

APPENDIX C
Consultation Letters

for the

American Electric Power
Mountaineer Commercial Scale
Carbon Capture and Storage Project
Mason County, West Virginia

Contract No. 326849x215
February 2011

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APPENDIX C CONSULTATION LETTERS

In the course of preparing this EIS, interaction efforts among state and federal agencies were necessary to discuss issues of concern or other interests that could be affected by the Proposed Action, obtain information pertinent to the environmental impact analysis of the Proposed Action, and initiate consultations or permit processes. Following are the consultation letters sent to the various agencies accompanied by the agency responses, when responses were received. This appendix is organized as follows:

C1 – Native American Tribal Consultation (Cayuga Nation, Delaware Nation, Kenweenaw Bay Indian Community, Prairie Band of Potawatomi Nation, Senece Nation of Indians, Seneca-Cayuga Tribe of Oklahoma, Shawnee Tribe, Wyandotte Nation)

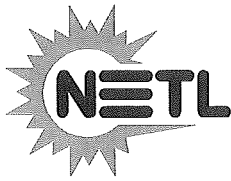
C2 – Protected Species Consultation (U.S. Fish and Wildlife Service, West Virginia Field Office, West Virginia Division of Natural Resources, Natural Heritage Program)

C3 – Cultural Resources Consultation (West Virginia Division of Culture & Hisotry, State Historic Preservation Office)

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**APPENDIX C1
NATIVE AMERICAN TRIBAL CONSULTATION**

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September 17, 2010

Keweenaw Bay Indian Community
Warren C. Swartz, Jr., President
16429 Beartown Road
Baraga, MI 49908

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Mr. Swartz:

The U. S. Department of Energy (DOE) is preparing an Environmental Impact Statement (EIS) for the proposed action of providing Federal funding for the proposed American Electric Power (AEP) Mountaineer Carbon Capture and Storage (CCS) II Project. The project would involve the planning, design, construction, and operation, by AEP, of a commercial scale CCS system at its existing Mountaineer Power Plant near New Haven, WV.

AEP would construct a CCS facility using Alstom's chilled ammonia process (CAP) within the boundaries of the existing 1,300-megawatt (MW) Mountaineer Plant near New Haven, WV, as depicted in Figure 1. The facility would occupy an area approximately 500 feet by 1,000 feet, and would process a 235-MW slip-stream of flue gas after it exits the plant's flue gas desulfurization system. The project would capture CO₂ from the Mountaineer Plant; compress the captured CO₂ to supercritical conditions; and transport the captured CO₂ by pipeline to injection wells for permanent geologic storage in saline formations.

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- Mountaineer Plant (see Figure 2);
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The project would remove at least 90 percent of the CO₂ from the 235-MW slip stream and would demonstrate a commercial-scale deployment of the CAP for CO₂ capture, as well as demonstrate permanent geologic storage of CO₂ in deep underground saline formations. Approximately 1.5 million metric tons of CO₂ from the Mountaineer Plant flue gas slip stream would be annually captured and injected for permanent geologic storage into one or more geologic formations approximately 1.5 miles below ground.

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Mr. Mark Lusk
U.S. Department of Energy
National Energy Technology Laboratory
3610 Collins Ferry Road
P. O. Box 880, MS B07
Morgantown, WV 26507-0880
Telephone: (304) 285-4145
Email: Mark.Lusk@netl.doe.gov

To assist in your review, the enclosed figures illustrate the potential areas where construction impacts may occur.

Thank you in advance for your consideration.

Sincerely,



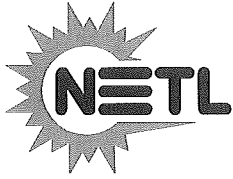
Mark Lusk
NEPA Document Manager

cc: M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
T. Sara, TRC
G. Henry, TRC

Enclosures

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September 17, 2010

Delaware Nation
Kerry Holton, President
P.O. Box 825
Anadarko, OK 73005

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Kerry Holton:

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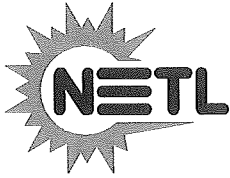


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NEPA Document Manager

cc: M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
T. Sara, TRC
G. Henry, TRC

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September 17, 2010

Prairie Band of Potawatomi Nation
Steve Ortiz, Chairman
16281 Q Road
Mayetta, KS 66509

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Mr. Ortiz:

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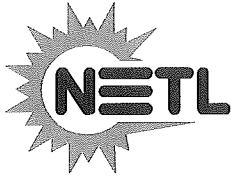


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T. Sara, TRC
G. Henry, TRC

Enclosures

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September 17, 2010

Wyandotte Nation
Leaford Bearskin, Chief
64700 East Highway 60
Wyandotte, OK 74370

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Leaford Bearskin:

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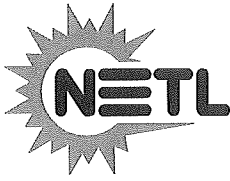


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September 17, 2010

Seneca Nation of Indians
Barry E. Snyder, Sr., President
12837 Rte. 438
Irving, NY 14081

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Mr. Snyder:

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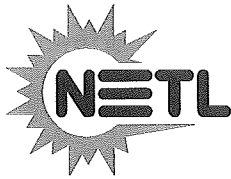


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September 17, 2010

Shawnee Tribe
Ron Sparkman, Chairman
P.O. Box 189
Miami, OK 74354

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Mr. Sparkman:

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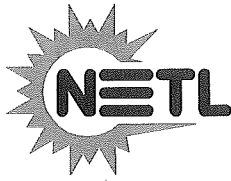


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September 17, 2010

Seneca-Cayuga Tribe of Oklahoma
LeRoy Howard, Chief
P.O. Box 1283
Miami, OK 74355

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

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- Eastern Sporn Tract - 4.5 miles south of the Mountaineer Plant (see Figure 4);
- Jordan Tract - 10.5 miles south of the Mountaineer Plant (see Figure 5); and
- Western Sporn Tract - 6 miles west of the Mountaineer Plant (see Figure 6).

The project would remove at least 90 percent of the CO₂ from the 235-MW slip stream and would demonstrate a commercial-scale deployment of the CAP for CO₂ capture, as well as demonstrate permanent geologic storage of CO₂ in deep underground saline formations. Approximately 1.5 million metric tons of CO₂ from the Mountaineer Plant flue gas slip stream would be annually captured and injected for permanent geologic storage into one or more geologic formations approximately 1.5 miles below ground.

DOE and AEP have conducted cultural resource studies (literature review and Phase I Archaeological Survey) in support of the project to determine if any potentially significant cultural resources would be impacted by the overall project. The work was conducted at the Mountaineer Plant site, along the proposed CO₂ pipeline corridors, and at the potential injection sites in accordance with all applicable Federal and WV State Historic Preservation Office (WVSHPO) guidelines. The records search found no previously recorded archaeological resources in the proposed project's potential impact areas. The Phase I Archaeological Survey did not identify any cultural resource in these areas with the exception of a single isolated archaeological find within the northern portion of the South Corridor (a single chert flake – byproduct of stone tool making). The single artifact in the Southern Corridor was delineated with additional shovel tests; no additional cultural material was recovered. The results of the archaeological investigation will be submitted in a Technical Report to the WVSHPO and would be available for your review, upon request.

The purpose of this letter is to inform the tribe about the proposed project and request your input on concerns the tribe may have about it. In particular, DOE is interested in learning whether this project has the potential to impact any significant archaeological, religious, or cultural sites that may be of special importance to your tribe. DOE asks that you (or your designated representative) submit any concerns to my office, including any known significant archaeological, religious, or cultural sites within the areas of potential impact. If you have any such information, require additional information, or have any questions or comments about this project, please contact the DOE's National Energy Technology Laboratory as soon as possible at the following:

Mr. Mark Lusk
U.S. Department of Energy
National Energy Technology Laboratory
3610 Collins Ferry Road
P. O. Box 880, MS B07
Morgantown, WV 26507-0880
Telephone: (304) 285-4145
Email: Mark.Lusk@netl.doe.gov

To assist in your review, the enclosed figures illustrate the potential areas where construction impacts may occur.

Thank you in advance for your consideration.

Sincerely,

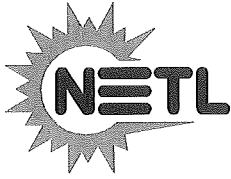


Mark Lusk
NEPA Document Manager

cc: M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
T. Sara, TRC
G. Henry, TRC

Enclosures

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September 17, 2010

Cayuga Nation
Clint Halftown, Nation Representative
P.O. Box 11
Versailles, NY 14168

RE: *Request for Consultation, Mountaineer CCS II Project, Mason County, WV*

Dear Mr. Halftown:

The U. S. Department of Energy (DOE) is preparing an Environmental Impact Statement (EIS) for the proposed action of providing Federal funding for the proposed American Electric Power (AEP) Mountaineer Carbon Capture and Storage (CCS) II Project. The project would involve the planning, design, construction, and operation, by AEP, of a commercial scale CCS system at its existing Mountaineer Power Plant near New Haven, WV.

AEP would construct a CCS facility using Alstom's chilled ammonia process (CAP) within the boundaries of the existing 1,300-megawatt (MW) Mountaineer Plant near New Haven, WV, as depicted in Figure 1. The facility would occupy an area approximately 500 feet by 1,000 feet, and would process a 235-MW slip-stream of flue gas after it exits the plant's flue gas desulfurization system. The project would capture CO₂ from the Mountaineer Plant; compress the captured CO₂ to supercritical conditions; and transport the captured CO₂ by pipeline to injection wells for permanent geologic storage in saline formations.

AEP proposes to locate injection site(s) on two to four of AEP's properties within an estimated 12 miles of the Mountaineer Plant (refer to Figure 1). As shown in Figure 1, the following properties are under consideration for potential injection wells in descending order of preference:

- Mountaineer Plant (see Figure 2);
- Borrow Area Site - 2 miles south of the Mountaineer Plant (see Figure 3);
- Eastern Sporn Tract - 4.5 miles south of the Mountaineer Plant (see Figure 4);
- Jordan Tract - 10.5 miles south of the Mountaineer Plant (see Figure 5); and
- Western Sporn Tract - 6 miles west of the Mountaineer Plant (see Figure 6).

The project would remove at least 90 percent of the CO₂ from the 235-MW slip stream and would demonstrate a commercial-scale deployment of the CAP for CO₂ capture, as well as demonstrate permanent geologic storage of CO₂ in deep underground saline formations. Approximately 1.5 million metric tons of CO₂ from the Mountaineer Plant flue gas slip stream would be annually captured and injected for permanent geologic storage into one or more geologic formations approximately 1.5 miles below ground.

