSION CORP.	Wells: oil and gas	SHOCK; VIRGINIA
310	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
311	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
316	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
322	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
327	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
328	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
330	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
331	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
332	I-40	Oil/Gas Well	Wells: oil and gas	OPERATOR UNKNOWN
338	C-1	AGST's	Above Ground Storage Tanks	rusty, abandoned above ground storage tanks
397	R-6	Pizza Barn	Septic Systems (leach field)*	Septic Tank
54	I-40	HARRIS; LAVERNA	HARRIS; LAVERNA	SMITH; WALTER E.
55	I-40	BENNETT; OFA	BENNETT; OFA	SMITH; WALTER E.
56	I-40	ROGERS & SON	ROGERS & SON	STURMS; MALLIE
57	I-40	JOHNSON; GLEN	JOHNSON; GLEN	CAIN; FRANCIS E.

PSSC Number	Map Code	Site Name	Site Description	Comments
58	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
59	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
60	I-40	HARRIS; MARY E.	HARRIS; MARY E.	SMITH; WALTER E.
61	I-40	CNG TRANSMISSION CORP.	CNG TRANSMISSION CORP.	SHOCK; VIRGINIA
62	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
63	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
64	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
65	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
66	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
67	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
68	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
69	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
70	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
71	R-06	Pizza Barn	Pizza Barn	Septic Tank

## Prioritization of Potential Threats and Management Strategies

Once the utility has identified local concerns, they must develop a management plan that identifies specific activities that will be pursued by the public water utility in cooperation and concert with the WVBPH, local health departments, local emergency responders, LEPCs, and other agencies or organizations to protect the source water from contamination.

Depending on the number identified, it may not be feasible to develop management strategies for all of the PSSCs in the SWPA. The identified PSSCs can be prioritized by potential threat to water quality, proximity to the intake(s), and local concern. The highest priority PSSCs can be addressed first in the initial management plan. Lower ranked PSSCs can be addressed in the future as time and resources allow. To assess the threat to the source water, water systems should consider confidential information about each PSSC. This information may be obtained from state or local emergency planning agencies, Tier II reports, facility owner, facility groundwater protection plans, spill prevention response plans, results of field investigations, etc.

In addition to identifying and prioritizing PSSCs within the SWPA, local source water concerns may also focus on critical areas. For the purposes of this source water protection plan, a critical area is defined as an area that is identified by local stakeholders and can lie within or outside of the ZCC. Critical areas may contain one or more PSSC(s) which would require immediate response to address a potential incident that could impact the source water.

A list of priority PSSCs was selected and ranked by the Grantsville Water Department Protection Team. This list reflects the concerns of this specific utility and may contain PSSCs not previously identified and not within the ZCC or ZPC. **Table 8** contains a description of why each critical area or PSSC is considered a threat and what management strategies the utility is either currently using or could use in the future to address each threat.

## Implementation Plan for Management Strategies

Grantsville Water Department reviewed the recommended strategies listed in their previous source water protection plan, to consider if any of them should be adopted and incorporated in this updated plan. **Table 9** provides a brief statement summarizing the status of the recommended strategies. **Table 9** also lists strategies from a previous plan that are being incorporated in this plan update.

When considering source management strategies and education and outreach strategies, this utility has considered how and when the strategies will be implemented. The initial step in implementation is to establish responsible parties and timelines to implement the strategies. The water utility, working in conjunction with the protection team members, can determine the best process for completing activities within the projected time periods. Additional meetings may be needed during the initial effort to complete activities, after which the Protection Team should consider meeting annually to review and update the Source Water Protection Plan. A system of regular updates should be included in every implementation plan.

Proposed commitments and schedules may change but should be well documented and reported to the local stakeholders. If possible, utilities should include cost estimates for strategies to better plan for implementation and possible funding opportunities. Grantsville Water Department has developed an implementation plan for priority concerns **Table 8**. The responsible team member, timeline, and potential cost of each strategy are presented in **Table 9**. Note: Because timelines may change, future plan updates should describe the status of each strategy and explain the lack of progress.

**Table 8. Priority PSSCs or Critical Areas**

PSSC or Critical Area	Priority Number	Reason for Concern
Sanitary Septic Systems, Home Aeration Units and Wastewater Treatment Systems	1	Discharge from smaller, failing sanitary systems as well as overflows from larger sanitary sewer systems located upstream of the intake can pose a possible contamination threat including fecal coliform into the source water.
Oil and Gas Wells	2	Due to the significant number of oil and gas wells and related storage tanks they are considered a high priority. Contaminants such as brine water, benzene and certain radioactive elements are used in the fracturing process and could spill.
Vandalism	3	Vandals could damage facilities, including raw water system. Water treatment plant has suffered vandalism in the past.
State Route 5 and 16	4	Sections of the roads pass through the SWPA and potential spills are a concern.
Future Development	5	Extent and type of future development, including potential impacts on source water, is not known at this time.

**Table 9. Priority PSSC Management Strategies**

PSSC or Critical Area	Management Activity	Responsible Protection Team Member	Status/Schedule	Comments	Estimated Cost
General	<p>There are 4 general management strategies for source water protection. These are incorporated in this plan update and listed below:</p> <ol style="list-style-type: none"><li>1. A tier II recommendation is to meet with county OES or local fire chief to have access to local tier II information that is confidential and maintain that going forward with at least one annual meeting. Identify tier II facilities in critical areas and reach out to them.</li><li>2. No generator – recommend doing the wiring to accept a generator. MOVRC will submit grant paperwork for a generator.</li><li>3. Build capacity to identify contaminants, BPH staff will assist. The first step is to get spill reports</li><li>4. Build communication team if possible to include more local and county entities including but not limited to: County OES/911 health department, county commission local fire department, etc.</li></ol>	Alan Bell	This work will begin in 2016		\$0 up front costs to begin these strategies.

Sanitary Septic Systems, Home Aeration Units and Wastewater Treatment Systems	<p>There were 4 management strategies recommended in the existing plan. 1 of these strategies has been accomplished. 3 of these are ongoing or continue to be a concern. These are incorporated in this plan update and listed below:</p> <ol style="list-style-type: none"> <li>1. Support study and planning of sanitary sewer system extensions and upgrades along Little Kanawha River and tributaries upstream of intake to extend service to these areas and eliminate failing septic systems, home aeration units and wastewater treatment systems and overflows from larger sanitary sewer systems.</li> <li>2. Raise awareness at city government and/or county commissions for need for source water protection to increase support for proposed sanitary sewer system extensions and upgrades.</li> <li>3. Evaluate enhanced fecal coliform testing of surface water to better identify sources of fecal coliform contamination including coordinating efforts with towns upstream of intake.</li> </ol>	Alan Bell	<p>Strategies number 1 has been implemented. Strategies number 2 and 3 have not been implemented.</p>	\$0	
Oil and Gas Wells	<p>There were 4 management strategies recommended in the existing plan. 1 of these strategies has been accomplished. 3 of these are ongoing or continue to be a concern.</p>	Alan Bell	<p>Strategies 1 and 4 have been completed. Strategies 2 and 3 are being</p>	<p>The installation of the early detection system may reduce the need for additional sampling.</p>	<p>\$20,000 for early detection monitoring system, with \$500 yearly operational</p>

	<p>These are incorporated in this plan update and listed below:</p> <ol style="list-style-type: none"> <li>1. Reviewing public information of surface water protection practices for oil and gas industry to raise PSD staff awareness of surface water protection practices of oil and gas industry (completed)</li> <li>2. Evaluate increased sampling of water quality for parameters associated with oil and gas industry to better assess whether source water quality is being impacted by oil and gas industry</li> <li>3. Evaluate installing monitoring equipment upstream of the intake are being evaluated as part of this SWPP.</li> <li>4. Maintain contact with other neighboring public water systems, to receive input on effects of anticipated Marcellus shale and gas well drilling and tract status of regulations through such organizations as WVDHHR, WVRWA, WVPSC and WVDEP.</li> <li>5. If parameters associated with oil and gas industry become problematic to water quality, consider symposium form local oil and gas industry to raise awareness of source water</li> </ol>		<p>evaluated as a part of this SWPP. Strategy 5 is not yet applicable.</p>	<p>costs. The cost for increased sampling is currently being evaluated</p>
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	protection and review regulatory requirements.				
Vandalism	<p>There were 2 management strategies recommended in the existing plan. 0 of these strategies has been accomplished. 2 of these are ongoing or continue to be a concern.</p> <p>These are incorporated in this plan update and listed below:</p> <ol style="list-style-type: none"> <li>1. Consider installing available security cameras at WTP intake.</li> <li>2. Install signage at intake, in visible places to general public identifying this as a source water area and providing a notice regarding video surveillance. Include emergency contact numbers.</li> </ol>	Alan Bell	These strategies are being evaluated by the board.		\$20,000
State Route 5 and 16	<p>There were 4 management strategies recommended in the existing plan. 2 of these strategies has been accomplished. 2 of these are ongoing or continue to be a concern.</p> <p>These are incorporated in this plan update and listed below:</p> <ol style="list-style-type: none"> <li>1. Better coordination of emergency response with local first responders, including raising awareness for the need to protect drinking water supplies.</li> <li>2. Evaluate installing signage along state routes and targeted city streets with emergency contact numbers. This</li> </ol>	Alan Bell	<p>Strategies number 1 and 3 are currently being implemented.</p> <p>Strategies number 2 and 4 have not been implemented.</p>		\$0

	<p>would also help raise awareness with motorist and truckers that they are traveling through a source water protection zone while providing them.</p> <ol style="list-style-type: none"> <li>3. Regular inspections of the roadways to identify if spillage is occurring. Maintain records of identified leaks and spills.</li> <li>4. Contact fire department and other first responders on boom availability, if any. If none (or if unsuitable), evaluate purchase of booms for in-stream spill containment.</li> </ol>				
Future Development	<p>There were 3 management strategies recommended in the existing plan. 0 of these strategies has been accomplished. 3 of these are ongoing or continue to be a concern. These are incorporated in this plan update and listed below:</p> <ol style="list-style-type: none"> <li>1. Raise awareness of city and/or county government by providing SWPA map and educational brochure, to help decision making with respect to future development.</li> <li>2. Evaluate what authority exists at city and/or county government regarding approval over development that could be a high risk to surface water resources.</li> </ol>	Alan Bell	Ongoing as part of this SWPP update		\$500

	3. Evaluate developing policy that PWS Chief Operator should comment on building permit applications.				
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## **Education and Outreach Strategies**

The goal of education and outreach is to raise awareness of the need to protect drinking water supplies and build support for implementation strategies. Education and outreach activities will also ensure that affected citizens and other local stakeholders are kept informed and provided an opportunity to contribute to the development of the source water protection plan. Grantsville Water Department has created an Education and Outreach plan that describes activities it has either already implemented or could implement in the future to keep the local community involved in protecting their source of drinking water. This information can be found in **Table 10**.

**Table 10. Education and Outreach Implementation Plan**

<b>Education and Outreach Strategy</b>	<b>Description of Activity</b>	<b>Responsible Protection Team Member</b>	<b>Status/Schedule</b>	<b>Comments</b>	<b>Estimated Cost</b>
Utilize Social Media	Use the Calhoun SWAP program Facebook page to inform residents with educational materials related to source water protection.	Rod Godfrey	This strategy is currently being utilized.		\$0
Consumer Confidence Report	A copy of the Consumer Confidence Report is kept online at CDC.gov	Alan Bell	This strategy is currently being utilized.	A link to the CCR will be posted on the Facebook page.	\$0
Educational Brochure at <a href="http://www.yourwaterourdecision.org">www.yourwaterourdecision.org</a> . This brochure building tool was prepared by the Source Water Collaborative, a partnership between local, state and federal drinking water organizations and regulatory entities including USEPA	Provide web address to public for their use.	Linda Jarvis	This strategy is currently being utilized	A link to the brochure will be posted on the Facebook page.	\$0

School Curricula	Source water protection is incorporated in the school's curriculum.	Linda Jarvis	This strategy is currently in the beginning stages. It is the system's goal to have source water protection added to the school curricula by 2017.	This strategy is currently being discussed with local schools.	\$0
Awareness of Best Management Practices and Need to Protect Drinking Water Supplies	Local first responders are to be educated about BMPs and the need to protect drinking water supplies	Alan Bell	This strategy has not yet been utilized. It is Grantsville's goal to implement this strategy by the end of 2016.		\$1,000
Signage	Use signage to inform public about the limits of the source water protection area and provide an emergency number.	Signage	This strategy has not yet utilized.		\$500

## Contingency Plan

The goal of contingency planning is to identify and document how the utility will prepare for and respond to any drinking water shortages or emergencies that may occur due to short and long term water interruption, or incidents of spill or contamination. Utilities should examine their capacity to protect their intake, treatment, and distribution system from contamination. They should also review their ability to use alternative sources and minimize water loss, as well as their ability to operate during power outages. In addition, utilities should report the feasibility of establishing an early warning monitoring system and meeting future water demands.

Isolating or diverting any possible contaminant from the intake for a public water system is an important strategy in the event of an emergency. One commonly used method of diverting contaminants from an intake is establishing booms around the intake. This can be effective, but only for contaminants that float on the surface of the water. Alternatively, utilities can choose to pump floating contaminants from the water or chemically neutralize the contaminant before it enters the treatment facility.

Public utilities using surface sources should be able to close the intake by one means or another. However, depending upon the system, methods for doing so could vary greatly from closing valves, lowering hatches or gates, raising the intake piping out of the water, or shutting down pumps. Systems should have plans in place in advance as to the best method to protect the intake and treatment facility. Utilities may benefit from turning off pumps and, if possible, closing the intake opening to prevent contaminants from entering the piping leading to the pumps. Utilities should also have a plan in place to sample raw water to identify the movement of a plume and allow for maximum pumping time before shutting down an intake (See Early Warning Monitoring System). The amount of time that an intake can remain closed depends on the water infrastructure and should be determined by the utility before an emergency occurs. The longer an intake can remain closed in such a case, the better.

Treated water storage capacity in the event of such an emergency also becomes extremely important. Storage capacity can directly determine how well a water system can respond to a contamination event and how long an intake can remain closed. Information regarding the water shortage response capability of Grantsville Water Department is provided in **Table 11**.

### Response Networks and Communication

Statewide initiatives for emergency response, including source water related incidents, are being developed. These include the West Virginia Water/Wastewater Agency Response Network (WV WARN, see <http://www.wwarn.org/>) and the Rural Water Association Emergency Response Team (see <http://www.wvrwa.org/>). Grantsville Water Department has analyzed its ability to effectively respond to emergencies and this information is provided in **Table 11**.

**Table 11. Grantsville Water Department Water Shortage Response Capability**

<b>Can the utility isolate or divert contamination from the intake or groundwater supply?</b>	No
<b>Describe the utility's capability to isolate or divert potential contaminants:</b>	None except to shut intake down

<b>Can the utility switch to an alternative water source or intake that can supply full capacity at any time?</b>	no
<b>Describe in detail the utility's capability to switch to an alternative source:</b>	No alternative source
<b>Can the utility close the water intake to prevent contamination from entering the water supply?</b>	Yes, pump shut down
<b>How long can the intake stay closed?</b>	2-days
<b>Describe the process to close the intake:</b>	Shut off pumps
<b>Describe the treated water storage capacity of the water system:</b>	675000
<b>Is the utility a member of WVRWA Emergency Response Team?</b>	yes
<b>Is the utility a member of WV-WARN?</b>	Yes
<b>List any other mutual aid agreements to provide or receive assistance in the event of an emergency:</b>	Glenville Water

### Operation During Loss of Power

This utility analyzed and examined its ability to operate effectively during a loss of power. This involved ensuring a means to supply water through treatment, storage, and distribution without creating a public health emergency. Information regarding the utility's capacity for operation during power outages is shown in **Table 12.**

**Table 12. Generator Capacity**

<b>What is the type and capacity of the generator needed to operate during a loss of power?</b>	3 phase 277/480 500KW
<b>Can the utility connect to generator at intake/wellhead? If yes, select a scenario that best describes system.</b>	Power is fed from the treatment plant- generator would not need to be connected at intake.
<b>Can the utility connect to generator at treatment facility? If yes, select a scenario that best describes system.</b>	Currently no connection point in place- wiring and connection point would have to be installed for a generator to be connected to facility.
<b>Can the utility connect to a generator in distribution system? If yes, select a scenario that best describes system.</b>	There is no need for generator to be connected to the distribution system- pumps at the treatment facility and pressure for system comes from gravity.

Does the utility have adequate fuel on hand for the generator?		NO	
What is your on-hand fuel storage and how long will it last operating at full capacity?		Gallons	Hours
		None	0
Provide a list of suppliers that could provide generators and fuel in the event of an emergency:	Supplier		Contact Name
	Generator	Walker Machinery	304.949.6400
	Generator		
	Fuel	Harris Oil Company	Fred Depue
	Fuel		304.927.2470
Does the utility test the generator(s) periodically?		No	
Does the utility routinely maintain the generator?		No	
If no scenario describing the ability to connect to generator matches the utility's system or if utility does not have ability to connect to a generator, describe plans to respond to power outages:		Wait for power to be restored.	

### Future Water Supply Needs

When planning for potential emergencies and developing contingency plans, a utility needs to not only consider their current demands for treated water but also account for likely future needs. This could mean expanding current intake sources or developing new ones in the near future. This can be an expensive and time consuming process, and any water utility should take this into account when determining emergency preparedness. Grantsville Water Department has analyzed its ability to meet future water demands at current capacity, and this information is included in **Table 13**.

**Table 13. Future Water Supply Needs for Grantsville Water Department**

Is the utility able to meet water demands with the current production capacity over the next 5 years? If so, explain how you plan to do so.	Yes
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If not, describe the circumstances and plans to increase production capacity:	NA
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## Water Loss Calculation

In any public water system there is a certain percentage of the total treated water that does not reach the customer. Some of this water is used in treatment plant processes such as back washing filters or flushing piping, but there is usually at least a small percentage that goes unaccounted for. To measure and report on this unaccounted for water, a public utility must use the same method used in the Public Service Commission's rule, *Rules for the Government of Water Utilities*, 150CSR7, section 5.6. The rule defines unaccounted for water as the volume of water introduced into the distribution system less all metered usage and all known non-metered usage which can be estimated with reasonable accuracy.

To further clarify, metered usages are most often those that are distributed to customers. Non-metered usages that are being estimated include uses such as by the fire departments for fires or training, un-metered bulk sells, flushing to maintain the distribution system, backwashing filters, and cleaning settling basins. By totaling the metered and non-metered uses the utility calculates unaccounted for water. Note: To complete annual reports submitted to the PSC, utilities typically account for known water main breaks by estimating the amount of water lost. However, for the purposes of the source water protection plan, any water lost due to leaks, even if the system is aware of how much water is lost at a main break, is not considered a use. Water lost through leaks and main breaks cannot be controlled during a water shortages or other emergencies and should be included in the calculation of percentage of water loss for purposes of the source water protection plan. The data in **Table 14** is taken from the most recently submitted Grantsville Water Department PSC Annual Report.

**Table 14. Water Loss Information**

Total Water Pumped (gal)	118824000
Total Water Purchased (gal)	0
Total Water Pumped and Purchased (gal)	118824000
Water Loss Accounted for Except Main Leaks (gal)	Mains, Plants, Filters, Flushing, etc.
	9393000
	Fire Department
	0
Back Washing	0
	Blowing Settling Basins
Total Water Loss Accounted For Except Main Leaks	9393000
Water Sold- Total Gallons (gal)	97953000

<b>Unaccounted For Lost Water (gal)</b>	10479000
<b>Water lost from main leaks (gal)</b>	0
<b>Total gallons of Unaccounted for Lost Water and Water Lost from Main Leaks (gal)</b>	10479000
<b>Total Percent Unaccounted For Water and Water Lost from Main Leaks (gal)</b>	9%
<b>If total percentage of Unaccounted for Water is greater than 15%, please describe any measures that could be taken to correct this problem:</b>	NA

### Early Warning Monitoring System

Public water utilities are required to provide an examination of the technical and economic feasibility of implementing an early warning monitoring system. Implementing an early warning monitoring system may be approached in different ways depending upon the water utility's resources and threats to the source water. A utility may install a continuous monitoring system that will provide real time information regarding water quality conditions. This would require utilities to analyze the data in order to establish what condition is indicative of a contamination event. Continuous monitoring will provide results for a predetermined set of parameters. The more parameters being monitored, the more sophisticated the monitoring equipment will be. When establishing a continuous monitoring system, the utility should consider the logistics of placing and maintaining the equipment, and receiving output data from the equipment.

Alternately, or in addition, a utility may also pull periodic grab samples on a regular basis, or in case of a reported incident. The grab samples may be analyzed for specific contaminants. A utility should examine their PSSCs to determine what chemical contaminants could pose a threat to the water source. If possible, the utility should plan in advance how those contaminants will be detected. Consideration should be given for where samples will be collected, the preservations and hold times for samples, available laboratories to analyze samples, and costs associated with the sampling event. Regardless of the type of monitoring (continuous or grab), utilities should collect samples for their source throughout the year to better understand the baseline water quality conditions and natural seasonal fluctuations. Having a baseline will help determine if changes in the water quality are indicative of a contamination event and inform the needed response.

Every utility should establish a system or process for receiving or detecting chemical threats with sufficient time to respond to protect the treatment facility and public health. All approaches to receiving and responding to an early warning should incorporate communication with facility owners and operators that pose a threat to the water quality, with state and local emergency response agencies, with surrounding water utilities, and with the public. Communication plays an important role in knowing how to interpret data and how to respond.

Grantsville Water Department has analyzed its ability to monitor for and detect potential contaminants that could impact its source water. Information regarding this utility's early warning monitoring system capabilities can be found in **Table 15** and in **Appendix B**.

**Table 15. Early Warning Monitoring System Capabilities**

<b>Does your system currently receive spill notifications from a state agency, neighboring water system, local emergency responders, or other facilities? If yes, from whom do you receive notices?</b>	Yes-DHHR Engineering Department sends email notices and calls of Spills in our area. We also hear from the Glenville Water Department, which is upstream of us. Local 911 will call if they are notified of a spill.	
<b>Are you aware of any facilities, land uses, or critical areas within your protection areas where chemical contaminants could be released or spilled?</b>	Yes	
<b>Are you prepared to detect potential contaminants if notified of a spill?</b>	No	
<b>List laboratories (and contact information) on whom you would rely to analyze water samples in case of a reported spill.</b>	<b>Laboratories</b>	
	<b>Name</b>	<b>Contact</b>
	Reic Labs	John- 304-241-5861
<b>Do you have an understanding of baseline or normal conditions for your source water quality that accounts for seasonal fluctuations?</b>	Yes	
<b>Does your utility currently monitor raw water (through continuous monitoring or periodic grab samples) at the surface water intake or from a groundwater source on a regular basis?</b>	Yes. Periodic grabs for PH and Turbidity. Daily samples for manganese, iron, hardness and alkalinity.	
<b>Provide or estimate the capital and O&amp;M costs for your current or proposed early warning system or upgraded system.</b>	<b>Capital</b>	\$20,000
	<b>Yearly O &amp; M</b>	\$500
<b>Do you serve more than 100,000 customers? If so, please describe the methods you use to monitor at the same technical levels utilized by ORSANCO.</b>	NA	
<b>Note:</b> Complete appropriate Early Warning Monitoring form for your system in Appendix B (Line 71).		

## Single Source Feasibility Study

If a public water utility's water supply plant is served by a single-source intake to a surface water source of supply or a surface water influenced source of supply, the submitted source water protection plan must also include an examination and analysis of the technical and economic feasibility of alternative sources of water to provide continued safe and reliable public water service in the event that its primary source of supply is detrimentally affected by contamination, release, spill event or other reason. These alternatives may include a secondary intake, two days of additional raw or treated water storage, an interconnection with neighboring systems, or other options identified on a local level. Note: a suitable secondary intake would draw water supplies from a substantially different location or water source.

To accomplish this requirement, utilities should examine all existing or possible alternatives and rank them by their technical, economic, and environmental feasibility. To have a consistent and complete method for ranking alternatives, WVBPH has developed a feasibility study guide (**See Instructions**). This guide provides several criteria to consider for each category, organized in a Feasibility Study Matrix. By completing the Feasibility Study Matrix, utilities will demonstrate the process used to examine the feasibility of each alternative and document scores that compare the alternatives. The Feasibility Study matrix and summary of the results are presented in an alternatives feasibility study attached as **Appendix D**.

## Communication Plan

Grantsville Water Department has also developed a Communication Plan that documents the manner in which the public water utility, working in concert with state and local emergency response agencies, shall notify the local health agencies and the public of the initial spill or contamination event and provide updated information related to any contamination or impairment of the source water supply or the system's drinking water supply. The initial notification to the public will occur in any event no later than thirty minutes after the public water system becomes aware of the spill, release, or potential contamination of the public water system. A copy of the source water protection plan and the Communication Plan has been provided to the local fire department. Grantsville Water Department will update the Communication Plan as needed to ensure contact information is up to date.

Procedures should be in place for the kinds of catastrophic spills that can reasonably be predicted at the source location or within the SWPA. The chain-of-command, notification procedures and response actions should be known by all water system employees.

The WVBPH has developed a recommended communication plan template that provides a tiered incident communication process to provide a universal system of alert levels to utilities and water system managers. The comprehensive Communication Plan for Grantsville Water Department is attached as **Appendix C** for internal review and planning purposes only.

The West Virginia Department of Environmental Protection is capable of providing expertise and assistance related to prevention, containment, and clean-up of chemical spills. The West Virginia Department of Environmental Protection Emergency Response 24-hour Phone is 1-800-642-3074. The West Virginia Department of Environmental Protection also operates an upstream distance estimator that can be used to determine the distance from a spill site to the closest public water supply surface water intake.

## **Emergency Response Short Form**

A public water utility must be prepared for any number of emergency scenarios and events that would require immediate response. It is imperative that information about key contacts, emergency services, and downstream water systems be posted and readily available in the event of an emergency. Elements of this source water protection plan, such as the contingency planning and communication plan, may contain similar information to the utility's emergency response plan. However, the emergency response plan is to be kept confidential and is not included in this source water protection plan. An Emergency Short Form is included in **Appendix C** to support the Communicate Plan by providing quick access to important information about emergency response and are to be used for internal review and planning purposes only.

## **Conclusion**

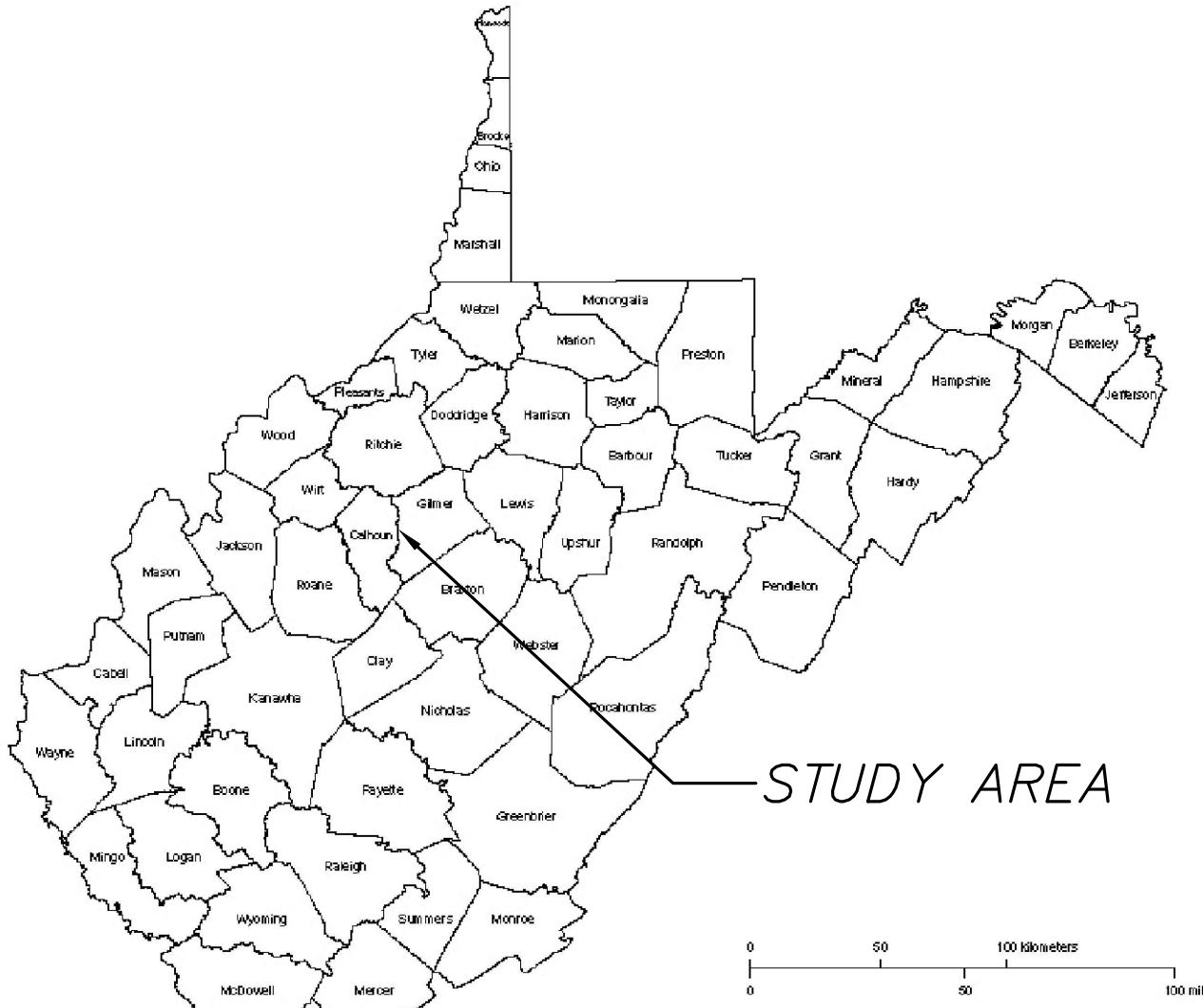
This report represents a detailed explanation of the required elements of Grantsville Water Department's Source Water Protection Plan. Any supporting documentation or other materials that the utility considers relevant to their plan can be found in **Appendix E**.

This source water protection plan is intended to help prepare community public water systems all over West Virginia to properly handle any emergencies that might compromise the quality of the system's source water supply. It is imperative that this plan is updated as often as necessary to reflect the changing circumstances within the water system. The protection team should continue to meet regularly and continue to engage the public whenever possible. Communities taking local responsibility for the quality of their source water is the most effective way to prevent contamination and protect a water system against contaminated drinking water. Community cooperation, sufficient preparation, and accurate monitoring are all critical components of this source water protection plan, and a multi-faceted approach is the only way to ensure that a system is as protected as possible against source water degradation.

## Appendix A. Figures

**Watershed Delineation Area (WSDA Map**

WEST VIRGINIA



Plotted by: imccoy 0\_04-15-0044 move source water protection plan grantsville phase 2maps\grantsville\phase 2maps\grantsville\maps.dwg

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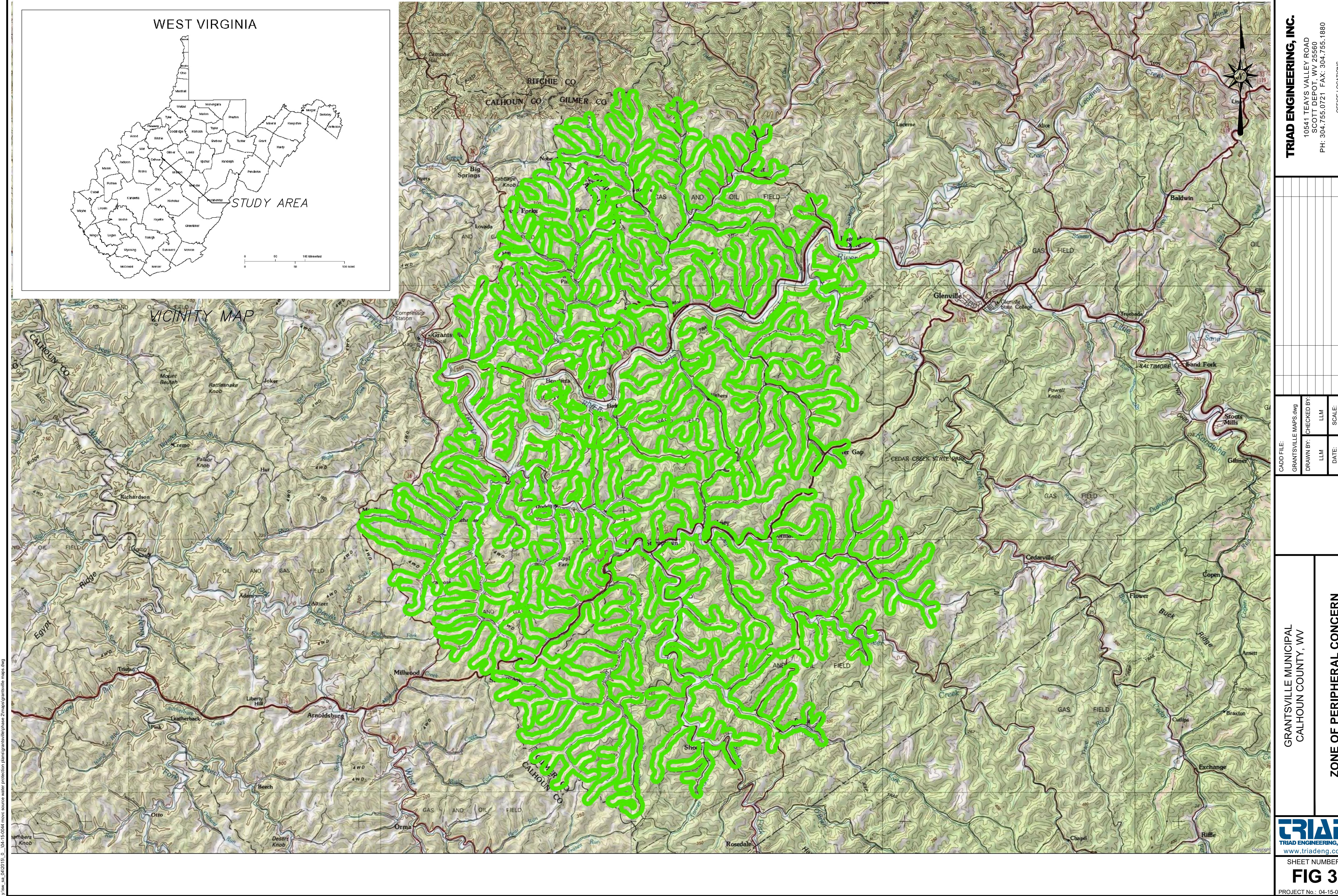
MARYLAND • PENNSYLVANIA • VIRGINIA • WEST VIRGINIA • OHIO

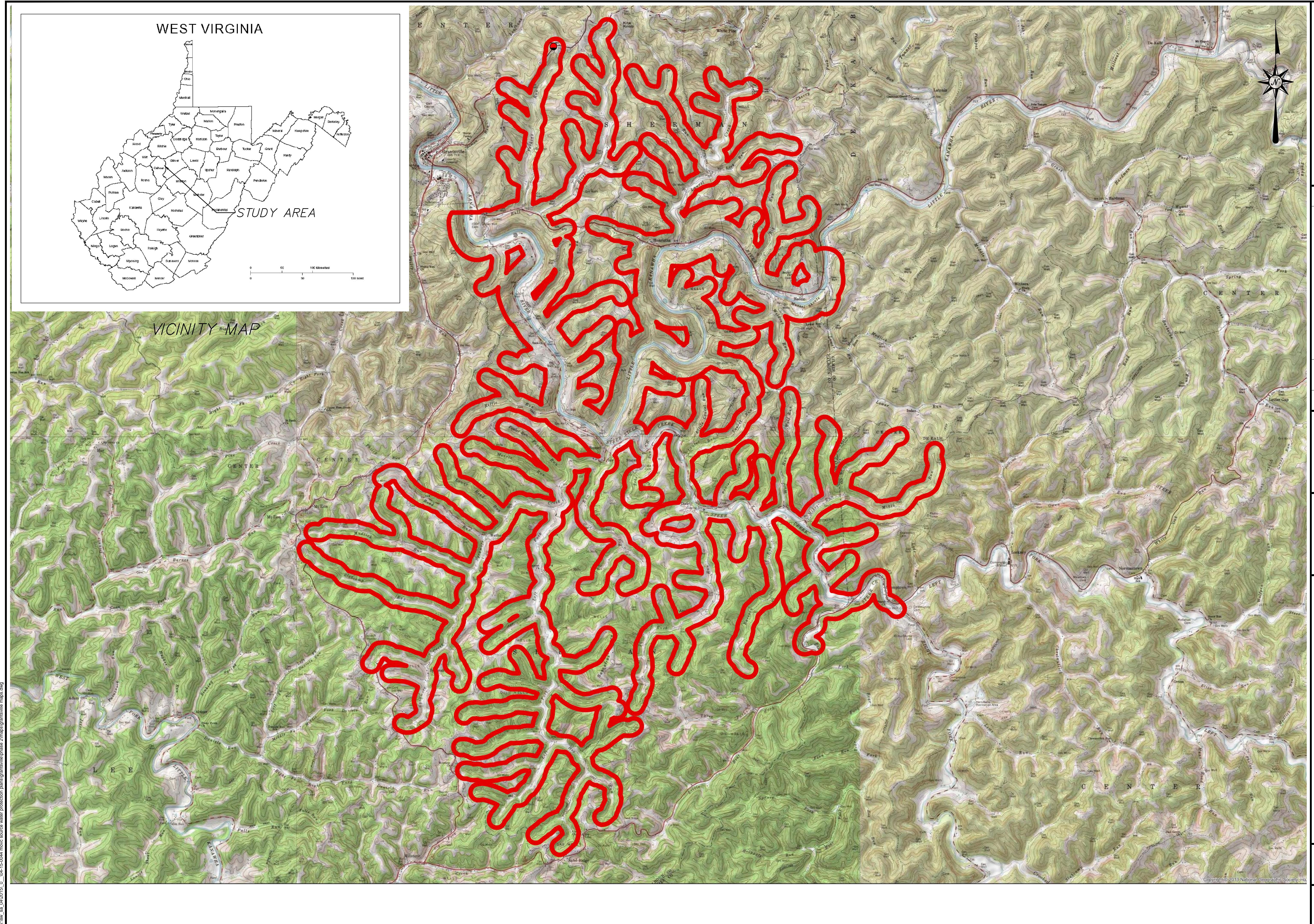
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**FIG 1**

PROJECT NO.: 04-15-0044

**Zone of Critical Concern (ZCC) and Zone of Peripheral Concern (ZPC) Map(s)**





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**FIG 2**

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## List of Locally Identified PSSCs

**FIGURE 4 - LIST OF LOCALLY IDENTIFIED POTENTIAL SOURCES OF SIGNIFICANT CONTAMINATION**

PSSC #	MAPCODE	SITE NAME	SITE DESCRIPTION	COMMENTS
38	I-40	HUFFMAN, J. B.	Wells; oil and gas	DRAKE; BONNIE M.
40	I-40	ALAMCO, INC.	Wells; oil and gas	SMITH
44	I-40	CNG TRANSMISSION CORP.	Wells; oil and gas	WARD; J. B.
50	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
54	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
56	I-40	CNG TRANSMISSION CORP.	Wells; oil and gas	HARRIS; L. L.; ETAL
57	I-40	OPERATOR UNKNOWN	Wells; oil and gas	FOWLER; JOHN P.
61	I-40	CNG TRANSMISSION CORP.	Wells; oil and gas	JARVIS; C. A.
64	I-40	CNG TRANSMISSION CORP.	Wells; oil and gas	KERBY; JOHN L.; ETAL
65	I-40	JARVIS; C. A.	Wells; oil and gas	SMITH; WALTER E.
70	I-40	OPERATOR UNKNOWN	Wells; oil and gas	BENNETT; ELLEN R. - HEIR
76	I-40	CRESTON OIL CORPORATION	Wells; oil and gas	HA YES; S. A.
77	I-40	EASTERN STATES OIL & GAS, INC.	Wells; oil and gas	DELONA; EMMA
91	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
92	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
101	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
121	I-40	YOAK GAS COMPANY	Wells; oil and gas	BENNETT; O. C.
123	I-40	JOHNSON; WILLARD C.	Wells; oil and gas	CAIN; FRANCIS E.
125	I-40	CNG TRANSMISSION CORP.	Wells; oil and gas	STUMP; SYLVESTER
141	I-40	PETRO HOLDINGS, INC.	Wells; oil and gas	RICE; S. C. B.
149	C-1	Oil Storage Tanks	Above Ground Storage Tanks	Tanks; 124' 58" x 60'
150	M-5	Town of Grantsville Municipal Water Treatment Plant	Drinking Water Treatment Plants	
167	I-40	SMITH; WALTER E.	Wells; oil and gas	ELLIOTT; C.
194	I-40	UNITED PETRO LTD	Wells; oil and gas	BENNETT; A
197	I-40	MRS. M. STUMP HEIRS	Wells; oil and gas	MORRIS; CARL R.
201	I-40	BLAZER ENERGY CORPORATION	Wells; oil and gas	SAMPSON; BRYON DEAN; ETU
202	I-40	MRS. M. STUMP HEIRS	Wells; oil and gas	MORRIS; CARL R.
204	I-40	MRS. M. STUMP HEIRS	Wells; oil and gas	MORRIS; CARL R.
231	I-40	LOPEZ; SANTIAGO & DORA	Wells; oil and gas	CAIN; FRANCIS E.
235	I-40	BARR; DAVID	Wells; oil and gas	SMITH; WALTER E.
243	C-30	LITTLE KANAWHA RV - Boat Ramp	Marina/boat docks	Boat Launch-COUNTY RT 7.2.5 MILES UPSTREAM FROM GR
244	M-29	BRAMBLEWOOD LP	Wastewater Treatment Plant	Sewage Treatment Plant
246	M-29	open area	Wastewater Treatment Plant	OWNPDES
261	I-40	BARR; DAVID	Wells; oil and gas	SMITH; WALTER E.
264	I-40	HARRIS; LAVERNA	Wells; oil and gas	SMITH; WALTER E.

PSSC #	MAPCODE	SITE NAME	SITE DESCRIPTION	COMMENTS
266	I-40	UNITED PETRO LTD.	Wells; oil and gas	BURROUGHS, M. L.
275	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
277	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
281	I-40	EAST KENTUCKY ENERGY	Wells; oil and gas	DOBBINS, J. F.; HEIRS
291	I-40	HARRIS; MARY E.	Wells; oil and gas	SMITH; WALTER E.
292	I-40	R & A PRODUCTION DBA/R LYNCH & A. ENGLEIKE	Wells; oil and gas	WHITE; OLA O.
304	I-40	CNG TRANSMISSION CORP.	Wells; oil and gas	SHOCK; VIRGINIA
310	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
311	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
316	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
322	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
327	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
328	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
330	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
331	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
332	I-40	Oil/Gas Well	Wells; oil and gas	OPERATOR UNKNOWN
338	C-1	AGST's	Above Ground Storage Tanks	rusty, abandoned above ground storage tanks
397	R-6	Pizza Barn	Septic Systems (leach field)*	Septic Tank
54	I-40	HARRIS; LAVERNA		SMITH; WALTER E.
55	I-40	BENNETT; OFA		SMITH; WALTER E.
56	I-40	ROGERS & SON		STURMS; MAULIE
57	I-40	JOHNSON; GLEN		CAIN; FRANCIS E.
58	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
59	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
60	I-40	HARRIS; MARY E.		HARRIS; MARY E.
61	I-40	CNG TRANSMISSION CORP.		CNG TRANSMISSION CORP.
62	I-40	Oil/Gas Well	Oil/Gas Well	SHOCK; VIRGINIA
63	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
64	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
65	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
66	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
67	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
68	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
69	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
70	I-40	Oil/Gas Well	Oil/Gas Well	OPERATOR UNKNOWN
71	R-06	Pizza Barn	Pizza Barn	Septic Tank

## **Map of Locally Identified PSSCs**



## **List of Regulated PSSCs**

**Figure 6 - List of Non Oil and Gas Related Regulated PSSCs within the ZCC**

PSSC #	ArcMap Layer	SITE_NAME	SITE DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
1	LUST	Dairy Products, Inc.	Leaking Tank	38.94249167	-81.00779167	Dairy Products Inc.	
90	OWNER NPDES	LITTLE KANAWHA BUS	Septic System	38.855611	-81.122194	LITTLE KANAWHA BUS	
94	OWNER NPDES	LANDSCAPING	Septic System	38.849694	-80.995306	LANDSCAPING	
182	OWNER NPDES	BEAR FORK TRUSS BRIDGE	Septic System	38.843111	-81.009694	BEAR FORK TRUSS BRIDGE	
23	OWNER NPDES	CALHOUN-GILMER CAREER CENTER	Septic System	38.838988	-81.015132	CALHOUN-GILMER CAREER CENTER	
57	OWNER NPDES	CALHOUN-GILMER CAREER CTR WATE	Septic System	38.839988	-81.004831	CALHOUN-GILMER CAREER CTR WATE	
139	OWNER NPDES	CALHOUN CNTY BD OF ED	Septic System	38.839877	-81.015138	CALHOUN CNTY BD OF ED	
163	OWNER NPDES	GRANTSVILLE - GLENVILLE ROAD	Septic System	38.908611	-81.037806	GRANTSVILLE - GLENVILLE ROAD	
46	OWNER NPDES	CHARLES A STEVENS MEM. MUNICIP	Septic System	38.908889	-81.084389	CHARLES A STEVENS MEM. MUNICIP	
75	OWNER NPDES	R.P.R. INDUSTRIES, INC.	Septic System	38.909694	-81.076111	R.P.R. INDUSTRIES, INC.	
76	OWNER NPDES	R.P.R. INDUSTRIES, INC.	Septic System	38.910087	-81.077324	R.P.R. INDUSTRIES, INC.	
91	OWNER NPDES	LOMA SURVEY	Septic System	38.911111	-81.086389	LOMA SURVEY	
151	OWNER NPDES	CALHOUN REC & DEV CNTR	Septic System	38.91092	-81.08039	CALHOUN REC & DEV CNTR	
152	OWNER NPDES	CHARLES A. STEVENS MEM. WTP	Septic System	38.901111	-81.084694	CHARLES A. STEVENS MEM. WTP	
168	OWNER NPDES	2011 PIPELINE REPLACEMENT SEGMENT	Septic System	38.921694	-81.033889	2011 PIPELINE REPLACEMENT SEGMENT	
100	OWNER NPDES	KITE KNOB WATER STORAGE TANK	Septic System	38.944389	-81.033111	KITE KNOB WATER STORAGE TANK	
5	OWNER NPDES	BF GOODRICH AEROSPACE	Septic System	38.935086	-81.079234	BF GOODRICH AEROSPACE	
18	OWNER NPDES	305TH MPCO	Septic System	38.935278	-81.077222	305TH MPCO	
77	OWNER NPDES	R.P.R. INDUSTRIES INC	Septic System	38.935278	-81.077222	R.P.R. INDUSTRIES INC	
56	NPDES OUTLET	Calhoun County Headquarters	WV DOH+MUN	38.838333	-81.108333	WVDOH	
57	NPDES OUTLET	Calhoun County Headquarters	WV DOH+MUN	38.835555	-81.109166	WVDOH	
58	NPDES OUTLET	Calhoun County Headquarters	WV DOH+MUN	38.837222	-81.108611	WVDOH	
59	NPDES OUTLET	Calhoun County Headquarters	WV DOH+MUN	38.838611	-81.108333	WVDOH	
60	NPDES OUTLET	Calhoun County Headquarters	WV DOH+MUN	38.837777	-81.109444	WVDOH	
3	NPDES OUTLET	Vannoy, Garry	Home Aeration Unit General	38.873	-81.056233	VANNOW, GARRY N	
162	NPDES OUTLET	Calhoun-Gilmer Career Ctr Water Treatment System	Water Treatment Plant (GP)	38.839888	-81.015277	CALHOUN-GILMER CAREER CENTER	
171	NPDES OUTLET	Calhoun-Gilmer Career Center	Sewage General	38.839888	-81.015277	CALHOUN CNTY BD OF ED	
6	NPDES OUTLET	Opal A Weaver	Home Aeration Unit General	38.839466	-81.073611	WEAVER, OPAL A	
90	NPDES OUTLET	Town of Grantsville	Water Treatment Plant (GP)	38.90894	-81.084638	GRANTSVILLE TOWN OF	
91	NPDES OUTLET	Town of Grantsville	Water Treatment Plant (GP)	38.909166	-81.084444	GRANTSVILLE TOWN OF	
157	NPDES OUTLET	R.P.R. INDUSTRIES, INC.	Sewage General	38.910147	-81.07753	CALHOUN REC AND DEV. CORP	
14	NPDES OUTLET	BRAMBLEWOOD LP	Sewage General	38.935175	-81.071019	BELMONT PROPERTIES INC	