DOE and AEP have conducted cultural resource studies (literature review and Phase I Archaeological Survey) in support of the project to determine if any potentially significant cultural resources would be impacted by the overall project. The work was conducted at the Mountaineer Plant site, along the proposed CO₂ pipeline corridors, and at the potential injection sites in accordance with all applicable Federal and WV State Historic Preservation Office (WVSHPO) guidelines. The records search found no previously recorded archaeological resources in the proposed project's potential impact areas. The Phase I Archaeological Survey did not identify any cultural resource in these areas with the exception of a single isolated archaeological find within the northern portion of the South Corridor (a single chert flake – byproduct of stone tool making). The single artifact in the Southern Corridor was delineated with additional shovel tests; no additional cultural material was recovered. The results of the archaeological investigation will be submitted in a Technical Report to the WVSHPO and would be available for your review, upon request.

The purpose of this letter is to inform the tribe about the proposed project and request your input on concerns the tribe may have about it. In particular, DOE is interested in learning whether this project has the potential to impact any significant archaeological, religious, or cultural sites that may be of special importance to your tribe. DOE asks that you (or your designated representative) submit any concerns to my office, including any known significant archaeological, religious, or cultural sites within the areas of potential impact. If you have any such information, require additional information, or have any questions or comments about this project, please contact the DOE's National Energy Technology Laboratory as soon as possible at the following:

Mr. Mark Lusk
U.S. Department of Energy
National Energy Technology Laboratory
3610 Collins Ferry Road
P. O. Box 880, MS B07
Morgantown, WV 26507-0880
Telephone: (304) 285-4145
Email: Mark.Lusk@netl.doe.gov

To assist in your review, the enclosed figures illustrate the potential areas where construction impacts may occur.

Thank you in advance for your consideration.

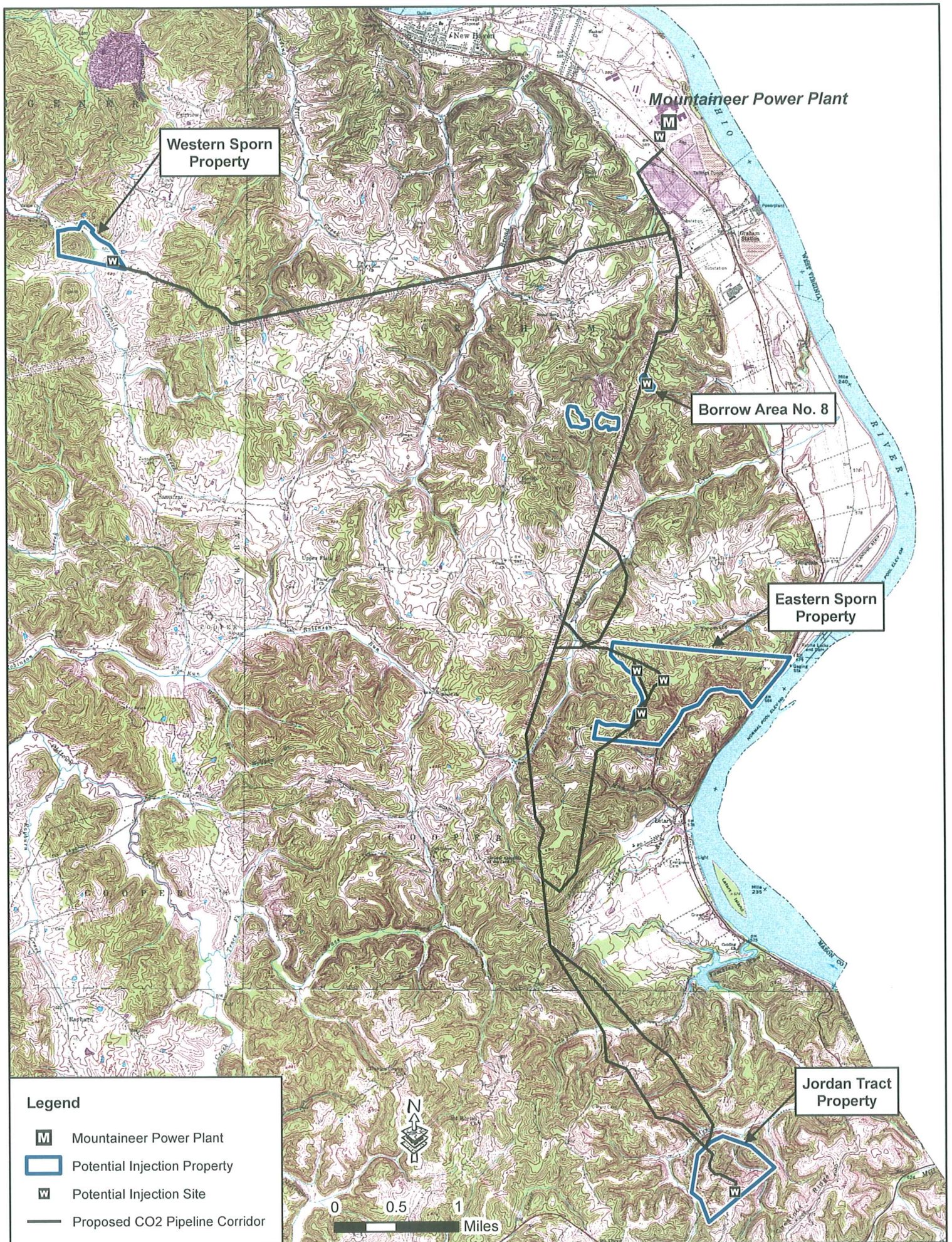
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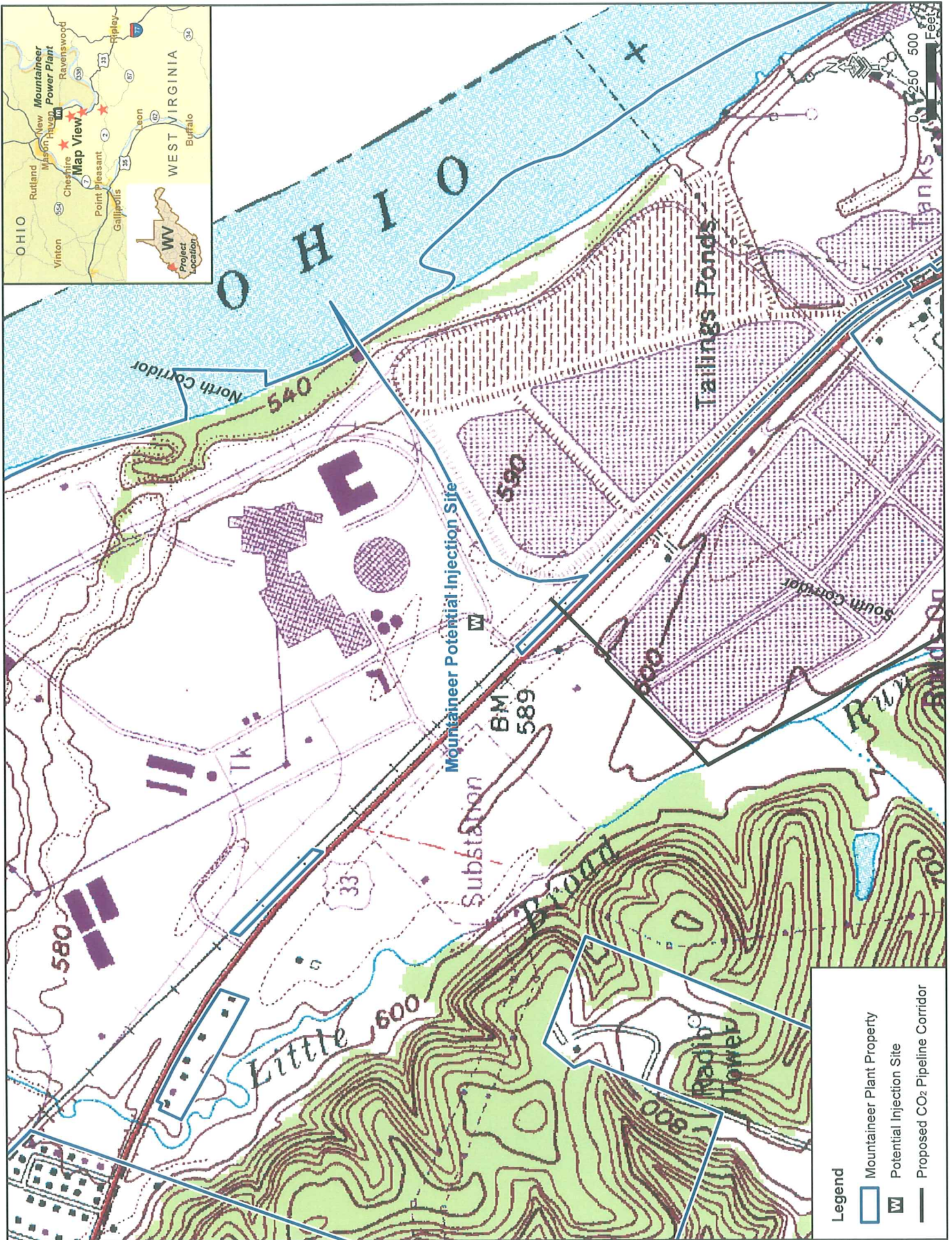