**Figure 6B - List of Oil and Gas Related Regulated PSSCs within the ZCC**

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
48	AST UNIQUE	Weston ProductionDistrict	007-00000013	38.9082	-81.0316	EQT PRODUCTION COMPANY	
49	AST UNIQUE	Weston ProductionDistrict	007-00000014	38.9038	-81.0318	EQT PRODUCTION COMPANY	
61	AST UNIQUE	Weston ProductionDistrict	007-00000015	38.902	-81.0096	EQT PRODUCTION COMPANY	
63	AST UNIQUE	Weston ProductionDistrict	007-00000017	38.912	-81.0172	EQT PRODUCTION COMPANY	
104	AST UNIQUE	Weston Production District	007-00000026	38.902	-81.0218	EQT PRODUCTION COMPANY	
116	AST UNIQUE	Charity Poling #1,2,&3	007-00000037	38.856166	-81.07086	MORRIS OIL & GAS CO., INC	
117	AST UNIQUE	Poling #4 and Starcher	007-00000038	38.856166	-81.07086	MORRIS OIL & GAS CO., INC	
118	AST UNIQUE	Poling #4 and Starcher	007-00000039	38.854888	-81.07161	MORRIS OIL & GAS CO., INC	
119	AST UNIQUE	Poling #4 and Starcher	007-00000040	38.854888	-81.07161	MORRIS OIL & GAS CO., INC	
127	AST UNIQUE	S.C.B RICE #40	007-00000049	38.90936	-81.03665	POCONO ENERGY CORP.	
158	AST UNIQUE	Weston Production District	007-00000030	38.9073	-81.0151	EQT PRODUCTION COMPANY	
159	AST UNIQUE	Weston Production District	007-00000031	38.9123	-81.0312	EQT PRODUCTION COMPANY	
172	AST UNIQUE	Weston Production District	007-00000028	38.9205	-81.0153	EQT PRODUCTION COMPANY	
182	AST UNIQUE	Weston Production District	007-00000029	38.9148	-81.0088	EQT PRODUCTION COMPANY	
189	AST UNIQUE	Weston Production District	011-000000204	38.9057	-81.0099	EQT PRODUCTION COMPANY	
197	AST UNIQUE	Town of Grantsville Water Treatment	007-00000005	38.909948	-81.084122	GRANTSVILLE TOWN OF	
319	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000055	38.825133	-81.098733	MEADOWS, ZELMA MAE	
320	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000056	38.82945	-81.095967	MEADOWS, ZELMA MAE	
330	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000060	38.8332	-81.104283	MEADOWS, ZELMA MAE	
331	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000061	38.820367	-81.06835	MEADOWS, ZELMA MAE	
332	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000062	38.828767	-81.071	MEADOWS, ZELMA MAE	
333	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000063	38.831933	-81.0757	MEADOWS, ZELMA MAE	
334	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000064	38.831817	-81.067167	MEADOWS, ZELMA MAE	
336	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000065	38.840067	-81.092333	MEADOWS, ZELMA MAE	
337	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000066	38.840783	-81.0922	MEADOWS, ZELMA MAE	
343	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000072	38.816783	-81.080883	MEADOWS, ZELMA MAE	
355	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000074	38.824067	-81.07875	MEADOWS, ZELMA MAE	
356	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000075	38.824533	-81.069567	MEADOWS, ZELMA MAE	
357	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000076	38.8219	-81.081317	MEADOWS, ZELMA MAE	
358	AST UNIQUE	SHILOH RESOURCES, LLC - OFFICE	007-00000077	38.821917	-81.081283	MEADOWS, ZELMA MAE	
367	AST UNIQUE	Clarksburg Office	007-00000081	38.883643	-81.067309	EXCO RESOURCES (PA), LLC	
369	AST UNIQUE	Clarksburg Office	007-00000082	38.88784	-81.066815	EXCO RESOURCES (PA), LLC	
370	AST UNIQUE	Clarksburg Office	007-00000083	38.892078	-81.072994	EXCO RESOURCES (PA), LLC	
607	AST UNIQUE	Drilco Oil & Gas Corporation	007-000000106	38.912448	-81.030324	DRILCO OIL & GAS CORPORATION	
629	AST UNIQUE	Drilco Oil & Gas Corporation	007-000000113	38.934472	-81.06211	DRILCO OIL & GAS CORPORATION	
630	AST UNIQUE	Drilco Oil & Gas Corporation	007-000000114	38.936794	-81.066381	DRILCO OIL & GAS CORPORATION	
661	AST UNIQUE	Ritchie Petroleum Corp	007-000000532	38.81258	-81.07693	RITCHIE PETROLEUM CORP.	
662	AST UNIQUE	Ritchie Petroleum Corp	007-000000533	38.81873	-81.072969	RITCHIE PETROLEUM CORP.	
756	AST UNIQUE	E. J. HICKMAN LEASE	007-000000941	38.93631	-81.03222	PETRO HOLDINGS, INC.	
810	AST UNIQUE	Weston ProductionDistrict	007-00000138	38.9373	-81.0541	EQT PRODUCTION COMPANY	
819	AST UNIQUE	Eastridge #2	007-00000241	38.928917	-81.03005	CRESTON COMPANY, INC.	
820	AST UNIQUE	Haught #1	007-00000242	38.8515	-81.085067	GARNET GAS CORPORATION	
821	AST UNIQUE	White #2	007-00000243	38.928917	-81.03005	GARNET GAS CORPORATION	
822	AST UNIQUE	Poling #1	007-00000244	38.854483	-81.0831	GARNET GAS CORPORATION	
841	AST UNIQUE	Weston ProductionDistrict	007-00000123	38.9222	-81.0583	EQT PRODUCTION COMPANY	
850	AST UNIQUE	Weston ProductionDistrict	007-00000125	38.914	-81.0241	EQT PRODUCTION COMPANY	
854	AST UNIQUE	Weston ProductionDistrict	007-00000126	38.942	-81.0559	EQT PRODUCTION COMPANY	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
968	AST UNIQUE	Weston ProductionDistrict	007-00000096	38.9126	-81.0563	EQT PRODUCTION COMPANY	
990	AST UNIQUE	Weston ProductionDistrict	007-00000097	38.9171	-81.0197	EQT PRODUCTION COMPANY	
1065	AST UNIQUE	ROGERS AND SON OIL AND GAS	007-00000248	38.853804	-81.089089	ROGERS & SON PRODUCTION ACCT	
1066	AST UNIQUE	ROGERS AND SON OIL AND GAS	007-00000249	38.852481	-81.086152	ROGERS & SON PRODUCTION ACCT	
1259	AST UNIQUE	Calhoun County, WV Tanks	007-00000465	38.879784	-81.07584	CNX GAS COMPANY LLC	
1102	AST UNIQUE	LAURA V. ASH #5	007-00000316	38.90683	-81.03439	POCONO ENERGY CORP.	
1103	AST UNIQUE	L. V. ASH (CABOT) #3	007-00000317	38.90038	-81.02628	POCONO ENERGY CORP.	
1107	AST UNIQUE	A.M. BENNETT #2	007-00000321	38.90667	-81.01112	POCONO ENERGY CORP.	
1108	AST UNIQUE	E.B. BENNETT #1	007-00000322	38.90053	-81.01523	POCONO ENERGY CORP.	
1109	AST UNIQUE	E.B. BENNETT #2	007-00000323	38.90026	-81.0133	POCONO ENERGY CORP.	
1110	AST UNIQUE	E.B. BENNETT #3	007-00000324	38.90212	-81.01521	POCONO ENERGY CORP.	
1113	AST UNIQUE	J.B. BENNETT #2	007-00000327	38.89664	-81.01721	POCONO ENERGY CORP.	
1114	AST UNIQUE	T.J. BRAKE #7	007-00000356	38.91091	-81.02773	POCONO ENERGY CORP.	
1115	AST UNIQUE	R.G. LINN #8	007-00000357	38.90373	-81.01622	POCONO ENERGY CORP.	
1118	AST UNIQUE	MCGINTYRE,RAFFERTY #4	007-00000359	38.90326	-81.03369	POCONO ENERGY CORP.	
1120	AST UNIQUE	ELIAS POOL #2	007-00000361	38.90097	-81.03725	POCONO ENERGY CORP.	
1121	AST UNIQUE	ELIAS POOL #3	007-00000362	38.90266	-81.04025	POCONO ENERGY CORP.	
1122	AST UNIQUE	ELIAS POOL #4	007-00000363	38.90014	-81.0395	POCONO ENERGY CORP.	
1124	AST UNIQUE	W.T. RAFFERTY #10	007-00000366	38.90145	-81.02759	POCONO ENERGY CORP.	
1125	AST UNIQUE	GRANVILLE RICE #6	007-00000367	38.888779	-81.02771	POCONO ENERGY CORP.	
1126	AST UNIQUE	GRANVILLE RICE #7	007-00000368	38.89141	-81.02961	POCONO ENERGY CORP.	
1127	AST UNIQUE	GRANVILLE RICE #8	007-00000369	38.88838	-81.03261	POCONO ENERGY CORP.	
1131	AST UNIQUE	S.C.B. RICE #3	007-00000374	38.9116	-81.03468	POCONO ENERGY CORP.	
1132	AST UNIQUE	S.C.B. RICE #9	007-00000375	38.8925	-81.03696	POCONO ENERGY CORP.	
1135	AST UNIQUE	Calhoun-Gilmer Career Center	007-00000983	38.899247	-81.014358	CALHOUN-GILMER CAREER CENTER	
1142	AST UNIQUE	FRANCIS E. CAIN	007-00000154	38.860734	-81.090112	CAIN, FRANCIS E	
1162	AST UNIQUE	S&R Gas Ventures Ltd.	007-00000205	38.93099	-81.029727	S & R GAS VENTURES LTD	
1275	AST UNIQUE	Weston ProductionDistrict	007-00000130	38.9014	-81.0148	EQT PRODUCTION COMPANY	
1278	AST UNIQUE	Weston ProductionDistrict	007-00000131	38.8995	-81.0339	EQT PRODUCTION COMPANY	
1296	AST UNIQUE	STAHLNAKER ENERGY CORPORATION	007-00000330	38.935071	-81.02527	STAHLNAKER ENERGY CORPORATION	
1307	AST UNIQUE	STAHLNAKER ENERGY CORPORATION	007-00000336	38.93478	-81.073809	STAHLNAKER ENERGY CORPORATION	
1342	AST UNIQUE	Calhoun County, WV Tanks	007-00000476	38.894982	-81.040605	CNX GAS COMPANY LLC	
1368	AST UNIQUE	Weston ProductionDistrict	007-00000133	38.9373	-81.0541	EQT PRODUCTION COMPANY	
1409	AST UNIQUE	United Petro, L.t.d.	007-0000084	38.888549	-81.045386	UNITED PETRO LTD.	
1459	AST UNIQUE	STAHLNAKER ENERGY CORPORATION	007-00000339	38.809058	-81.078386	STAHLNAKER ENERGY CORPORATION	
1462	AST UNIQUE	STAHLNAKER ENERGY CORPORATION	007-00000340	38.807173	-81.073195	STAHLNAKER ENERGY CORPORATION	
1498	AST UNIQUE	W.E. STUMP #1	007-00000407	38.85254	-81.05769	PETRO HOLDINGS, INC.	
1548	AST UNIQUE	BRIGGS 1380	007-00000199	38.940436	-81.069354	HAYDEN HARPER ENERGY	
1550	AST UNIQUE	Millstone - MSO	007-00000211	38.845467	-81.088181	MOUNTAINEER STATE ENERGY INC	
1552	AST UNIQUE	Millstone - MSO	007-00000213	38.853292	-81.070359	MOUNTAINEER STATE ENERGY INC	
1553	AST UNIQUE	Millstone - MSO	007-00000214	38.853292	-81.070359	MOUNTAINEER STATE ENERGY INC	
1554	AST UNIQUE	Millstone - MSO	007-00000215	38.844058	-81.088394	MOUNTAINEER STATE ENERGY INC	
1555	AST UNIQUE	Millstone - MSO	007-00000216	38.853292	-81.070359	MOUNTAINEER STATE ENERGY INC	
1556	AST UNIQUE	Millstone - MSO	007-00000217	38.853292	-81.070359	MOUNTAINEER STATE ENERGY INC	
1557	AST UNIQUE	Millstone - MSO	007-00000218	38.842434	-81.069281	MOUNTAINEER STATE ENERGY INC	
1559	AST UNIQUE	Millstone - MSO	007-00000220	38.842434	-81.069281	MOUNTAINEER STATE ENERGY INC	
1560	AST UNIQUE	Millstone - MSO	007-00000221	38.842434	-81.069281	MOUNTAINEER STATE ENERGY INC	
1562	AST UNIQUE	Millstone - MSO	007-00000223	38.842003	-81.080929	MOUNTAINEER STATE ENERGY INC	
1563	AST UNIQUE	Millstone - MSO	007-00000224	38.844479	-81.071555	MOUNTAINEER STATE ENERGY INC	
1564	AST UNIQUE	Millstone - MSO	007-00000225	38.841417	-81.090459	MOUNTAINEER STATE ENERGY INC	
1565	AST UNIQUE	Millstone - MSO	007-00000226	38.844479	-81.071555	MOUNTAINEER STATE ENERGY INC	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
1567	AST UNIQUE	Millstone - MSO	007-000000228	38.844348	-81.089299	MOUNTAINER STATE ENERGY INC	
1568	AST UNIQUE	Millstone - MSO	007-000000229	38.842434	-81.069281	MOUNTAINER STATE ENERGY INC	
1569	AST UNIQUE	Millstone - MSO	007-000000230	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
1571	AST UNIQUE	Millstone - MSO	007-000000232	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
1573	AST UNIQUE	Millstone - MSO	007-000000234	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
1574	AST UNIQUE	Millstone - MSO	007-000000235	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
1575	AST UNIQUE	Millstone - MSO	007-000000236	38.841417	-81.090459	MOUNTAINER STATE ENERGY INC	
1576	AST UNIQUE	Millstone - MSO	007-000000237	38.849847	-81.056419	MOUNTAINER STATE ENERGY INC	
1577	AST UNIQUE	Millstone - MSO	007-000000238	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
1578	AST UNIQUE	Millstone - MSO	007-000000239	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
1579	AST UNIQUE	Millstone - MSO	007-000000240	38.863687	-81.093989	MOUNTAINER STATE ENERGY INC	
1598	AST UNIQUE	STALNAKER ENERGY CORPORATION	007-000000341	38.864357	-81.043354	STALNAKER ENERGY CORPORATION	
1599	AST UNIQUE	STALNAKER ENERGY CORPORATION	007-000000342	38.860731	-81.034889	STALNAKER ENERGY CORPORATION	
1640	AST UNIQUE	United Petro, Ltd.	007-000000247	38.880492	-81.05684	UNITED PETRO LTD.	
1641	AST UNIQUE	United Petro, Ltd.	007-000000248	38.890022	-81.046546	UNITED PETRO LTD.	
1644	AST UNIQUE	United Petro, Ltd.	007-000000246	38.886474	-81.04049023	UNITED PETRO LTD.	
1697	AST UNIQUE	STALNAKER ENERGY CORPORATION	007-000000343	38.864311	-81.038333	STALNAKER ENERGY CORPORATION	
1702	AST UNIQUE	STALNAKER ENERGY CORPORATION	007-000000345	38.861021	-81.040269	STALNAKER ENERGY CORPORATION	
1703	AST UNIQUE	STALNAKER ENERGY CORPORATION	007-000000346	38.866532	-81.01597	STALNAKER ENERGY CORPORATION	
1720	AST UNIQUE	STALNAKER ENERGY CORPORATION	007-000000347	38.854785	-81.050588	STALNAKER ENERGY CORPORATION	
2148	AST UNIQUE	United Petro, Ltd.	007-000000873	38.885695	-81.046147	UNITED PETRO LTD.	
2153	AST UNIQUE	Clara Kirby #2	007-000000874	38.884722	-81.043333	UNITED PETRO LTD.	
2154	AST UNIQUE	Holley Nester #1	007-000000875	38.837305	-81.10425	MORRIS OIL & GAS CO., INC	
2246	AST UNIQUE	L. BENNETT #1	007-000000833	38.89271	-81.010745	POCONO ENERGY CORP.	
2247	AST UNIQUE	Irving Stump	007-000000833	38.834231	-81.041966	D.P. GUNN DOZER SERVICE	
2261	AST UNIQUE	Ritchie Petroleum Corp	007-000000530	38.808351	-81.081763	ITCHIE PETROLEUM CORP.	
2312	AST UNIQUE	RAMIREZ 1357	007-000000894	38.849274	-81.050587	HAYDEN HARPER ENERGY	
2401	AST UNIQUE	Ritchie Petroleum Corp	007-000000529	38.813563	-81.072975	ITCHIE PETROLEUM CORP.	
2596	AST UNIQUE	ROUSH 1554	007-000000618	38.920858	-81.075473	HAYDEN HARPER ENERGY	
2597	AST UNIQUE	ROUSH 1553	007-000000619	38.924338	-81.077517	HAYDEN HARPER ENERGY	
2716	AST UNIQUE	ROGERS AND SON OIL AND GAS	007-000000571	38.858543	-81.004281	ROGERS & SON PRODUCTION ACCT	
3056	AST UNIQUE	ENERVEST OPERATING, LLC	007-000000626	38.91347	-81.02395	ENERVEST OPERATING L. C.	
3065	AST UNIQUE	Rogers & Son Oil & Gas	007-000000496	38.810637	-81.080982	ROGERS & SON PRODUCTION ACCT	
3068	AST UNIQUE	Rogers & Son Oil & Gas	007-000000504	38.815292	-81.086043	ROGERS & SON PRODUCTION ACCT	
3069	AST UNIQUE	Rogers & Son Oil & Gas	007-000000505	38.817177	-81.089988	ROGERS & SON PRODUCTION ACCT	
3094	AST UNIQUE	CHESEAPEAKE APPALACHIA, L.L.C.	011-000001929	38.872831	-80.993185	CHESEAPEAKE APPALACHIA, L.L.C.	
3208	AST UNIQUE	Clarksburg Office	007-000000527	38.889764	-81.07452	EXCO RESOURCES (PA), LLC	
3255	AST UNIQUE	Ritchie Petroleum Corp	007-000000578	38.826398	-81.069669	ITCHIE PETROLEUM CORP.	
3283	AST UNIQUE	H. M. AYERS #4	007-000000442	38.90765	-81.01913	POCONO ENERGY CORP.	
3328	AST UNIQUE	White #1	007-000000761	38.9331667	-81.03015	GARNET GAS CORPORATION	
3330	AST UNIQUE	Eastridge #1	007-000000765	38.9331667	-81.03015	GARNET GAS CORPORATION	
3431	AST UNIQUE	Prime Operating Company - Oil Field Facility	011-000001773	38.854479	-81.020055	PRIME OPERATING	
3532	AST UNIQUE	H. M. AYERS #2	007-00000050	38.90942	-81.02	POCONO ENERGY CORP.	
3590	AST UNIQUE	Prime Operating Company - Oil Field Facility	011-000001784	38.858833	-81.000016	PRIME OPERATING	
3591	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000691	38.854479	-81.009656	PRIME OPERATING	
3594	AST UNIQUE	Prime Operating Company - Oil Field Facility	011-000001786	38.850126	-80.998943	PRIME OPERATING	
3598	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000699	38.848965	-81.006875	PRIME OPERATING	
3641	AST UNIQUE	Prime Operating Company - Oil Field Facility	011-000001788	38.862172	-80.994494	PRIME OPERATING	
3642	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000700	38.817458	-81.059294	PRIME OPERATING	
3645	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000703	38.812309	-81.058773	PRIME OPERATING	
3651	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000708	38.810798	-81.065967	PRIME OPERATING	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
3653	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000721	38.80053	-81.0659	PRIME OPERATING	
3654	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000728	38.812309	-81.058773	PRIME OPERATING	
3657	AST UNIQUE	Prime Operating Company - Oil Field Facility	007-000000731	38.810798	-81.065967	PRIME OPERATING	
3708	AST UNIQUE	Prime Operating Company - Oil Field Facility	011-000001795	38.85448	-81.002055	PRIME OPERATING	
3716	AST UNIQUE	Clarksburg Office	007-000000554	38.887535	81.074077	EXCO RESOURCES (PA), LLC	
3921	AST UNIQUE	GRANVILLE RICE #2	007-00000046	38.89495	-81.03377	POCONO ENERGY CORP.	
3922	AST UNIQUE	S.C.B. RICE #4	007-00000047	38.91851	-81.03855	POCONO ENERGY CORP.	
3923	AST UNIQUE	J.N. GAINER #2	007-00000041	38.90302	-81.02342	POCONO ENERGY CORP.	
3924	AST UNIQUE	W.T. RAFFERTY #3	007-00000045	38.90463	-81.02557	POCONO ENERGY CORP.	
3925	AST UNIQUE	T.J. BRAKE #1	007-00000044	38.90752	-81.02506	POCONO ENERGY CORP.	
3926	AST UNIQUE	GRANVILLE RICE #11	007-000000372	38.89309	-81.03091	POCONO ENERGY CORP.	
4276	AST UNIQUE	Alliance Petroleum Corporation	007-000000977	38.933933	-81.031644	ALLIANCE PETROLEUM CORPORATION	
4375	AST UNIQUE	Alliance Petroleum Corporation	007-000000980	38.929933	-81.028576	ALLIANCE PETROLEUM CORPORATION	
177	AST CHEMICALS	Weston ProductionDistrict	007-000000013	38.9082	-81.0316	EQT PRODUCTION COMPANY	
178	AST CHEMICALS	Weston ProductionDistrict	007-000000013	38.9082	-81.0316	EQT PRODUCTION COMPANY	
179	AST CHEMICALS	Weston ProductionDistrict	007-000000013	38.9082	-81.0316	EQT PRODUCTION COMPANY	
180	AST CHEMICALS	Weston ProductionDistrict	007-000000013	38.9082	-81.0316	EQT PRODUCTION COMPANY	
181	AST CHEMICALS	Weston ProductionDistrict	007-000000014	38.9038	-81.0318	EQT PRODUCTION COMPANY	
182	AST CHEMICALS	Weston ProductionDistrict	007-000000014	38.9038	-81.0318	EQT PRODUCTION COMPANY	
183	AST CHEMICALS	Weston ProductionDistrict	007-000000014	38.9038	-81.0318	EQT PRODUCTION COMPANY	
184	AST CHEMICALS	Weston ProductionDistrict	007-000000014	38.9038	-81.0318	EQT PRODUCTION COMPANY	
231	AST CHEMICALS	Weston ProductionDistrict	007-000000015	38.902	-81.0096	EQT PRODUCTION COMPANY	
232	AST CHEMICALS	Weston ProductionDistrict	007-000000015	38.902	-81.0096	EQT PRODUCTION COMPANY	
233	AST CHEMICALS	Weston ProductionDistrict	007-000000015	38.902	-81.0096	EQT PRODUCTION COMPANY	
234	AST CHEMICALS	Weston ProductionDistrict	007-000000015	38.902	-81.0096	EQT PRODUCTION COMPANY	
239	AST CHEMICALS	Weston ProductionDistrict	007-000000017	38.912	-81.0172	EQT PRODUCTION COMPANY	
240	AST CHEMICALS	Weston ProductionDistrict	007-000000017	38.912	-81.0172	EQT PRODUCTION COMPANY	
241	AST CHEMICALS	Weston ProductionDistrict	007-000000017	38.912	-81.0172	EQT PRODUCTION COMPANY	
242	AST CHEMICALS	Weston ProductionDistrict	007-000000017	38.912	-81.0172	EQT PRODUCTION COMPANY	
403	AST CHEMICALS	Weston Production District	007-000000026	38.902	-81.0218	EQT PRODUCTION COMPANY	
404	AST CHEMICALS	Weston Production District	007-000000026	38.902	-81.0218	EQT PRODUCTION COMPANY	
405	AST CHEMICALS	Weston Production District	007-000000026	38.902	-81.0218	EQT PRODUCTION COMPANY	
406	AST CHEMICALS	Weston Production District	007-000000026	38.902	-81.0218	EQT PRODUCTION COMPANY	
441	AST CHEMICALS	Charity Poling #1,&#3	007-000000037	38.856166	-81.07086	MORRIS OIL & GAS CO., INC	
442	AST CHEMICALS	Poling #4 and Starcher	007-000000038	38.856166	-81.07086	MORRIS OIL & GAS CO., INC	
443	AST CHEMICALS	Poling #4 and Starcher	007-000000039	38.854888	-81.07161	MORRIS OIL & GAS CO., INC	
444	AST CHEMICALS	Poling #4 and Starcher	007-000000040	38.854888	-81.07161	MORRIS OIL & GAS CO., INC	
445	AST CHEMICALS	J.N. GAINER #2	007-000000041	38.90302	-81.02342	POCONO ENERGY CORP.	
446	AST CHEMICALS	J.N. GAINER #2	007-000000041	38.90302	-81.02342	POCONO ENERGY CORP.	
447	AST CHEMICALS	J.N. GAINER #2	007-000000041	38.90302	-81.02342	POCONO ENERGY CORP.	
448	AST CHEMICALS	J.N. GAINER #2	007-000000041	38.90302	-81.02342	POCONO ENERGY CORP.	
449	AST CHEMICALS	H. M. AYERS #4	007-000000042	38.90765	-81.01913	POCONO ENERGY CORP.	
450	AST CHEMICALS	H. M. AYERS #4	007-000000042	38.90765	-81.01913	POCONO ENERGY CORP.	
451	AST CHEMICALS	H. M. AYERS #4	007-000000042	38.90765	-81.01913	POCONO ENERGY CORP.	
452	AST CHEMICALS	H. M. AYERS #4	007-000000042	38.90765	-81.01913	POCONO ENERGY CORP.	
453	AST CHEMICALS	L. BENNETT #1	007-000000043	38.89271	-81.01709	POCONO ENERGY CORP.	
454	AST CHEMICALS	L. BENNETT #1	007-000000043	38.89271	-81.01709	POCONO ENERGY CORP.	
455	AST CHEMICALS	L. BENNETT #1	007-000000043	38.89271	-81.01709	POCONO ENERGY CORP.	
456	AST CHEMICALS	L. BENNETT #1	007-000000043	38.89271	-81.01709	POCONO ENERGY CORP.	
457	AST CHEMICALS	T.J. BRAKE #1	007-000000044	38.90752	-81.02506	POCONO ENERGY CORP.	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
458	AST CHEMICALS	T.J. BRAKE #1	007-000000044	38.90752	-81.02506	POCONO ENERGY CORP.	
459	AST CHEMICALS	T.J. BRAKE #1	007-000000044	38.90752	-81.02506	POCONO ENERGY CORP.	
460	AST CHEMICALS	T.J. BRAKE #1	007-000000044	38.90752	-81.02506	POCONO ENERGY CORP.	
461	AST CHEMICALS	W.T. RAFFERTY #3	007-000000045	38.90463	-81.02557	POCONO ENERGY CORP.	
462	AST CHEMICALS	W.T. RAFFERTY #3	007-000000045	38.90463	-81.02557	POCONO ENERGY CORP.	
463	AST CHEMICALS	W.T. RAFFERTY #3	007-000000045	38.90463	-81.02557	POCONO ENERGY CORP.	
464	AST CHEMICALS	W.T. RAFFERTY #3	007-000000045	38.90463	-81.02557	POCONO ENERGY CORP.	
465	AST CHEMICALS	GRANVILLE RICE #2	007-000000046	38.89495	-81.03377	POCONO ENERGY CORP.	
466	AST CHEMICALS	GRANVILLE RICE #2	007-000000046	38.89495	-81.03377	POCONO ENERGY CORP.	
467	AST CHEMICALS	GRANVILLE RICE #2	007-000000046	38.89495	-81.03377	POCONO ENERGY CORP.	
468	AST CHEMICALS	GRANVILLE RICE #2	007-000000046	38.89495	-81.03377	POCONO ENERGY CORP.	
469	AST CHEMICALS	S.C.B. RICE #4	007-000000047	38.91851	-81.03855	POCONO ENERGY CORP.	
470	AST CHEMICALS	S.C.B. RICE #4	007-000000047	38.91851	-81.03855	POCONO ENERGY CORP.	
471	AST CHEMICALS	S.C.B. RICE #4	007-000000047	38.91851	-81.03855	POCONO ENERGY CORP.	
472	AST CHEMICALS	S.C.B. RICE #4	007-000000047	38.91851	-81.03855	POCONO ENERGY CORP.	
473	AST CHEMICALS	S.C.B. RICE #5	007-000000048	38.91552	-81.03877	POCONO ENERGY CORP.	
474	AST CHEMICALS	S.C.B. RICE #5	007-000000048	38.91552	-81.03877	POCONO ENERGY CORP.	
475	AST CHEMICALS	S.C.B. RICE #5	007-000000048	38.91552	-81.03877	POCONO ENERGY CORP.	
476	AST CHEMICALS	S.C.B. RICE #5	007-000000048	38.91552	-81.03877	POCONO ENERGY CORP.	
477	AST CHEMICALS	S.C.B. RICE #10	007-000000049	38.90936	-81.03665	POCONO ENERGY CORP.	
478	AST CHEMICALS	S.C.B. RICE #10	007-000000049	38.90936	-81.03665	POCONO ENERGY CORP.	
479	AST CHEMICALS	S.C.B. RICE #10	007-000000049	38.90936	-81.03665	POCONO ENERGY CORP.	
480	AST CHEMICALS	S.C.B. RICE #10	007-000000049	38.90936	-81.03665	POCONO ENERGY CORP.	
481	AST CHEMICALS	H. M. AYERS #2	007-000000050	38.90942	-81.02	POCONO ENERGY CORP.	
482	AST CHEMICALS	H. M. AYERS #2	007-000000050	38.90942	-81.02	POCONO ENERGY CORP.	
483	AST CHEMICALS	H. M. AYERS #2	007-000000050	38.90942	-81.02	POCONO ENERGY CORP.	
484	AST CHEMICALS	H. M. AYERS #2	007-000000050	38.90942	-81.02	POCONO ENERGY CORP.	
485	AST CHEMICALS	LAURA V. ASH #1	007-000000051	38.90811	-81.02961	POCONO ENERGY CORP.	
486	AST CHEMICALS	LAURA V. ASH #1	007-000000051	38.90811	-81.02961	POCONO ENERGY CORP.	
487	AST CHEMICALS	LAURA V. ASH #1	007-000000051	38.90811	-81.02961	POCONO ENERGY CORP.	
488	AST CHEMICALS	LAURA V. ASH #1	007-000000051	38.90811	-81.02961	POCONO ENERGY CORP.	
665	AST CHEMICALS	Weston Production District	007-000000028	38.9205	-81.0153	EQT PRODUCTION COMPANY	
666	AST CHEMICALS	Weston Production District	007-000000028	38.9205	-81.0153	EQT PRODUCTION COMPANY	
667	AST CHEMICALS	Weston Production District	007-000000028	38.9205	-81.0153	EQT PRODUCTION COMPANY	
668	AST CHEMICALS	Weston Production District	007-000000028	38.9205	-81.0153	EQT PRODUCTION COMPANY	
609	AST CHEMICALS	Weston Production District	007-000000030	38.9073	-81.0151	EQT PRODUCTION COMPANY	
610	AST CHEMICALS	Weston Production District	007-000000030	38.9073	-81.0151	EQT PRODUCTION COMPANY	
611	AST CHEMICALS	Weston Production District	007-000000030	38.9073	-81.0151	EQT PRODUCTION COMPANY	
612	AST CHEMICALS	Weston Production District	007-000000030	38.9073	-81.0151	EQT PRODUCTION COMPANY	
613	AST CHEMICALS	Weston Production District	007-000000031	38.9123	-81.0312	EQT PRODUCTION COMPANY	
614	AST CHEMICALS	Weston Production District	007-000000031	38.9123	-81.0312	EQT PRODUCTION COMPANY	
615	AST CHEMICALS	Weston Production District	007-000000031	38.9123	-81.0312	EQT PRODUCTION COMPANY	
616	AST CHEMICALS	Weston Production District	007-000000031	38.9123	-81.0312	EQT PRODUCTION COMPANY	
705	AST CHEMICALS	Weston Production District	007-000000029	38.9118	-81.0088	EQT PRODUCTION COMPANY	
706	AST CHEMICALS	Weston Production District	007-000000029	38.9118	-81.0088	EQT PRODUCTION COMPANY	
707	AST CHEMICALS	Weston Production District	007-000000029	38.9148	-81.0088	EQT PRODUCTION COMPANY	
708	AST CHEMICALS	Weston Production District	007-000000029	38.9148	-81.0088	EQT PRODUCTION COMPANY	
733	AST CHEMICALS	Weston Production District	011-000000204	38.9057	-81.0099	EQT PRODUCTION COMPANY	
734	AST CHEMICALS	Weston Production District	011-000000204	38.9057	-81.0099	EQT PRODUCTION COMPANY	
735	AST CHEMICALS	Weston Production District	011-000000204	38.9057	-81.0099	EQT PRODUCTION COMPANY	
736	AST CHEMICALS	Weston Production District	011-000000204	38.9057	-81.0099	EQT PRODUCTION COMPANY	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
746	AST CHEMICALS	Town of Grantsville Water Treatment	007-00000005	38.909948	-81.084122	GRANTSVILLE TOWN OF	
1102	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000074	38.824067	-81.07875	MEADOWS, ZELMA MAE	
1103	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000075	38.824533	-81.069567	MEADOWS, ZELMA MAE	
1104	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000076	38.8219	-81.081317	MEADOWS, ZELMA MAE	
1105	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000077	38.821917	-81.081283	MEADOWS, ZELMA MAE	
1065	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000055	38.825133	-81.098733	MEADOWS, ZELMA MAE	
1066	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000056	38.82945	-81.095967	MEADOWS, ZELMA MAE	
1076	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000060	38.8332	-81.104283	MEADOWS, ZELMA MAE	
1077	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000061	38.830367	-81.06835	MEADOWS, ZELMA MAE	
1078	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000062	38.828767	-81.071	MEADOWS, ZELMA MAE	
1079	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000063	38.831933	-81.0757	MEADOWS, ZELMA MAE	
1080	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000064	38.831817	-81.067167	MEADOWS, ZELMA MAE	
1082	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000065	38.840667	-81.092333	MEADOWS, ZELMA MAE	
1083	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000066	38.840783	-81.0922	MEADOWS, ZELMA MAE	
1089	AST CHEMICALS	SHILOH RESOURCES, LLC - OFFICE	007-00000072	38.816783	-81.080883	MEADOWS, ZELMA MAE	
1114	AST CHEMICALS	Clarksburg Office	007-00000081	38.883643	-81.067309	EXCO RESOURCES (PA), LLC	
1116	AST CHEMICALS	Clarksburg Office	007-00000082	38.88784	-81.066815	EXCO RESOURCES (PA), LLC	
1117	AST CHEMICALS	Clarksburg Office	007-00000083	38.892078	-81.072994	EXCO RESOURCES (PA), LLC	
1364	AST CHEMICALS	Drilco Oil & Gas Corporation	007-00000106	38.912448	-81.030324	DRILCO OIL & GAS CORPORATION	
1402	AST CHEMICALS	Drilco Oil & Gas Corporation	007-00000113	38.934472	-81.06211	DRILCO OIL & GAS CORPORATION	
1403	AST CHEMICALS	Drilco Oil & Gas Corporation	007-00000114	38.936794	-81.066381	DRILCO OIL & GAS CORPORATION	
1434	AST CHEMICALS	Ritchie Petroleum Corp	007-00000532	38.81258	-81.07693	RITCHIE PETROLEUM CORP.	
1435	AST CHEMICALS	Ritchie Petroleum Corp	007-00000533	38.81273	-81.072969	RITCHIE PETROLEUM CORP.	
1651	AST CHEMICALS	E. J. HICKMAN LEASE	007-00000941	38.93631	-81.03222	PETRO HOLDINGS, INC.	
1652	AST CHEMICALS	E. J. HICKMAN LEASE	007-00000941	38.93631	-81.03222	PETRO HOLDINGS, INC.	
1653	AST CHEMICALS	E. J. HICKMAN LEASE	007-00000941	38.93631	-81.03222	PETRO HOLDINGS, INC.	
1654	AST CHEMICALS	E. J. HICKMAN LEASE	007-00000941	38.93631	-81.03222	PETRO HOLDINGS, INC.	
1863	AST CHEMICALS	Weston ProductionDistrict	007-00000138	38.9373	-81.0541	EQT PRODUCTION COMPANY	
1864	AST CHEMICALS	Weston ProductionDistrict	007-00000138	38.9373	-81.0541	EQT PRODUCTION COMPANY	
1865	AST CHEMICALS	Weston ProductionDistrict	007-00000138	38.9373	-81.0541	EQT PRODUCTION COMPANY	
1866	AST CHEMICALS	Weston ProductionDistrict	007-00000138	38.9373	-81.0541	EQT PRODUCTION COMPANY	
1890	AST CHEMICALS	Eastridge #2	007-00000241	38.928917	-81.030505	CRESTON COMPANY, INC.	
1891	AST CHEMICALS	Haugt #1	007-00000242	38.8515	-81.080567	GARNET GAS CORPORATION	
1892	AST CHEMICALS	White #2	007-00000243	38.928917	-81.030505	GARNET GAS CORPORATION	
1893	AST CHEMICALS	Poling #1	007-00000244	38.854483	-81.0831	GARNET GAS CORPORATION	
1937	AST CHEMICALS	Weston ProductionDistrict	007-00000123	38.9222	-81.0583	EQT PRODUCTION COMPANY	
1938	AST CHEMICALS	Weston ProductionDistrict	007-00000123	38.9222	-81.0583	EQT PRODUCTION COMPANY	
1939	AST CHEMICALS	Weston ProductionDistrict	007-00000123	38.9222	-81.0583	EQT PRODUCTION COMPANY	
1940	AST CHEMICALS	Weston ProductionDistrict	007-00000123	38.9222	-81.0583	EQT PRODUCTION COMPANY	
1973	AST CHEMICALS	Weston ProductionDistrict	007-00000125	38.914	-81.0241	EQT PRODUCTION COMPANY	
1974	AST CHEMICALS	Weston ProductionDistrict	007-00000125	38.914	-81.0241	EQT PRODUCTION COMPANY	
1975	AST CHEMICALS	Weston ProductionDistrict	007-00000125	38.914	-81.0241	EQT PRODUCTION COMPANY	
1976	AST CHEMICALS	Weston ProductionDistrict	007-00000125	38.914	-81.0241	EQT PRODUCTION COMPANY	
1989	AST CHEMICALS	Weston ProductionDistrict	007-00000126	38.942	-81.0559	EQT PRODUCTION COMPANY	
1990	AST CHEMICALS	Weston ProductionDistrict	007-00000126	38.942	-81.0559	EQT PRODUCTION COMPANY	
1991	AST CHEMICALS	Weston ProductionDistrict	007-00000126	38.942	-81.0559	EQT PRODUCTION COMPANY	
1992	AST CHEMICALS	Weston ProductionDistrict	007-00000126	38.942	-81.0559	EQT PRODUCTION COMPANY	
2335	AST CHEMICALS	Weston ProductionDistrict	007-00000096	38.9126	-81.0563	EQT PRODUCTION COMPANY	
2336	AST CHEMICALS	Weston ProductionDistrict	007-00000096	38.9126	-81.0563	EQT PRODUCTION COMPANY	
2337	AST CHEMICALS	Weston ProductionDistrict	007-00000096	38.9126	-81.0563	EQT PRODUCTION COMPANY	
2338	AST CHEMICALS	Weston ProductionDistrict	007-00000096	38.9126	-81.0563	EQT PRODUCTION COMPANY	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
2411	AST CHEMICALS	Weston ProductionDistrict	007-00000097	38.9171	-81.0197	EQT PRODUCTION COMPANY	
2412	AST CHEMICALS	Weston ProductionDistrict	007-00000097	38.9171	-81.0197	EQT PRODUCTION COMPANY	
2413	AST CHEMICALS	Weston ProductionDistrict	007-00000097	38.9171	-81.0197	EQT PRODUCTION COMPANY	
2414	AST CHEMICALS	Weston ProductionDistrict	007-00000097	38.9171	-81.0197	EQT PRODUCTION COMPANY	
2615	AST CHEMICALS	ROGERS AND SON OIL AND GAS	007-00000248	38.853804	-81.089089	ROGERS & SON PRODUCTION ACCT	
2616	AST CHEMICALS	ROGERS AND SON OIL AND GAS	007-00000249	38.852481	-81.086152	ROGERS & SON PRODUCTION ACCT	
2652	AST CHEMICALS	LAURA V. ASH #5	007-00000316	38.906883	-81.03439	POCONO ENERGY CORP.	
2653	AST CHEMICALS	LAURA V. ASH #5	007-00000316	38.906883	-81.03439	POCONO ENERGY CORP.	
2654	AST CHEMICALS	LAURA V. ASH #5	007-00000316	38.906883	-81.03439	POCONO ENERGY CORP.	
2655	AST CHEMICALS	LAURA V. ASH #5	007-00000316	38.906883	-81.03439	POCONO ENERGY CORP.	
2656	AST CHEMICALS	L.V. ASH (CABOT) #3	007-00000317	38.90038	-81.02628	POCONO ENERGY CORP.	
2657	AST CHEMICALS	L.V. ASH (CABOT) #3	007-00000317	38.90038	-81.02628	POCONO ENERGY CORP.	
2658	AST CHEMICALS	L.V. ASH (CABOT) #3	007-00000317	38.90038	-81.02628	POCONO ENERGY CORP.	
2659	AST CHEMICALS	L.V. ASH (CABOT) #3	007-00000317	38.90038	-81.02628	POCONO ENERGY CORP.	
2672	AST CHEMICALS	A.M. BENNETT #2	007-00000321	38.90667	-81.01112	POCONO ENERGY CORP.	
2673	AST CHEMICALS	A.M. BENNETT #2	007-00000321	38.90667	-81.01112	POCONO ENERGY CORP.	
2674	AST CHEMICALS	A.M. BENNETT #2	007-00000321	38.90667	-81.01112	POCONO ENERGY CORP.	
2675	AST CHEMICALS	A.M. BENNETT #2	007-00000321	38.90667	-81.01112	POCONO ENERGY CORP.	
2676	AST CHEMICALS	E.B. BENNETT #1	007-00000322	38.90053	-81.01523	POCONO ENERGY CORP.	
2677	AST CHEMICALS	E.B. BENNETT #1	007-00000322	38.90053	-81.01523	POCONO ENERGY CORP.	
2678	AST CHEMICALS	E.B. BENNETT #1	007-00000322	38.90053	-81.01523	POCONO ENERGY CORP.	
2679	AST CHEMICALS	E.B. BENNETT #1	007-00000322	38.90053	-81.01523	POCONO ENERGY CORP.	
2680	AST CHEMICALS	E.B. BENNETT #2	007-00000323	38.90026	-81.0133	POCONO ENERGY CORP.	
2681	AST CHEMICALS	E.B. BENNETT #2	007-00000323	38.90026	-81.0133	POCONO ENERGY CORP.	
2682	AST CHEMICALS	E.B. BENNETT #2	007-00000323	38.90026	-81.0133	POCONO ENERGY CORP.	
2683	AST CHEMICALS	E.B. BENNETT #2	007-00000323	38.90026	-81.0133	POCONO ENERGY CORP.	
2684	AST CHEMICALS	E.B. BENNETT #3	007-00000324	38.90212	-81.01521	POCONO ENERGY CORP.	
2685	AST CHEMICALS	E.B. BENNETT #3	007-00000324	38.90212	-81.01521	POCONO ENERGY CORP.	
2686	AST CHEMICALS	E.B. BENNETT #3	007-00000324	38.90212	-81.01521	POCONO ENERGY CORP.	
2687	AST CHEMICALS	E.B. BENNETT #3	007-00000324	38.90212	-81.01521	POCONO ENERGY CORP.	
2696	AST CHEMICALS	J.B. BENNETT #2	007-00000327	38.89664	-81.01721	POCONO ENERGY CORP.	
2697	AST CHEMICALS	J.B. BENNETT #2	007-00000327	38.89664	-81.01721	POCONO ENERGY CORP.	
2698	AST CHEMICALS	J.B. BENNETT #2	007-00000327	38.89664	-81.01721	POCONO ENERGY CORP.	
2699	AST CHEMICALS	J.B. BENNETT #2	007-00000327	38.89664	-81.01721	POCONO ENERGY CORP.	
2700	AST CHEMICALS	T.J. BRAKE #7	007-00000356	38.91091	-81.02773	POCONO ENERGY CORP.	
2701	AST CHEMICALS	T.J. BRAKE #7	007-00000356	38.91091	-81.02773	POCONO ENERGY CORP.	
2702	AST CHEMICALS	T.J. BRAKE #7	007-00000356	38.91091	-81.02773	POCONO ENERGY CORP.	
2703	AST CHEMICALS	T.J. BRAKE #7	007-00000356	38.91091	-81.02773	POCONO ENERGY CORP.	
2704	AST CHEMICALS	R.G. LINN #8	007-00000357	38.90373	-81.01622	POCONO ENERGY CORP.	
2705	AST CHEMICALS	R.G. LINN #8	007-00000357	38.90373	-81.01622	POCONO ENERGY CORP.	
2706	AST CHEMICALS	R.G. LINN #8	007-00000357	38.90373	-81.01622	POCONO ENERGY CORP.	
2707	AST CHEMICALS	R.G. LINN #8	007-00000357	38.90373	-81.01622	POCONO ENERGY CORP.	
2713	AST CHEMICALS	McINTYRE-RAFFERTY #4	007-00000359	38.90226	-81.03369	POCONO ENERGY CORP.	
2714	AST CHEMICALS	McINTYRE-RAFFERTY #4	007-00000359	38.90226	-81.03369	POCONO ENERGY CORP.	
2715	AST CHEMICALS	McINTYRE-RAFFERTY #4	007-00000359	38.90226	-81.03369	POCONO ENERGY CORP.	
2716	AST CHEMICALS	McINTYRE-RAFFERTY #4	007-00000359	38.90226	-81.03369	POCONO ENERGY CORP.	
2721	AST CHEMICALS	ELIAS POOL #2	007-00000361	38.90097	-81.03725	POCONO ENERGY CORP.	
2722	AST CHEMICALS	ELIAS POOL #2	007-00000361	38.90097	-81.03725	POCONO ENERGY CORP.	
2723	AST CHEMICALS	ELIAS POOL #2	007-00000361	38.90097	-81.03725	POCONO ENERGY CORP.	
2724	AST CHEMICALS	ELIAS POOL #2	007-00000362	38.90266	-81.04025	POCONO ENERGY CORP.	
2725	AST CHEMICALS	ELIAS POOL #3	007-00000362	38.90266	-81.04025	POCONO ENERGY CORP.	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
2726	AST CHEMICALS	ELIAS POOL #3	007-00000362	38.90266	-81.04025	POCONO ENERGY CORP.	
2727	AST CHEMICALS	ELIAS POOL #3	007-00000362	38.90266	-81.04025	POCONO ENERGY CORP.	
2728	AST CHEMICALS	ELIAS POOL #3	007-00000362	38.90266	-81.04025	POCONO ENERGY CORP.	
2729	AST CHEMICALS	ELIAS POOL #4	007-00000363	38.90014	-81.0395	POCONO ENERGY CORP.	
2730	AST CHEMICALS	ELIAS POOL #4	007-00000363	38.90014	-81.0395	POCONO ENERGY CORP.	
2731	AST CHEMICALS	ELIAS POOL #4	007-00000363	38.90014	-81.0395	POCONO ENERGY CORP.	
2732	AST CHEMICALS	ELIAS POOL #4	007-00000363	38.90014	-81.0395	POCONO ENERGY CORP.	
2741	AST CHEMICALS	W.T RAFFERTY #10	007-00000366	38.90145	-81.02759	POCONO ENERGY CORP.	
2742	AST CHEMICALS	W.T RAFFERTY #10	007-00000366	38.90145	-81.02759	POCONO ENERGY CORP.	
2743	AST CHEMICALS	W.T RAFFERTY #10	007-00000366	38.90145	-81.02759	POCONO ENERGY CORP.	
2744	AST CHEMICALS	W.T RAFFERTY #10	007-00000366	38.90145	-81.02759	POCONO ENERGY CORP.	
2745	AST CHEMICALS	GRANVILLE RICE #6	007-00000367	38.88779	-81.02771	POCONO ENERGY CORP.	
2746	AST CHEMICALS	GRANVILLE RICE #6	007-00000367	38.88779	-81.02771	POCONO ENERGY CORP.	
2747	AST CHEMICALS	GRANVILLE RICE #6	007-00000367	38.88779	-81.02771	POCONO ENERGY CORP.	
2748	AST CHEMICALS	GRANVILLE RICE #6	007-00000367	38.88779	-81.02771	POCONO ENERGY CORP.	
2749	AST CHEMICALS	GRANVILLE RICE #7	007-00000368	38.89141	-81.02961	POCONO ENERGY CORP.	
2750	AST CHEMICALS	GRANVILLE RICE #7	007-00000368	38.89141	-81.02961	POCONO ENERGY CORP.	
2751	AST CHEMICALS	GRANVILLE RICE #7	007-00000368	38.89141	-81.02961	POCONO ENERGY CORP.	
2752	AST CHEMICALS	GRANVILLE RICE #7	007-00000368	38.89141	-81.02961	POCONO ENERGY CORP.	
2753	AST CHEMICALS	GRANVILLE RICE #8	007-00000369	38.88838	-81.03261	POCONO ENERGY CORP.	
2754	AST CHEMICALS	GRANVILLE RICE #8	007-00000369	38.88838	-81.03261	POCONO ENERGY CORP.	
2755	AST CHEMICALS	GRANVILLE RICE #8	007-00000369	38.88838	-81.03261	POCONO ENERGY CORP.	
2756	AST CHEMICALS	GRANVILLE RICE #8	007-00000369	38.88838	-81.03261	POCONO ENERGY CORP.	
2765	AST CHEMICALS	GRANVILLE RICE #11	007-00000372	38.89309	-81.03091	POCONO ENERGY CORP.	
2766	AST CHEMICALS	GRANVILLE RICE #11	007-00000372	38.89309	-81.03091	POCONO ENERGY CORP.	
2767	AST CHEMICALS	GRANVILLE RICE #11	007-00000372	38.89309	-81.03091	POCONO ENERGY CORP.	
2768	AST CHEMICALS	GRANVILLE RICE #11	007-00000372	38.89309	-81.03091	POCONO ENERGY CORP.	
2773	AST CHEMICALS	S.C.B. RICE #3	007-00000374	38.9116	-81.03468	POCONO ENERGY CORP.	
2774	AST CHEMICALS	S.C.B. RICE #3	007-00000374	38.9116	-81.03468	POCONO ENERGY CORP.	
2775	AST CHEMICALS	S.C.B. RICE #3	007-00000374	38.9116	-81.03468	POCONO ENERGY CORP.	
2776	AST CHEMICALS	S.C.B. RICE #3	007-00000374	38.9116	-81.03468	POCONO ENERGY CORP.	
2777	AST CHEMICALS	S.C.B. RICE #9	007-00000375	38.8925	-81.03696	POCONO ENERGY CORP.	
2778	AST CHEMICALS	S.C.B. RICE #9	007-00000375	38.8925	-81.03696	POCONO ENERGY CORP.	
2779	AST CHEMICALS	S.C.B. RICE #9	007-00000375	38.8925	-81.03696	POCONO ENERGY CORP.	
2780	AST CHEMICALS	S.C.B. RICE #9	007-00000375	38.8925	-81.03696	POCONO ENERGY CORP.	
2786	AST CHEMICALS	Calhoun-Gilmer Career Center	007-00000983	38.899247	-81.014358	CALHOUN-GILMER CAREER CENTER	
2795	AST CHEMICALS	FRANCIS E. CAIN	007-00000154	38.860734	-81.090112	CAIN, FRANCIS E	
2815	AST CHEMICALS	S&R Gas Ventures Ltd.	007-00000205	38.9309	-81.029727	S & R GAS VENTURES LTD	
3039	AST CHEMICALS	Weston ProductionDistrict	007-00000130	38.9014	-81.01048	EQT PRODUCTION COMPANY	
3040	AST CHEMICALS	Weston ProductionDistrict	007-00000130	38.9014	-81.01048	EQT PRODUCTION COMPANY	
3041	AST CHEMICALS	Weston ProductionDistrict	007-00000130	38.9014	-81.01048	EQT PRODUCTION COMPANY	
3042	AST CHEMICALS	Weston ProductionDistrict	007-00000130	38.9014	-81.01048	EQT PRODUCTION COMPANY	
3051	AST CHEMICALS	Weston ProductionDistrict	007-00000131	38.8995	-81.0339	EQT PRODUCTION COMPANY	
3052	AST CHEMICALS	Weston ProductionDistrict	007-00000131	38.8995	-81.0339	EQT PRODUCTION COMPANY	
3053	AST CHEMICALS	Weston ProductionDistrict	007-00000131	38.8995	-81.0339	EQT PRODUCTION COMPANY	
3054	AST CHEMICALS	Weston ProductionDistrict	007-00000131	38.8995	-81.0339	EQT PRODUCTION COMPANY	
2978	AST CHEMICALS	Calhoun County, WV Tanks	007-00000465	38.879784	-81.07584	CNX GAS COMPANY LLC	
3091	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000330	38.935071	-81.02527	STALNAKER ENERGY CORPORATION	
3092	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000330	38.935071	-81.02527	STALNAKER ENERGY CORPORATION	
3108	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000336	38.93478	-81.073809	STALNAKER ENERGY CORPORATION	
3152	AST CHEMICALS	Calhoun County, WV Tanks	007-00000476	38.894982	-81.040065	CNX GAS COMPANY LLC	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
3230	AST CHEMICALS	Weston ProductionDistrict	007-00000133	38.9373	-81.0541	EQT PRODUCTION COMPANY	
3231	AST CHEMICALS	Weston ProductionDistrict	007-00000133	38.9373	-81.0541	EQT PRODUCTION COMPANY	
3232	AST CHEMICALS	Weston ProductionDistrict	007-00000133	38.9373	-81.0541	EQT PRODUCTION COMPANY	
3233	AST CHEMICALS	Weston ProductionDistrict	007-00000133	38.9373	-81.0541	EQT PRODUCTION COMPANY	
3642	AST CHEMICALS	United Petro, Ltd.	007-00000247	38.880492	-81.050684	UNITED PETRO LTD.	
3643	AST CHEMICALS	United Petro, Ltd.	007-00000247	38.880492	-81.050684	UNITED PETRO LTD.	
3644	AST CHEMICALS	United Petro, Ltd.	007-00000245	38.890022	-81.046546	UNITED PETRO LTD.	
3645	AST CHEMICALS	United Petro, Ltd.	007-00000245	38.890022	-81.046546	UNITED PETRO LTD.	
3648	AST CHEMICALS	United Petro, Ltd.	007-00000246	38.886472	-81.049023	UNITED PETRO LTD.	
3649	AST CHEMICALS	United Petro, Ltd.	007-00000246	38.886472	-81.049023	UNITED PETRO LTD.	
3326	AST CHEMICALS	United Petro, Ltd.	007-00000884	38.888549	-81.045386	UNITED PETRO LTD.	
3327	AST CHEMICALS	United Petro, Ltd.	007-00000884	38.888549	-81.045386	UNITED PETRO LTD.	
3392	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000339	38.809058	-81.078386	STALNAKER ENERGY CORPORATION	
3393	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000339	38.809058	-81.078386	STALNAKER ENERGY CORPORATION	
3396	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000340	38.807173	-81.073195	STALNAKER ENERGY CORPORATION	
3397	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000340	38.807173	-81.073195	STALNAKER ENERGY CORPORATION	
3436	AST CHEMICALS	W. E. STUMP #1	007-00000407	38.85554	-81.05769	PETRO HOLDINGS, INC.	
3437	AST CHEMICALS	W. E. STUMP #1	007-00000407	38.85554	-81.05769	PETRO HOLDINGS, INC.	
3438	AST CHEMICALS	W. E. STUMP #1	007-00000407	38.85554	-81.05769	PETRO HOLDINGS, INC.	
3439	AST CHEMICALS	W. E. STUMP #1	007-00000407	38.85554	-81.05769	PETRO HOLDINGS, INC.	
3530	AST CHEMICALS	BRIGGS 1380	007-00000199	38.940436	-81.069354	HAYDEN HARPER ENERGY	
3532	AST CHEMICALS	Millstone - MSO	007-00000211	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
3534	AST CHEMICALS	Millstone - MSO	007-00000213	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3535	AST CHEMICALS	Millstone - MSO	007-00000214	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3536	AST CHEMICALS	Millstone - MSO	007-00000215	38.844058	-81.089394	MOUNTAINER STATE ENERGY INC	
3537	AST CHEMICALS	Millstone - MSO	007-00000216	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3538	AST CHEMICALS	Millstone - MSO	007-00000217	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3539	AST CHEMICALS	Millstone - MSO	007-00000218	38.842434	-81.069281	MOUNTAINER STATE ENERGY INC	
3541	AST CHEMICALS	Millstone - MSO	007-00000220	38.842434	-81.069281	MOUNTAINER STATE ENERGY INC	
3542	AST CHEMICALS	Millstone - MSO	007-00000221	38.842434	-81.069281	MOUNTAINER STATE ENERGY INC	
3544	AST CHEMICALS	Millstone - MSO	007-00000223	38.842003	-81.080029	MOUNTAINER STATE ENERGY INC	
3545	AST CHEMICALS	Millstone - MSO	007-00000224	38.844479	-81.071555	MOUNTAINER STATE ENERGY INC	
3546	AST CHEMICALS	Millstone - MSO	007-00000225	38.841417	-81.069459	MOUNTAINER STATE ENERGY INC	
3547	AST CHEMICALS	Millstone - MSO	007-00000226	38.844479	-81.071555	MOUNTAINER STATE ENERGY INC	
3549	AST CHEMICALS	Millstone - MSO	007-00000228	38.844348	-81.089299	MOUNTAINER STATE ENERGY INC	
3550	AST CHEMICALS	Millstone - MSO	007-00000229	38.842434	-81.069281	MOUNTAINER STATE ENERGY INC	
3551	AST CHEMICALS	Millstone - MSO	007-00000230	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
3553	AST CHEMICALS	Millstone - MSO	007-00000232	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3555	AST CHEMICALS	Millstone - MSO	007-00000234	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3556	AST CHEMICALS	Millstone - MSO	007-00000235	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
3557	AST CHEMICALS	Millstone - MSO	007-00000236	38.841417	-81.090459	MOUNTAINER STATE ENERGY INC	
3558	AST CHEMICALS	Millstone - MSO	007-00000237	38.843847	-81.056419	MOUNTAINER STATE ENERGY INC	
3559	AST CHEMICALS	Millstone - MSO	007-00000238	38.853292	-81.070359	MOUNTAINER STATE ENERGY INC	
3560	AST CHEMICALS	Millstone - MSO	007-00000239	38.845467	-81.088181	MOUNTAINER STATE ENERGY INC	
3561	AST CHEMICALS	Millstone - MSO	007-00000240	38.863687	-81.093989	MOUNTAINER STATE ENERGY INC	
3599	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000341	38.864357	-81.043354	STALNAKER ENERGY CORPORATION	
3600	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000342	38.860731	-81.034889	STALNAKER ENERGY CORPORATION	
3794	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000343	38.864311	-81.038333	STALNAKER ENERGY CORPORATION	
3802	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000345	38.861021	-81.040269	STALNAKER ENERGY CORPORATION	
3803	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000346	38.866532	-81.015957	STALNAKER ENERGY CORPORATION	
3804	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-00000346	38.866532	-81.015957	STALNAKER ENERGY CORPORATION	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
3824	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-000000347	38.854785	-81.050588	STALNAKER ENERGY CORPORATION	
3825	AST CHEMICALS	STALNAKER ENERGY CORPORATION	007-000000347	38.854785	-81.050588	STALNAKER ENERGY CORPORATION	
4377	AST CHEMICALS	United Petro, Ltd.	007-000000873	38.885695	-81.046147	UNITED PETRO LTD.	
4378	AST CHEMICALS	United Petro, Ltd.	007-000000873	38.885695	-81.046147	UNITED PETRO LTD.	
4387	AST CHEMICALS	Clara Kirby #2	007-000000874	38.884722	-81.043333	UNITED PETRO LTD.	
4388	AST CHEMICALS	Clara Kirby #2	007-000000874	38.884722	-81.043333	UNITED PETRO LTD.	
4389	AST CHEMICALS	Holley Nester #1	007-000000875	38.837305	-81.104225	MORRIS OIL & GAS CO., INC	
4548	AST CHEMICALS	Irving Stump	007-000000833	38.834231	-81.041966	D.P. GUNN DOZER SERVICE	
4563	AST CHEMICALS	Ritchie Petroleum Corp	007-000000530	38.808351	-81.081763	RITCHIE PETROLEUM CORP.	
4623	AST CHEMICALS	RAMIREZ 1357	007-000000894	38.849274	-81.050587	HAYDEN HARPER ENERGY	
4717	AST CHEMICALS	Ritchie Petroleum Corp	007-000000529	38.813563	-81.072975	RITCHIE PETROLEUM CORP.	
5001	AST CHEMICALS	ROUSH 1554	007-000000618	38.920858	-81.075473	HAYDEN HARPER ENERGY	
5002	AST CHEMICALS	ROUSH 1553	007-000000619	38.924338	-81.077517	HAYDEN HARPER ENERGY	
5161	AST CHEMICALS	ROGERS AND SON OIL AND GAS	007-000000571	38.858543	-81.004281	ROGERS & SON PRODUCTION ACCT	
5505	AST CHEMICALS	ENERVEST OPERATING, LLC	007-000000626	38.91347	-81.02395	ENERVEST OPERATING L.L.C.	
5514	AST CHEMICALS	Rogers & Son Oil & Gas	007-000000496	38.810637	-81.080982	ROGERS & SON PRODUCTION ACCT	
5517	AST CHEMICALS	Rogers & Son Oil & Gas	007-000000504	38.815292	-81.086043	ROGERS & SON PRODUCTION ACCT	
5518	AST CHEMICALS	Rogers & Son Oil & Gas	007-000000505	38.817177	-81.089988	ROGERS & SON PRODUCTION ACCT	
5551	AST CHEMICALS	CHESAPEAKE APPALACHIA, L.L.C.	011-000001929	38.872831	-80.993185	CHESAPEAKE APPALACHIA, L.L.C.	
5720	AST CHEMICALS	Clarksburg Office	007-000000527	38.889764	-81.07452	EXCO RESOURCES (PA), LLC	
5785	AST CHEMICALS	Ritchie Petroleum Corp	007-000000578	38.826398	-81.069669	RITCHIE PETROLEUM CORP.	
5901	AST CHEMICALS	White #1	007-000000761	38.931667	-81.03015	GARNET GAS CORPORATION	
5903	AST CHEMICALS	Eastridge #1	007-000000765	38.931667	-81.03015	GARNET GAS CORPORATION	
6032	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001773	38.854479	-81.002055	PRIME OPERATING	
6033	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001773	38.854479	-81.002055	PRIME OPERATING	
6034	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001773	38.854479	-81.002055	PRIME OPERATING	
6035	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001773	38.854479	-81.002055	PRIME OPERATING	
6288	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001784	38.858833	-81.000016	PRIME OPERATING	
6289	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001784	38.858833	-81.000016	PRIME OPERATING	
6290	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001784	38.858833	-81.000016	PRIME OPERATING	
6291	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001784	38.858833	-81.000016	PRIME OPERATING	
6292	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000691	38.854479	-81.009656	PRIME OPERATING	
6293	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000691	38.854479	-81.009656	PRIME OPERATING	
6294	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000691	38.854479	-81.009656	PRIME OPERATING	
6295	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000691	38.854479	-81.009656	PRIME OPERATING	
6304	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001786	38.850126	-80.998943	PRIME OPERATING	
6305	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001786	38.850126	-80.998943	PRIME OPERATING	
6306	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001786	38.850126	-80.998943	PRIME OPERATING	
6307	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001786	38.850126	-80.998943	PRIME OPERATING	
6320	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000699	38.848965	-81.006875	PRIME OPERATING	
6321	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000699	38.848965	-81.006875	PRIME OPERATING	
6322	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000699	38.848965	-81.006875	PRIME OPERATING	
6323	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000699	38.848965	-81.006875	PRIME OPERATING	
6368	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001788	38.863172	-80.994494	PRIME OPERATING	
6369	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001788	38.863172	-80.994494	PRIME OPERATING	
6370	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001788	38.862172	-80.994494	PRIME OPERATING	
6371	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001788	38.862172	-80.994494	PRIME OPERATING	
6372	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000700	38.817458	-81.059294	PRIME OPERATING	
6373	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000700	38.817458	-81.059294	PRIME OPERATING	
6374	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000700	38.817458	-81.059294	PRIME OPERATING	
6375	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000700	38.817458	-81.059294	PRIME OPERATING	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
6384	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000703	38.812309	-81.058773	PRIME OPERATING	
6385	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000703	38.812309	-81.058773	PRIME OPERATING	
6386	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000703	38.812309	-81.058773	PRIME OPERATING	
6387	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000703	38.812309	-81.058773	PRIME OPERATING	
6408	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000708	38.810798	-81.065967	PRIME OPERATING	
6409	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000708	38.810798	-81.065967	PRIME OPERATING	
6410	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000708	38.810798	-81.065967	PRIME OPERATING	
6411	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000708	38.810798	-81.065967	PRIME OPERATING	
6416	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000721	38.806553	-81.0659	PRIME OPERATING	
6417	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000721	38.806553	-81.0659	PRIME OPERATING	
6418	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000721	38.806553	-81.0659	PRIME OPERATING	
6419	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000721	38.806553	-81.0659	PRIME OPERATING	
6420	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000728	38.812309	-81.058773	PRIME OPERATING	
6421	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000728	38.812309	-81.058773	PRIME OPERATING	
6426	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000731	38.810798	-81.065967	PRIME OPERATING	
6427	AST CHEMICALS	Prime Operating Company - Oil Field Facility	007-000000731	38.810798	-81.065967	PRIME OPERATING	
6565	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001795	38.85448	-81.002055	PRIME OPERATING	
6566	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001795	38.85448	-81.002055	PRIME OPERATING	
6567	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001795	38.85448	-81.002055	PRIME OPERATING	
6568	AST CHEMICALS	Prime Operating Company - Oil Field Facility	011-000001795	38.85448	-81.002055	PRIME OPERATING	
6576	AST CHEMICALS	Clarksburg Office	007-000000554	38.8877535	-81.074077	EXCO RESOURCES (PA), LLC	
8522	AST CHEMICALS	Alliance Petroleum Corporation	007-000000977	38.933933	-81.031644	ALLIANCE PETROLEUM CORPORATION	
8644	AST CHEMICALS	Alliance Petroleum Corporation	007-000000980	38.929933	-81.028576	ALLIANCE PETROLEUM CORPORATION	
18	ESRI WELL	ELLIOTT, ARMANDA	OIL AND GAS WELL	38.90833558	-81.02991233	EAST RESOURCES, INC.	
34	ESRI WELL	SAMPSON, BRYON DEAN, ETUX	OIL AND GAS WELL	38.9118194	-81.01710052	WACO OIL & GAS CO INC	