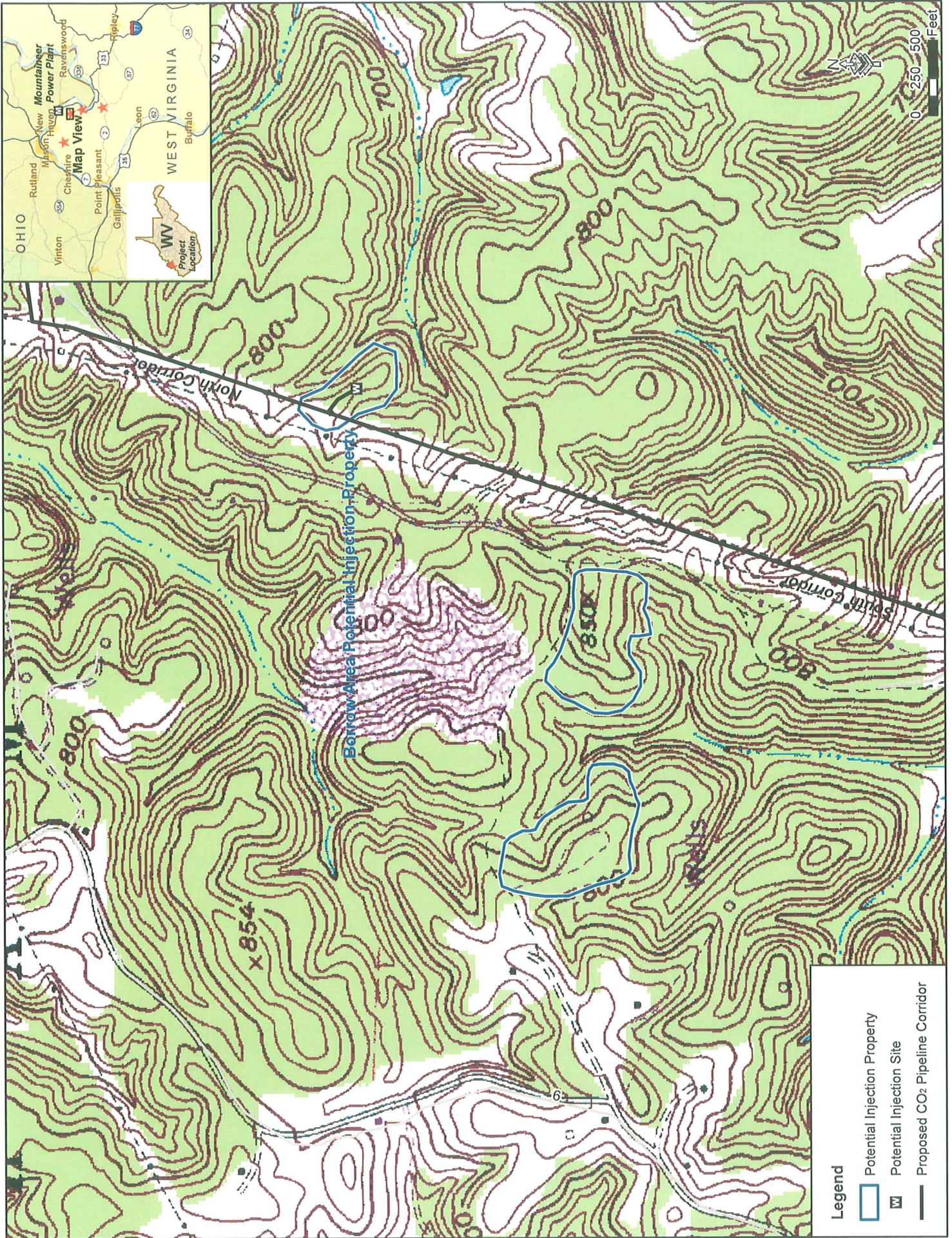
Mark Lusk
NEPA Document Manager

cc: M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
T. Sara, TRC
G. Henry, TRC