46	ESRI WELL	DESPARD HEIRS	OIL AND GAS WELL	38.93647328	-81.02925032	PETROLEUM DEVELOPMENT CORPORATION	
85	ESRI WELL	WARD, RONALD & TERESA	OIL AND GAS WELL	38.93320024	-81.0528083	WACO OIL & GAS CO INC	
96	ESRI WELL	STUMP, CORA	OIL AND GAS WELL	38.90441686	-81.08067985	SMITH, WALTER E	
97	ESRI WELL	STUMP, CORA	OIL AND GAS WELL	38.90441686	-81.08067985	SMITH, WALTER E	
112	ESRI WELL	BENNETT, OFA	OIL AND GAS WELL	38.921477884	-81.02659095	SMITH, WALTER E	
116	ESRI WELL	HARDMAN, A. JR. - ESTATE	OIL AND GAS WELL	38.891033	-81.06941067	MOUNTAIN OIL & GAS, INC.	
203	ESRI WELL	GAINER, ADDIE M. - HEIRS	OIL AND GAS WELL	38.81717716	-81.0898763	OPERATOR UNKNOWN	
225	ESRI WELL	MCDONALD, LAUREL	OIL AND GAS WELL	38.83872309	-81.092334826	OPERATOR UNKNOWN	
274	ESRI WELL	WRIGHT, GAYLE	OIL AND GAS WELL	38.91327713	-81.030470336	DALE, DAVID DBA DD OIL COMPANY	
275	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83246804	-81.07611447	EAST RESOURCES, INC.	
276	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83246804	-81.07611447	EAST RESOURCES, INC.	
294	ESRI WELL	WILSON, E. O.	OIL AND GAS WELL	38.88713094	-81.06481672	SMITH, WALTER E	
303	ESRI WELL	RAFFERTY, W. T.	OIL AND GAS WELL	38.83532108	-81.08891326	EAST RESOURCES, INC.	
430	ESRI WELL	WILSON, ALLEN	OIL AND GAS WELL	38.90833619	-81.0237857	EAST RESOURCES, INC.	
431	ESRI WELL	WILSON, ALLEN	OIL AND GAS WELL	38.90833619	-81.0237857	EAST RESOURCES, INC.	
361	ESR WELL	SLIDER, W. H.	OIL AND GAS WELL	38.85383683	-81.06953385	ROGERS & SON	
534	ESRI WELL	MARION, GROVER E.	OIL AND GAS WELL	38.90006326	-81.02100021	BLAZER ENERGY CORPORATION	
535	ESRI WELL	MARION, GROVER E.	OIL AND GAS WELL	38.90006326	-81.02100021	BLAZER ENERGY CORPORATION	
536	ESRI WELL	MARION, GROVER E.	OIL AND GAS WELL	38.90006326	-81.02100021	BLAZER ENERGY CORPORATION	
537	ESRI WELL	MARION, GROVER E.	OIL AND GAS WELL	38.90006326	-81.02100021	EAST RESOURCES, INC.	
544	ESRI WELL	ASH, LAURA V. (50 ACRES)	OIL AND GAS WELL	38.90411587	-81.02988646	C. I. MCKOWN & SON, INC.	
550	ESRI WELL	SHARP, J.S. HEIRS	OIL AND GAS WELL	38.8292138	-81.07060176	OPERATOR UNKNOWN	
551	ESRI WELL	SHARP, J.S. HEIRS	OIL AND GAS WELL	38.8292138	-81.07060176	OPERATOR UNKNOWN	
468	ESRI WELL	BALL, LEWIS	OIL AND GAS WELL	38.92667341	-81.0657854	CAIN, FRANCIS E.	
480	ESRI WELL	HUPP, C. & LEE FOGLE	OIL AND GAS WELL	38.879669146	-81.06562852	OPERATOR UNKNOWN	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
482	ESRI WELL	WESTFALL, A.	OIL AND GAS WELL	38.94192389	-81.06072869	SMITH, WALTER E	
496	ESRI WELL	BENNETT, J. B.	OIL AND GAS WELL	38.89759628	-81.01190086	C. I. MCKOWN & SON, INC.	
573	ESRI WELL	GAINER, E. W.	OIL AND GAS WELL	38.91350627	-81.03965185	SMITH, WALTER E	
589	ESRI WELL	COASTAL LUMBER COMPANY	OIL AND GAS WELL	38.85041619	-81.01948054	Dominion Exploration & Production	
590	ESRI WELL	COASTAL LUMBER COMPANY	OIL AND GAS WELL	38.85041619	-81.01948054	Dominion Exploration & Production	
602	ESRI WELL	PEARCY-BOGGS	OIL AND GAS WELL	38.86922796	-80.98121057	Dominion Transmission Inc	
668	ESRI WELL	MACE, BEULAH	OIL AND GAS WELL	38.80249472	-81.064043	GREER, INC.	
616	ESRI WELL	MCDONALD, SCOTCH	OIL AND GAS WELL	38.83925566	-81.06872431	OPERATOR UNKNOWN	
702	ESRI WELL	POLING, CHARLEY	OIL AND GAS WELL	38.82442459	-81.05262118	OPERATOR UNKNOWN	
704	ESRI WELL	POLING, CHARLEY	OIL AND GAS WELL	38.82442459	-81.05262118	OPERATOR UNKNOWN	
765	ESRI WELL	STUMP (ALL)	OIL AND GAS WELL	38.87406333	-81.05791109	OPERATOR UNKNOWN	
779	ESRI WELL	STUMP, R. B.	OIL AND GAS WELL	38.84317125	-81.00881168	GUNN, C. C.	
844	ESRI WELL	FALCK, LINDA	OIL AND GAS WELL	38.82689197	-81.07968447	ANGERMAN ASSOCIATES INC	
852	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.83168129	-81.07815101	EAST RESOURCES, INC.	
884	ESRI WELL	DOBDRINS, J. F.	OIL AND GAS WELL	38.84926197	-81.03439463	EAST KENTUCKY ENERGY	
897	ESRI WELL	NEWELL, JAMES	OIL AND GAS WELL	38.93447159	-81.06211033	DALE, DAVID DBA DD OIL COMPANY	
902	ESRI WELL	MICINTYRE-RAFFERTY	OIL AND GAS WELL	38.89769414	-81.03272395	PETRO HOLDINGS, INC.	
906	ESRI WELL	KENDALL, RONALD A.	OIL AND GAS WELL	38.86657312	-81.01599278	STAINAKER ENERGY CORPORATION	
940	ESRI WELL	YOAK, J. W. - HEIRS	OIL AND GAS WELL	38.93654125	-81.07763094	KNIGHT, W. V	
943	ESRI WELL	HARRIS, JAMES & FRANKIE	OIL AND GAS WELL	38.90819099	-81.03214055	WACO OIL & GAS CO INC	
984	ESRI WELL	HICKMAN, L.	OIL AND GAS WELL	38.91244752	-81.03032352	DALE, DAVID DBA DD OIL COMPANY	
986	ESRI WELL	JACOBS	OIL AND GAS WELL	38.83944011	-81.06767018	REGISTRY DRILLING & DEVELOPMENT I	
994	ESRI WELL	PINGLEY, DARRELL & KANDI	OIL AND GAS WELL	38.83037447	-81.07356725	REGISTRY DRILLING & DEVELOPMENT I	
995	ESRI WELL	PINGLEY, DARRELL & KANDI	OIL AND GAS WELL	38.83037447	-81.07356725	REGISTRY DRILLING & DEVELOPMENT I	
1002	ESRI WELL	GODFREY, JENNINGS	OIL AND GAS WELL	38.86376641	-81.00766809	OPERATOR UNKNOWN	
1011	ESRI WELL	SNYDER, J. P. - HEIRS	OIL AND GAS WELL	38.94159494	-81.05533241	CRESTON OIL CORPORATION	
1017	ESRI WELL	RULEY, D. A.	OIL AND GAS WELL	38.92749387	-81.02842292	CHEVRON U.S.A., INC.	
1018	ESRI WELL	RULEY, D. A.	OIL AND GAS WELL	38.92749387	-81.02842292	CHEVRON U.S.A., INC.	
1021	ESRI WELL	SAMPSON, BYRON D.	OIL AND GAS WELL	38.90405626	-81.02155742	EAST RESOURCES, INC.	
1022	ESRI WELL	SAMPSON, BYRON D.	OIL AND GAS WELL	38.90405626	-81.02155742	EAST RESOURCES, INC.	
1034	ESRI WELL	WILSON, ALLEN N.	OIL AND GAS WELL	38.90674017	-81.02415654	PETRO HOLDINGS, INC.	
1035	ESRI WELL	WILSON, ALLEN N.	OIL AND GAS WELL	38.90674017	-81.02415654	PETRO HOLDINGS, INC.	
1057	ESRI WELL	JOHNSON, THOMAS	OIL AND GAS WELL	38.91207248	-81.0373644	CRESTON OIL CORPORATION	
1082	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83280365	-81.0796004	EAST RESOURCES, INC.	
1104	ESRI WELL	WILMOTH, MALLISSA	OIL AND GAS WELL	38.86917202	-81.08913903	OPERATOR UNKNOWN	
1253	ESRI WELL	SLIDER, W. H.	OIL AND GAS WELL	38.85226188	-81.07206395	ROGERS & SON	
1194	ESRI WELL	RICHARDS, DEWAIN & GRETA	OIL AND GAS WELL	38.89933826	-81.03436918	BLAZER ENERGY CORPORATION	
1195	ESRI WELL	RICHARDS, DEWAIN & GRETA	OIL AND GAS WELL	38.89933826	-81.03436918	BLAZER ENERGY CORPORATION	
1197	ESRI WELL	STUMP (ALL)	OIL AND GAS WELL	38.83834506	-81.01375644	GUNN, C. C.	
1226	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82775637	-81.07247356	EAST RESOURCES, INC.	
1227	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82775637	-81.07247356	EAST RESOURCES, INC.	
1228	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82775637	-81.07247356	EAST RESOURCES, INC.	
1243	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.8340265	-81.06667881	REGISTRY DRILLING & DEVELOPMENT I	
1296	ESRI WELL	HARDMAN, A. - HEIRS	OIL AND GAS WELL	38.88527573	-81.06907186	OPERATOR UNKNOWN	
1297	ESRI WELL	HARDMAN, A. - HEIRS	OIL AND GAS WELL	38.88527573	-81.06907186	OPERATOR UNKNOWN	
1333	ESRI WELL	GUNN, A.	OIL AND GAS WELL	38.86144507	-81.1048543	EAST RESOURCES, INC.	
1422	ESRI WELL	YOAK, CREED	OIL AND GAS WELL	38.84295329	-81.07573616	CRESTON OIL CORPORATION	
1427	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84295228	-81.08987374	OPERATOR UNKNOWN	
1459	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.89234528	-81.03133085	C. I. MCKOWN & SON, INC.	
1506	ESRI WELL	BLACKSHIRE HEIRS	OIL AND GAS WELL	38.84787289	-80.99652672	Dominion Transmission Inc	
1535	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.8507297	-81.08692986	ROGERS & SON	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
1536	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.8507297	-81.08692986	ROGERS & SON	
1555	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.82616572	-81.06967482	K. PETROLEUM, INC.	
1619	ESRI WELL	BRANNON, H.	OIL AND GAS WELL	38.87142931	-81.08060105	EAST RESOURCES, INC.	
1629	ESRI WELL	MORRIS, JAMES J.	OIL AND GAS WELL	38.8965914	-81.07294558	CRESTON OIL CORPORATION	
1701	ESRI WELL	BURNS, MONOKA	OIL AND GAS WELL	38.90151507	-81.01468661	WACO OIL & GAS CO INC	
1652	ESRI WELL	POLING, H.	OIL AND GAS WELL	38.86725972	-81.06455776	CONNOLY, Z. N	
1654	ESRI WELL	DAVSON, LANNY & NINA	OIL AND GAS WELL	38.8607194	-81.09002519	CAIN, FRANCIS E.	
1655	ESRI WELL	DAVSON, LANNY & NINA	OIL AND GAS WELL	38.8607194	-81.09002519	CAIN, FRANCIS E.	
1669	ESRI WELL	STUMP, RUPERT, ETUX	OIL AND GAS WELL	38.8559304	-81.02819157	ROGERS & SON	
1676	ESRI WELL	BRAKE, T. J.	OIL AND GAS WELL	38.90804627	-81.02675664	PETRO HOLDINGS, INC.	
1800	ESRI WELL	SIMPSON, BYRON D.	OIL AND GAS WELL	38.90615944	-81.02155675	EAST RESOURCES, INC.	
1801	ESRI WELL	SIMPSON, BYRON D.	OIL AND GAS WELL	38.90615944	-81.02155675	EAST RESOURCES, INC.	
1820	ESRI WELL	MACE, RALPH	OIL AND GAS WELL	38.8121388	-81.06360339	GREER, INC.	
1821	ESRI WELL	MACE, RALPH	OIL AND GAS WELL	38.81321388	-81.06360339	GREER, INC.	
1865	ESRI WELL	BURROWS, COLEMAN, ETUX	OIL AND GAS WELL	38.94387417	-81.05561111	ANGERMAN ASSOCIATES INC	
1877	ESRI WELL	JARVIS, C. A.	OIL AND GAS WELL	38.8969027	-81.0443418	DOMINION TRANSMISSION INC	
1883	ESRI WELL	STUMP, CLAYTON	OIL AND GAS WELL	38.87165358	-81.04812216	OPERATOR UNKNOWN	
1884	ESRI WELL	STUMP, CLAYTON	OIL AND GAS WELL	38.87165358	-81.04812216	OPERATOR UNKNOWN	
1890	ESRI WELL	BALL, JOHN LEWIS	OIL AND GAS WELL	38.92910185	-81.06508102	CAIN, FRANCIS E.	
1928	ESRI WELL	JOHNSON, JERRY, ETAL	OIL AND GAS WELL	38.92431276	-81.07752301	LINN OPERATING, LLC	
1929	ESRI WELL	BENNETT, E. B.	OIL AND GAS WELL	38.90064452	-81.01505077	C. I. MCKOWN & SON, INC.	
1935	ESRI WELL	WILSON, E. O.	OIL AND GAS WELL	38.88349626	-81.06134848	SMITH, WALTER E	
1941	ESRI WELL	BURNS, MONOKA	OIL AND GAS WELL	38.90586906	-81.00967288	WACO OIL & GAS CO INC	
1963	ESRI WELL	JACOBS	OIL AND GAS WELL	38.83787346	-81.05662319	RAVEN DRILLING & DEVELOPMENT I	
1992	ESRI WELL	JOHNSON, GLEN	OIL AND GAS WELL	38.91296374	-81.07183347	CAIN, FRANCIS E.	
2016	ESRI WELL	FOWLER, M. D.	OIL AND GAS WELL	38.87612594	-81.07408821	DOMINION TRANSMISSION INC	
2026	ESRI WELL	KENNY, M. T.	OIL AND GAS WELL	38.86522731	-81.05828199	EAST RESOURCES, INC.	
2027	ESRI WELL	KENNY, M. T.	OIL AND GAS WELL	38.86522731	-81.05828199	EAST RESOURCES, INC.	
2028	ESRI WELL	WITT, H. A.	OIL AND GAS WELL	38.85232132	-81.03465771	OPERATOR UNKNOWN	
2057	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83599516	-81.06588905	EAST RESOURCES, INC.	
2062	ESRI WELL	MINNEY, J. O.	OIL AND GAS WELL	38.85359566	-81.03498793	ATKINSON, ROGER L	
2063	ESRI WELL	MINNEY, J. O.	OIL AND GAS WELL	38.85359566	-81.03498793	ATKINSON, ROGER L	
2089	ESRI WELL	JOHNSON, EMMA	OIL AND GAS WELL	38.91631841	-81.0662574	DOMINION TRANSMISSION INC	
2104	ESRI WELL	NESTER, HOLLY	OIL AND GAS WELL	38.83694051	-81.10413508	MORRIS OIL & GAS CO., INC	
2127	ESRI WELL	HATHAWAY, EVA DYE	OIL AND GAS WELL	38.83332223	-81.08782464	OPERATOR UNKNOWN	
2153	ESRI WELL	MILLER, RONALD	OIL AND GAS WELL	38.82118346	-81.07477783	D & D ENERGY INC	
2156	ESRI WELL	STUMP	OIL AND GAS WELL	38.84896494	-81.006587521	PRIME OPERATING COMPANY	
2162	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84197508	-81.09031269	MORRIS, CARL R	
2183	ESRI WELL	BALL, JASPER	OIL AND GAS WELL	38.93983284	-81.06951015	OPERATOR UNKNOWN	
2326	ESRI WELL	TRUST, RIM	OIL AND GAS WELL	38.92692834	-81.07056122	TRIO PETROLEUM CORP.	
2335	ESRI WELL	BARR, HAGAN	OIL AND GAS WELL	38.83323463	-81.10007288	EAST RESOURCES, INC.	
2336	ESRI WELL	BARR, HAGAN	OIL AND GAS WELL	38.83323463	-81.10007288	EAST RESOURCES, INC.	
2341	ESRI WELL	MCDONALD, LOGAN	OIL AND GAS WELL	38.8507793	-81.11319143	HOPE GAS, INC.	
2342	ESRI WELL	MCDONALD, LOGAN	OIL AND GAS WELL	38.8507793	-81.11319143	HOPE GAS, INC.	
2346	ESRI WELL	POLING, CHARITY	OIL AND GAS WELL	38.85511584	-81.07206798	MORRIS OIL & GAS CO., INC	
2349	ESRI WELL	JACOBS REALTY CO.	OIL AND GAS WELL	38.8346985	-81.06393382	CHEVRON U.S.A., INC.	
2351	ESRI WELL	JACOBS REALTY CO.	OIL AND GAS WELL	38.8346985	-81.06393382	CHEVRON U.S.A., INC.	
2396	ESRI WELL	BLAND, MARTHA	OIL AND GAS WELL	38.94085799	-81.06043931	GUNN, P. P., ESTATE HEIRS	
2404	ESRI WELL	JARVIS, C. A., ETAL	OIL AND GAS WELL	38.85159483	-81.05781565	DOMINION TRANSMISSION INC	
2405	ESRI WELL	JARVIS, C. A., ETAL	OIL AND GAS WELL	38.85159483	-81.05781565	DOMINION TRANSMISSION INC	
2407	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.85248123	-81.08615639	ROGERS & SON	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
2408	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.85248123	-81.08611539	ROGERS & SON	
2560	ESRI WELL	WALKER, MICHAEL	OIL AND GAS WELL	38.82932354	-81.06307301	STONESTREET LANDS CO	
2561	ESRI WELL	WALKER, MICHAEL	OIL AND GAS WELL	38.82932354	-81.06307301	STONESTREET LANDS CO	
2443	ESRI WELL	WILSON, ALLEN N.	OIL AND GAS WELL	38.91356105	-81.02378513	EAST RESOURCES, INC.	
2444	ESRI WELL	WILSON, ALLEN N.	OIL AND GAS WELL	38.91356105	-81.02378513	EAST RESOURCES, INC.	
2452	ESRI WELL	ROBINSON, COY	OIL AND GAS WELL	38.84447466	-81.07255505	M & A WELL SERVICE, INC.	
2457	ESRI WELL	MORRIS, HELEN	OIL AND GAS WELL	38.90717479	-81.07176651	CRESTON OIL CORPORATION	
2458	ESRI WELL	MORRIS, HELEN	OIL AND GAS WELL	38.90717479	-81.07176651	CRESTON OIL CORPORATION	
2535	ESRI WELL	HUPP, DOYLE & SHIRLEY	OIL AND GAS WELL	38.87655113	-81.08613818	STEPHEN L SATTERFIELD PRODUCTION	
2536	ESRI WELL	GLOSS, MICHAEL L.	OIL AND GAS WELL	38.85823844	-81.00445806	ROGERS & SON	
2543	ESRI WELL	BOGGER HOLE HUNTING CLUB	OIL AND GAS WELL	38.90521549	-81.02594987	WACO OIL & GAS CO INC	
2544	ESRI WELL	FREDERICK, VIEVA R.	OIL AND GAS WELL	38.90732022	-81.029356	EAST RESOURCES, INC.	
2545	ESRI WELL	FREDERICK, VIEVA R.	OIL AND GAS WELL	38.90732022	-81.029356	C. I. MCKOWN & SON, INC.	
2547	ESRI WELL	DEAN, BRYON & R. SAMPSION	OIL AND GAS WELL	38.9055787	-81.02359909	EAST RESOURCES, INC.	
2548	ESRI WELL	DEAN, BRYON & R. SAMPSION	OIL AND GAS WELL	38.9055787	-81.02359909	BLAZER ENERGY CORPORATION	
2549	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.89481735	-81.03381465	C. I. MCKOWN & SON, INC.	
2555	ESRI WELL	CUNNINGHAM, T. S.	OIL AND GAS WELL	38.83124569	-81.08816887	PETROLEUM DEVELOPMENT CORPORATION	
2582	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.92024523	-81.04175622	PETRO HOLDINGS, INC.	
2584	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.9198341	-81.03976381	PETRO HOLDINGS, INC.	
2596	ESRI WELL	SHAFFER, ELIA	OIL AND GAS WELL	38.86423575	-81.08516431	DALE, DAVID DBA DD OIL COMPANY	
2600	ESRI WELL	MORRIS, JAMES J.	OIL AND GAS WELL	38.87978886	-81.08255681	MOUNTAIN V OIL & GAS, INC.	
2616	ESRI WELL	GARRETTSON, JAMES	OIL AND GAS WELL	38.90202378	-81.0178697	EAST RESOURCES, INC.	
2663	ESRI WELL	GARRETTSON, JAMES	OIL AND GAS WELL	38.90202378	-81.0178697	EAST RESOURCES, INC.	
2664	ESRI WELL	FOWLER, M. D.	OIL AND GAS WELL	38.87673149	-81.07960291	Dominion Transmission Inc	
2678	ESRI WELL	FOWLER, I. B.	OIL AND GAS WELL	38.87026863	-81.045546	Dominion Transmission Inc	
2685	ESRI WELL	FOWLER, I. B.	OIL AND GAS WELL	38.87026863	-81.045546	Dominion Transmission Inc	
2686	ESRI WELL	WHITE HALL	OIL AND GAS WELL	38.81051668	-81.06637458	OPERATOR UNKNOWN	
2726	ESRI WELL	MCDONALD, BROWN	OIL AND GAS WELL	38.84629096	-81.09677817	MORRIS, CARL R	
2727	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.90983588	-81.03693356	PETRO HOLDINGS, INC.	
2736	ESRI WELL	BRAKE, T. J.	OIL AND GAS WELL	38.90949773	-81.02397062	PETRO HOLDINGS, INC.	
2745	ESRI WELL	DONOHOE, MARY E.	OIL AND GAS WELL	38.9062331	-81.02277989	EAST RESOURCES, INC.	
2753	ESRI WELL	HARRIS	OIL AND GAS WELL	38.87258424	-80.9925369	ALAMCO INC	
2774	ESRI WELL	STUMP, WARDER MRS.	OIL AND GAS WELL	38.83632712	-81.09521621	MOORE, DANIEL M. & RICHARD D.	
2817	ESRI WELL	ROBINSON, HOMER	OIL AND GAS WELL	38.85548122	-81.05275239	CABOT OIL & GAS CORPORATION	
2850	ESRI WELL	BENNETT, A. M.	OIL AND GAS WELL	38.90698008	-81.01070757	C. I. MCKOWN & SON, INC.	
2851	ESRI WELL	PINSON, HERBERT & ROSE	OIL AND GAS WELL	38.86870295	-81.05669869	SMITH, WALTER E	
2852	ESRI WELL	PINSON, HERBERT & ROSE	OIL AND GAS WELL	38.86870295	-81.05669869	SMITH, WALTER E	
2853	ESRI WELL	PINSON, HERBERT & ROSE	OIL AND GAS WELL	38.86870295	-81.05669869	SMITH, WALTER E	
2921	ESRI WELL	WILSON, ALLEN NEWT, ETUX	OIL AND GAS WELL	38.91385118	-81.02397093	WACO OIL & GAS CO INC	
2970	ESRI WELL	POLING, W. M.	OIL AND GAS WELL	38.8236472	-81.07124137	GREER, INC.	
3000	ESRI WELL	ROGERS, SHIRLEY	OIL AND GAS WELL	38.90136975	-81.0219278	EAST RESOURCES, INC.	
3001	ESRI WELL	ROGERS, SHIRLEY	OIL AND GAS WELL	38.90136975	-81.0219278	EAST RESOURCES, INC.	
3015	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.82792888	-81.0788308	EAST RESOURCES, INC.	
3016	ESRI WELL	MINNEY, ROBERT	OIL AND GAS WELL	38.8572241	-81.03604658	DOMINION TRANSMISSION INC	
3017	ESRI WELL	MINNEY, ROBERT	OIL AND GAS WELL	38.8572241	-81.03604658	DOMINION TRANSMISSION INC	
3024	ESRI WELL	HARDMAN, ALLEN - HEIRS	OIL AND GAS WELL	38.8833938	-81.06787782	MOUNTAIN V OIL & GAS, INC.	
3028	ESRI WELL	RAFFERTY, W. T.	OIL AND GAS WELL	38.90025835	-81.02753791	PETRO HOLDINGS, INC.	
3052	ESRI WELL	MAECE, DEO. D.	OIL AND GAS WELL	38.80652628	-81.06564772	PRIME OPERATING COMPANY	
3109	ESRI WELL	FERRELL, PHILLIP	OIL AND GAS WELL	38.88903929	-81.04892718	UNITED PETRO LTD.	
3131	ESRI WELL	STUMP, E.	OIL AND GAS WELL	38.84054784	-81.01049827	DOMINION TRANSMISSION INC	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
3159	ESRI WELL	LYNN, R. G.	OIL AND GAS WELL	38.85052344	-81.06118562	YOAK, CREDE	
3161	ESRI WELL	GARRETSON, JAMES M.	OIL AND GAS WELL	38.89977375	-81.01691427	EAST RESOURCES, INC.	
3636	ESRI WELL	GUNN, DONALD POE	OIL AND GAS WELL	38.81549192	-81.0860428	ROGERS & SON	
3641	ESRI WELL	BARR, FRED	OIL AND GAS WELL	38.83337881	-81.08879987	MORRIS OIL & GAS CO., INC	
3188	ESRI WELL	LOCKNEY, J. R.	OIL AND GAS WELL	38.81014077	-81.05518822	HEETER III, WILLIAM B	
3189	ESRI WELL	LOCKNEY, J. R.	OIL AND GAS WELL	38.81014077	-81.05518822	HEETER II, WILLIAM B	
3203	ESRI WELL	HATHAWAY-WALTERS	OIL AND GAS WELL	38.86216427	-81.07275398	PETROLEUM DEVELOPMENT CORPORATION	
3247	ESRI WELL	SMITH, SHARON SUE	OIL AND GAS WELL	38.83356668	-81.06707472	STONESTREET, VANCE	
3257	ESRI WELL	FRANCIS, EMMA	OIL AND GAS WELL	38.92014306	-81.04954954	SMITH, WALTER E	
3297	ESRI WELL	WESTVACO	OIL AND GAS WELL	38.88496987	-81.04123978	UNITED PETRO LTD.	
3298	ESRI WELL	WESTVACO	OIL AND GAS WELL	38.88496987	-81.04123978	UNITED PETRO LTD.	
3302	ESRI WELL	JACOBS	OIL AND GAS WELL	38.83993847	-81.05569183	REGISTRY DRILLING & DEVELOPMENT I	
3314	ESRI WELL	FREDERICK, VIEVA RUTH	OIL AND GAS WELL	38.90253082	-81.02452761	EAST RESOURCES, INC.	
3368	ESRI WELL	RUELEY, D. B.	OIL AND GAS WELL	38.87341769	-80.98287526	OPERATOR UNKNOWN	
3379	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84071258	-81.09027767	ROGERS & SON	
3380	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84071258	-81.09027767	ROGERS & SON	
3385	ESRI WELL	HATHOWAY, O. C.	OIL AND GAS WELL	38.84524209	-81.07732997	OPERATOR UNKNOWN	
3416	ESRI WELL	MCDONALD, CLAY	OIL AND GAS WELL	38.85093445	-81.11670659	Dominion Transmission Inc	
3428	ESRI WELL	WHITE, ROYAL LORENA	OIL AND GAS WELL	38.92914228	-81.02996491	R & A PRODUCTION DBA/R LYNCH & A	
3503	ESRI WELL	MCDONALD, TELL	OIL AND GAS WELL	38.85734387	-81.10286592	UNITED PETRO LTD.	
3512	ESRI WELL	FRIDAY, AARON	OIL AND GAS WELL	38.80903989	-81.07838613	STALNAKER ENERGY CORPORATION	
3528	ESRI WELL	ROBBINSON, DICE	OIL AND GAS WELL	38.85486813	-81.04932558	Dominion Transmission Inc	
3560	ESRI WELL	BARR, LUERNA	OIL AND GAS WELL	38.87698691	-81.0609618	CAIN, FRANCIS E.	
3579	ESRI WELL	BALL, JOHN	OIL AND GAS WELL	38.9231105	-81.06274875	CAIN, FRANCIS E.	
3586	ESRI WELL	BALL FAMILY TRUST	OIL AND GAS WELL	38.93476188	-81.07838613	STEPHEN L SATTERFIELD PRODUCTION	
3644	ESRI WELL	BARR, FRED	OIL AND GAS WELL	38.83337881	-81.08879987	MORRIS OIL & GAS CO., INC	
3656	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82976259	-81.07635929	EAST RESOURCES, INC.	
3697	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84070667	-81.0824319	OPERATOR UNKNOWN	
3707	ESRI WELL	POOL, ELIAS	OIL AND GAS WELL	38.90093245	-81.03715041	C. I. MCKOWN & SON, INC.	
3724	ESRI WELL	WHITE, SPENCER	OIL AND GAS WELL	38.92586574	-81.03763167	CRESTON OIL CORPORATION	
3726	ESRI WELL	MICCONAUGHEY	OIL AND GAS WELL	38.87740662	-81.04085151	CAIN, MILTON	
3776	ESRI WELL	BENNETT, LOUIS	OIL AND GAS WELL	38.8916922	-81.01706456	C. I. MCKOWN & SON, INC.	
3792	ESRI WELL	YOKH, ARVIN	OIL AND GAS WELL	38.92431192	-81.0570979	SMITH, WALTER E	
3824	ESRI WELL	IVORY	OIL AND GAS WELL	38.84243383	-81.01188014	PRIME OPERATING COMPANY	
3843	ESRI WELL	DONIOHOE, MARY E.	OIL AND GAS WELL	38.9062331	-81.0227989	EAST RESOURCES, INC.	
3848	ESRI WELL	JACOBS, D. W.	OIL AND GAS WELL	38.82979254	-81.06400086	CHEVRON U.S.A., INC.	
3856	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84426397	-81.09381633	MORRIS, CARL R	
3861	ESRI WELL	MCDONALD, SCOTCH	OIL AND GAS WELL	38.84223929	-81.07041182	OPERATOR UNKNOWN	
3946	ESRI WELL	BURNS, MONOKA	OIL AND GAS WELL	38.90688498	-81.01505793	WACO OIL & GAS CO INC	
3948	ESRI WELL	ROGERS, SHIRLEY & ROSETTA	OIL AND GAS WELL	38.90195017	-81.02155663	WACO OIL & GAS CO INC	
3955	ESRI WELL	POLING, A. P.	OIL AND GAS WELL	38.86698107	-81.05984993	MEADOWS Jr, S. L PRODUCTION Inc.	
3956	ESRI WELL	POLING, A. P.	OIL AND GAS WELL	38.86698107	-81.05984993	EAST RESOURCES, INC.	
3984	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83982331	-81.09349363	MEADOWS Jr, S. L PRODUCTION Inc.	
3985	ESRI WELL	MCDONALD, SCOTCH	OIL AND GAS WELL	38.84032545	-81.07987114	CRESTON OIL CORPORATION	
3992	ESRI WELL	SLIDER	OIL AND GAS WELL	38.85114694	-81.06943527	ROGERS & SON	
3999	ESRI WELL	FRANCIS, EMMA	OIL AND GAS WELL	38.92185667	-81.05442343	SMITH, WALTER E	
4047	ESRI WELL	STUMP, WARDER MRS.	OIL AND GAS WELL	38.83633713	-81.09521621	MOORE, DANIEL M. & RICHARD D.	
4071	ESRI WELL	WEAVER, O. D., ET AL	OIL AND GAS WELL	38.83547842	-81.06482169	SMITH, WALTER E	
4109	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.84419513	-81.08967019	OPERATOR UNKNOWN	
4113	ESRI WELL	JOHNSON, JERRY JR, AL	OIL AND GAS WELL	38.92077273	-81.07540734	WACO OIL & GAS CO INC	
4123	ESRI WELL	HARRIS, LAVERNA	OIL AND GAS WELL	38.90094684	-81.05728249	SMITH, WALTER E	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
4143	ESRI WELL	FOWLER, LEONARD	OIL AND GAS WELL	38.87563733	-81.06096219	CAIN, FRANCIS E.	
4154	ESRI WELL	BALL, JOHN LEWIS	OIL AND GAS WELL	38.91850717	-81.06159531	WACO OIL & GAS CO INC	
4172	ESRI WELL	ASH, LAURA	OIL AND GAS WELL	38.90473331	-81.03167883	C. I. MCKOWN & SON, INC.	
4192	ESRI WELL	BENNETT, E. B.	OIL AND GAS WELL	38.90383717	-81.01598684	C. I. MCKOWN & SON, INC.	
4224	ESRI WELL	VANNJOY, DANNY	OIL AND GAS WELL	38.84902129	-81.01886017	ROGERS, M & SCULL, DAVID	
4254	ESRI WELL	GOODRICH, RICKY JOE	OIL AND GAS WELL	38.86069101	-81.03496213	STALNAKER ENERGY CORPORATION	
4262	ESRI WELL	STULL, RONDAL, ETUX	OIL AND GAS WELL	38.90493777	-81.03744463	WACO OIL & GAS CO INC	
4277	ESRI WELL	BURROWS, COLEMAN & KATHY	OIL AND GAS WELL	38.94071312	-81.05449785	SMITH, WALTER E	
4279	ESRI WELL	HAUGHT, MCCLELLAN, ETAL	OIL AND GAS WELL	38.84392558	-81.08031995	BOWSER, PAUL	
4280	ESRI WELL	HAUGHT, MCCLELLAN, ETAL	OIL AND GAS WELL	38.84392258	-81.08031995	BOWSER, PAUL	
4296	ESRI WELL	PENNINGER, A. M.	OIL AND GAS WELL	38.90354704	-81.05059786	SMITH, WALTER E	
4301	ESRI WELL	HUFFMAN, DANIEL	OIL AND GAS WELL	38.86977715	-81.05475488	SMITH, WALTER E	
4302	ESRI WELL	HUFFMAN, DANIEL	OIL AND GAS WELL	38.86977715	-81.05475488	SMITH, WALTER E	
4305	ESRI WELL	ROBBINSON, COY	OIL AND GAS WELL	38.845464	-81.07377196	M & A WELL SERVICE, INC.	
4316	ESRI WELL	DEAN, BYRON/R. SAMPSON#2	OIL AND GAS WELL	38.90340209	-81.02062868	ASHLAND EXPLORATION PROPERTIES IN	
4317	ESRI WELL	DEAN, BYRON/R. SAMPSON#2	OIL AND GAS WELL	38.90340209	-81.02062868	ASHLAND EXPLORATION PROPERTIES IN	
4366	ESRI WELL	STUMP, LEON	OIL AND GAS WELL	38.84881985	-81.0068752	CHISLER, F. M.	
4415	ESRI WELL	WHITE, ROYAL & LOREN	OIL AND GAS WELL	38.93186	-81.03047024	R & A PRODUCTION DBA/R LYNCH & A	
4427	ESRI WELL	PARSONS, OKEY	OIL AND GAS WELL	38.81693304	-81.08124684	EAST RESOURCES, INC.	
4439	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83764366	-81.09540116	MOORE, DANIEL M. & RICHARD D.	
4440	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83764366	-81.09540116	MOORE, DANIEL M. & RICHARD D.	
4483	ESRI WELL	FALCK, LINDA	OIL AND GAS WELL	38.82689197	-81.07968447	PETROLEUM DEVELOPMENT CORPORATION	
4545	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83332408	-81.06895479	EAST RESOURCES, INC.	
4546	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83332408	-81.06895479	EAST RESOURCES, INC.	
4558	ESRI WELL	POLING, CHEO	OIL AND GAS WELL	38.85199235	-81.05382505	GREER, INC.	
4563	ESRI WELL	WILSON, E. O.	OIL AND GAS WELL	38.88349626	-81.06134848	SMITH, WALTER E	
4574	ESRI WELL	ELLIOTT, ALVA	OIL AND GAS WELL	38.84770726	-81.08808086	CABOT OIL & GAS CORPORATION	
4581	ESRI WELL	BLACKSHIRE HEIRS	OIL AND GAS WELL	38.84787289	-80.99652672	Dominion Transmission Inc	
4602	ESRI WELL	MILLER, MILES	OIL AND GAS WELL	38.8550638	-81.03381195	CAIN, FRANCIS E.	
4638	ESRI WELL	MARSHALL, R. M.	OIL AND GAS WELL	38.91181902	-81.08558101	SMITH, WALTER E	
4662	ESRI WELL	FOWLER, M. D.	OIL AND GAS WELL	38.87612594	-81.07408821	Dominion Transmission Inc	
4678	ESRI WELL	PENNINGER, A. M.	OIL AND GAS WELL	38.9054704	-81.05059786	SMITH, WALTER E	
4683	ESRI WELL	MAECE, DEO	OIL AND GAS WELL	38.81411984	-81.06504076	GREER, INC.	
4737	ESRI WELL	BRAKE, T. J.	OIL AND GAS WELL	38.90593275	-81.02898453	PETRO HOLDINGS, INC.	
4765	ESRI WELL	YOAK, IVY/VON	OIL AND GAS WELL	38.94042228	-81.06935264	TRIO PETROLEUM CORP.	
4766	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.83126971	-81.07437696	EAST RESOURCES, INC.	
4769	ESRI WELL	KNOTTS & MINNEY	OIL AND GAS WELL	38.87352022	-81.03731482	OPERATOR UNKNOWN	
4786	ESRI WELL	MOSS, ERMA L.	OIL AND GAS WELL	38.9367942	-81.06638149	DALE, DAVID DBA DD OIL COMPANY	
4903	ESRI WELL	HATHOWAY, O. C.	OIL AND GAS WELL	38.84524209	-81.07732997	OPERATOR UNKNOWN	
4919	ESRI WELL	KENDALL, J. D.	OIL AND GAS WELL	38.84472905	-81.02387743	HEETER II, WILLIAM B	
4952	ESRI WELL	HUPP, GERALDINE	OIL AND GAS WELL	38.9090616	-81.07770826	SMITH, WALTER E	
4974	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.82792888	-81.0788308	EAST RESOURCES, INC.	
4992	ESRI WELL	MCCUMBERS, RONDELL L. JR.	OIL AND GAS WELL	38.85007453	-80.99463815	STALNAKER ENERGY CORPORATION	
5016	ESRI WELL	LAHAIE, RAYMOND R. & MADEL	OIL AND GAS WELL	38.82895257	-81.08150129	PDC MOUNTAINEER LLC	
5017	ESRI WELL	LAHAIE, RAYMOND R. & MADEL	OIL AND GAS WELL	38.82895257	-81.08150129	PETROLEUM DEVELOPMENT CORPORATION	
5023	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.82855264	-81.07447206	EAST RESOURCES, INC.	
5024	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.82855264	-81.07447206	EAST RESOURCES, INC.	
5042	ESRI WELL	MILLER, RONALD	OIL AND GAS WELL	38.82044353	-81.07203843	D & D ENERGY INC	
5060	ESRI WELL	BARR, LUERNA E.	OIL AND GAS WELL	38.87474691	-81.05871515	CAIN, FRANCIS E.	
5062	ESRI WELL	AYERS, HESTER, ETAL	OIL AND GAS WELL	38.87163554	-81.03842394	OPERATOR UNKNOWN	
5063	ESRI WELL	AYERS, HESTER, ETAL	OIL AND GAS WELL	38.87163554	-81.03842394	OPERATOR UNKNOWN	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
5076	ESRI WELL	ARNETT, A. J.	OIL AND GAS WELL	38.8566446	-81.0823742	OPERATOR UNKNOWN	
5078	ESRI WELL	ELLIOTT, ALVA	OIL AND GAS WELL	38.8477076	-81.0880808	CABOT OIL & GAS CORPORATION	
5197	ESRI WELL	POLING, FRENCH	OIL AND GAS WELL	38.85953883	-81.06689028	POLING, COREL	
5240	ESRI WELL	WITTE, CLIFTON	OIL AND GAS WELL	38.83387976	-81.03716536	GREER, INC.	
5268	ESRI WELL	WESTVACO	OIL AND GAS WELL	38.8877269	-81.04261348	UNITED PETRO LTD.	
5273	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.89481735	-81.03381465	C. I. MCKOWN & SON, INC.	
5283	ESRI WELL	WILSON, F. S.	OIL AND GAS WELL	38.88613081	-81.05189762	C. I. MCKOWN & SON, INC.	
5323	ESRI WELL	MORRIS	OIL AND GAS WELL	38.81719129	-81.05926408	PRIME OPERATING COMPANY	
5412	ESRI WELL	WARD, SHERLENE J.	OIL AND GAS WELL	38.94092832	-81.05676078	SMITH, WALTER E	
5528	ESRI WELL	CUNNINGHAM, LOIS	OIL AND GAS WELL	38.93476216	-81.07380882	STALNAKER ENERGY CORPORATION	
5533	ESRI WELL	BALL, LEWIS	OIL AND GAS WELL	38.925287939	-81.06336031	CAIN, FRANCIS E.	
5534	ESRI WELL	SPENCER, W. E.	OIL AND GAS WELL	38.92319902	-81.01766044	OPERATOR UNKNOWN	
5535	ESRI WELL	SPENCER, W. E.	OIL AND GAS WELL	38.92319902	-81.01766044	OPERATOR UNKNOWN	
5580	ESRI WELL	PROUDFOOT, EVERETT	OIL AND GAS WELL	38.834305	-81.09299099	OPERATOR UNKNOWN	
5591	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.8340969	-81.07739049	EAST RESOURCES, INC.	
5617	ESRI WELL	HARRIS, C. W.	OIL AND GAS WELL	38.91463579	-81.06655808	CENTRAL WEST VIRGINIA GAS PRODUCE	
5660	ESRI WELL	HILL, JOHN M.	OIL AND GAS WELL	38.84852971	-80.99375173	DUCKWORTH, STEVE WELL SERVICE	
5663	ESRI WELL	DELONA, EMMA	OIL AND GAS WELL	38.86913842	-81.0027976	CRESTON OIL CORPORATION	
5697	ESRI WELL	YOAK, ORVILLE RAY	OIL AND GAS WELL	38.93365508	-81.04132831	TRIO PETROLEUM CORP.	
5774	ESRI WELL	WARD, J. B.	OIL AND GAS WELL	38.93549567	-81.05412695	DOMINION TRANSMISSION INC	
5775	ESRI WELL	WARD, J. B.	OIL AND GAS WELL	38.93549567	-81.05412695	DOMINION TRANSMISSION INC	
5777	ESRI WELL	MCDONALD, SCOTCH	OIL AND GAS WELL	38.84077829	-81.07786094	OPERATOR UNKNOWN	
5805	ESRI WELL	SHOCK, A.	OIL AND GAS WELL	38.85833185	-81.04570516	CRESTON OIL CORPORATION	
5820	ESRI WELL	BARR, LUERNA	OIL AND GAS WELL	38.87111044	-81.06442637	GUNN, P. P., ESTATE HEIRS	
5860	ESRI WELL	RIDDLE, JOHN	OIL AND GAS WELL	38.85926822	-81.08687056	BARKER, CREED	
5861	ESRI WELL	RIDDLE, JOHN	OIL AND GAS WELL	38.85926822	-81.08687456	BARKER, CREED	
5917	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.85380373	-81.08908873	ROGERS & SON	
5945	ESRI WELL	MCDONALD, EDITH ZEE	OIL AND GAS WELL	38.84156651	-81.0895943	ROGERS & SON	
5966	ESRI WELL	HUFFMAN, A. J.	OIL AND GAS WELL	38.8774949	-81.08474576	HUNT, K METAL	
5975	ESRI WELL	HUFFMAN, A. J.	OIL AND GAS WELL	38.8747949	-81.08474576	HUNT, K METAL	
5985	ESRI WELL	FERRELL, PHILLIP	OIL AND GAS WELL	38.8890329	-81.04892718	UNITED PETRO LTD.	
6023	ESRI WELL	SHAFFER, ELIA	OIL AND GAS WELL	38.86141397	-81.0891328	DOMINION TRANSMISSION INC	
6025	ESRI WELL	SHAFFER, ELIA	OIL AND GAS WELL	38.86141397	-81.0891328	DOMINION TRANSMISSION INC	
6055	ESRI WELL	MILLER, RONALD	OIL AND GAS WELL	38.81919953	-81.07579163	RITCHIE PETROLEUM CORP.	
6093	ESRI WELL	BURNS, WILLIAM	OIL AND GAS WELL	38.90108266	-81.07928988	SMITH, WALTER E	
6094	ESRI WELL	BURNS, WILLIAM	OIL AND GAS WELL	38.90108266	-81.07928988	SMITH, WALTER E	
6127	ESRI WELL	BOATWRIGHT, RAYMOND H.	OIL AND GAS WELL	38.81197012	-81.05907938	MCINTOSH, PARTNERSHIPS, THE	
6176	ESRI WELL	ELLIOTT, ARMINDA	OIL AND GAS WELL	38.83510194	-81.09484587	OPERATOR UNKNOWN	
6200	ESRI WELL	WARDER, IDA	OIL AND GAS WELL	38.82359878	-81.07332182	OPERATOR UNKNOWN	
6201	ESRI WELL	WARDER, IDA	OIL AND GAS WELL	38.82359878	-81.07332182	OPERATOR UNKNOWN	
6203	ESRI WELL	BOYNE, EDWIN N.	OIL AND GAS WELL	38.86537208	-81.03108756	YOAK, IVY V. DBA YOAK GAS COMPAN	
6264	ESRI WELL	STUMP, SYLVESTER	OIL AND GAS WELL	38.8610672	-81.01807613	PALEO, INC.	
6265	ESRI WELL	STUMP, SYLVESTER	OIL AND GAS WELL	38.8610672	-81.01807613	PALEO, INC.	
6267	ESRI WELL	GLOSS, MICHAEL L.	OIL AND GAS WELL	38.85828844	-81.00445806	ROGERS & SON	
6272	ESRI WELL	BARNES, W. F.	OIL AND GAS WELL	38.87341713	-81.03557635	HOPE GAS, INC.	
6273	ESRI WELL	BARNES, W. F.	OIL AND GAS WELL	38.87341713	-81.03557635	HOPE GAS, INC.	
6280	ESRI WELL	YOAK, ORVILLE RAY, ETUX	OIL AND GAS WELL	38.93874934	-81.03218723	CRESTON OIL CORPORATION	
6282	ESRI WELL	THORPE, RICHARD & BILLY	OIL AND GAS WELL	38.93418185	-81.04068215	TRIO PETROLEUM CORP.	
6292	ESRI WELL	DELONG, EMMA	OIL AND GAS WELL	38.8727674	-80.9989429	CRESTON OIL CORPORATION	
6294	ESRI WELL	SMITH, WALTER E.	OIL AND GAS WELL	38.93457399	-81.0334162	STALNAKER ENERGY CORPORATION	
6315	ESRI WELL	ASH, LAURA V.	OIL AND GAS WELL	38.90693408	-81.0343225	C. I. MCKOWN & SON, INC.	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
6326	ESRI WELL	HAYES, S. A.	OIL AND GAS WELL	38.8618821	-80.99245619	CRESTON OIL CORPORATION	
6339	ESRI WELL	MCDONALD, BROWN	OIL AND GAS WELL	38.84820921	-81.1093891	HOPE GAS, INC.	
6340	ESRI WELL	MCDONALD, BROWN	OIL AND GAS WELL	38.84820921	-81.1093891	HOPE GAS, INC.	
6370	ESRI WELL	STURM, FRED	OIL AND GAS WELL	38.85784676	-81.09970177	OPERATOR UNKNOWN	
6371	ESRI WELL	STURM, FRED	OIL AND GAS WELL	38.85784676	-81.09970177	OPERATOR UNKNOWN	
6393	ESRI WELL	FOX, THOMAS	OIL AND GAS WELL	38.85750312	-81.0815062	CAIN, FRANCIS E.	
6485	ESRI WELL	GARRETT, J.J.	OIL AND GAS WELL	38.80840577	-81.07928725	D & D ENERGY INC	
6494	ESRI WELL	SAUERS, JOSEPH R	OIL AND GAS WELL	38.88177644	-81.05579711	SMITH, WALTER E	
6503	ESRI WELL	WHITE, LONA	OIL AND GAS WELL	38.82884963	-81.05578458	STONESTREET LANDS CO	
6509	ESRI WELL	JARVIS, C. A.	OIL AND GAS WELL	38.8969027	-81.0443418	Dominion Transmission Inc	
6556	ESRI WELL	STURMS, OTHO	OIL AND GAS WELL	38.85418581	-81.0854877	ROGERS & SON	
6562	ESRI WELL	HARDMAN, A. & N.	OIL AND GAS WELL	38.82524825	-81.09858376	EAST RESOURCES, INC.	
6590	ESRI WELL	MAECE, RALPH	OIL AND GAS WELL	38.81610879	-81.06325683	MACE OIL & GAS	
6606	ESRI WELL	BENNETT, H. M.	OIL AND GAS WELL	38.90586872	-81.02434193	MCINTOSH, PARTNERSHIPS, THE	
6624	ESRI WELL	SAMPSON, BYRON D.	OIL AND GAS WELL	38.90732002	-81.02211417	EAST RESOURCES, INC.	
6625	ESRI WELL	SAMPSON, BYRON D.	OIL AND GAS WELL	38.90732002	-81.02211417	EAST RESOURCES, INC.	
6628	ESRI WELL	MORRIS	OIL AND GAS WELL	38.86217238	-80.99449513	PRIME OPERATING COMPANY	
6642	ESRI WELL	HICKMAN, E. J.	OIL AND GAS WELL	38.93840246	-81.03325496	CHEVRON U.S.A., INC.	
6677	ESRI WELL	MORRIS, JAMES & L.GILBERT	OIL AND GAS WELL	38.88787139	-81.06693896	MOUNTAIN V OIL & GAS, INC.	
6709	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82970826	-81.07251471	EAST RESOURCES, INC.	
6753	ESRI WELL	FULKS, EVELYN J.	OIL AND GAS WELL	38.85955928	-81.06133283	GREER, INC.	
6754	ESRI WELL	FULKS, EVELYN J.	OIL AND GAS WELL	38.85955928	-81.06133283	EAST RESOURCES, INC.	
6761	ESRI WELL	CALHOUN DEVELOPMENT CORP.	OIL AND GAS WELL	38.91036741	-81.0853958	SMITH, WALTER E	
6788	ESRI WELL	BOATRIGHT, DOUGLAS CRAIG	OIL AND GAS WELL	38.81159322	-81.05879216	PRIME OPERATING COMPANY	
6789	ESRI WELL	BOATRIGHT, DOUGLAS CRAIG	OIL AND GAS WELL	38.81159322	-81.05879216	PRIME OPERATING COMPANY	
6911	ESRI WELL	WILSON, DAISY	OIL AND GAS WELL	38.83225442	-81.04716355	CHEVRON U.S.A., INC.	
6919	ESRI WELL	STUMP, CLAYTON	OIL AND GAS WELL	38.86916141	-81.04924669	CAIN, FRANCIS E.	
6926	ESRI WELL	SMITH, ORAL & VIRGINIA	OIL AND GAS WELL	38.8349401	-81.0653996	REGISTRY DRILLING & DEVELOPMENT I	
6929	ESRI WELL	YOAK, CREED	OIL AND GAS WELL	38.81404951	-81.05952352	MCINTOSH, PARTNERSHIPS, THE	
6933	ESRI WELL	SCHUMACHER, FRANK	OIL AND GAS WELL	38.92545532	-81.03235703	MORRIS OIL & GAS CO., INC	
6934	ESRI WELL	SCHUMACHER, FRANK	OIL AND GAS WELL	38.92545532	-81.03235703	MORRIS OIL & GAS CO., INC	
6935	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83716509	-81.09323667	EAST RESOURCES, INC.	
6936	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83716509	-81.09323667	MEADOWS JR, S. L. PRODUCTION INC.	
6939	ESRI WELL	GARRETT, JOHN	OIL AND GAS WELL	38.80787858	-81.08190802	RITCHIE PETROLEUM CORP.	
6965	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.88724282	-81.02832039	C. I. MCKOWN & SON, INC.	
6976	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.83429818	-81.07202509	EAST RESOURCES, INC.	
6979	ESRI WELL	BURROWS, M. L.	OIL AND GAS WELL	38.88196157	-81.05099299	UNITED PETRO LTD.	
6981	ESRI WELL	STUMP, WARDER E.	OIL AND GAS WELL	38.85835813	-81.05760099	PETRO HOLDINGS, INC.	
7012	ESRI WELL	GARRETSON, JAMES M.	OIL AND GAS WELL	38.89977375	-81.01691427	EAST RESOURCES, INC.	
7051	ESRI WELL	KIRBY, CLARA	OIL AND GAS WELL	38.8862958	-81.04280402	UNITED PETRO LTD.	
7052	ESRI WELL	KIRBY, CLARA	OIL AND GAS WELL	38.8862958	-81.04280402	UNITED PETRO LTD.	
7064	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.88642053	-81.01654329	PETRO HOLDINGS, INC.	
7073	ESRI WELL	POLING, N. C. & VIENA	OIL AND GAS WELL	38.80745615	-81.07199575	HEETER, W. L.	
7101	ESRI WELL	YOAK, RAY	OIL AND GAS WELL	38.93098669	-81.02972687	S & R GAS VENTURES, LTD	
7113	ESRI WELL	WHITSELL, W. E. & VELDA	OIL AND GAS WELL	38.83906643	-81.0587757	REGISTRY DRILLING & DEVELOPMENT I	
7114	ESRI WELL	WHITSELL, W. E. & VELDA	OIL AND GAS WELL	38.83906643	-81.0587757	REGISTRY DRILLING & DEVELOPMENT I	
7127	ESRI WELL	WILSON, FLOYD	OIL AND GAS WELL	38.87601142	-81.05648431	OPERATOR UNKNOWN	
7132	ESRI WELL	FRAME, JOHN W.	OIL AND GAS WELL	38.8793084	-81.07187797	Dominion Transmission Inc	
7133	ESRI WELL	FRAME, JOHN W.	OIL AND GAS WELL	38.8793084	-81.07187797	Dominion Transmission Inc	
7134	ESRI WELL	FRAME, JOHN W.	OIL AND GAS WELL	38.8793084	-81.07187797	Dominion Transmission Inc	
7164	ESRI WELL	CUNNINGHAM, T. S.	OIL AND GAS WELL	38.83797219	-81.0816579	MORRIS, CARL R	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
7189	ESRI WELL	RICHARDS, DEWAIN, ET AL	OIL AND GAS WELL	38.89933843	-81.03381218	WACO OIL & GAS CO INC	
7195	ESRI WELL	HARDMAN, A. - HEIRS	OIL AND GAS WELL	38.88779336	-81.06786362	OPERATOR UNKNOWN	
7196	ESRI WELL	HARDMAN, A. - HEIRS	OIL AND GAS WELL	38.88779336	-81.06786362	OPERATOR UNKNOWN	
7198	ESRI WELL	FREDERICK, VIEVA RUTH	OIL AND GAS WELL	38.90253082	-81.02452761	EAST RESOURCES, INC.	
7200	ESRI WELL	FREDERICK, VIEVA RUTH	OIL AND GAS WELL	38.90253082	-81.02452761	BLAZER ENERGY CORPORATION	
7232	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.91181973	-81.03251244	PETRO HOLDINGS, INC.	
7250	ESRI WELL	BALL, LEWIS	OIL AND GAS WELL	38.92474786	-81.07213722	CAIN, FRANCIS E.	
7252	ESRI WELL	RULEY, D. A.	OIL AND GAS WELL	38.93002038	-81.02840777	PETROLEUM DEVELOPMENT CORPORATION	
7259	ESRI WELL	BARR, GARNETT, ET AL	OIL AND GAS WELL	38.88453391	-81.04781263	BLAZER ENERGY CORPORATION	
7261	ESRI WELL	STUMP, JOHN S.	OIL AND GAS WELL	38.91979903	-81.04639932	SMITH, WALTER E	
7277	ESRI WELL	BELL, S. P.	OIL AND GAS WELL	38.92627323	-81.03847416	SMITH, WALTER E	
7288	ESRI WELL	VANNOCY, HARRY L.	OIL AND GAS WELL	38.81281369	-81.07745956	ROGERS & SON	
7289	ESRI WELL	VANNOCY, HARRY L.	OIL AND GAS WELL	38.81281369	-81.07745956	ROGERS & SON	
7290	ESRI WELL	LITTLE, D.	OIL AND GAS WELL	38.83781905	-81.05913416	REGISTRY DRILLING & DEVELOPMENT I	
7293	ESRI WELL	SHAFFER, ELLA	OIL AND GAS WELL	38.86285985	-81.08256326	DALE, DAVID DB ADD OIL COMPANY	
7349	ESRI WELL	AYERS, HESTER M., ET AL	OIL AND GAS WELL	38.87474612	-81.03324372	OPERATOR UNKNOWN	
7350	ESRI WELL	AYERS, HESTER M., ET AL	OIL AND GAS WELL	38.87474612	-81.03324372	OPERATOR UNKNOWN	
7369	ESRI WELL	BALL, LEWIS & OKIE	OIL AND GAS WELL	38.92490499	-81.07726294	SMITH, WALTER E	
7376	ESRI WELL	BEALL, F.	OIL AND GAS WELL	38.86425956	-80.9851862	DOMINION TRANSMISSION INC	
7409	ESRI WELL	YOAK, CREED	OIL AND GAS WELL	38.82922586	-81.04874105	GREER, INC.	
7414	ESRI WELL	MELLOT WOOD PRESERVING	OIL AND GAS WELL	38.86588393	-81.02899199	MORRIS OIL & GAS CO., INC	
7451	ESRI WELL	KERBY, JOHN L., ET AL	OIL AND GAS WELL	38.86389149	-81.01695444	DOMINION TRANSMISSION INC	
7452	ESRI WELL	KERBY, JOHN L., ET AL	OIL AND GAS WELL	38.86389149	-81.01695444	DOMINION TRANSMISSION INC	
7459	ESRI WELL	POLING, VALERIA	OIL AND GAS WELL	38.8392228	-81.0478773	GREER, INC.	
7486	ESRI WELL	MORRIS, JAMES & L.GILBERT	OIL AND GAS WELL	38.88566279	-81.06730973	MOUNTAIN V OIL & GAS, INC.	
7508	ESRI WELL	HATHAWAY, ORAL C.	OIL AND GAS WELL	38.84485407	-81.07536943	OPERATOR UNKNOWN	
7516	ESRI WELL	STURM, AMOS	OIL AND GAS WELL	38.87234235	-81.05925152	OPERATOR UNKNOWN	
7521	ESRI WELL	LIPTON, MICHAEL	OIL AND GAS WELL	38.81063679	-81.08098169	ROGERS & SON	
7525	ESRI WELL	BALL, LOU	OIL AND GAS WELL	38.91299226	-81.05594958	BLAZER ENERGY CORPORATION	
7528	ESRI WELL	BRAGG	OIL AND GAS WELL	38.858883373	-81.00001729	PRIME OPERATING COMPANY	
7542	ESRI WELL	RICHARDS, DEWAIN & GRETA	OIL AND GAS WELL	38.889933826	-81.03436918	EAST RESOURCES, INC.	
7569	ESRI WELL	CUNNINGHAM, T. S.	OIL AND GAS WELL	38.827069	-81.08791373	PETROLEUM DEVELOPMENT CORPORATION	
7579	ESRI WELL	MCCARTNEY, DONALD	OIL AND GAS WELL	38.86057529	-81.0092853	ROGERS, M & SCULL, DAVID	
7591	ESRI WELL	GOODRICH, RICKY JOE	OIL AND GAS WELL	38.86437552	-81.04342424	STALNAKER ENERGY CORPORATION	
7610	ESRI WELL	SMITH	OIL AND GAS WELL	38.86334468	-80.9924422	ALAMCO INC	
7675	ESRI WELL	BURNS, MONOKA	OIL AND GAS WELL	38.90165981	-81.00930211	WACO OIL & GAS CO INC	
7683	ESRI WELL	DOBBS, J. F. - HEIRS	OIL AND GAS WELL	38.87756753	-81.04439665	EAST KENTUCKY ENERGY	
7688	ESRI WELL	MACE RALPH	OIL AND GAS WELL	38.82309914	-81.05798559	GREER, INC.	
7707	ESRI WELL	JOHNSON, JERRY ET AL	OIL AND GAS WELL	38.92434205	-81.07752085	WACO OIL & GAS CO INC	
7710	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.8356793	-81.08937676	OPERATOR UNKNOWN	
7734	ESRI WELL	CLOTHIER, ROBERT	OIL AND GAS WELL	38.81455524	-81.07245557	ROUZER OIL CO., INC.	
7755	ESRI WELL	RICHARDS, DEWAIN & GRETA	OIL AND GAS WELL	38.89919329	-81.03696845	BLAZER ENERGY CORPORATION	
7756	ESRI WELL	RICHARDS, DEWAIN & GRETA	OIL AND GAS WELL	38.89919329	-81.03696845	BLAZER ENERGY CORPORATION	
7764	ESRI WELL	WESTVACO	OIL AND GAS WELL	38.8877269	-81.04261348	UNITED PETRO LTD.	
7807	ESRI WELL	MACE, DEO. D.	OIL AND GAS WELL	38.80652628	-81.06564772	PRIME OPERATING COMPANY	
7816	ESRI WELL	POOL, ELIAS	OIL AND GAS WELL	38.89924288	-81.03961394	C. I. MCKOWN & SON, INC.	
7828	ESRI WELL	HILL, JOHN M.	OIL AND GAS WELL	38.84852971	-80.99375173	DUCKWORTH, STEVE WELL SERVICE	
7831	ESRI WELL	BENNETT, AMANDA	OIL AND GAS WELL	38.86304207	-81.03857262	HAUGHT INC	
7840	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83967529	-81.09150812	MOORE, DANIEL M. & RICHARD D.	
7841	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83967529	-81.09150812	MOORE, DANIEL M. & RICHARD D.	
7852	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.91268999	-81.07002116	EAST RESOURCES, INC.	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
7866	ESRI WELL	HUFFMAN, DANIEL	OIL AND GAS WELL	38.87550075	-81.04777314	SMITH, WALTER E	
7868	ESRI WELL	ROBINSON, J. - LEASE 1&2	OIL AND GAS WELL	38.84337234	-81.01353777	HEETER III, WILLIAM B	
7901	ESRI WELL	HARRIS, JERRY WAYNE	OIL AND GAS WELL	38.90427244	-81.02972725	C. I. MCKOWN & SON, INC.	
7910	ESRI WELL	BARR, L.J.	OIL AND GAS WELL	38.9757524	-81.04252217	CONNOLY, Z. N.	
7941	ESRI WELL	BOGGER HOLE HUNTING CLUB	OIL AND GAS WELL	38.90499797	-81.02545687	EAST RESOURCES, INC.	
7968	ESRI WELL	WHITE, QIAO	OIL AND GAS WELL	38.92789409	-81.03033702	R & A PRODUCTION DBA/R LYNCH & A	
7974	ESRI WELL	STUMP, J. NEIL	OIL AND GAS WELL	38.91268927	-81.05635419	WACO OIL & GAS CO INC	
7976	ESRI WELL	HALL, WHITE	OIL AND GAS WELL	38.80819505	-81.06501602	OPERATOR UNKNOWN	
7979	ESRI WELL	STUMP, ERVIN	OIL AND GAS WELL	38.83425091	-81.04129806	OPERATOR UNKNOWN	
7999	ESRI WELL	SMITH, ORAL & VIRGINIA	OIL AND GAS WELL	38.8349401	-81.06533906	REGISTRY DRILLING & DEVELOPMENT I	
8009	ESRI WELL	STURM, MALLIE	OIL AND GAS WELL	38.84431983	-81.06930419	R & A PRODUCTION DBA/R LYNCH & A	
8034	ESRI WELL	FOWLER, I. B.	OIL AND GAS WELL	38.87106871	-81.04592577	FOWLER, DALPH	
8036	ESRI WELL	BENNETT, R. W.	OIL AND GAS WELL	38.84174949	-81.02542049	DOMINION TRANSMISSION INC	
8037	ESRI WELL	BENNETT, R. W.	OIL AND GAS WELL	38.84174949	-81.02542049	DOMINION TRANSMISSION INC	
8058	ESRI WELL	OFFUTT, TIMOTHY	OIL AND GAS WELL	38.80715351	-81.07319567	STAHLAKER ENERGY CORPORATION	
8084	ESRI WELL	MINNEY, J.D.	OIL AND GAS WELL	38.84722204	-81.03338186	MINNEY, J D & FRESHWATER, DAVID	
8115	ESRI WELL	YOAK, ORVILLE R.	OIL AND GAS WELL	38.9350531	-81.02527032	STAHLAKER ENERGY CORPORATION	
8235	ESRI WELL	MCDONALD, SCOTCH	OIL AND GAS WELL	38.83733502	-81.07359401	ROUZER OIL CO., INC.	
8242	ESRI WELL	MILLER, ABE	OIL AND GAS WELL	38.86190448	-81.00843847	JAY-BEE OIL & GAS	
8295	ESRI WELL	HUFFMAN, DANIEL	OIL AND GAS WELL	38.87550075	-81.04777314	SMITH, WALTER E	
8297	ESRI WELL	SHAFFER, C. E.	OIL AND GAS WELL	38.83388782	-81.02629402	RITCHIE PETROLEUM CORP.	
8333	ESRI WELL	MCDONALD, TELL	OIL AND GAS WELL	38.8562527	-81.10782339	UNITED PETRO LTD.	
8344	ESRI WELL	MCDONALD, EDITH	OIL AND GAS WELL	38.84172964	-81.08913378	ROGERS & SON	
8345	ESRI WELL	MCDONALD, EDITH	OIL AND GAS WELL	38.84372964	-81.08913378	ROGERS & SON	
8350	ESRI WELL	REED, EMMA	OIL AND GAS WELL	38.84271582	-81.03771931	GREER, INC.	
8364	ESRI WELL	BRANNON, H.	OIL AND GAS WELL	38.86347782	-81.06244502	GREER, INC.	
8366	ESRI WELL	FRANCIS, EMMA	OIL AND GAS WELL	38.91847872	-81.04934305	SMITH, WALTER E	
8367	ESRI WELL	FRANCIS, EMMA	OIL AND GAS WELL	38.91847872	-81.04934305	SMITH, WALTER E	
8382	ESRI WELL	CABOT, GODFREY L.	OIL AND GAS WELL	38.81104283	-81.05724958	BOGGESS, GUY G.	
8439	ESRI WELL	HAYES, S. A.	OIL AND GAS WELL	38.82434571	-81.0790561	EAST RESOURCES, INC.	
8477	ESRI WELL	JACOBS, D. W.	OIL AND GAS WELL	38.82979254	-81.06400086	CHEVRON U.S.A., INC.	
8488	ESRI WELL	ROGERS, SHIRLEY	OIL AND GAS WELL	38.90401802	-81.02359986	EAST RESOURCES, INC.	
8489	ESRI WELL	ROGERS, SHIRLEY	OIL AND GAS WELL	38.90441802	-81.02359986	EAST RESOURCES, INC.	
8512	ESRI WELL	MORRIS, SARAH	OIL AND GAS WELL	38.90337492	-81.07561694	CRESTON OIL CORPORATION	
8534	ESRI WELL	BROWN, CHARLES W.	OIL AND GAS WELL	38.91123888	-81.01115804	WACO OIL & GAS CO INC	
8542	ESRI WELL	BRINNSTOOL, JERINE	OIL AND GAS WELL	38.90543331	-81.02508451	RIDDLE, WILLIAM D	
8581	ESRI WELL	MCCARTNEY, DONALD	OIL AND GAS WELL	38.85524348	-81.00428058	ROGERS, M. & SCULL, DAVID	
8589	ESRI WELL	DESPARD	OIL AND GAS WELL	38.93402068	-81.03147725	PETROLEUM DEVELOPMENT CORPORATION	
8617	ESRI WELL	SHOCK, HOLDA	OIL AND GAS WELL	38.86152952	-81.04476588	CRESTON OIL CORPORATION	
8625	ESRI WELL	JACOBSS	OIL AND GAS WELL	38.83666623	-81.05844534	REGISTRY DRILLING & DEVELOPMENT I	
8633	ESRI WELL	BRAKE, T. J.	OIL AND GAS WELL	38.91022517	-81.02710001	WACO OIL & GAS CO INC	
8666	ESRI WELL	ROBINSON, J. W. - HEIRS	OIL AND GAS WELL	38.8478696	-81.0116183	HEETER III, WILLIAM B	
8688	ESRI WELL	JOHNSON, JERRY, ETAL	OIL AND GAS WELL	38.92082936	-81.07547973	LINN OPERATING, LLC	
8699	ESRI WELL	MCDONALD, EDITH Z.	OIL AND GAS WELL	38.83942393	-81.08297312	OPERATOR UNKNOWN	
8719	ESRI WELL	MCINTYRE-RAFFERTY	OIL AND GAS WELL	38.90192382	-81.03386069	PETRO HOLDINGS, INC.	
8726	ESRI WELL	ROBINSON, COY	OIL AND GAS WELL	38.84849032	-81.06943615	M & A WELL SERVICE, INC.	
8819	ESRI WELL	VANNOY	OIL AND GAS WELL	38.86130148	-81.01095513	PRIME OPERATING COMPANY	
8826	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83280365	-81.0796004	EAST RESOURCES, INC.	
8891	ESRI WELL	RAFFERTY, W. T.	OIL AND GAS WELL	38.83532108	-81.08891326	EAST RESOURCES, INC.	
8903	ESRI WELL	STURM, MALLIE	OIL AND GAS WELL	38.85464928	-81.08260588	R & A PRODUCTION DBA/R LYNCH & A	
8913	ESRI WELL	RAYBUCK & HARNIS	OIL AND GAS WELL	38.83662726	-81.04835781	POLING, COREL	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
8915	ESRI WELL	BURROUGHS, M. L..	OIL AND GAS WELL	38.88425819	-81.04988894	UNITED PETRO LTD.	
8942	ESRI WELL	STUTZ, EDWARD, ETUX	OIL AND GAS WELL	38.91676633	-81.010951481	WACO OIL & GAS CO INC	
8948	ESRI WELL	BALI, JOHN LEWIS	OIL AND GAS WELL	38.92284163	-81.06011428	WACO OIL & GAS CO INC	
9020	ESRI WELL	WHITE, LONA	OIL AND GAS WELL	38.822906824	-81.05466032	SPENCER ENTERPRISES DBA HUGH SPEN	
9044	ESRI WELL	HAYES, S. A.	OIL AND GAS WELL	38.82184072	-81.08111924	EAST RESOURCES, INC.	
9046	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.88700222	-81.0349432	PARKER GAS COMPANY	
9047	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.88700222	-81.0349432	PARKER GAS COMPANY	
9087	ESRI WELL	TAGLIANTE JR, ET AL, JOE	OIL AND GAS WELL	38.85475911	-81.05055048	STAINAKER ENERGY CORPORATION	
9093	ESRI WELL	JACOBS REALTY CO.	OIL AND GAS WELL	38.83765442	-81.06694605	CHEVRON U.S.A., INC.	
9110	ESRI WELL	ELLIOTT, ALVA	OIL AND GAS WELL	38.84632891	-81.08870835	OPERATOR UNKNOWN	
9121	ESRI WELL	STUMP, GEORGIA, ETAL	OIL AND GAS WELL	38.90297155	-81.08191579	CABOT OIL & GAS CORPORATION	
9129	ESRI WELL	KIMBLE, D. A.	OIL AND GAS WELL	38.92621005	-81.04842433	SMITH, WALTER E	
9134	ESRI WELL	STUMP-MCDONALD	OIL AND GAS WELL	38.84332286	-81.07227371	OPERATOR UNKNOWN	
9156	ESRI WELL	DESPARD	OIL AND GAS WELL	38.93704105	-81.0252191	PETROLEUM DEVELOPMENT CORP.	
9186	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82974093	-81.07910584	EAST RESOURCES, INC.	
9202	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.8531646	-81.08698353	ROGERS & SON	
9203	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.8531646	-81.08698353	ROGERS & SON	
9226	ESRI WELL	FLING, WILLIE B.	OIL AND GAS WELL	38.8727058	-81.04197739	OPERATOR UNKNOWN	
9279	ESRI WELL	BARNETT, CHARLES E.	OIL AND GAS WELL	38.86162981	-81.00833309	JAY-BEE OIL & GAS	
9296	ESRI WELL	MORRIS, JAMES J.	OIL AND GAS WELL	38.88163229	-81.07806092	MOUNTAIN V OIL & GAS, INC.	
9302	ESRI WELL	MORRIS, JAMES J.	OIL AND GAS WELL	38.90630355	-81.07715166	CRESTON OIL CORPORATION	
9339	ESRI WELL	MORRIS, JAMES	OIL AND GAS WELL	38.90254511	-81.07839531	CRESTON OIL CORPORATION	
9411	ESRI WELL	TIDWELL, FRANK	OIL AND GAS WELL	38.83577888	-81.06220031	REGISTRY DRILLING & DEVELOPMENT I	
9413	ESRI WELL	HARDMAN HEIRS	OIL AND GAS WELL	38.88860553	-81.07344279	MOUNTAIN V OIL & GAS, INC.	
9431	ESRI WELL	CHURCH, JOHN W.	OIL AND GAS WELL	38.84588814	-81.08764649	OPERATOR UNKNOWN	
9436	ESRI WELL	BARR, LUERNA E.	OIL AND GAS WELL	38.87244085	-81.05871556	CAIN, FRANCIS E.	
9461	ESRI WELL	BURROWS, M. L.	OIL AND GAS WELL	38.88613037	-81.048774071	UNITED PETRO LTD.	
9478	ESRI WELL	POLING, CHARITY	OIL AND GAS WELL	38.85643374	-81.07140892	MORRIS OIL & GAS CO., INC	
9479	ESRI WELL	GARRETSON, JAMES	OIL AND GAS WELL	38.90122497	-81.02025671	EAST RESOURCES, INC.	
9492	ESRI WELL	MCDONALD, BROWN	OIL AND GAS WELL	38.84556176	-81.10226471	HOPE GAS, INC.	
9493	ESRI WELL	MCDONALD, BROWN	OIL AND GAS WELL	38.84556176	-81.10226471	HOPE GAS, INC.	
9523	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.83122418	-81.0778609	EAST RESOURCES, INC.	
9532	ESRI WELL	ROBINSON, COY	OIL AND GAS WELL	38.84497872	-81.0705747	M & A WELL SERVICE, INC.	
9548	ESRI WELL	ERLEWINNE, FRANCIS	OIL AND GAS WELL	38.92272006	-81.0434546	SMITH, WALTER E	
9549	ESRI WELL	ERLEWINNE, FRANCIS	OIL AND GAS WELL	38.92272006	-81.0434546	SMITH, WALTER E	
9577	ESRI WELL	FRAME, JOHN W.	OIL AND GAS WELL	38.88000345	-81.06997062	EAST RESOURCES, INC.	
9578	ESRI WELL	FRAME, JOHN W.	OIL AND GAS WELL	38.88000345	-81.06997062	EAST RESOURCES, INC.	
9628	ESRI WELL	STUMP, GEORGIE	OIL AND GAS WELL	38.899337	-81.08335301	SMITH, WALTER E	
9629	ESRI WELL	STUMP, GEORGIE	OIL AND GAS WELL	38.899337	-81.08335301	SMITH, WALTER E	
9659	ESRI WELL	HARRIS, N. P. - HERRS	OIL AND GAS WELL	38.91122802	-81.03621748	WACO OIL & GAS CO INC	
9704	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.83520701	-81.0755878	OPERATOR UNKNOWN	
9711	ESRI WELL	HUFFMAN	OIL AND GAS WELL	38.90026825	-81.07484329	CRESTON OIL CORPORATION	
9759	ESRI WELL	PLANT, AMANDA	OIL AND GAS WELL	38.88990371	-81.0665678	OPERATOR UNKNOWN	
9776	ESRI WELL	SHAFFER, C. E.	OIL AND GAS WELL	38.83639238	-81.02808823	OPERATOR UNKNOWN	
9780	ESRI WELL	CARPENTER, ROY & ODA	OIL AND GAS WELL	38.81745756	-81.07152779	RITCHIE PETROLEUM CORP.	
9781	ESRI WELL	CARPENTER, ROY & ODA	OIL AND GAS WELL	38.81745756	-81.07152779	RITCHIE PETROLEUM CORP.	
9795	ESRI WELL	MORRIS, JAMES J.	OIL AND GAS WELL	38.90516839	-81.07351992	TRIO PETROLEUM CORP.	
9798	ESRI WELL	MORRIS, JAMES & L.GILBERT	OIL AND GAS WELL	38.892806	-81.07455179	MOUNTAIN V OIL & GAS, INC.	
9808	ESRI WELL	STURMS, MALLIE	OIL AND GAS WELL	38.85380373	-81.08908873	ROGERS & SON	
9824	ESRI WELL	MCDONALD & HARDMAN	OIL AND GAS WELL	38.85545584	-81.09220831	GOFF, DELBERT	
9833	ESRI WELL	CUNNINGHAM, T. S.	OIL AND GAS WELL	38.82882908	-81.08655644	PETROLEUM DEVELOPMENT CORP.	