Enclosures







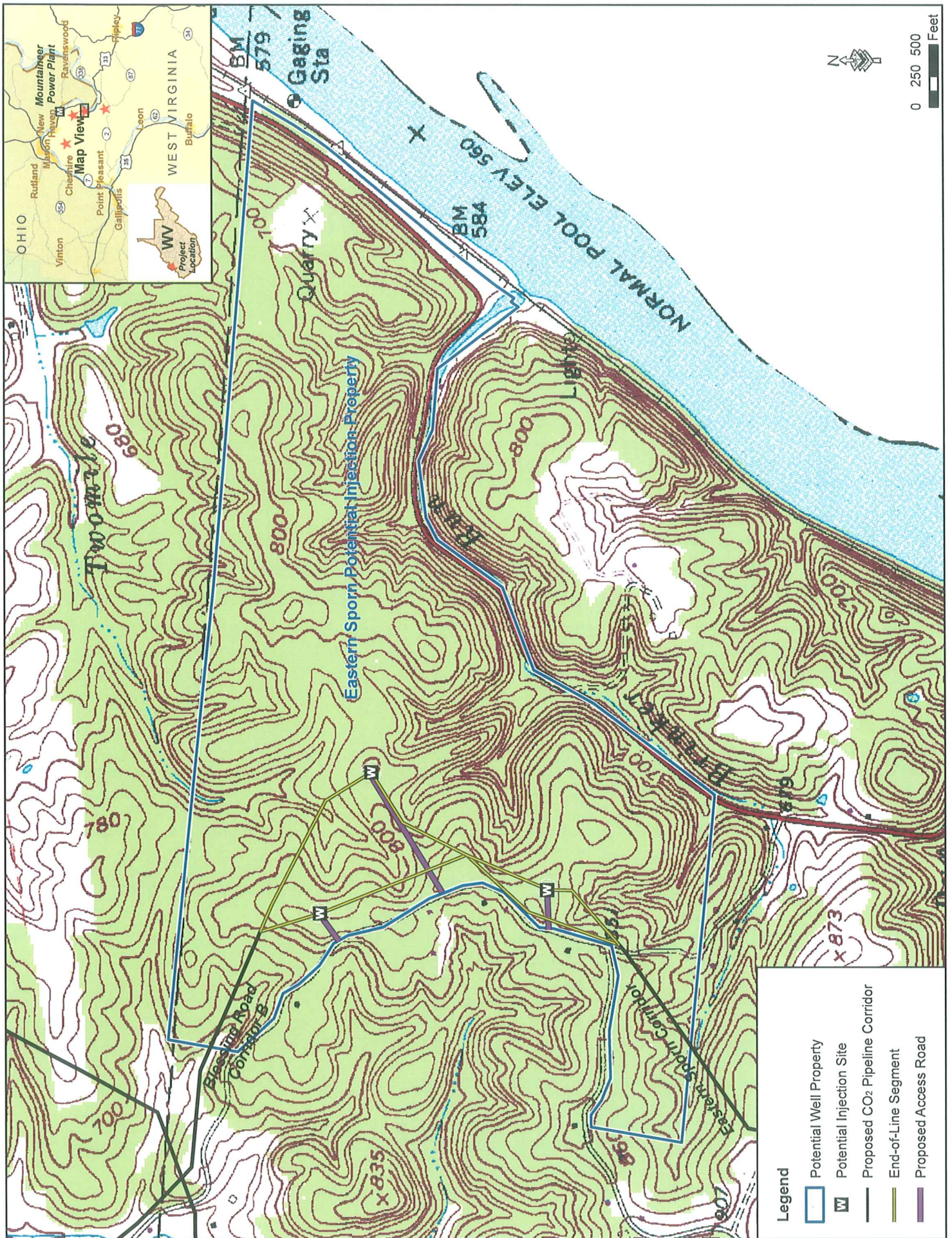


Figure 4 Eastern Sporn Potential Injection Property

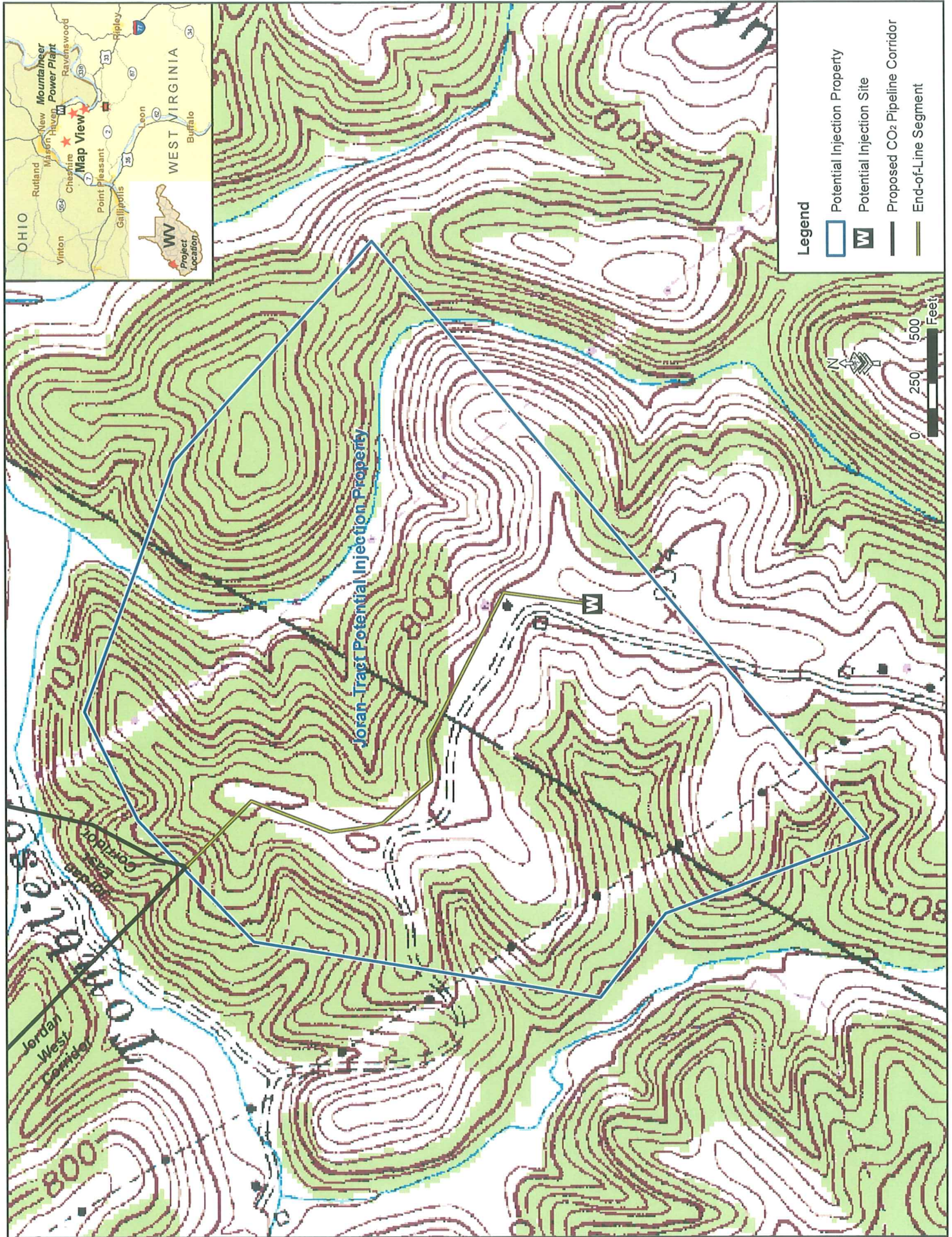


Figure 2. Jordan Tract Potential Injection Property

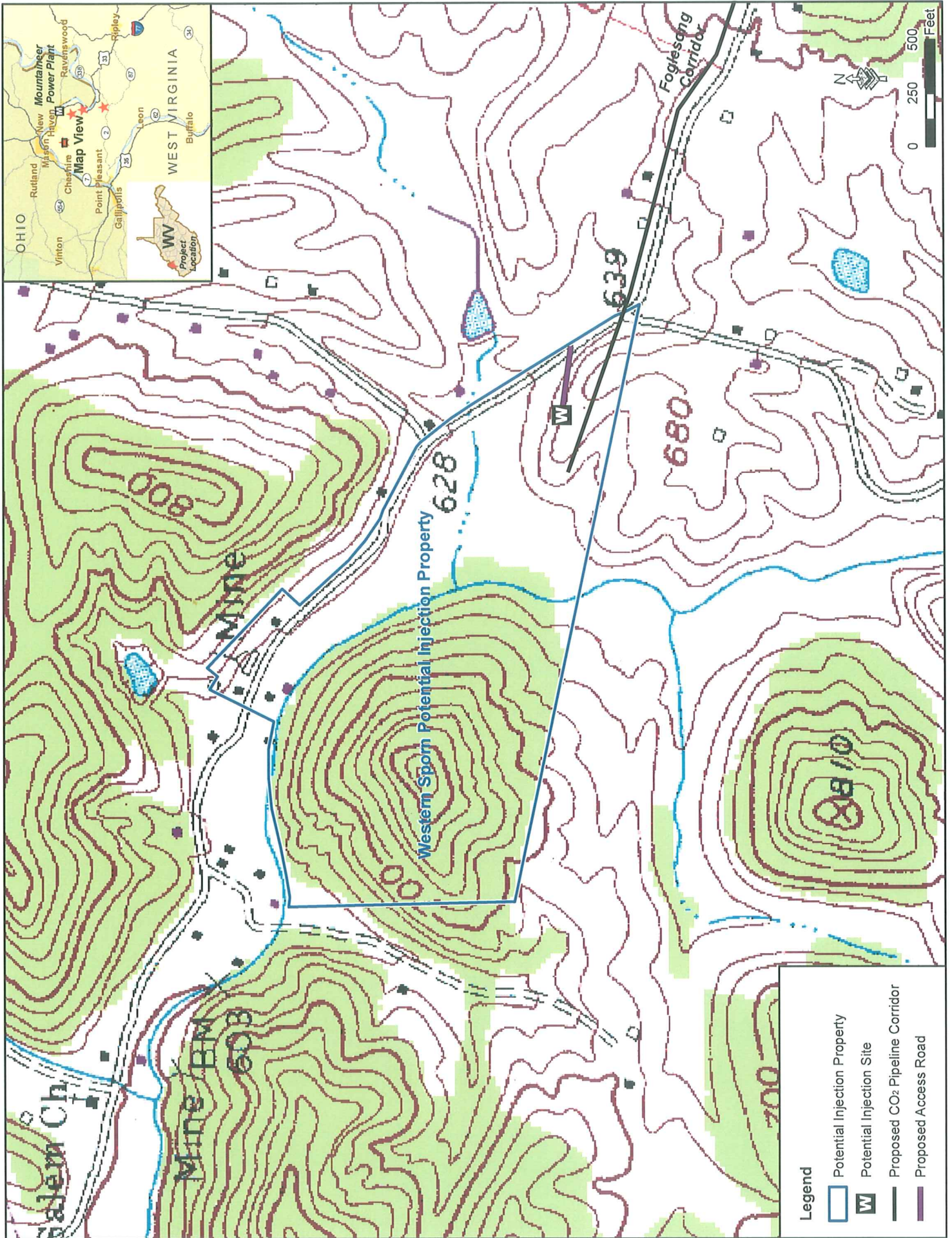


Figure C. Western Sporn Potential Injection Property

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**APPENDIX C2
PROTECTED SPECIES CONSULTATION**

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ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.

781 Neeb Road
Cincinnati, OH 45233
Phone: (513) 451-1777; Fax: (513) 451-3321

Pesi 926.01

9 June 2010

Ms. Barbara Douglas
U.S. Fish and Wildlife Service
West Virginia Field Office
Ecological Services
694 Beverly Pike
Elkins, West Virginia 26241

RE: *Request for Early Coordination/Informal Consultation for AEP's Proposed Mountaineer CCS II Project in Mason County, West Virginia.*

American Electric Power (AEP) and the U.S. Department of Energy (DOE), as lead Federal agency, propose to develop a carbon dioxide capture and storage (CCS) project at AEP's Mountaineer Power Plant in Mason County, West Virginia. The project is referred to as the proposed Mountaineer CCS II Project (or "Project" hereafter in this transmittal). AEP is seeking financial assistance from DOE for the proposed Project. As such, AEP will support DOE's preparation of an environmental impact statement (EIS) and future consultation under Section 7 of the Endangered Species Act (ESA).

The EIS will address all aspects of the Project; however, site selection for characterization wells and potential corridor alignments for the CO₂ pipeline are currently undergoing feasibility considerations by AEP. Preliminary field studies for characterization wells are expected to precede preliminary development of the Draft EIS. For that reason, Environmental Solutions & Innovations, Inc. (ESI) is writing on behalf of AEP and their consultant Potomac-Hudson Engineering, Inc (PHE), to request early coordination/informal consultation with U.S. Fish and Wildlife Service (USFWS) regarding threatened and endangered species or their critical habitat in the vicinity of the Project. Our approach is to investigate all such concerns as early in the Project as possible.

The following provides a brief description of the Project and plans for characterization work in support of Project planning and EIS development.

Project Description

The Project will add the infrastructure necessary to capture approximately 1.5 million tonnes of carbon dioxide (CO₂) annually from a 235-megawatt slipstream of flue gas from the existing 1300-megawatt Mountaineer Power Plant located near New Haven, West Virginia. Captured CO₂ will be transported by pipeline (primarily underground) to well injection sites within approximately 12 miles of the plant and injected for permanent storage into geologic formations approximately 1.5 miles underground.

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AEP will conduct geologic and hydrogeologic characterization activities to support preliminary Project engineering and design. As part of these activities, preliminary characterization work is planned at potential injection well sites and within potential pipeline corridors between the Mountaineer Plant and well sites. Up to three deep characterization wells will be developed to characterize subsurface conditions and assess their suitability for injection and storage of CO₂. Four properties owned by AEP have been identified for potential characterization wells and, in order of preference to support characterization activities; they are the (1) Jordan Tract, (2) AEP Landfill Site, (3) Eastern Sporn Tract, and (4) the Western Sporn Tract. Conceptual pipeline corridors to each of the four locations have been preliminarily identified. The final locations and design of the characterization wells, pipeline corridors, access roads, injection and monitoring wells, and potentially other work areas will be refined after completion of associated environmental studies.

Attachment A contains maps depicting the location of the Mountaineer Plant, characterization well properties, and preliminary conceptual pipeline corridors.

Indiana Bat Surveys

ESI has been contracted to conduct Indiana bat surveys within the study area, following guidelines in the 2007 Indiana Bat Draft Recovery Plan. Along with this early coordination letter, ESI is submitting a Project Study Plan for the Indiana bat to your office and to the West Virginia Division of Natural Resources (WVDNR) for review and approval. Based on the acceptability of the Study Plan, fieldwork will be coordinated with your office and with WVDNR.

Evaluations for Other Species

ESI is also requesting information from USFWS about ecologically significant habitats and/or species of special concern present within or near the Project. We are also coordinating with WVDNR to see whether they have concerns for any protected or unique species or habitats that could be adversely affect. If so, we are seeking to identify appropriate characterization and evaluation needs/studies as a part of our efforts to avoid and minimize adverse impacts and to support our characterization and evaluation of these species and potential Project impacts in the EIS process and applicable documentation.

Ongoing Consultation

On-going coordination and consultation with the USFWS and WVDNR throughout the Project is expected. Updates to your agency will be provided as information becomes available. If you desire, we are available to participate in face-to-face or teleconference meetings to facilitate your review or understanding of the Project.

We would appreciate your participation and request a response as soon as practical within the next 30 days to help us more quickly identify and focus on potential impacts to protected species.

If you need additional information please do not hesitate to contact me at (513) 451-1777, VBrack@EnvironmentalSI.com.

Sincerely,

Virgil Brack, Jr., Ph.D., MBA, Principal Scientist
Certified Wildlife Biologist, TWS
Certified Senior Ecologist, ESA

cc: M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
J. Magalski, AEP
B. Sherrick, AEP
V. Brack, ESI

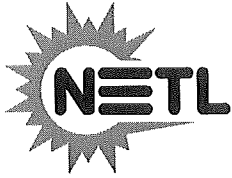
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August 23, 2010

Ms. Barbara Douglas
U.S. Fish and Wildlife Service
West Virginia Field Office
Ecological Services
694 Beverly Pike
Elkins, West Virginia 26241

RE: *Continued Consultation for AEP's Proposed Mountaineer CCS II Project in Mason County, West Virginia.*

Dear Ms. Douglas:

The American Electric Power (AEP) and U.S. Department of Energy (DOE), as lead Federal agency, propose to develop a carbon dioxide (CO₂) capture and storage (CCS) project at AEP's Mountaineer Power Plant in Mason County, West Virginia. The proposed project is referred to as the Mountaineer CCS II Project (or "Project" hereafter in this transmittal).

Previous informal consultation was initiated with your office in a letter dated June 9, 2010, entitled "*Request for Early Coordination/Informal Consultation for AEP's Proposed Mountaineer CCS II Project in Mason County, West Virginia.*" The letter introduced the overall proposed Project and the initial characterization well studies, as well as requested early coordination/informal consultation with the U.S. Fish and Wildlife Service (USFWS) regarding threatened and endangered species or their critical habitat in the vicinity of the Project. The letter also contained a copy of the "*Study Plan: Endangered Bat Studies for American Electric Power's Proposed Mountaineer CCS II Project: CO₂ Pipeline and Injection Well Sites, Mason County, West Virginia*" for your office's review and comment.

As previously introduced in the June 9, 2010 letter, AEP is seeking financial assistance from DOE for the proposed Project. As such, DOE is preparing an environmental impact statement (EIS) and is continuing informal consultation with the USFWS under Section 7 of the Endangered Species Act (ESA). The following provides a brief description of the proposed Project to be analyzed within the EIS and methodology that will be followed to characterize the affected environment and assess potential impacts to resources protected under the ESA and other biological resources within the study area.

Proposed Agency Action

The Proposed Action under consideration by DOE would provide financial assistance to AEP under the Clean Coal Power Initiative (CCPI) Program to support construction and start-up of the Mountaineer CCS II Project. AEP proposes to construct a commercial scale CCS system at their

existing Mountaineer Plant near New Haven, West Virginia, as depicted in Figures 1 through 6. This Project would capture CO₂ from the existing Mountaineer pulverized coal power plant, compress the captured CO₂ to supercritical conditions, and transport the captured CO₂ by pipeline to injection wells for permanent geologic storage in saline reservoir(s) approximately 1.5 miles below the surface.

As part of the proposed project, AEP would construct a carbon capture facility using Alstom's chilled ammonia process (CAP) within the boundaries of the existing 1,300-megawatt (MW) Mountaineer Plant. The system would occupy an area of approximately 500 feet by 1,000 feet, and would process a 235-MW slip-stream of flue gas after it exits the plant's flue gas desulfurization system. Approximately 1.5 million metric tons of CO₂ would be captured annually, treated, and compressed for geologic storage.

The processed CO₂ would be transported by pipeline (primarily underground) to the proposed injection site(s) on two to four of AEP's properties, located within an estimated 12 miles of the Mountaineer Plant (refer to Figure 1). The CO₂ would then be injected for permanent geologic storage into one or more geologic formations approximately 1.5 miles below ground. The Project would be designed to remove 90 percent of the CO₂ from the 235-MW slip stream and would demonstrate a commercial-scale deployment of the CAP for CO₂ capture, as well as demonstrate permanent geologic storage of CO₂ in deep underground saline formations.

Indiana Bat Surveys

Environmental Solutions & Innovations, Inc. (ESI) submitted a *Study Plan* for USFWS and West Virginia Division of Natural Resources (WVDNR) approval regarding conducting Indiana Bat surveys within the study area, following guidelines in the 2007 Indiana Bat Draft Recovery Plan (refer to the June 9, 2010 letter and *Study Plan* sent to your office). Bat surveys were recently completed as outlined in the *Study Plan*. No Indiana bats were identified by the study. A final report is being drafted and will be submitted to your office in September 2010. Findings from this study will also be incorporated into the EIS.