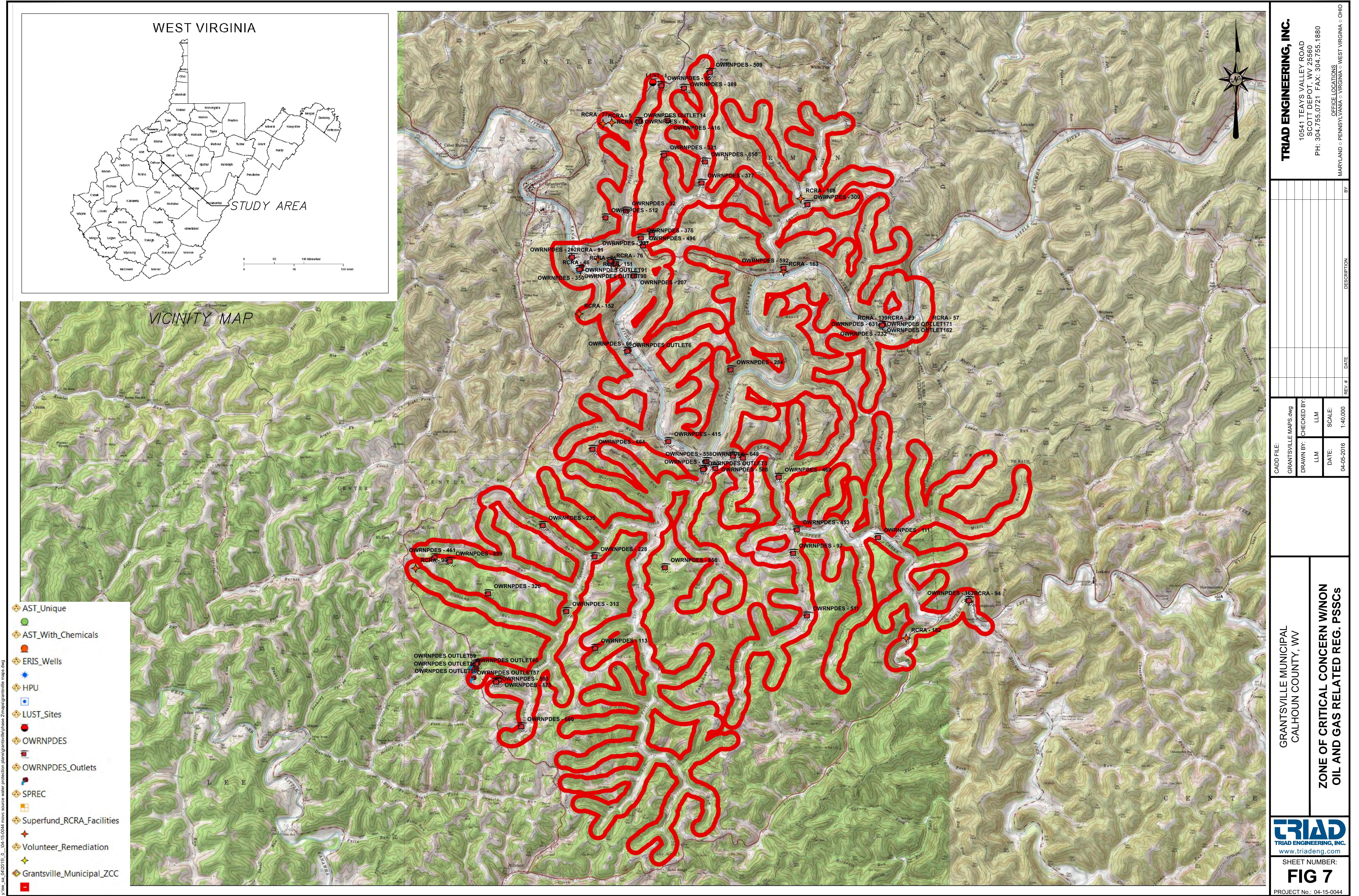
PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
9850	ESRI WELL	CARPENTER, ROY & ODA	OIL AND GAS WELL	38.82390316	-81.07508353	RITCHIE PETROLEUM CORP.	
9869	ESRI WELL	POLING, CHARITY	OIL AND GAS WELL	38.85496667	-81.06690575	MORRIS OIL & GAS CO., INC.	
9883	ESRI WELL	STALLMAN, A. J.	OIL AND GAS WELL	38.93185185	-81.04219106	APPLIED MECHANICS CORP.	
9939	ESRI WELL	GWINN, ROGER L.	OIL AND GAS WELL	38.90064426	-81.02230007	BLAZER ENERGY CORPORATION	
9940	ESRI WELL	GWINN, ROGER L.	OIL AND GAS WELL	38.90064426	-81.02230007	BLAZER ENERGY CORPORATION	
9941	ESRI WELL	GWINN, ROGER L.	OIL AND GAS WELL	38.90064426	-81.02230007	EAST RESOURCES, INC.	
9948	ESRI WELL	STUMP, FRED PELL	OIL AND GAS WELL	38.84083699	-81.00864673	PRIME OPERATING COMPANY	
9953	ESRI WELL	WILSON, G. S.	OIL AND GAS WELL	38.8568912	-81.02747046	DOMINION TRANSMISSION INC	
9963	ESRI WELL	HAMILTON, L. C.	OIL AND GAS WELL	38.84782382	-81.06070553	ROGERS & SON	
9977	ESRI WELL	HARDMAN, RUBY P.	OIL AND GAS WELL	38.86333222	-81.07690349	PETROLEUM DEVELOPMENT CORP	
9978	ESRI WELL	HARDMAN, RUBY P.	OIL AND GAS WELL	38.86333222	-81.07690349	PETROLEUM DEVELOPMENT CORP	
10098	ESRI WELL	POLING, VALERIA	OIL AND GAS WELL	38.84752429	-81.04324633	DOMINION TRANSMISSION INC	
10180	ESRI WELL	BENNETT, OFA	OIL AND GAS WELL	38.9198733	-81.03548995	SMITH, WALTER E	
10241	ESRI WELL	BRANNON HEIRS	OIL AND GAS WELL	38.86157485	-81.00826277	JAY-BEE OIL & GAS	
10265	ESRI WELL	GARRETSON, JAMES	OIL AND GAS WELL	38.90122497	-81.02746571	EAST RESOURCES, INC.	
10266	ESRI WELL	GODFREY, OMAR	OIL AND GAS WELL	38.85454011	-81.00950802	PRIME OPERATING COMPANY	
10267	ESRI WELL	GODFREY, OMAR	OIL AND GAS WELL	38.85454011	-81.00950802	PRIME OPERATING COMPANY	
10268	ESRI WELL	GODFREY, OMAR	OIL AND GAS WELL	38.85454011	-81.00950802	PRIME OPERATING COMPANY	
10280	ESRI WELL	MASIARCZYK, FRANK J.	OIL AND GAS WELL	38.89820778	-81.03891741	WACO OIL & GAS CO INC	
10308	ESRI WELL	STUMP	OIL AND GAS WELL	38.85448021	-81.00205604	PRIME OPERATING COMPANY	
10312	ESRI WELL	STUMP	OIL AND GAS WELL	38.85012583	-80.99894323	PRIME OPERATING COMPANY	
10337	ESRI WELL	SHOCK, VIRGINIA	OIL AND GAS WELL	38.89149989	-81.06452435	SMITH, WALTER E	
10338	ESRI WELL	SHOCK, VIRGINIA	OIL AND GAS WELL	38.89149989	-81.06452435	SMITH, WALTER E	
10363	ESRI WELL	WILSON, G. S.	OIL AND GAS WELL	38.8568912	-81.02747046	DOMINION TRANSMISSION INC	
10383	ESRI WELL	POLING, VALERIA	OIL AND GAS WELL	38.84752429	-81.04324633	DOMINION TRANSMISSION INC	
10398	ESRI WELL	GAINER, VISTA	OIL AND GAS WELL	38.86326722	-81.04984087	CAIN, FRANCIS E.	
10399	ESRI WELL	GAINER, VISTA	OIL AND GAS WELL	38.86326722	-81.04984087	CAIN, FRANCIS E.	
10405	ESRI WELL	PLANT, AMANDA	OIL AND GAS WELL	38.89486851	-81.07204241	OPERATOR UNKNOWN	
10416	ESRI WELL	HARRIS, N. P.	OIL AND GAS WELL	38.91022337	-81.03399843	EAST RESOURCES, INC.	
10436	ESRI WELL	SAMPSON BYRON D	OIL AND GAS WELL	38.91167431	-81.01710048	EAST RESOURCES, INC.	
10437	ESRI WELL	SAMPSON BYRON D	OIL AND GAS WELL	38.91167431	-81.01710048	EAST RESOURCES, INC.	
10452	ESRI WELL	WARD, J. B.	OIL AND GAS WELL	38.9362444	-81.05036651	KNIGHT, W V	
10453	ESRI WELL	WARD, J. B.	OIL AND GAS WELL	38.9362444	-81.05036651	KNIGHT, W V	
10484	ESRI WELL	HARDMAN, A. & N.	OIL AND GAS WELL	38.82394935	-81.09896099	EAST RESOURCES, INC.	
10489	ESRI WELL	STUMP, WARDER MRS.	OIL AND GAS WELL	38.8354666	-81.09632806	MOORE, DANIEL M. & RICHARD D.	
10490	ESRI WELL	STUMP, WARDER MRS.	OIL AND GAS WELL	38.8354666	-81.09632806	MOORE, DANIEL M. & RICHARD D.	
10519	ESRI WELL	HUFFMAN, DANIEL	OIL AND GAS WELL	38.87558293	-81.05361688	SMITH, WALTER E	
10537	ESRI WELL	MCDONALD, CLAY	OIL AND GAS WELL	38.84727816	-81.09515589	CONNOLLY, Z. N.	
10555	ESRI WELL	MCDONALD, LOGAN	OIL AND GAS WELL	38.85805577	-81.10688997	DOMINION TRANSMISSION INC	
10580	ESRI WELL	MCDONALD, CLAY	OIL AND GAS WELL	38.84732112	-81.10294598	MORRIS OIL & GAS CO., INC.	
10591	ESRI WELL	GARRETSON, JAMES	OIL AND GAS WELL	38.90282141	-81.01710067	EAST RESOURCES, INC.	
10592	ESRI WELL	GARRETSON, JAMES	OIL AND GAS WELL	38.90282141	-81.01710067	EAST RESOURCES, INC.	
10597	ESRI WELL	MC DONALD, SCOTCH	OIL AND GAS WELL	38.84163983	-81.06768724	ROGERS & SON	
10608	ESRI WELL	HAUGHT, M. C.	OIL AND GAS WELL	38.85138589	-81.08427775	R & A PRODUCTION DBA R LYNCH & A	
10614	ESRI WELL	MORRIS, JAMES & L. GILBERT	OIL AND GAS WELL	38.8938034	-81.07311846	MOUNTAIN OIL & GAS, INC.	
10615	ESRI WELL	STUMP, A. H.	OIL AND GAS WELL	38.84548117	-81.00446533	GAINER, IVY	
10619	ESRI WELL	MASIARCZYK, FRANK & LINDA	OIL AND GAS WELL	38.89716131	-81.03659722	EAST RESOURCES, INC.	
10620	ESRI WELL	MASIARCZYK, FRANK & LINDA	OIL AND GAS WELL	38.89716131	-81.03659722	BLAZER ENERGY CORPORATION	
10621	ESRI WELL	MASIARCZYK, FRANK & LINDA	OIL AND GAS WELL	38.89716131	-81.03659722	BLAZER ENERGY CORPORATION	
10622	ESRI WELL	ROBBINS, COY	OIL AND GAS WELL	38.84825083	-81.07205529	M & A WELL SERVICE, INC.	
10649	ESRI WELL	HARRIS, N. P. - HEIRS	OIL AND GAS WELL	38.91240047	-81.03102709	WACO OIL & GAS CO INC	