Evaluations for Other Species

The study area or region of influence (ROI) for biological resources includes the Mountaineer Plant Site, associated corridors and rights-of-way for the CO₂ transport pipeline, as well as the properties where the CO₂ injection and monitoring wells could be located, as shown in Figure 1. In addition, the ROI includes surface waters that would be crossed by CO₂ transport pipelines or would be influenced by construction or operation of the AEP Project.

The EIS will characterize the existing biological resources within the study area using a combination of online databases and site observations from the 2010 summer field season (including data from the bat surveys and wetland delineation work). This information will be used to provide a holistic view of the potentially affected biological environment in terms of vegetative communities, habitats, and potential species present. Estimates of terrestrial habitat losses will be calculated utilizing GIS systems and land cover data. The following list contains representative questions which will be reviewed when developing the affected environment and analyzing the potential effects of the Proposed Action on biological resources within the EIS document:

- What acreage of land cover types (i.e., vegetative communities) will be permanently disturbed (converted to another community type) or lost?
- Are invasive species abundant within the ROI?
- What measures will be used to repair/restore temporarily disturbed areas (including vegetation and riparian areas)?
- What indirect effects to biological resources could occur (i.e., noise, fragmentation, traffic)?
- Are threatened and endangered (T&E) species present, or have the potential to be present within areas impacted by the Project?
- Does critical habitat occur within or adjacent to these areas?
- Are there any candidate T&E species or species of concern?
- Would construction, operation, and maintenance of the Proposed Action affect T&E species or their habitat? (i.e., “no effect”, “may affect, but not likely to adversely affect”, or “may affect, and is likely to adversely affect”)

The following is a list of representative impact criteria assessment which will be used to determine the level of impact to biological resources resulting from the Proposed Action:

- Potential to cause substantial loss of vegetation communities within the ROI (i.e., unique communities not in regional abundance or ecologically important communities such as wetlands).
- Potential to substantially alter existing vegetation communities within the ROI including fragmentation or loss of habitat.
- Potential to cause a decline in native wildlife populations.
- Potential to promote the spread of invasive, non-native species.
- Potential to cause substantial mortality or displacement of species, or interfere with the movement of native or migratory species.
- Potential to encroach upon or degrade critical or protected habitat, or impact sensitive and T&E species.
- Potential for the Proposed Action to violate Federal and State regulations governing biological resources including the ESA, Executive Order 11990, the Migratory Bird Treaty Act (MBTA) and Executive Order 13186.
- Potential to alter drainage patterns causing the displacement of fish species.
- Potential to diminish the value of habitat available for fish species or cause a decline in native fish populations.
- Potential to interfere with the movement of native resident or migratory fish species.

Ongoing Consultation

DOE anticipates on-going coordination and consultation with the USFWS and WVDNR throughout the EIS process. DOE will provide your office a copy of the Draft EIS for review and comment. The Draft EIS is anticipated to be released in January 2011.

At this time, DOE is requesting information from USFWS about ecologically significant habitats and/or species of special concern that may be present within or near the Project. Such information would be included for consideration within the EIS. DOE is also seeking comments regarding the characterization and evaluation of these species and potential Project impacts in the EIS process.

We appreciate any comments as soon as practical within the next 30 days to help us more quickly identify and focus on potential impacts to protected species. If you need additional information please do not hesitate to contact me at (304) 285-4145 or Mark.Lusk@NETL.DOE.gov.