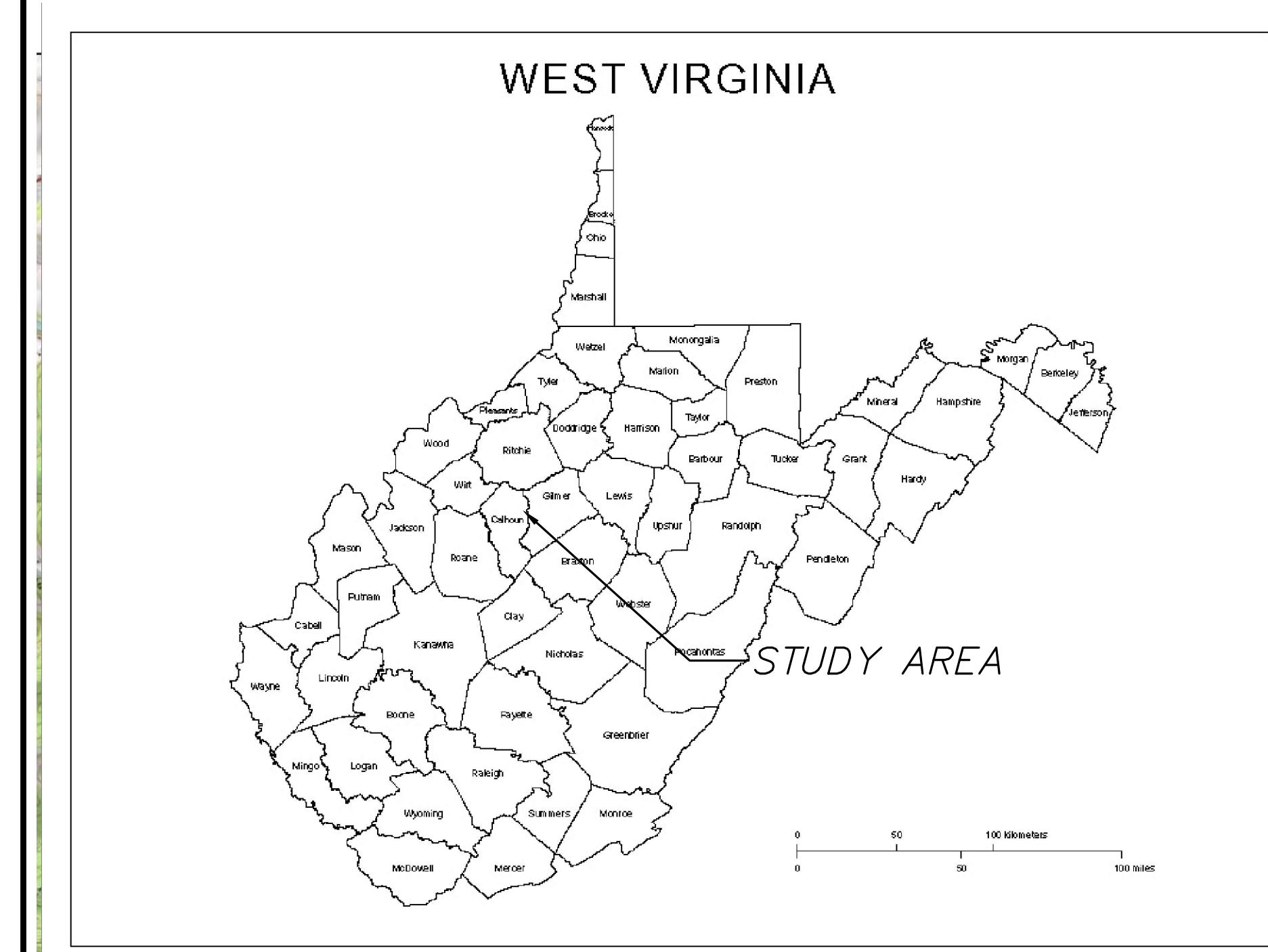
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10658	ESRI WELL	PLANT, ROSCOE	OIL AND GAS WELL	38.89387099	-81.07525045	CRESTON OIL CORPORATION	
10670	ESRI WELL	GEHO, O. R., ETAL	OIL AND GAS WELL	38.93036375	-81.05765918	SMITH, WALTER E	
10671	ESRI WELL	GEHO, O. R., ETAL	OIL AND GAS WELL	38.93036375	-81.05765918	SMITH, WALTER E	
10693	ESRI WELL	HALL	OIL AND GAS WELL	38.91052434	-81.06624334	PRIME OPERATING COMPANY	
10713	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.89177357	-81.03578038	PETRO HOLDINGS, INC.	
10743	ESRI WELL	POLING, CHARLEY	OIL AND GAS WELL	38.82584835	-81.0507571	GREFER, INC.	
10748	ESRI WELL	BOWE, EDWIN N.	OIL AND GAS WELL	38.85955872	-81.02707962	YOAK, IVY V. DBA YOAK GAS COMPANY	
10749	ESRI WELL	BOWE, EDWIN N.	OIL AND GAS WELL	38.85955872	-81.02707962	YOAK, IVY V. DBA YOAK GAS COMPANY	
10775	ESRI WELL	JOHNSON, SUSAN	OIL AND GAS WELL	38.90054838	-81.011778245	SMITH, WALTER E	
10792	ESRI WELL	SMITH, SHARON SUE	OIL AND GAS WELL	38.88511496	-81.02545669	STONESTREET, VANCE	
10829	ESRI WELL	MACE, RALPH	OIL AND GAS WELL	38.8105181	-81.06626344	PRIME OPERATING COMPANY	
10836	ESRI WELL	STUMP (ALL)	OIL AND GAS WELL	38.84735015	-81.00521909	GUNN, P. P., ESTATE HEIRS	
10860	ESRI WELL	STUMP, LENNA	OIL AND GAS WELL	38.84059439	-81.0456395	GREER, INC.	
10896	ESRI WELL	JOHNSON, GEORGE	OIL AND GAS WELL	38.91298036	-81.07547949	ARDENT RESOURCES, INC.	
10906	ESRI WELL	MILLAR, RONALD	OIL AND GAS WELL	38.81818379	-81.07171397	RITCHIE PETROLEUM CORP.	
10907	ESRI WELL	MILLAR, RONALD	OIL AND GAS WELL	38.81818379	-81.07171397	RITCHIE PETROLEUM CORP.	
10910	ESRI WELL	POLING, A. P.	OIL AND GAS WELL	38.86698307	-81.05984993	EAST RESOURCES, INC.	
10918	ESRI WELL	WHITE, OLA O.	OIL AND GAS WELL	38.93294418	-81.03009949	R & A PRODUCTION DBA/R LYNCH & A	
10928	ESRI WELL	HARDMAN, ALLEN	OIL AND GAS WELL	38.87103519	-81.09314603	DOMINION TRANSMISSION INC	
10965	ESRI WELL	RIDDLE, PELL - HEIRS	OIL AND GAS WELL	38.81818379	-81.07171397	RITCHIE PETROLEUM CORP.	
11002	ESRI WELL	M. A. C. BOARD	OIL AND GAS WELL	38.81678475	-81.07664376	ROGERS & SON	
11035	ESRI WELL	GODFREY, J. R.	OIL AND GAS WELL	38.85083509	-81.00861279	CRESTON OIL CORPORATION	
11068	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83982331	-81.09349463	EAST RESOURCES, INC.	
11080	ESRI WELL	POLING, N. C. & VENA	OIL AND GAS WELL	38.80745615	-81.079957	HEFTER, W. L.	
11125	ESRI WELL	DLORENZO, EDGAR & GRACE	OIL AND GAS WELL	38.83103164	-81.06562644	STONESTREET, VANCE	
11126	ESRI WELL	DLORENZO, EDGAR & GRACE	OIL AND GAS WELL	38.83103164	-81.06562644	STONESTREET, VANCE	
11152	ESRI WELL	HUFFMAN, J. B.	OIL AND GAS WELL	38.90951558	-81.06792351	DRAKE, BONNIE M	
11162	ESRI WELL	REED, HARLESS	OIL AND GAS WELL	38.84076014	-81.04337706	OPERATOR UNKNOWN	
11174	ESRI WELL	SIFERS, MURL	OIL AND GAS WELL	38.86022433	-81.11926436	EAST RESOURCES, INC.	
11201	ESRI WELL	GODFREY, J. R.	OIL AND GAS WELL	38.85641121	-81.00510059	CRESTON OIL CORPORATION	
11229	ESRI WELL	PROUDFOOT, EVERETT	OIL AND GAS WELL	38.83677224	-81.09428927	EAST RESOURCES, INC.	
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11267	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.91851704	-81.03812395	PETRO HOLDINGS, INC.	
11277	ESRI WELL	WITT, IDA ROSE	OIL AND GAS WELL	38.814212686	-81.0549356	MCINTOSH, PARTNERSHIPS, THE	
11279	ESRI WELL	FOC, THOMAS	OIL AND GAS WELL	38.87332907	-81.04548539	CAIN, FRANCIS E.	
11280	ESRI WELL	HOLLAND, A.	OIL AND GAS WELL	38.89454813	-81.04149901	DOMINION TRANSMISSION INC	
11292	ESRI WELL	HAYES, S. A.	OIL AND GAS WELL	38.82052407	-81.08882493	EAST RESOURCES, INC.	
11349	ESRI WELL	YOAK, FRANCES JEAN	OIL AND GAS WELL	38.929282712	-81.0567254	SMITH, WALTER E	
11391	ESRI WELL	ROBINSON, DICE	OIL AND GAS WELL	38.85486813	-81.04932558	DOMINION TRANSMISSION INC	
11397	ESRI WELL	HUFFMAN, O. J.	OIL AND GAS WELL	38.89886219	-81.06942982	DOMINION TRANSMISSION INC	
11406	ESRI WELL	SHOCK, A.	OIL AND GAS WELL	38.86162912	-81.04254545	CRESTON OIL CORPORATION	
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11499	ESRI WELL	BROWN, CHARLES W.	OIL AND GAS WELL	38.92010392	-81.03176935	WACO OIL & GAS CO INC	
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11517	ESRI WELL	HARRIS, JERRY WAYNE	OIL AND GAS WELL	38.90427244	-81.02972725	EAST RESOURCES, INC.	
11536	ESRI WELL	RICE, GRANVILLE	OIL AND GAS WELL	38.89096822	-81.02817197	PETRO HOLDINGS, INC.	
11557	ESRI WELL	HARRIS, JAMES & FRANKIE	OIL AND GAS WELL	38.90340139	-81.03176935	WACO OIL & GAS CO INC	
11561	ESRI WELL	YOAK, IVY VON	OIL AND GAS WELL	38.94220241	-81.06639103	YOAK, IVY V. DBA YOAK GAS COMPANY	
11562	ESRI WELL	YOAK, IVY VON	OIL AND GAS WELL	38.94220241	-81.06639103	YOAK, IVY V. DBA YOAK GAS COMPANY	
11566	ESRI WELL	GAINER, E. W.	OIL AND GAS WELL	38.91049176	-81.04014037	SMITH, WALTER E	
11607	ESRI WELL	HARDMAN/POLING	OIL AND GAS WELL	38.85009029	-81.0687451	CRESTON OIL CORPORATION	

PSSC #	ArcMap Layer	SITE_NAME	SITE_DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
11655	ESRI WELL	WHITE, LONA	OIL AND GAS WELL	38.82906324	-81.05466032	SPENCER ENTERPRISES DBA HUGH SPEN	
11669	ESRI WELL	RICHARDS, COY	OIL AND GAS WELL	38.89890231	-81.01710088	EAST RESOURCES, INC.	
11685	ESRI WELL	JACKSON, SAMUEL	OIL AND GAS WELL	38.85284267	-81.05652014	GREER, INC.	
11688	ESRI WELL	FRAME, STELLA	OIL AND GAS WELL	38.97358539	-81.0824445	GUNN, P. P., ESTATE HEIRS	
11833	ESRI WELL	HUFFMAN, J. B.	OIL AND GAS WELL	38.90533332	-81.06764319	CRESTON OIL CORPORATION	
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11887	ESRI WELL	BENNETT, OFA	OIL AND GAS WELL	38.92062811	-81.03044582	SMITH, WALTER E	
11902	ESRI WELL	FRANCIS, EMMA	OIL AND GAS WELL	38.91984246	-81.04862534	SMITH, WALTER E	
11929	ESRI WELL	BRANNON, H.	OIL AND GAS WELL	38.86765388	-81.065868478	EAST RESOURCES, INC.	
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11964	ESRI WELL	SAMPSON, BYRON D.	OIL AND GAS WELL	38.90565193	-81.02241812	EAST RESOURCES, INC.	
11965	ESRI WELL	SAMPSON, BYRON D.	OIL AND GAS WELL	38.90565193	-81.02241812	EAST RESOURCES, INC.	
11968	ESRI WELL	GOODRICH, RICKY JOE	OIL AND GAS WELL	38.86437055	-81.03830154	STAINAKER ENERGY CORPORATION	
11979	ESRI WELL	JOHNSTON, JAMES T.	OIL AND GAS WELL	38.826336703	-81.05798475	ROSS AND WHARTON GAS COMPANY, INC	
11984	ESRI WELL	FOWLER, LEONARD	OIL AND GAS WELL	38.87363733	-81.06096219	CAIN, FRANCIS E.	
11991	ESRI WELL	FRAME, JOHN W.	OIL AND GAS WELL	38.88058546	-81.07595479	DOMINION TRANSMISSION INC	
12001	ESRI WELL	RIDDLE, LOUISA J.	OIL AND GAS WELL	38.87974093	-81.02329425	HOPE GAS, INC.	
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12126	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83856516	-81.09477557	MOORE, DANIEL M. & RICHARD D.	
12127	ESRI WELL	MORGAN, DAVID	OIL AND GAS WELL	38.83856516	-81.09477557	MOORE, DANIEL M. & RICHARD D.	
12159	ESRI WELL	BRANNON, HENRY	OIL AND GAS WELL	38.86968289	-81.07656221	EAST RESOURCES, INC.	
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12174	ESRI WELL	RICE, S. C. B.	OIL AND GAS WELL	38.91530292	-81.019143	PETRO HOLDINGS, INC.	
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12261	ESRI WELL	BOGGER HOLE HUNTING CLUB	OIL AND GAS WELL	38.90499797	-81.02545687	BLAZER ENERGY CORPORATION	
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12285	ESRI WELL	FREDERICK, VIEVA RUTH	OIL AND GAS WELL	38.90260645	-81.02443734	C. I. MCKOWN & SON, INC.	
12286	ESRI WELL	FREDERICK, VIEVA RUTH	OIL AND GAS WELL	38.90260645	-81.02443734	C. I. MCKOWN & SON, INC.	
12328	ESRI WELL	BOURNE, P. A.	OIL AND GAS WELL	38.8133233	-81.0820686	ROGERS & SON	
12329	ESRI WELL	BOURNE, P. A.	OIL AND GAS WELL	38.8133233	-81.0820686	ROGERS & SON	
12395	ESRI WELL	JOHNSON, S. E. B.	OIL AND GAS WELL	38.93999122	-81.0652179	SMITH, WALTER E	
12396	ESRI WELL	JOHNSON, S. E. B.	OIL AND GAS WELL	38.93999122	-81.0652179	SMITH, WALTER E	
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12414	ESRI WELL	OWENS, J. S.	OIL AND GAS WELL	38.9058688	-81.04966594	OPERATOR UNKNOWN	
12471	ESRI WELL	BRINNSTOOL, JERRINE	OIL AND GAS WELL	38.86579939	-81.02207479	RIDDLE, WILLIAM D	
12472	ESRI WELL	BRINNSTOOL, JERRINE	OIL AND GAS WELL	38.86579939	-81.02207479	RIDDLE, WILLIAM D	
12492	ESRI WELL	RICE, S.C.B	OIL AND GAS WELL	38.9152576	-81.04218947	PETRO HOLDINGS, INC.	
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12560	ESRI WELL	FRANCIS, HAROLD, ETAL	OIL AND GAS WELL	38.92128022	-81.03263638	ANGERMAN ASSOCIATES INC	
12573	ESRI WELL	MINNEY, H. O. & A. G.	OIL AND GAS WELL	38.85912336	-81.03727502	EASTERN STATES OIL & GAS INC	
12581	ESRI WELL	BENNETT, AMANDA	OIL AND GAS WELL	38.85976997	-81.03198666	HAUGHT INC	
12583	ESRI WELL	BELL, S. P. - HEIRS	OIL AND GAS WELL	38.92512929	-81.03688615	SMITH, WALTER E	

PSSC #	ArcMap Layer	SITE_NAME	SITE DESCRIPTION	LATITUDE	LONGITUDE	RESPONSIBLE PARTY	Comments
12615	ESRI WELL	RULEY, D. A.	OIL AND GAS WELL	38.93157297	-81.02874759	PETROLEUM DEVELOPMENT CORP.	
12623	ESRI WELL	MACE, RALPH	OIL AND GAS WELL	38.8105181	-81.06626344	PRIME OPERATING COMPANY	
12666	ESRI WELL	ROBINSON, H. L.	OIL AND GAS WELL	38.87381534	-81.02947478	Dominion Transmission Inc	
12668	ESRI WELL	ROBINSON, H. L.	OIL AND GAS WELL	38.87381534	-81.02947478	Dominion Transmission Inc	
12697	ESRI WELL	HARDMAN, A., JR.	OIL AND GAS WELL	38.89250554	-81.07228563	MOUNTAIN V OIL & GAS, INC.	
12798	ESRI WELL	STUMP (ALL)	OIL AND GAS WELL	38.87161211	-81.05621799	GUNN, C. C.	
12803	ESRI WELL	BENNETT, A.	OIL AND GAS WELL	38.88599952	-81.04916723	UNITED PETRO LTD.	
12828	ESRI WELL	HARRIS, N. P.	OIL AND GAS WELL	38.91022337	-81.03399843	EAST RESOURCES, INC.	
12856	ESRI WELL	BARR, FRANK - HERS	OIL AND GAS WELL	38.84787567	-81.03234157	MORRIS, CARL R	
12876	ESRI WELL	SMITH, SHARON	OIL AND GAS WELL	38.83599516	-81.06889054	EAST RESOURCES, INC.	
12905	ESRI WELL	SAMPSON, KENNETH & DIANNE	OIL AND GAS WELL	38.83139081	-81.09503105	SMITH, WALTER E	
12925	ESRI WELL	SHARP, J. S.	OIL AND GAS WELL	38.82760717	-81.07610929	EAST RESOURCES, INC.	
12931	ESRI WELL	SMITH-PRICE	OIL AND GAS WELL	38.92198588	-81.05561518	SMITH, WALTER E	
12966	ESRI WELL	POOL, ELIAS	OIL AND GAS WELL	38.90268784	-81.04004487	C. I. MCKOWN & SON, INC.	
12997	ESRI WELL	BRANNON, HENRY	OIL AND GAS WELL	38.86668289	-81.07656221	EAST RESOURCES, INC.	

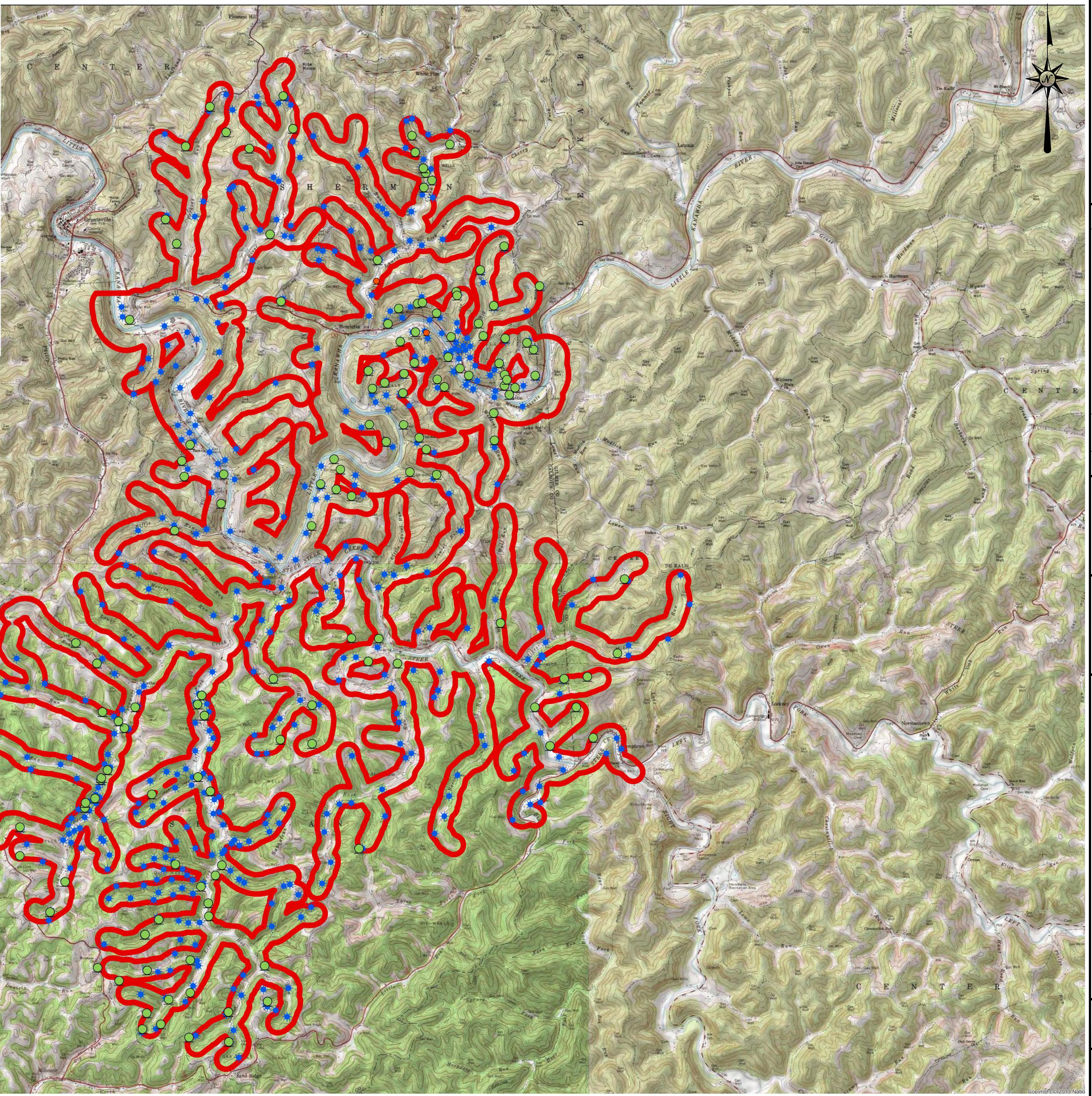
## **Map of Regulated PSSCs**





Y:\S\SA\404\15-0044 move source water protection plan\grantsville phase 2\maps\grantsville.mxd  
Plotted by: imccoy, O\_044-15-0044 move source water protection plan\grantsville phase 2\maps\grantsville.mxd

- ◆ AST\_Unique
- AST\_With\_Chemicals
- ERIS\_Wells
- ◆ HPU
- LUST\_Sites
- OWRNPDES
- OWRNPDES\_Outlets
- SPREC
- ◆ Superfund\_RCRA\_Facilities
- ◆ Volunteer\_Remediation
- ◆ Grantsville\_Municipal\_ZCC



GRANTSVILLE MUNICIPAL CALHOUN COUNTY, WV		CADD FILE: GRANTSVILLE MAPS.dwg
DRAWN BY:	CHECKED BY:	
LLM	LLM	SCALE:
DATE:		
04-05-2016	1:40,000	REV #:
DATE:		
DESCRIPTION		

**FIG 7B**

SHEET NUMBER:  
**FIG 7B**

PROJECT No.: 04-15-0044

## Appendix B. Early Warning Monitoring System Forms

### Proposed Early Warning Monitoring System Worksheet- Surface

<b>Describe the type of early warning detection equipment that could be installed, including the design.</b>
An Advanced Water Quality Monitoring Platform connected to the riser is proposed. For the basis of this report, we evaluated and priced an EXO2 sonde (probe) with related appurtenances from YSI (xylem). The sonde can be moved up and down in the water column as needed. The system proposed includes: <ul style="list-style-type: none"><li>• Sensors for:<ul style="list-style-type: none"><li>○ Conductivity (to detect potential contaminants from oil and gas wells)</li><li>○ Salinity (to detect potential contaminants from oil and gas wells (brine))</li><li>○ Total Suspended Solids (TDS) (to detect potential contaminants from oil and gas wells)</li><li>○ pH (Changes in pH provide information regarding potential heavy metals such as iron and manganese).</li><li>○ Turbidity (Total Suspended Solids) (this is a standard measurement for raw water sources. Bacteria such as e. coli and protozoa such as Giardia can attach themselves to the suspended solids and promote gastrointestinal disease).</li></ul></li><li>• Central wiper – This wipes the sensors prior to each reading to remove algae or other biofouling)</li><li>• Localized power (D batteries)</li></ul>
<b>Where would the equipment be located?</b>
In a raw water sampling port that exists in the water plant.
<b>What would the maintenance plan for the monitoring equipment entail?</b>
Occasional adjustment in elevation and replacement of batteries
<b>Describe the proposed sampling plan at the monitoring site.</b>
The monitoring system takes readings at user-defined intervals. To start, readings should be taken every hour, but can be adjusted as needed.
<b>Describe the proposed procedures for data management and analysis.</b>
The monitoring system will be connected to the water treatment plants system via hard wiring.

# Communication Plan Template

## For Grantsville Water Department

PWSID: WV3300701 District: St. Albans

Certified Operator: Robert Alan Bell

Contact Phone Number: 304.354.7316

Contact Email Address: grantsvillewaterplant@yahoo.com

Plan Developed On: 5/31/2016 Plan Update Due On: \_\_\_\_\_

### **ACKNOWLEDGMENTS:**

*This plan was developed by Alan Bell of Grantsville Water Department to meet certain requirements of the Source Water and Assessment Protection Program (SWAPP) and the Wellhead Protection Program (WHPP) for the State of West Virginia, as directed by the federal Safe Drinking Water Act (SDWA) and state laws and regulations.*

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## Introduction

Legislative Rule 64CSR3 requires public water systems to develop a Communication Plan that documents how public water suppliers, working in concert with state and local emergency response agencies, shall notify state and local health agencies and the public in the event of a spill or contamination event that poses a potential threat to public health and safety. The plan must indicate how the public water supplier will provide updated information, with an initial notification to the public to occur no later than thirty minutes after the supplier becomes aware that the spill, release or potential contamination of the public water system poses a potential threat to public health and safety.

The public water system has responsibility to communicate to the public, as well as to state and local health agencies. This plan is intended to comply with the requirements of Legislative Rule 64CSR3, and other state and federal regulations.

## TIERS Reporting System

This water system has elected to use the *Tiered Incident / Event Reporting System* (TIERS) for communicating with the public, agencies, the media, and other entities in the event of a spill or other incident that may threaten water quality. TIERS provides a multi-level notification framework, which escalates the communicated threat level commensurate with the drinking water system risks associated with a particular contamination incident or event. TIERS also includes a procedural flow chart illustrating key incident response communication functions and how they interface with overall event response / incident management actions. Finally, TIERS identifies the roles and responsibilities for key people involved in risk response, public notification, news media and other communication.

TIERS provides an easy-to-remember five-tiered **A-B-C-D-E** risk-based incident response communication format, as described below. Table 1 provides also associated risk levels. Example press releases are provided as attachments to this plan.

**A = Announcement.** The water system is issuing an announcement to the public and public agencies about an incident or event that may pose a threat to water quality. Additional information will be provided as it becomes available. As always, if water system customers notice anything unusual about their water, they should contact the water system

**B = Boil Water.** A boil water advisory has been issued by the water system. Customers may use the water for showering, bathing, and other non-potable uses, but should boil water used for drinking or cooking.

**C = Cannot Drink.** The water system asks that users not drink or cook with the water at this time. Non-potable uses, such as showering, bathing, cleaning, and outdoor uses are not affected.

**D = Do Not Use.** An incident or event has occurred affecting nearly all uses of the water. Do not use the water for drinking, cooking, showering, bathing, cleaning, or other tasks where water can come in contact with your skin. Water can be used for flushing commodes and fire protection.

**E=Emergency.** Water cannot be used for any reason.

Tier	Tier Category	Risk Level	Tier Summary
A	Announcement	Low	The water system is issuing an announcement to the public and public agencies about an incident or event that could pose a threat to public health and safety. Additional information will be provided as it becomes available.
B	Boil Water Advisory	Moderate	Water system users are advised to boil any water to be used for drinking or cooking, due to possible microbial contamination. The system operator will notify users when the boil water advisory is lifted.
C	Cannot Drink	High	System users should not drink or cook with the water until further notice. The water can still be used for showering, bathing, cleaning, and other tasks.
D	Do Not Use	Very High	The water should only be used for flushing commodes and fire protection until further notice. More information on this notice will be provided as soon as it is available.
E	Emergency	Extremely High	The water should not be used for any purpose until further notice. More information on this notice will be provided as soon as it is available.

## Communication Team

The Communication Team for the water system is listed in the table below, along with key roles. In the event of a spill or other incident that may affect water quality, the water system spokesperson will provide initial information, until the team assembles (if necessary) to provide follow-up communication.

Water system communication team members, organizations, and roles.

Team Member Name	Organization	Phone	Email	Role
Doyle Hupp	City of Grantsville	304.354.7035		Primary Spokesperson
Alan Bell	Grantsville Water	304.354.7316	grantsvillewaterplant@yahoo.com	Secondary Spokesperson

In the event of a spill, release, or other incident that may threaten water quality, members of the team who are available will coordinate with the management staff of the local water supplier to:

- Collect information needed to investigate, analyze, and characterize the incident/event
- Provide information to the management staff, so they can decide how to respond
- Assist the management staff in handling event response and communication duties
- Coordinate fully and seamlessly with the management staff to ensure response effectiveness

## Communication Team Duties

The communication team will be responsible for working cooperatively with the management staff and state and local emergency response agencies to notify local health agencies and the public of the initial spill or contamination event. The team will also provide updated information related to any contamination or impairment of the source water supply or the system's drinking water supply.

**According to Legislative Rule 64CSR3, the initial notification to the public will occur no later than thirty minutes after the public water system becomes aware that the spill, release or potential contamination of the public water system poses a potential threat to public health and safety.**

As part of the group implementing the Source Water Protection Plan, team members are expected to be familiar with the plan, including incident/event response and communication tasks. Specifically, team members should:

- Be knowledgeable on elements of the Source Water Protection Plan and Communication Plan
- Attend team meetings to ensure up-to-date knowledge of the system and its functions
- Participate in periodic exercises that practice incident response and communication tasks
- Help to educate local officials, the media, and others on source water protection
- Cooperate with water supplier efforts to coordinate incident response communication
- Be prepared to respond to requests for field investigations of reported incidents
- Agree not to speak on behalf of the water supplier unless designated as the system's spokesperson

The primary spokesperson will be responsible for speaking on behalf of the water system to local agencies, the public, and the news media. The spokesperson should work with the management staff and the team to ensure that all communication is clear, accurate, timely, and consistent. The spokesperson may authorize and/or direct others to issue news releases or other information that has been approved by the system's management staff. The spokesperson is expected to be on call immediately when an incident or event which may threaten water quality occurs. The spokesperson will perform the following tasks in the event of a spill, release, or other event that threatens water quality:

- Announce which risk level (A, B, C, D, or E) will apply to the public notifications that are issued (see example press releases attached)
- Issue news releases, updates, and other information regarding the incident/event
- Use the news media, email, social media, and other appropriate information venues
- Ensure that news releases are sent to local health agencies and the public
- Respond to questions from the news media and others regarding the incident/event
- Appear at news conferences and interviews to explain incident response, etc.

## Incident / Event Communication Procedure

The flow chart in this section illustrates how the water system will respond when it receives a report that a spill, release, or other contamination event may have occurred. Key elements of the flow chart are described below.

### Communication with agencies, the public, and the media during threat incidents

Upon initial notification of the incident/event, system managers and staff will collect information and verify the need for further investigation. Only properly trained personnel will perform onsite investigations if permitted by emergency responders. If further investigation is warranted, and the initial facts support it, the water system spokesperson will issue a public communication statement consistent with the threat level. In addition, water system personnel and partners will be dispatched to conduct reconnaissance, a threat assessment, and a threat characterization, if present. This work may include:

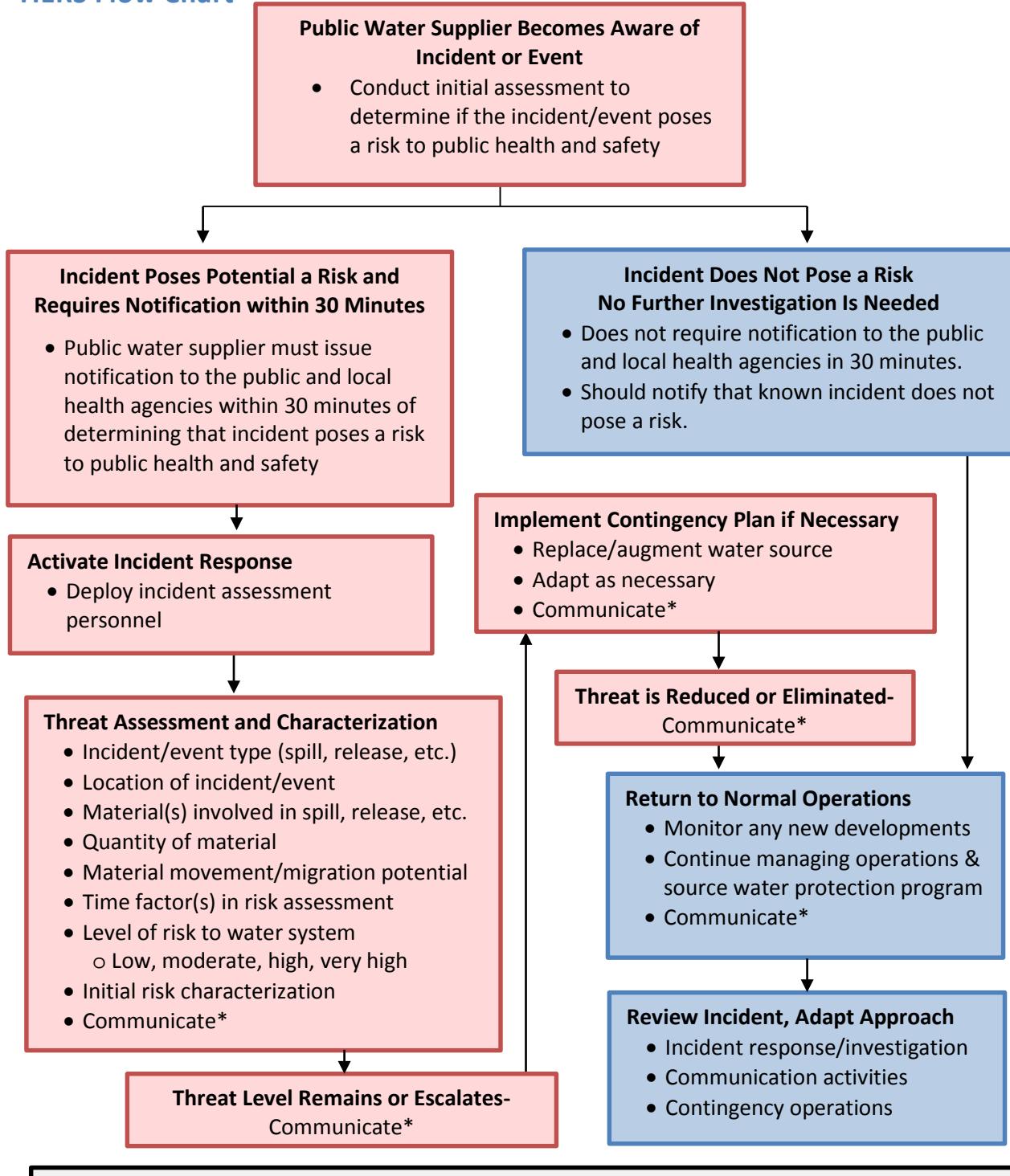
- Verification of the incident/event type (spill, release, etc.)
- Location of incident/event
- Type of material(s) involved in spill, release, etc.
- Quantity of material involved
- Potential of the material to move, migrate, or be transported
- Relevant time factor(s) in the risk assessment (e.g., downstream movement rate)
- Overall level of risk to water system, whether low, moderate, high, or very high
- Development of the initial risk characterization

As the flow chart indicates, several iterative cycles will occur after the initial threat assessment, including communication with local agencies and the public, further investigation of the incident, possible implementation of the water system's contingency plan, and eventual elimination of the threat and a return to normal operations. Communication activities during this period will include:

- The initial release (i.e., Announcement, Boil Water, Cannot Drink, Do Not Use, or Emergency attached)
  - Sent to local health agencies, the public, and the news media within 30 minutes
- Notification of the local water system's source water protection and communication teams
  - If warranted by initial findings regarding the spill, release, or incident
- Notification of the WV Bureau of Public Health
  - As required
- Periodic information updates, as incident response information is received
- Updates to the applicable A-B-C-D-E advisory tier, as necessary

If time permits and the need arises, after the threat level is reduced, and operations return to normal, the water system staff, the communication and source water protection teams, and their partners may conduct a post-event review and assessment. The purpose of the review is to examine the response to the incident, relevant communication activities, and overall outcomes. Plans and procedures may be updated, altered, or adapted based on lessons learned through this process.

## TIERS Flow Chart



### Communicate\*

Constant communication with local agencies, public, and the media is critical throughout the entire process. The initial notification should include all pertinent information, depending on the TIERS level. Regular information updates should be provided. The A-B-C-D-E TIERS levels should be updated and explained as necessary.

## **Press Release Attachments**

**TIERS Levels A, B, C, D, and E**

### **UTILITY ISSUED NOTICE – LEVEL A**

### **PUBLIC WATER SYSTEM ANNOUNCEMENT**

### **A WATER SYSTEM INVESTIGATION IS UNDERWAY**

On \_\_\_\_\_ at \_\_\_\_ : \_\_\_\_ AM/PM, the \_\_\_\_\_ Water System began investigating an incident that may affect local water quality.

The incident involves the following situation at this location:

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There are no restrictions on water use at this time. As always, if water system customers notice anything unusual about their water – such as abnormal odors, colors, sheen, etc. – they should contact the water system at \_\_\_\_\_.

At this time there is no need for concern if you have consumed or used the water.

Regular updates will be provided about this Announcement as water system staff continue their investigation. Again, there are no restrictions on water use at this time.

State Water System ID# \_\_\_\_\_ Date Distributed: \_\_\_\_\_

# **UTILITY ISSUED NOTICE – LEVEL B**

## **BOIL WATER ADVISORY**

### **A BOIL WATER ADVISORY IS IN EFFECT**

On \_\_\_\_\_ at \_\_\_\_\_ am/pm, a water problem occurred causing contamination of your water. The areas that are affected are as follows:

Entire Water System    or     Other: \_\_\_\_\_

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CONDITIONS INDICATE THERE IS A HIGH PROBABILITY THAT YOUR WATER IS CONTAMINATED. TESTING HAS NOT OCCURRED TO CONFIRM OR DENY THE PRESENCE OF CONTAMINATION IN YOUR WATER.

#### **What should I do?**

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, bathing, and food preparation **until further notice**. Boiling kills bacteria and other organisms in the water.

#### **What happened?**

- The problem is related to \_\_\_\_\_

#### **What is being done?**

- The water system is taking the following action: \_\_\_\_\_  
\_\_\_\_\_

#### **What should a customer do if they have consumed or used the water?**

- \_\_\_\_\_

We will inform you when you no longer need to boil your water. We anticipate resolving the problem within \_\_\_\_\_ hours/days. For more information, please contact \_\_\_\_\_ at \_\_\_\_\_ or \_\_\_\_\_ at \_\_\_\_\_.

General guidelines on ways to lessen the health risk are available from the EPA Safe Drinking Water Hotline at 1 (800) 426-4791.

*Please share this information others who use this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice was distributed by \_\_\_\_\_

State Water System ID# \_\_\_\_\_ Date Distributed: \_\_\_\_\_

## **UTILITY ISSUED NOTICE – LEVEL C**

### **“CANNOT DRINK” WATER NOTIFICATION**

### **A LEVEL C WATER ADVISORY IS IN EFFECT**

On \_\_\_\_\_ at \_\_\_\_\_ am/pm, a water problem occurred causing contamination of your water. The areas that are affected are as follows:

Entire Water System    or     Other: \_\_\_\_\_

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CONDITIONS INDICATE THERE IS A HIGH PROBABILITY THAT YOUR WATER IS CONTAMINATED. TESTING HAS NOT OCCURRED TO CONFIRM OR DENY THE PRESENCE OF CONTAMINATION IN YOUR WATER.

#### **What should I do?**

- **DO NOT DRINK THE WATER.** You can't drink the water, but you can use it for showering, bathing, toilet-flushing, and other non-potable purposes.
- **BOILING WILL NOT PURIFY THE WATER.** Do not drink the water, even if it is boiled. The type of contamination suspected is not removed by boiling.

#### **What happened?**

- The problem is related to \_\_\_\_\_

#### **What is being done?**

- The water system is taking the following action: \_\_\_\_\_

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#### **What should a customer do if they have consumed or used the water?**

- \_\_\_\_\_

We will inform you when the water is safe to drink. We anticipate resolving the problem within \_\_\_\_\_ hours/days. For more information – or to report unusual water conditions such as abnormal odors, colors, sheen, etc. – please contact \_\_\_\_\_ at \_\_\_\_\_ or \_\_\_\_\_ at \_\_\_\_\_.

*Please share this information others who use this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice was distributed by \_\_\_\_\_

State Water System ID# \_\_\_\_\_ Date Distributed: \_\_\_\_\_

## **UTILITY ISSUED NOTICE – LEVEL D**

### **“DO NOT USE” WATER NOTIFICATION**

### **A LEVEL D WATER ADVISORY IS IN EFFECT**

On \_\_\_\_\_ at \_\_\_\_\_ am/pm, a water problem occurred causing contamination of your water. The areas that are affected are as follows:

Entire Water System    or     Other: \_\_\_\_\_

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CONDITIONS INDICATE THERE IS A HIGH PROBABILITY THAT YOUR WATER IS CONTAMINATED. TESTING HAS NOT OCCURRED TO CONFIRM OR DENY THE PRESENCE OF CONTAMINATION IN YOUR WATER.

#### **What should I do?**

- **DO NOT DRINK THE WATER.** The water is contaminated.
- **DO NOT SHOWER OR BATHE IN THE WATER.** You can't use the water for drinking, showering, or bathing. It can be used for toilet flushing and firefighting.
- **BOILING WILL NOT PURIFY THE WATER.** Do not use the water, even if it is boiled. The type of contamination suspected is not removed by boiling.

#### **What happened?**

- The problem is related to \_\_\_\_\_

#### **What is being done?**

- The water system is taking the following action: \_\_\_\_\_

#### **What should a customer do if they have consumed or used the water?**

- \_\_\_\_\_

We will inform you when the water is safe to drink. We anticipate resolving the problem within \_\_\_\_\_ hours/days. For more information – or to report unusual water conditions such as abnormal odors, colors, sheen, etc. – please contact \_\_\_\_\_ at \_\_\_\_\_ or \_\_\_\_\_ at \_\_\_\_\_.

*Please share this information others who use this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice was distributed by \_\_\_\_\_

State Water System ID# \_\_\_\_\_ Date Distributed: \_\_\_\_\_

# **UTILITY ISSUED NOTICE – LEVEL E**

## **EMERGENCY WATER NOTIFICATION**

### **A LEVEL E WATER ADVISORY IS IN EFFECT**

On \_\_\_\_\_ at \_\_\_\_\_ am/pm, a water problem occurred causing contamination of your water. The areas that are affected are as follows:

Entire Water System    or     Other: \_\_\_\_\_

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CONDITIONS INDICATE THERE IS A HIGH PROBABILITY THAT YOUR WATER IS CONTAMINATED. TESTING HAS NOT OCCURRED TO CONFIRM OR DENY THE PRESENCE OF CONTAMINATION IN YOUR WATER.