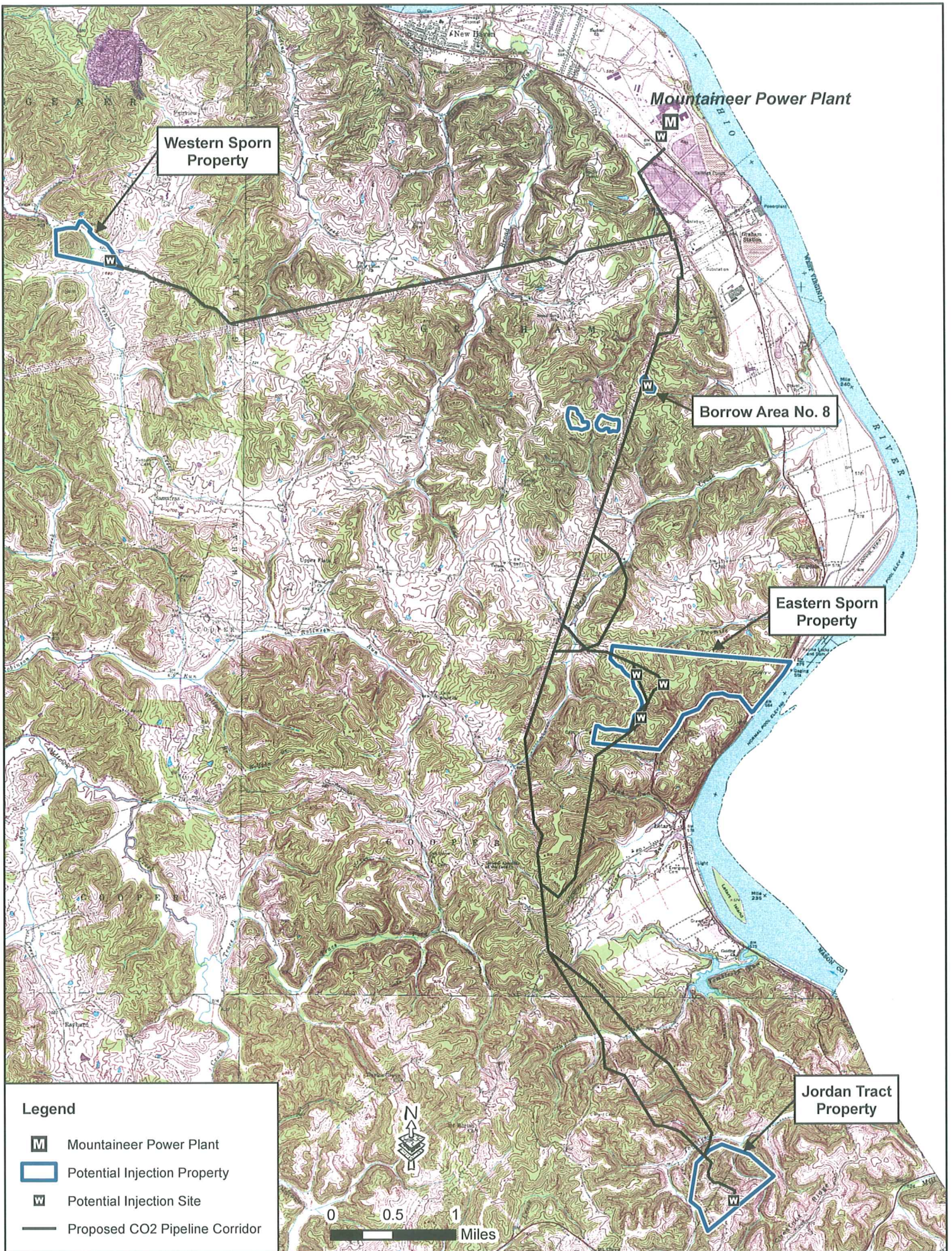
Sincerely,

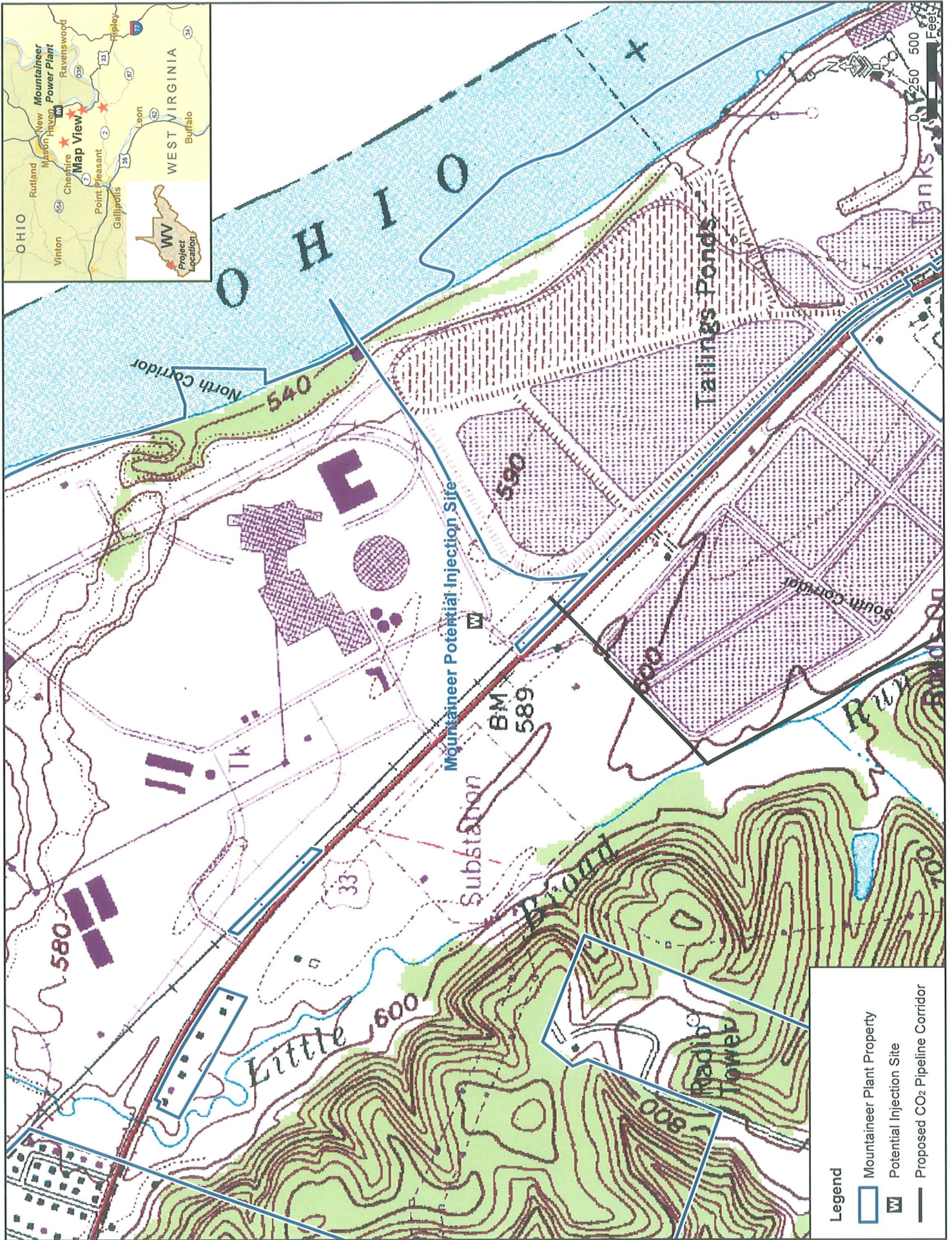


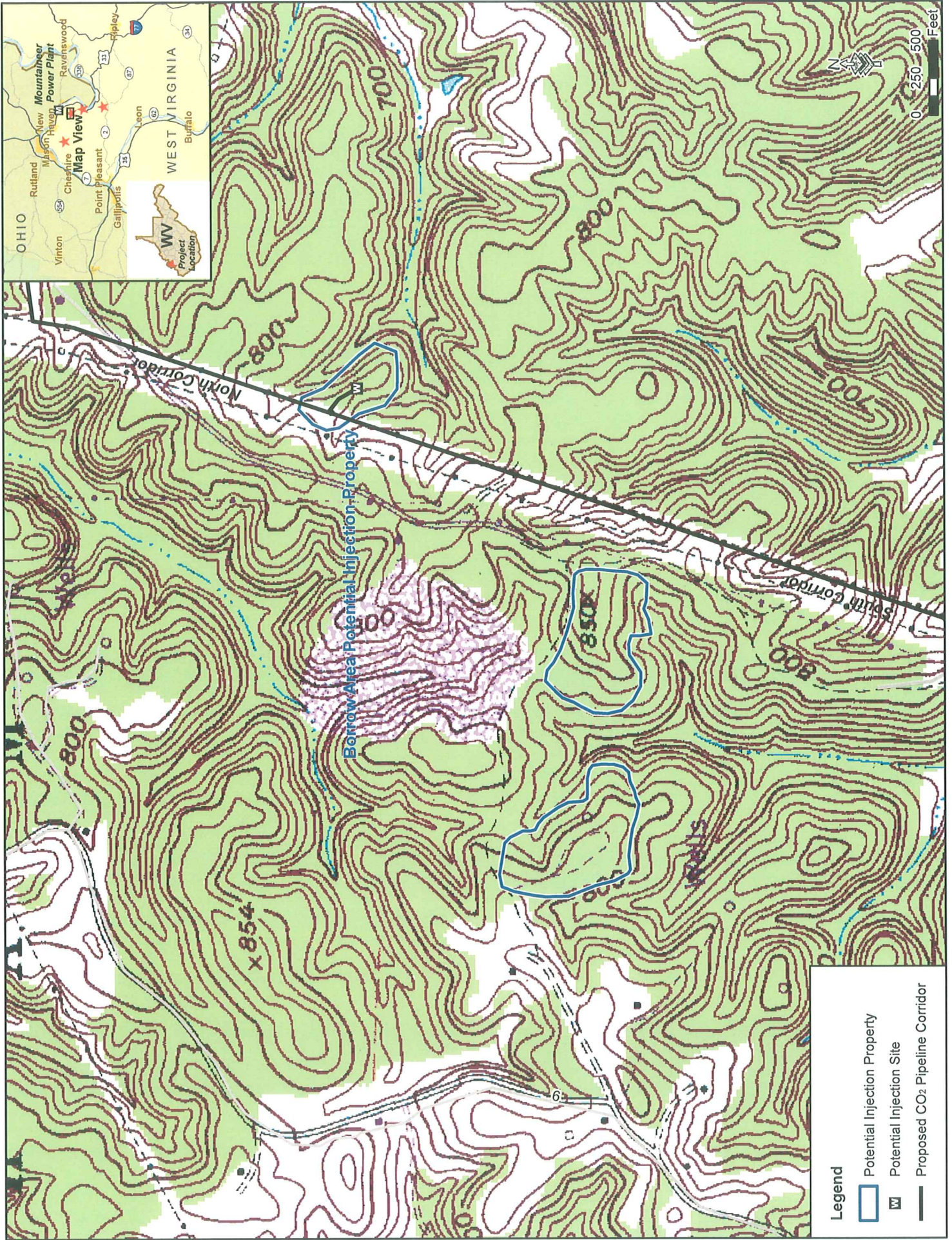
Mark W. Lusk
NEPA Document Manager
National Energy Technology Laboratory

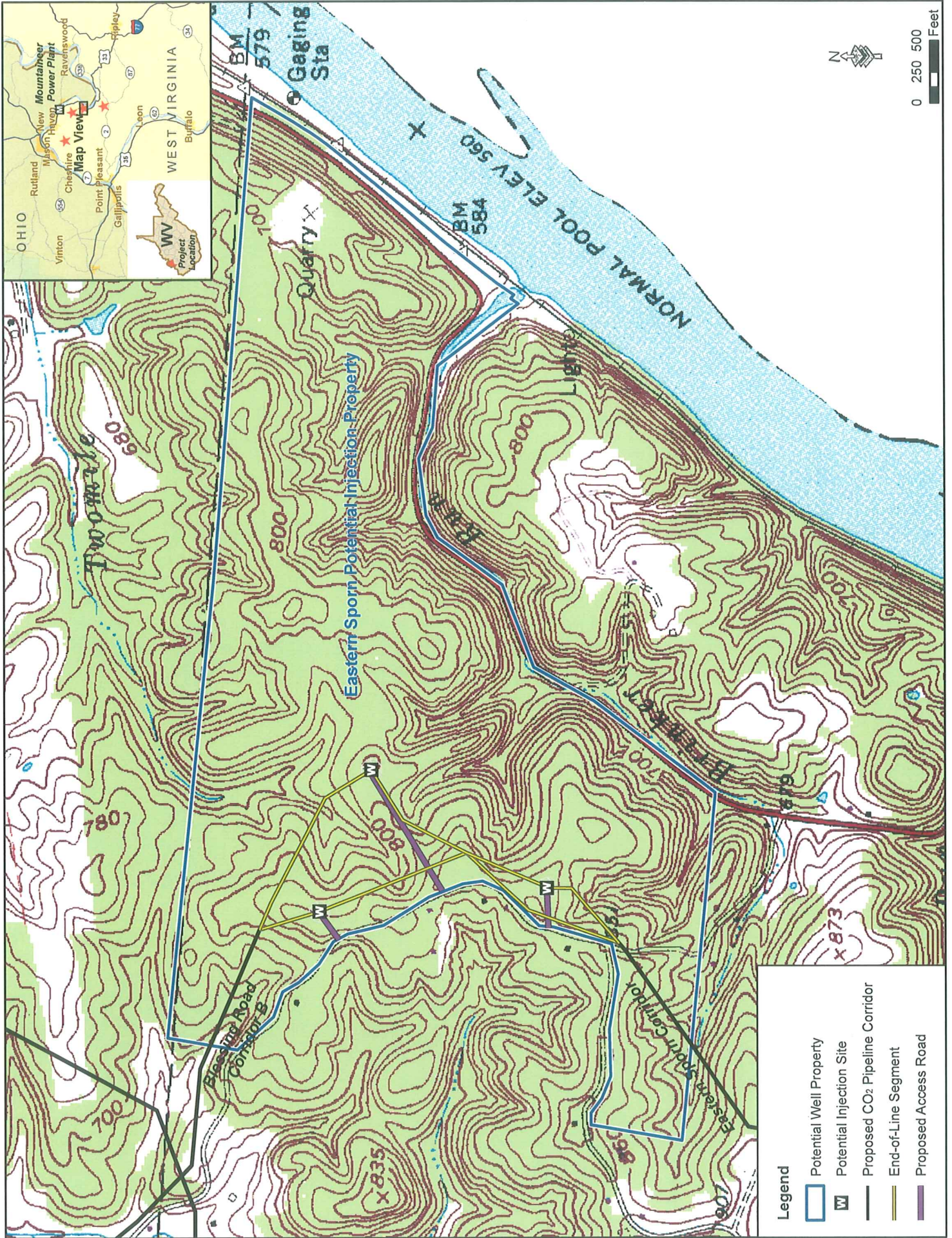
cc: M. McMillian, DOE/NETL
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B. Whipple, PHE
V. Brack, ESI

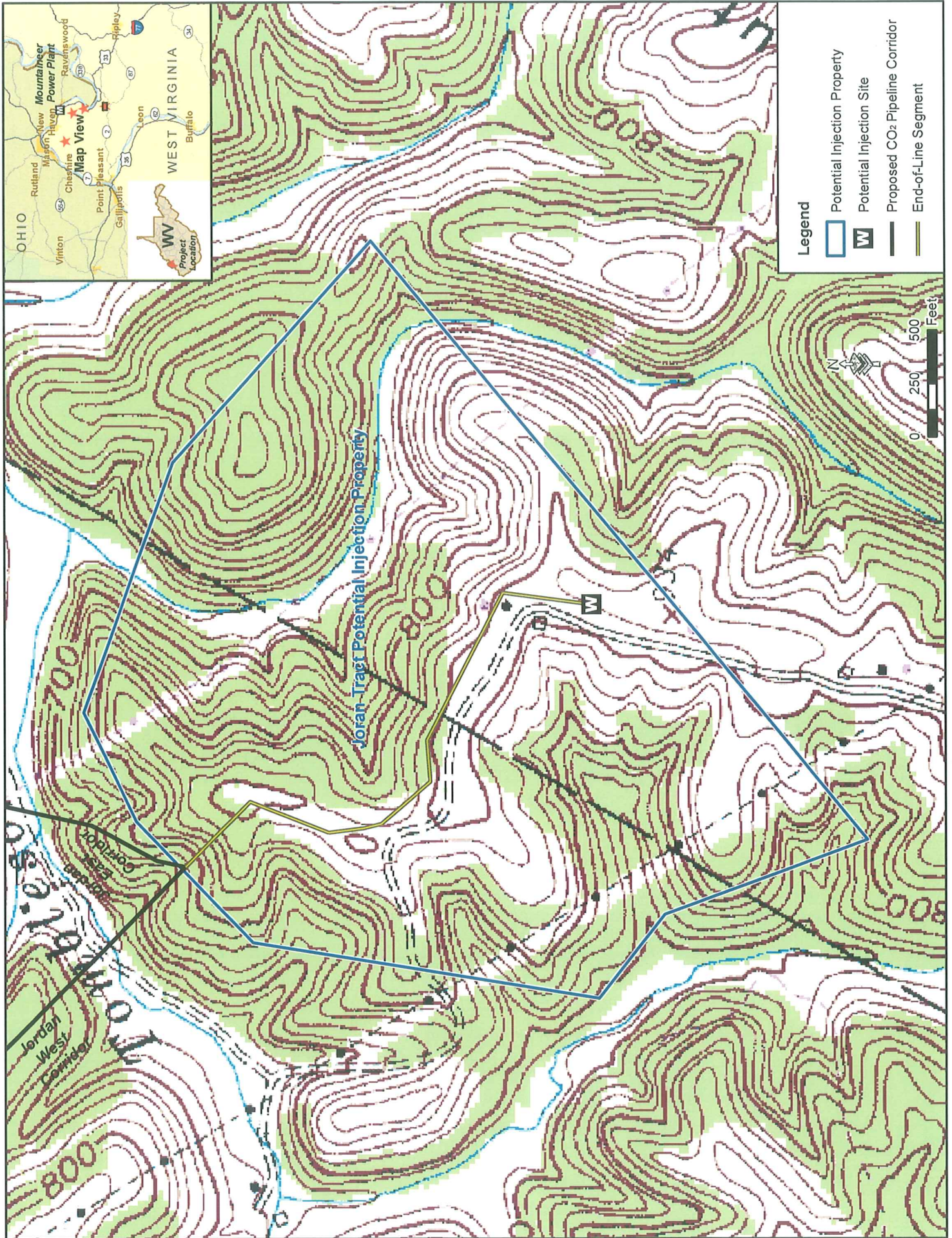
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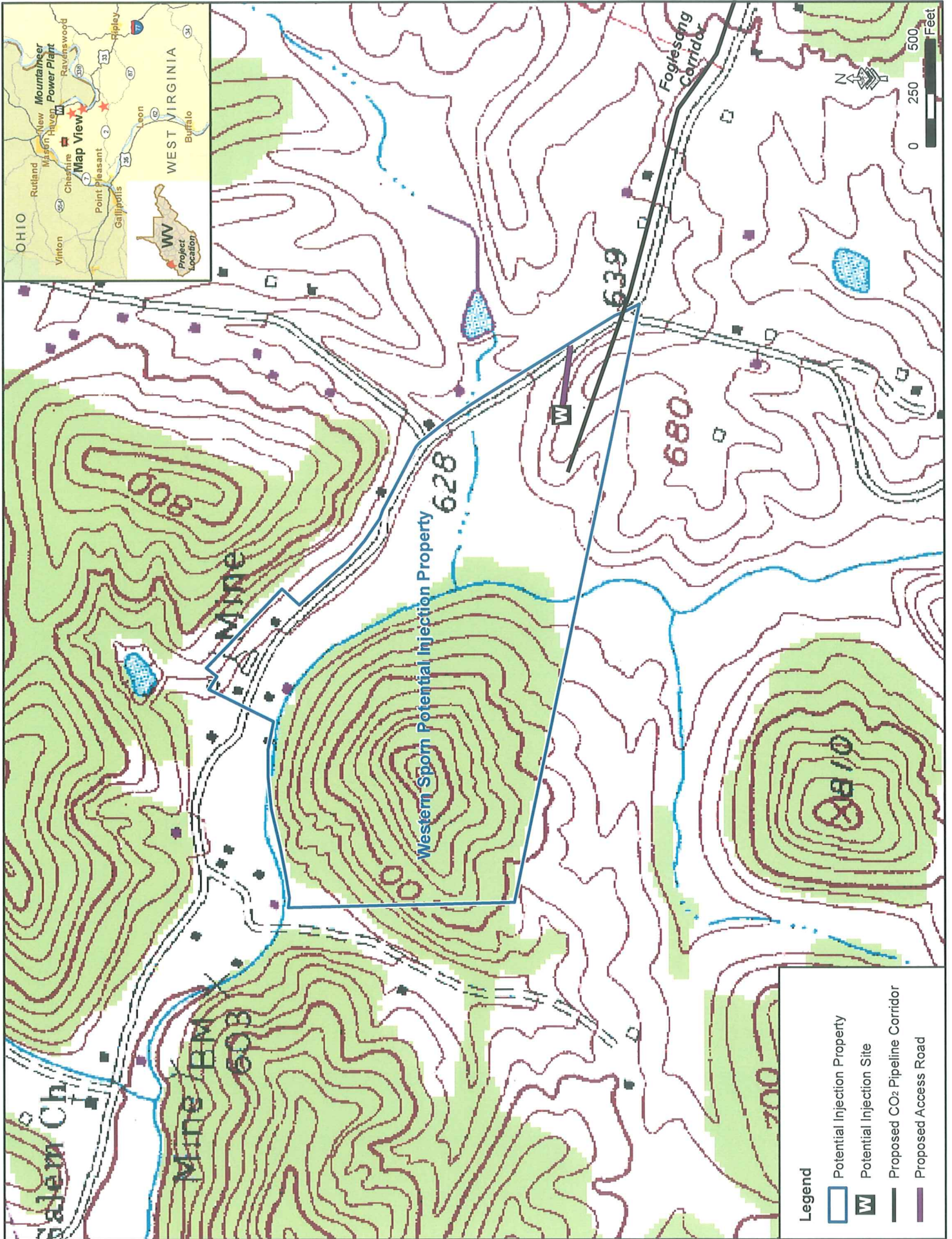














ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.

781 Neeb Road
Cincinnati, OH 45233
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Pesi 296.03

30 August 2010

Ms. Barbara Douglas
U.S. Fish and Wildlife Service
West Virginia Field Office
Ecological Services
694 Beverly Pike
Elkins, West Virginia 26241

RE: AEP's Mountaineer CCS II Project, Mason County, West Virginia – Request for USFWS Approval to Install a Characterization Well at Borrow Area No. 1

Dear Ms. Douglas:

As you will recall, American Electric Power (AEP) and the U.S. Department of Energy (DOE), as lead Federal agency, propose to develop a carbon dioxide capture and storage (CCS) project at AEP's Mountaineer Power Plant in Mason County, West Virginia. In correspondence dated June 9, 2010, Environmental Solutions & Innovations, Inc. (ESI), on behalf of AEP, DOE, and Potomac-Hudson Engineering, Inc. (PHE), AEP's prime consultant, requested early coordination/informal consultation with U.S. Fish and Wildlife Service (USFWS) regarding threatened and endangered species or their critical habitat in the vicinity of the Project. That correspondence included "*Study Plan: Endangered Bat Studies for American Electric Power's Proposed Mountaineer CCS II Project: CO₂ Pipeline and Injection Well Sites, Mason County, West Virginia.*" We subsequently completed the field studies and no endangered bats were found. We anticipate completion of a detailed report by October 2010 that will address all fieldwork completed in support of the Project. However, in advance of your review of that report, AEP is seeking your approval to install a geologic characterization well and an associated access road to a single location on one of AEP's existing properties.

Initially, AEP had identified four potential sites, all on AEP-owned properties, for the development of a geologic characterization well. AEP later determined that the preferred location for the well would be at the AEP Mountaineer Plant. An area identified as Borrow Area No. 1 was selected because the entire site is previously disturbed and biological values are essentially lacking, including habitat for the endangered Indiana bat and other listed species.

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The purpose of this letter is to seek your approval to install a characterization well and an associated access road to Borrow Area 1 (“BA-1”) located at the existing AEP Mountaineer Plant. Included below is a description of BA-1, and a summary of the field survey for endangered bats undertaken on and adjacent to BA-1. An additional Field Survey Report will be submitted in the near future for the entire project.

Description of Current Project Needs

Map 1 provides an overview of the project area, which also identifies the field mist net sampling sites. In the upper portion of the map, areas identified as mist net sampling areas KM9 and KM10 include three small areas that are colored deep pink. The western most of these three areas is labeled “Borrow Area 1.” This small site is the area intended for placement of the characterization well, located within the property boundary of AEP’s Little Broad Run Landfill. The landfill commenced operation with the inception of operations of the Mountaineer Plant in 1980. A maximum of 5 acres will be used for the geologic characterization well activities at the Borrow Area 1 site.

Borrow Area 1 is one of three borrow areas initially considered as a potential location for a characterization well. The other two borrow areas are no longer under consideration as potential characterization well sites. All three borrow areas and the proposed access road to Borrow Area 1 are shown on Map 2. Borrow Area 1 (as well as the other two areas) falls within the existing clay borrow pits that have been actively mined for clay to use in lining disposal cells within the landfill. Generally, this area consists of upland ridge finger landforms and steep slopes at elevations ranging from 700 to 840 ft. AMSL. The landscape has been heavily denuded of vegetation and modified by extraction and disposal activities. Existing vegetation on these previously disturbed areas consists mostly of short grasses and provides no suitable roosting habitat for the Indiana bat.

Summary of Field Efforts Completed to Date

A total of 28 sites, as Identified on Map 1, were netted. No endangered bats were caught. A total of 97 bats of 5 species were caught: 71 red bats, 21 big brown bats, 2 little brown bats, 2 tri-colored bats, and 1 hoary bat. This equates to 3.5 bats per net site and an average species richness of 1.2 species per net site.

At site KM10, which encompassed Borrow Area 1, the only captures were two red bats. At the two adjoining sites, KM 9 and KM 11, the only captures were three and one red bats, respectively. Surveys at site KM 10 were completed on August 4 - 5, 2010; and surveys on sites KM9 and KM 11 were completed on August 2 - 3 and on August 4 - 5, respectively.

In summary, no endangered bats were caught anywhere on lands to be used for the Project. In general, the rate of bat capture and species richness were low. Across the entire project, only two bats belonging to the genus *Myotis*, both little brown bats, were caught; no northern, Indiana, or small-footed bats were caught. The catch of tri-colored bats, another species that hibernates in caves during winter, was also low, and limited to two individuals.

It is even arguable that the catch of big brown bats, which only sometimes hibernate in caves, was low, with an abundance of less than one-third of the catch of red bats, which it often exceeds. The community of bats at the mist net sites nearest Borrow Area 1 was depauperate and limited to a single species. The area required for the characterization well and access road has been heavily disturbed for 30 years, is a very small part of the overall project area, and provides no suitable roosting habitat for endangered bats. As such, AEP requests concurrence to proceed with installation of the characterization well at Borrow Area No. 1 prior to further ESA and NEPA consultation.

We look forward to your concurrence with this request for AEP to install the characterization well at the Borrow Area No. 1 location. If you have questions or require additional information, please contact me at (513) 451-1777, or Vbrack@EnvironmentalSI.com.





Sincerely,

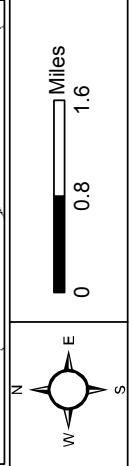
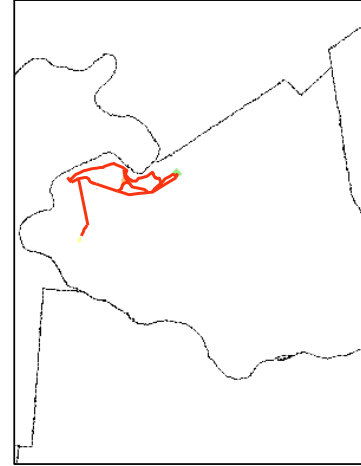
A handwritten signature in blue ink that reads "Virgil Brack, Jr." in a cursive style.

Virgil Brack, Jr., Ph.D., MBA, Principal Scientist
Certified Wildlife Biologist, TWS
Certified Senior Ecologist, ESA
Email: VBrack@EnvironmentalSI.com

cc: B. Sargent, WVDNR
M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
J. Magalski, AEP
B. Sherrick, AEP

Map 1. Proposed Mist Net Sites at the Mountaineer CCS II Project: CO2 Pipeline and Injection Well Sites, Mason County, West Virginia.