#### **What should I do?**

- **DO NOT DRINK THE WATER.** The water is contaminated.
- **DO NOT USE THE WATER FOR ANY PURPOSE!** You can't use the water for drinking, showering, or bathing, or any other use – not even for toilet flushing.
- **BOILING WILL NOT PURIFY THE WATER.** Do not use the water, even if it is boiled. The type of contamination suspected is not removed by boiling.

#### **What happened?**

- The problem is related to \_\_\_\_\_

#### **What is being done?**

- The water system is taking the following action: \_\_\_\_\_

#### **What should a customer do if they have consumed or used the water?**

- \_\_\_\_\_

We will inform you when the water is safe to drink. We anticipate resolving the problem within \_\_\_\_\_ hours/days. For more information – or to report unusual water conditions such as abnormal odors, colors, sheen, etc. – please contact \_\_\_\_\_ at \_\_\_\_\_ or \_\_\_\_\_ at \_\_\_\_\_.

*Please share this information others who use this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice was distributed by \_\_\_\_\_

State Water System ID# \_\_\_\_\_ Date Distributed: \_\_\_\_\_

## Emergency Short Forms

### Emergency Communication Information

	Name	Phone Number	Email
<b>Designated spokesperson:</b>	Doyle Huff	304.354.7035	grantsvillewaterplant@yahoo.com
<b>Alternate spokesperson:</b>	Robert Alan Bell	304.354.7316	grantsvillewaterplant@yahoo.com
<b>Designated location to disseminate information to media:</b>	City Hall		
<b>Methods of contacting affected residents:</b>	Utilizing the 911 reverse call system and VHF Scanners.		
<b>Media contacts:</b>	Name	Title	Phone Number
	Multiple	WVRC 104.7 FM	304.927.3760

### Emergency Services Contacts

	Name	Emergency Phone	Alternate Phone	Email
<b>Local Police</b>	Grantsville Police	911	304.354.6400	
<b>Local Fire Department</b>	Grantsville Fire Department	911	304.354.9272	
<b>Local Ambulance Service</b>	Calhoun County EMS	911	304.354.7006	

Hazardous Material Response Service	Grantsville Fire Department	911	304.354.9272	
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### Key Personnel

	Name	Title	Phone	Email
<b>Key staff responsible for coordinating emergency response procedures?</b>	Alan Bell	Chief Operator Class II	304.354.7316	Grantsvillewaterplant@yahoo.com
<b>Staff responsible for keeping confidential PSSC information and releasing to emergency responders:</b>	Alan Bell	Chief Operator Class II	304.354.7316	Grantsvillewaterplant@yahoo.com

### Sensitive Populations

Other communities that are served by the utility:	Pleasant Hill Mt. Zion		
<b>Major user/sensitive population notification:</b>	Name	Emergency Phone	Alternate Phone
	Calhoun General Hospital (Minnie Hamilton Health System)	304.354.9244	
	Calhoun School Board	304.354.7011	

EED District Office Contact:		Name	Phone	Email
		Richard Snyder	304.722.0611	Richard.c.snyder@wv.com
OEHS Readiness Coordinator	Warren Von Dollen		304-356-4290 (main) 304-550-5607 (cell)	<a href="mailto:warren.r.vondollen@wv.gov">warren.r.vondollen@wv.gov</a>
Downstream Water Contacts:	Water System Name	Contact Name	Emergency Phone	Alternate Phone
	NA			
Are you planning on implementing the TIER system?		Yes		

#### Emergency Response Information

Has the utility developed a detailed Emergency Response Plan in accordance with the Public Health Security Bioterrorism Preparedness and Response Pan Act of 2002?	Yes
When was the Emergency Response Plan developed or last updated?	2011

## **Emergency Contact Information**

**State Emergency Spill Notification**  
1-800-642-3074

**Office of Emergency Services**  
<http://www.wvdhsem.gov/>  
Charleston, WV- (304) 558-5380

**WV Bureau for Public Health Office of Environmental Health Services (OEHS)**  
[www.wvdhhr.org/oehs](http://www.wvdhhr.org/oehs)

*Readiness Coordinator- Warren Von Dollen*  
Phone; 304-356-4290  
Cell; 304-550-5607  
e-mail; [warren.r.vondollen@wv.gov](mailto:warren.r.vondollen@wv.gov)

*Environmental Engineering Division Staff*  
Charleston, Central Office (304) 558-2981  
Beckley, District 1 (304) 256-6666  
St. Albans, District 2 (304) 722-0611  
Kearneysville, District 4 (304) 725-9453  
Wheeling, District 5 (304) 238-1145  
Fairmont, District 6 (304) 368-2530

**National Response Center - Chemical, Oil, & Chemical/Biological Terrorism**  
1-800-424-8802

**WV State Fire Marshal's Office**  
1-800-233-3473

**West Virginia State Police**  
1-304-746-2100

**WV Watch – Report Suspicious Activity**  
1-866-989-2824

**DEP Distance Calculator**

<http://tagis.dep.wv.gov/pswicheck/>

## **Appendix D. Single Source Feasibility Study**

## Single Source Feasibility Study

**Discussion** – Currently, Grantsville Water Department serves 564 customers directly, 1,088 indirectly through Pleasant Hill PSD and 389 through Mt. Zion PSD. According to 64 CSR 77 (WVDHHR Water System Design Standards) the secondary source must be able to provide 300 gpd for each customer, plus fire flow, if applicable, for at least two days. Also according to 64 CSR 77, fire flow can be calculated at 250 gpm for two hours (total of 30,000 gallons). Due to the excessive calculations and field work required, pressure evaluation for fire flow was not considered in this analysis. Therefore, the required volume can be calculated as follows:

$$((312+1088+389) \times 300) \times 2 \text{ days} + 30,000 = \mathbf{1,103,400 \text{ gallons}}$$

### Backup Intake

*Introduction* - One secondary source option for Grantsville Water Department is the construction or establishment of a secondary or backup intake which draws water supplies from a substantially different location or water source.

*Exploration* – Windshield surveys were performed, and discussions were held with local stakeholders to better ascertain the feasibility of establishing a backup intake at an existing water source or constructing a second water source and backup intake. No obvious existing water sources were revealed. Therefore, a new water source was evaluated. Discussions with Grantsville Water Department personnel revealed that impounding Bull River, a tributary of the Little Kanawha River just downstream from the existing water plant, is a practical choice for the construction of a reservoir.



*Evaluation* – The second water source/backup intake was evaluated for three criteria: Economic, Technical and Environmental. It must be stated that geographical location of a secondary reservoir greatly affects the evaluation of these criteria.

- Economics
  - Operations and Maintenance Costs – Operations and maintenance costs include operation and maintenance of a source water intake system, early warning detection system, pump station and 500 feet of 8" PVC waterline. In addition, the reservoir would be subject to bi-annual inspections by a licensed engineer for submission to West Virginia Department of Environmental Protection – Dam Safety Division. Operation and Maintenance Costs are estimated in the following table:

Item	Unit	Quantity	Unit Cost	Total Item Cost	Notes
Personnel	HR	260	\$ 30	\$ 7,800	Assume 1 hour a day, 5 days a week, 52 weeks a year
Power	LS	1	\$ 20,000	\$ 20,000	Based on 20% of power usage at water plant
Replacement Parts, Supplies	LS	1	\$ 12,750	\$ 12,750	Based on 5% of capital costs.
				\$ 40,550	

This results in an Operations and Maintenance cost of \$40,550/91,642,000 gallons, or \$0.44/kgal.

- Capital Costs – For estimating purposes, it is assumed that an earthen dam would be constructed to create a reservoir at Bull River, adjacent to the existing water plant. The dam would be from approximate elevations 665 to 685. The resulting reservoir would contain approximately 4,000,000 gallons. Capital funds would be required for the acquisition of property, construction of approximately 200 feet of PVC 8" waterline and retrofitting the existing pump station to pump the raw water to the existing treatment plant just upstream. For the basis of this estimate, it is assumed a pump system similar to the ones currently in use at the existing intake would be constructed. Based on a life of 15 years, 8% annual interest and the following cost opinion, the annualized capital cost to implement the alternative was calculated to be \$29,789/91,642,000 gallons, or \$0.33/kgal.

Item	Unit	Quantity	Unit Cost	Total Item Cost	Notes
8" PVC Waterline	LF	500	\$ 20	\$ 10,000	Run line to current waterworks.
20' Earthen Dam	LS	1	\$ 200,000	\$ 200,000	
Retrofit Existing Pump Station	LS	1	\$ 25,000	\$ 25,000	Considering the close proximity of Bull River to the existing treatment plant, this should be a relatively affordable system.
Early Warning System	LS	1	\$ 20,000	\$ 20,000	From Early Warning System specified for existing intake
				\$ 255,000	

- Technical
  - Permitting – Permits from WVDEP Dam Safety for construction of earthen dam, from the United States Corps of Engineers for work within a waterway, West Virginia Department of Natural Resources for work within a waterway and WVDEP for erosion and sediment

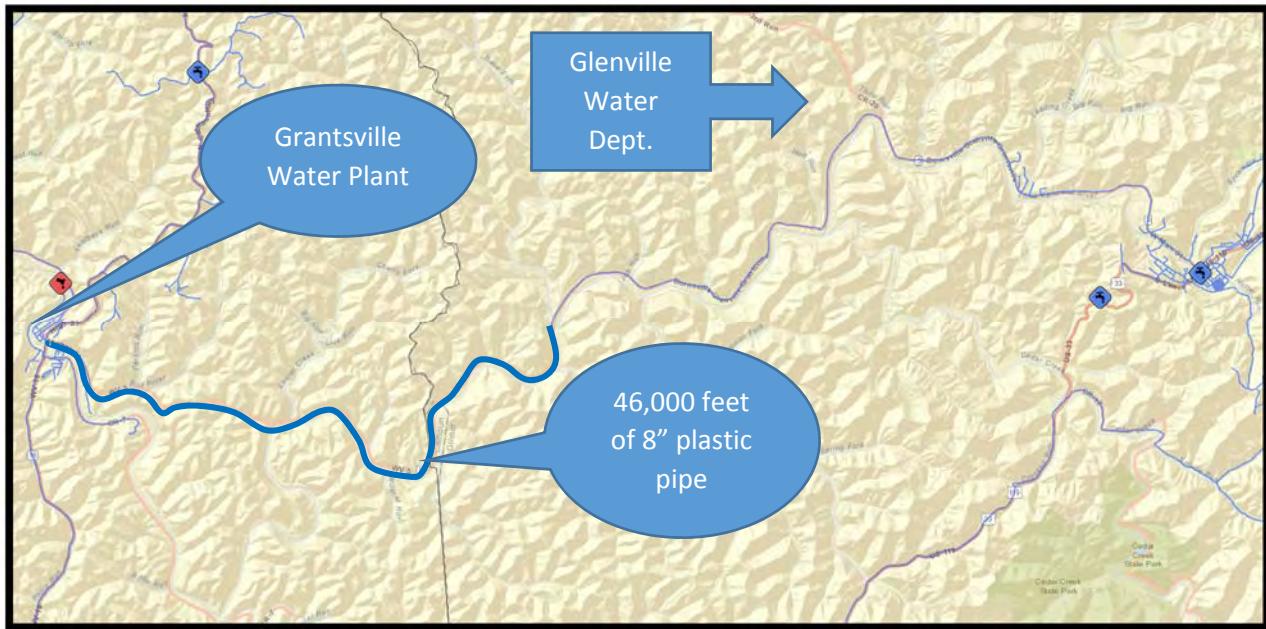
control during construction are required. In addition, a permit from West Virginia Bureau of Public Health is required for significant improvement to water supply system, WVDOH for work within road right of way. The work will also be performed within the FEMA designated 100 year floodplain. Therefore, a permit for construction within the floodplain will be required. Obtaining these permits will involve a significant amount of effort, but approval from these agencies is likely.

- Resilience/Flexibility – A secondary reservoir provides additional resilience to the water system, as it is a separate source. In addition, the earthen embankment can be raised as needed to increase capacity.
- Institutional Requirements – Grantsville Water Department will need to acquire approximately 10 acres from private property owners. There are currently no development or planning restrictions in place as a barrier to this alternative.
- Environmental
  - Environmental Impacts – The potential reservoir area must be evaluated for endangered species, potential historical preservation issues and cemeteries. Preliminary evaluation indicates that these should items should be non-issues.
  - Aesthetic Impacts – A second reservoir provides a potential recreational and park area for the use of local residents.
  - Stakeholder Issues – There are a few residents and businesses that are currently within the 100 year floodplain just upstream from the proposed reservoir. A hydrologic and hydraulic analysis will be required to verify that this project will not create an adverse effect on these properties.

## Interconnect

**Introduction** - One secondary source option for Grantsville Water Department is establishing an operational interconnection with another water system to allow the utility to receive its water from a different source of supply.

**Exploration** – Grantsville Water Department does not currently have an interconnection with other public water systems. The most fiscally feasible interconnection would be connecting to the Glenville Water Department. This requires approximately 32,000 feet of water main construction in addition to other capital components such as a pump station. The Glenville Water Department system must be analyzed further before such a connection should be investigated further to verify that Glenville Water Department has adequate flow to the point of connection.



**Evaluation** – The interconnection was evaluated for three criteria: Economic, Technical and Environmental.

### Economics

- Operations and Maintenance Costs – Operations and maintenance costs include operation and maintenance of an additional 32,000 feet of 8" PVC water line and a pump station. O & M costs are estimated in the following table:

Item	Unit	Quantity	Unit Cost	Total Item Cost	Notes
Personnel	HR	260	\$ 30	\$ 7,800	Assume 1 hour a day, 5 days a week, 52 weeks a year
Power	LS	1	\$ 20,000	\$ 20,000	Based on 20% of power usage at water plant
Replacement Parts, Supplies	LS	1	\$ 47,000	\$ 47,000	Based on 5% of capital costs.
				\$ 74,800	

This results in an Operations and Maintenance cost of \$74,800/91,642,000 gallons, or \$0.82/kgal.

- Capital Costs – The construction of 32,000 feet of 8" PVC as well as a pump station are required for this option. This analysis is prepared under the assumption that Glenville Water Department have/has the water pressure and volume available at the point of connection. Based on a life of 15 years, 8% annual interest and the following cost opinion, the annualized capital cost to implement the alternative was calculated to be \$109,813/91,642,000 gallons, or \$1.20/kgal.

Item	Unit	Quantity	Unit Cost	Total Item Cost	Notes
8" PVC water line	LF	32000	\$ 20	\$ 640,000	
Pump Station	LS	1	\$ 300,000	\$ 300,000	Based on 40 hp pump station
				\$ 940,000	

- Technical
  - Permitting – A permit from WVDEP for erosion and sediment control during construction, and a permit from West Virginia Bureau of Public Health is needed for significant improvement to water supply system. Any work within the WVDOH right of way will also require an encroachment permit. The majority if not all of the water main extension will be located within the 100 year floodplain and crosses the Gilmer County/Calhoun County line. Therefore, permits from both the Gilmer County Floodplain Manager and the Calhoun County Floodplain Manager are required.
  - Resilience/Flexibility – An interconnection with a separate system served by a different treatment works and different water source significant increases the resilience of a system. There is also the added benefit of Grantsville Water Department being able to provide water to Glenville Water Department if the need arises.
  - Institutional Requirements – Grantsville Water Department will need to develop an agreement with Glenville Water Department.
- Environmental
  - Environmental Impacts – The potential construction area will need to be evaluated for endangered species, potential historical preservation issues and cemeteries. Preliminary evaluation indicates that these should items should be non-issues.
  - Aesthetic Impacts – An additional storage tank will be located at a high elevation and likely screened by vegetation. There should be minimal adverse aesthetic impacts.
  - Stakeholder Issues – Glenville Water Department is a stakeholder, as well as their customers.

## Treated Water Storage

*Introduction* - One secondary source option for Grantsville Water Department is establishing/constructing enough treated water storage for use during a shutdown of the currently used water intake.

*Exploration* – Grantsville Water Department currently owns and operates three water storage tanks totaling 800,000 gallons:

Tank	Year Built	Capacity (gal)	Size	Material
1	unknown	300,000	20'Ø x 30' H	Steel
2*	unknown	200,000	20'Ø x 30' H	Steel
3	unknown	300,000	20'Ø x 30' H	Glass Fused to Steel
<b>Total</b>		<b>800,000</b>		

\* Leased from Pleasant Hill PSD

By reason that 800,000 gallons of treated water storage exist in existing tanks, an additional storage amount of 303,400 gallons is required for the treated water storage to be considered a secondary source with the following stipulations:

- The water source must be closed quickly enough to prevent contamination of the treated water stored in the tanks.
- The tanks will need to be full prior to the emergency event.
- Proper circulation of the treated water stored in the tanks must be considered and evaluated for turn-over requirements.

*Evaluation* – The treated storage was evaluated for three criteria: Economic, Technical and Environmental.

- Economics
  - Operations and Maintenance Costs – The addition of a storage tank should have minimal to no effect on the current operations and maintenance costs expended by Grantsville Water Department
  - Capital Costs – A 300,000 gallon storage tank with related appurtenances (piping, fencing, etc.) is estimated to cost \$250,000. For the basis of this evaluation, it is assumed that the tank can be placed in an area that already has vehicular access for Grantsville Water Department personnel to perform necessary tasks. Based on a life of 15 years, 8% annual interest and the following cost opinion, the annualized capital cost to implement the alternative was calculated to be \$26,824/91,642,000 gallons, or \$0.29/kgal.
- Technical
  - Permitting – A permit from WVDEP for erosion and sediment control during construction is required. In addition, a permit from West Virginia Bureau of Public Health is needed for significant improvement to water supply system. Obtaining these permits will involve a moderate amount of effort, and approval from these agencies is likely.

- Resilience/Flexibility – Four treated water storage tanks at different locations throughout the system provides Grantsville Water Department with flexibility during normal operations.
- Institutional Requirements – There are currently no development or planning restrictions in place as a barrier to this alternative.
- Environmental
  - Environmental Impacts – The potential tank area will need to be evaluated for endangered species, potential historical preservation issues and cemeteries. Preliminary evaluation indicates that these should items should be non-issues.
  - Aesthetic Impacts – Three storage tanks are currently a part of the system. The additional storage tank should not have significant impacts.
  - Stakeholder Issues – Three storage tanks are currently a part of the system. The additional storage tank should not have significant stakeholder issues.

## Raw Water Storage

*Introduction* - One secondary source option for Grantsville Water Department is the construction or establishment of a secondary or backup intake which draws water supplies from a substantially different location or water source.

*Exploration* – Windshield surveys were performed, and discussions were held with local stakeholders to better ascertain the feasibility of establishing a backup intake at an existing water source or constructing a second water source and backup intake. No obvious existing water sources were revealed. Therefore, a new water source was evaluated. Discussions with Grantsville Water Department personnel revealed that impounding Bull River, a tributary of the Little Kanawha River just downstream from the existing water plant, is a practical choice for the construction of a reservoir.



*Evaluation* – The second water source/backup intake was evaluated for three criteria: Economic, Technical and Environmental. It must be stated that geographical location of a secondary reservoir greatly affects the evaluation of these criteria.

- Economics
  - Operations and Maintenance Costs – Operations and maintenance costs include operation and maintenance of a source water intake system, early warning detection system, pump station and 500 feet of 8" plastic waterline. In addition, the reservoir would be subject to bi-annual inspections by a licensed engineer for submission to West Virginia Department of Environmental Protection – Dam Safety Division. Operation and Maintenance Costs are estimated in the following table:

Item	Unit	Quantity	Unit Cost	Total Item Cost	Notes
Personnel	HR	260	\$ 30	\$ 7,800	Assume 1 hour a day, 5 days a week, 52 weeks a year
Power	LS	1	\$ 20,000	\$ 20,000	Based on 20% of power usage at water plant
Replacement Parts, Supplies	LS	1	\$ 16,200	\$ 16,200	Based on 5% of capital costs.
				\$ 44,000	

This results in an Operations and Maintenance cost of \$44,000/91,642,000 gallons, or \$0.48/kgal.

- Capital Costs – For estimating purposes, it is assumed that an earthen dam would be constructed to create a reservoir at Bull River, adjacent to the existing water plant. The dam would be from approximate elevation 665 to elevation 685. The resulting reservoir would contain approximately 4,000,000 gallons. Capital funds would be required for the acquisition of property, construction of approximately 500 feet of plastic 8" waterline and retrofitting the existing pump station to pump the raw water to the existing treatment plant just upstream. For the basis of this estimate, it is assumed a pump system similar to the ones currently in use at the existing intake would be constructed. Based on a life of 15 years, 8% annual interest and the following cost opinion, the annualized capital cost to implement the alternative was calculated to be \$37,854/91,642,000 gallons, or \$0.41/kgal.

Item	Unit	Quantity	Unit Cost	Total Item Cost	Notes
8" PVC Waterline	LF	500	\$ 20	\$ 10,000	Run line to current waterworks.
20' Earthen Dam	LS	1	\$ 200,000	\$ 200,000	
Retrofit Existing Pump Station	LS	1	\$ 25,000	\$ 25,000	Considering the close proximity of Bull River to the existing treatment plant, this should be a relatively affordable system.
Early Warning System	LS	1	\$ 20,000	\$ 20,000	From Early Warning System specified for existing intake
				\$ 255,000	

- Technical
  - Permitting – Permits from WVDEP Dam Safety for construction of earthen dam, from the United States Corps of Engineers for work within a waterway, West Virginia Department of Natural Resources for work within a waterway and WVDEP for erosion and sediment control during construction are required. In addition, a permit from West Virginia Bureau of Public Health is required for significant improvement to water supply system, WVDOH for work within road right of way. The work will also be performed within the FEMA designated 100 year floodplain. Therefore, a permit for construction within the floodplain will be required. Obtaining these permits will involve a significant amount of effort, but approval from these agencies is likely.
  - Resilience/Flexibility – A secondary reservoir provides additional resilience to the water system, as it is a separate source. In addition, the earthen embankment can be raised as needed to increase capacity.
  - Institutional Requirements – Grantsville Water Department will need to acquire approximately 10 acres from private property owners. There are currently no development or planning restrictions in place as a barrier to this alternative.

- Environmental
  - Environmental Impacts – The potential reservoir area must be evaluated for endangered species, potential historical preservation issues and cemeteries. Preliminary evaluation indicates that these should items should be non-issues.
  - Aesthetic Impacts – A second reservoir provides a potential recreational and park area for the use of local residents.
  - Stakeholder Issues – There are a few residents and businesses that are currently within the 100 year floodplain just upstream from the proposed reservoir. A hydrologic and hydraulic analysis will be required to verify that this project will not create an adverse effect on these properties.

Feasibility Matrix		Grantsville Water Department		PWSID: [PWSID #]		Date: 42551		Completed By: Lee McCoy, Triad Engineering, Inc.													
Alternative Strategy Description	Economic Criteria	Technical Criteria				Environmental Criteria															
		Capital Costs	Maintenance and Operations Costs	Permitting	Flexibility	Resiliency	Institutional Requirements	Aesthetic Impacts	Stakeholder Issues	Weighted Total	Total %	Final Score	Total Capital Cost	Comments							
Backup Intake	2.0	1.0	3.0	50.0%	20.0%	2.2	2.5	3.0	2.3	10.0	83.6%	33.4%	2.0	3.0	2.3	7.3	81.5%	16.3%	69.7%	\$255,000.0	Bull River is close to the existing water treatment plant, and is a likely candidate for a reservoir and secondary intake.
Interconnect	1.0	1.0	2.0	33.3%	13.3%	2.4	2.5	2.0	2.3	9.2	76.9%	30.8%	3.0	3.0	2.0	8.0	88.9%	17.8%	61.9%	\$940,000.0	Connection to Glenville Water Department is the most feasible interconnection for Grantsville. Glenville's system is approximately 6 miles away. A study of Glenville's system will need to be performed to verify they can meet demands.
Treated water storage	3.0	2.7	5.7	94.4%	37.8%	2.4	3.0	1.7	2.3	9.4	78.3%	31.3%	3.0	3.0	2.3	8.3	92.6%	18.5%	87.6%	\$250,000.0	Grantsville operates three tanks totalling 800,000 gallons of treated water. An additional amount of approximately 300,000 gallons of storage is needed for this option to be considered a secondary source.
Raw Water Storage	2.0	1.0	3.0	50.0%	20.0%	2.2	2.5	3.0	2.3	10.0	83.6%	33.4%	2.0	3.0	2.7	7.7	85.2%	17.0%	70.5%	\$255,000.0	Bull River is close to the existing water treatment plant, and is a likely candidate for a reservoir and secondary intake.
Other-(Name of Alternative)	0.0	0.0	0.0	0.0%	0.0%	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%	0.0	0.0	0.0	0.0	0.0%	0.0%	0.0%	\$0.0	Comments
<b>Scoring:</b>																					

- 0 – Not feasible. Criterion cannot be met by this alternative and removes the alternative from further consideration.  
 1 – Feasible but difficult. Criterion represents a significant barrier to successful implementation but does not eliminate it from consideration.  
 2 – Feasible. Criterion can be met by the alternative.  
 3 – Very Feasible. Criterion can be easily met by the alternative

Feasibility Matrix		Granstville Water Department		PWSID: [PWSID #]		30-Jun		Matrix Completed By:		Lee McCoy, Triad Engineering, Inc.	
Criteria	Question	Backup Intake	Feasibility	Interconnect	Feasibility	Treated Water Storage	Feasibility	Raw Water Storage	Feasibility	Other-(Name of Alternative)	Feasibility
<b>Economic Criteria</b>											
	What is the total current budget year cost to operate and maintain the PWSU (current budget year)?	\$5.42		\$5.42		\$5.42		\$5.42		\$5.42	
O and M Costs	Describe the major O&M cost requirements for the alternative?	Changes to existing pump station to pump water to current treatment plant, maintain riser, intake structure, and secondary intake.	2	Additional pump station and 32,000 feet of water line	1	The addition of one 300,000 gallon tank will have little additional operations and maintenance costs.	3	Changes to existing pump station to pump water to current treatment plant, maintain riser, intake structure, and secondary intake.	2	[Describe]	0
	What is the incremental cost (\$/gal) to operate and maintain the alternative?	\$0.44	2	\$0.82	1	\$0.00	3	\$0.44	2	\$0.00	0
	Cost comparison of the incremental O&M cost to the current budgeted costs (%)	8.12%	2	15.13%	1	0.00%	3	8.12%	2	0.00%	0
<b>O and M-Feasibility Score</b>		2.0		1.0		3.0		2.0		0.0	
	Describe the capital improvements required to implement the alternative.	Construction of pump station at existing reservoir, a new intake with early detection system and approx. 500 LF of 8" PVC		pump station construction and 46,000 feet of water line		Construction of 300,000 gallon tank		Purchase of property, construction of dam, construction of intake structure, construction of 3,200 feet of pipe.		[Describe]	
Capital Costs	What is the total capital cost for the alternative?	\$255,000.00	1	\$940,000.00	1	\$250,000.00	2	\$255,000.00	1	\$0.00	0
	What is the annualized capital cost to implement the alternative, including land and easement costs, convenience tap fees, etc. (\$/gal)	\$0.33	1	\$1.20	1	\$0.29	3	\$0.33	1	\$0.00	0
	Cost comparison of the alternatives annualized capital cost to the current budgeted costs (%)	6.09%	1	22.14%	1	5.35%	3	6.09%	1	0.00%	0
<b>Capital Cost-Feasibility Score</b>		1.0		1.0		2.7		1.0		0.0	
<b>Technical Criteria</b>											
Permitting	Provide a listing of the expected permits required and the permitting agencies involved in their approval.	Dam Safety - for construction of earthen dam, USACOE - for work within a waterway, WVDRN - for work within a waterway, WVDEP	2	WVDEP NPDES - for construction erosion and sediment control, WVBRH - for significant improvement to water supply system, WVDODH for WVDEP NPDES - 6 months, WVDODH - 6 months	2	WVDEP NPDES - for construction erosion and sediment control, WVBRH - for significant improvement to water supply system	2	Dam Safety - for construction of earthen dam, USACOE - for work within a waterway, WVDRN - for work within a waterway, WVDEP	2	[List and Describe]	0
	What is the timeframe for permit approval for each permit?	Dam Safety - 1 year, USACOE, 1 year, WVDRN - 6 months, WVDEP NPDES - 6 months, WVDODH - 6 months	2	WVDEP NPDES - 6 months,	2	WVDEP NPDES - 6 months,	2	Dam Safety - 1 year, USACOE, 1 year, WVDRN - 6 months, WVDEP NPDES - 6 months, WVDODH - 6 months	2	[List the timeframe for approval for each permit listed above]	0
	Describe the major requirements in obtaining the permits (environmental impact studies, public hearings, etc.)	USACOE and Dam Safety will require public hearings. Comments during the hearings will need to be adequately addressed.	2	NA	3	NA	3	USACOE and Dam Safety will require public hearings. Comments during the hearings will need to be adequately addressed.	2	[Describe all major requirements for approval for the listed permits]	0
	What is the likelihood of successfully obtaining the permits?	likely	2	likely	2	likely	2	likely	2	[Describe]	0
	Does the implementation of the alternative require regulatory exceptions or variances?	No	3	No	3	No	3	No	3	[Yes/No:Describe]	0
<b>Permitting-Feasibility Score</b>		2.2		2.4		2.4		2.2		0.0	
Flexibility	Will the alternative be needed on a regular basis or only used intermittently?	intermittantly	2	intermittantly	2	intermittantly	3	intermittantly	2	[Describe]	0
	How will implementing the alternative affect the PWSU's current method of treating and delivering potable water including meeting Safe Drinking Water Act regulations? (ex. In the case of storage, will the alternative increase the likelihood of disinfection byproducts?)	This alternative will have little to no affect on the current method of treating and delivering potable water	3	This alternative will have little to no affect on the current method of treating and delivering potable water	3	No affect	3	This alternative will have little to no affect on the current method of treating and delivering potable water	3	[Describe]	0
<b>Flexibility-Feasibility Score</b>		2.5		2.5		3.0		2.5		0.0	
Resilience	Will the alternative provide any advantages or disadvantages to meeting seasonal changes in demand?	Advantages: This alternative will provide a totally separate source.	3	Advantages: This alternative will provide a totally separate source.	3	Neither	2	Advantages: This alternative will provide a totally separate source.	3	[Yes/No]	0
	How resistant will the alternative be to extreme weather conditions such as drought and flooding?	Somewhat Resistant	3	Very resistant	3	Very Resistant	3	Somewhat Resistant	3	[Yes/No]	0
	Will the alternative be expandable to meet the growing needs of the service area?	Yes. The embankment could be raised if needed.	3	No	0	No	0	Yes. The embankment could be raised if needed.	3	[Describe]	0
<b>Resilience-Feasibility Score</b>		3.0		2.0		1.7		3.0		0.0	
Institutional Requirements	Identify any agreements or other legal instruments with governmental entities, private institutions or other PWSU required to implement the alternative.	None	3	Agreement with Glenville Water Department	2	Property owner at location of tank	2	None	3	[Describe]	0
	Are any development/planning restrictions in place that can act as a barrier to the implementation of the alternative.	No	3	NO	3	None.	3	No	3	[Yes/No]	0
	Identify potential land acquisitions and easements requirements.	Several property owners would be affected.	1	Land acquisition for construction of pump station	2	Property at location of the tank	2	Several property owners would be affected.	1	[Describe]	0
<b>Institutional Requirements-Feasibility Score</b>		2.3		2.3		2.3		2.3		0.0	
<b>Environmental Criteria</b>											
Environmental Impacts	Identify any environmentally protected areas or habitats that might be impacted by the alternative.	Area to be backed up will need to be checked for endangered species, historic properties, etc.	2	No	3	None.	3	Area to be backed up will need to be checked for endangered species, historic properties, etc.	2	[Describe]	0
<b>Environmental Impacts-Feasibility Score</b>		2.0		3.0		3.0		2.0		0.0	
Aesthetic Impacts	Identify any visual or noise issues caused by the alternative that may affect local land uses?	None	3	None	3	None.	3	None	3	[Describe]	0
	Identify any mitigation measures that will be required to address aesthetic impacts?	None	3	none	3	None.	3	None	3	[Describe]	0
<b>Aesthetic Impacts-Feasibility Score</b>		3.0		3.0		3.0		3.0		0.0	
Stakeholder Issues	Identify the potential stakeholders affected by the alternative.	Property owners along Bull River	2	Glenville Water Department and its customers, property owners in pump station location	2	Property owner at location of tank	2	None	3	[Describe]	0
	Identify the potential issues with stakeholders for and against the alternative.	None	3	Possible reduction in water pressure for Glenville customers	2	None	3	None	3	[Describe]	0
	Will stakeholder concerns represent a significant barrier to implementation (or assistance) of the alternative?	No	2	No	2	None.	2	No	2	[Yes/No]	0
<b>Stakeholder Issues-Feasibility Score</b>		2.3		2.0		2.3		2.7		0.0	
Comments		Bull River is close to the existing water treatment plant, and is a likely candidate for a reservoir and secondary intake.	Connection to Glenville Water Department is the most feasible interconnection for Grantsville. Glenville's system is approximately 6 miles away. A study of Glenville's system will need to be performed to verify they can meet demands.	Glenville operates three tanks totalling 800,000 gallons of treated water. An additional amount of approximately 300,000 gallons of storage is needed for this option to be considered a secondary source.	Bull River is close to the existing water treatment plant, and is a likely candidate for a reservoir and secondary intake.	Comments					

## **Appendix E. Supporting Documentation**

## Documents Referenced

- Source Water Assessment Report  
<http://www.wvdhhr.org/oehs/eed/swap/get.cfm?id=3300701>
- Source Water Protection Plan Instructions and Supplemental Guides  
[http://www.wvdhhr.org/oehs/eed/swap/Draft\\_Template.asp](http://www.wvdhhr.org/oehs/eed/swap/Draft_Template.asp)
- Consumer Confidence Report  
[https://ofmpub.epa.gov/apex/safewater/f?p=136:103:0::NO:RP,103:P103\\_STATE:WV](https://ofmpub.epa.gov/apex/safewater/f?p=136:103:0::NO:RP,103:P103_STATE:WV)
- City of Grantsville Water Department Annual Report for year ending 2014
- Source Water Protection Plan, by Potesta, dated February 22, 2011

Sign in list for Protection Team/Public Meeting:

Grantsville Water Department  
SWAP/Protection Team Meeting

5-Apr-16

21 APR 16

26147

Name	Organization	Address	Phone	Email
4/5 4/21 Patty Bellmore	714 Zion PSD	44153 Col Hwy Mt. Hope	354-7797	
4/5 STEVE WHITED	MHHS / BOE	1810 Hospital DR	354-9344	Stephen.Whited@mhhs.k12.wv.us
4/5 ROGER SWIPPENHISER	TOWN OF GRANTSVILLE	PO Box 168 26191 GRANTSVILLE WV	354-7316	grantsvillewater@statewide.net
4/5 4/21 JOHN DENNIS	Mo. Choc Valley Health	2B Hospital Drive	354-6101	John.L.Dennis@WVU.edu
4/5 → Kathy Ward	Citizens Eng.	511 Almond Street 14201-25261	354-9637	Kathy.Ward@citizensaction.org
4/5 Dale Cunningham	Pleasant Hill RD		304-354-7757	
4/5 4/21 Linda JARVIS	TOWN COUNCIL WOMAN PO Box 276 Grantsville WV	170 RIVER ST. 304-354-6398	lpjarvis@frontier.com	
4/21 Rod Gonfley	SGM 466 PINE CREEK RETIREN ARMY	GRANTSVILLE WV 354-354-7368		rod.gonfley@k12.wv.us
4/21 Rick Postalwait	Magistrate	PO Box 207 Grantsville WV 26191	304-354-9140	Rick.postalwait@med.com
4/21 Mike Molls	DEP Rel.	PO Box 178 Grantsville	354-0816	Treasorar @yahoo.com
4/21 Roger Jarvis (for Linda)				
Rod Cell'		304-786-4128		