-  Access Road
-  Proposed Kilometer Net Site
-  Power Plant
-  County Boundary

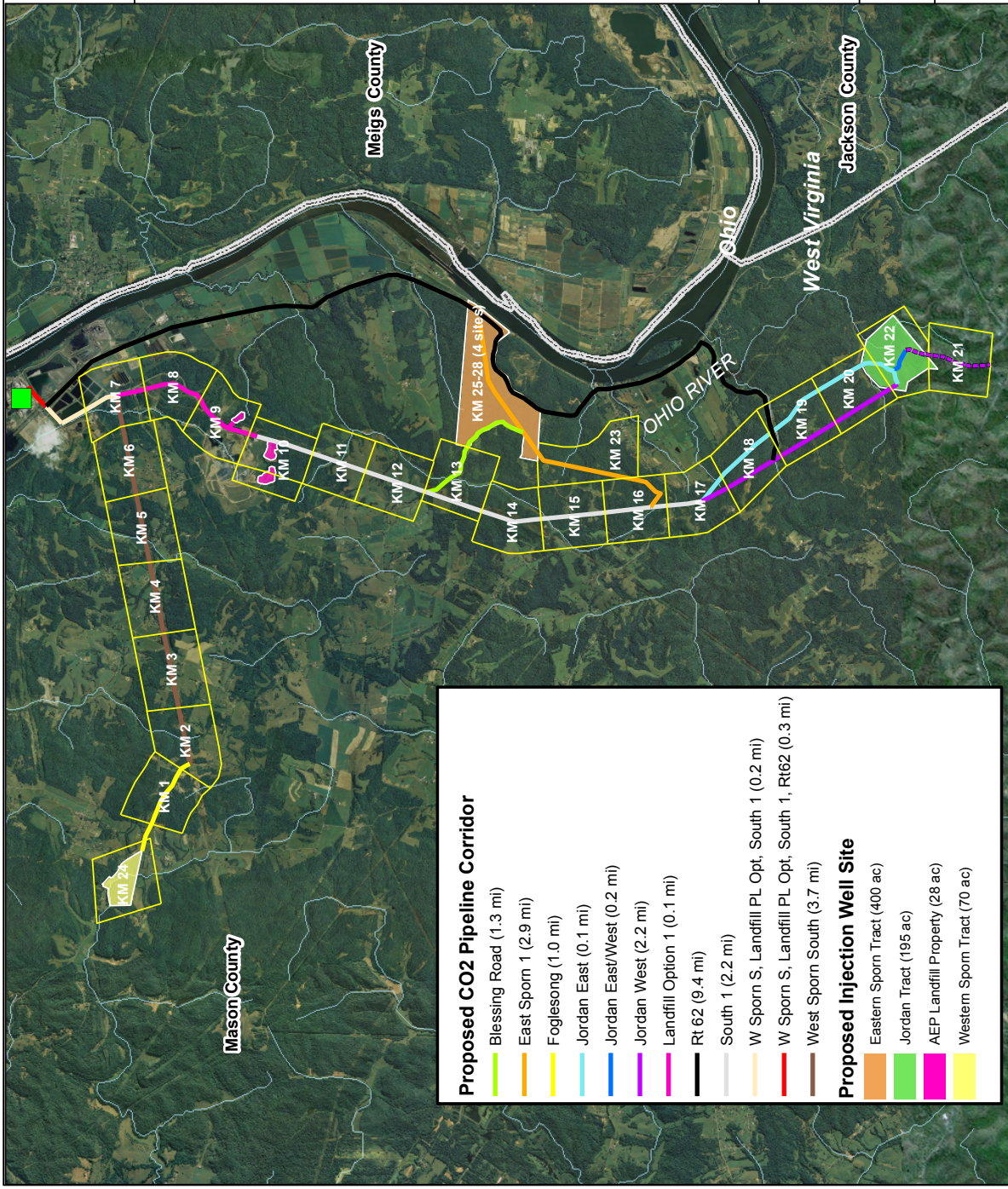


















Source: <http://www.mapwv.gov>

Base Map: WV Orthophotos - SAMBA South, UTM NAD1983.



ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.
Project No. 296



- Proposed CO2 Pipeline Corridor**
-  Blessing Road (1.3 mi)
 -  East Sporn 1 (2.9 mi)
 -  Foglesong (1.0 mi)
 -  Jordan East (0.1 mi)
 -  Jordan East/West (0.2 mi)
 -  Jordan West (2.2 mi)
 -  Landfill Option 1 (0.1 mi)
 -  Rt 62 (9.4 mi)
 -  South 1 (2.2 mi)
 -  W Sporn S, Landfill PL Opt, South 1 (0.2 mi)
 -  W Sporn S, Landfill PL Opt, South 1, Rt62 (0.3 mi)
 -  West Sporn South (3.7 mi)
- Proposed Injection Well Site**
-  Eastern Sporn Tract (400 ac)
 -  Jordan Tract (195 ac)
 -  AEP Landfill Property (28 ac)
 -  Western Sporn Tract (70 ac)

Map 2. Aerial photograph of AEP Borrow Area 1, where the proposed characterizations well and associated access road are proposed to be sited.



Borrow Area Potential Injection Property

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United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

Concurrence Form for Indiana Bat Mist Net Reports

Contact Name: Mr. Virgil Brack, Environmental Solutions & Innovations, Inc.

Fax Number: 513-451-3321

Project: American Electric Power's Mountaineer CCS II Project, Mason County, WV

The U.S. Fish and Wildlife Service has reviewed the report on the bat survey conducted in the proposed project area and submitted on October 6, 2010. The survey followed the protocol outlined in the Draft Indiana Bat Recovery Plan. The survey covered 28 linear kilometers of potential bat habitat and was conducted at 28 net sites from July 24 to August 15, 2010. No federally-listed bats were captured.

Mist net surveys are considered current for 5 years (the summer they are completed and the following four summer seasons). In this case, the survey will expire on May 15, 2014. If a significant amendment is proposed to change or expand this project, or if timber will be removed after that date, a new survey may be necessary and the Service should be contacted.

The area was surveyed for caves and abandoned mine portals and none were found on the property.

Based on the information provided to us, the Service has concluded that no federally-listed endangered and threatened bats are expected to be impacted by the project. Therefore, this project is not likely to adversely affect federally-listed species, and no further consultation under section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required with the Service. Should project plans change or amendments be proposed, or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

If you have any questions regarding these comments, please contact Ms. Barbara Douglas at (304) 636-6586, Ext. 19, or at the letterhead address.

Barbara Douglas
Biologist

Date: November 15, 2010

Deborah Carter
Deborah Carter, Field Supervisor

Date: November 15, 2010

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ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.

4525 Este Avenue
Cincinnati, OH 45232
Phone: (513) 451-1777; Fax: (513) 451-3321

Pesi 296.06

14 January 2010

Ms. Barbara Douglas
U.S. Fish & Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, WV 26241

Ms. Janet Clayton
West Virginia Division of Natural Resources
Wildlife Resource Section
P.O. Box 67
Elkins, WV 26241

RE: Mountaineer CO₂ Capture Facility, Mason County, West Virginia – Ohio River Equipment Barge Offloading Project

Dear Ms. Douglas and Ms. Clayton:

American Electric Power (AEP) and the U.S. Department of Energy (DOE), as lead federal agency, propose to develop a carbon dioxide (CO₂) capture and storage (CCS) project at AEP's Mountaineer Power Plant in Mason County, West Virginia. The project is referred to as the Mountaineer CCS II Project (or "project" hereafter in this transmittal).

Previous consultation was initiated with your office in a letter dated June 9, 2010 from Environmental Solutions & Innovations, Inc. (ESI) and another letter from DOE dated August 23, 2010. These letters introduced the proposed project and requested coordination and consultation regarding threatened and endangered species or their critical habitat in the vicinity of the project. Correspondence conducted to date has not addressed a new aspect of the proposed project, which involves a potential upgrade to an existing barge unloading area to support the delivery of certain equipment and materials for the project. This upgrade would enable AEP to receive the delivery of certain materials for the project via barge by two methods.

The first method would use an existing barge unloading platform to remove material from moored barges via a mobile crane. The second method ("bridge option") represents an upgrade to the existing unloading capabilities and would allow for larger equipment to be unloaded. Equipment unloading would be accomplished through the use of a temporary mobile bridge that would span the area between the river bank and

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the parked barge. Barges would then be unloaded by driving the payload off using specialized mobile carriers to an existing haul road. The area to be used for bridge unloading is within the Mountaineer Plant property at Ohio River mile 242.8 in the Gallipolis (Byrd) Pool (See Figure 1). The site is located next to the existing barge unloading platform, extending approximately 80 to 120 feet downstream of the barge unloading platform. The barges would use existing mooring cells located in the river. The barges would not touch the river bottom.

Under the first method, AEP would use the existing platform and no modifications or additional construction would be required. As currently proposed, the second method would require site preparation along the riverbank to support placement of the bridge. All of the riverbank site preparation will occur above the ordinary high water mark of the river. No dredging would be required within the Ohio River. The footprint for the bridge option would be up to 3,600 square feet (334 m²) (120 feet wide by 30 feet long). In addition, a temporary "spud barge" would be used to stabilize the delivery barge for unloading for the bridge option, which would be anchored with H-piles that would be gravity-dropped into the river bottom. The piles would be removed after the spud barge is no longer needed. The proposed modification to the existing unloading area at the Mountaineer Plant would require a Section 10 / 404 permit from the U.S. Army Corps of Engineers (USACE) and Section 401 Water Quality Certification from the West Virginia Department of Environmental Protection (WVDEP).

We are aware that the Ohio River is known to contain federally threatened and endangered mussel species, including *Cyprogenia stegaria*, *Lampsilis abrupta*, and *Plethobasus cyphus*. In addition, the WVDNR has a "no take" policy concerning native mussels. As currently proposed, placement of the four H pilings on the river bottom poses the only potential project-related impact to state rare and federally listed freshwater mussels. As a result, the proposed project was evaluated by ESI for potential impacts to rare freshwater mussels. ESI reviewed a prior mussel study conducted for AEP in June 2005 by EnviroScience, Inc. for the construction of 31 proposed barge mooring cells near the Mountaineer Plant. The survey addressed the area along the West Virginia bank of the Ohio River between river miles 242.0 and 243.4 and encompassed the location of the proposed upgrades to the existing barge unloading area.

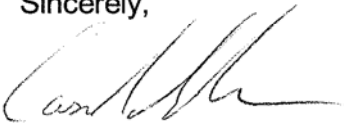
That survey collected 60 live unionids representing 8 species, with an additional 5 species collected only as weathered dead shells. No live or dead shells of federally endangered or threatened species were found. *Obliquaria reflexa*, *Amblema plicata*, and *Ligumia recta* were the most abundant species (56.7, 16.7, and 15.0 percent, respectively). Each of the five remaining live species was less than 5 percent of the total. The population consisted of primarily larger (older) individuals. Transect 9 of that initial survey extended approximately parallel through the area where the proposed spud barge will be positioned. The survey of Transect 9 yielded a maximum density of 0.3 mussel/m² at intervals 40 to 50 meters from the river bank. No mussels were found along Transect 8, just downstream of the proposed project area (Figure 1). Survey

Transects 10, 11, and 12, just upstream of the proposed project area, had densities of 0.0 to 0.2 mussel/m².

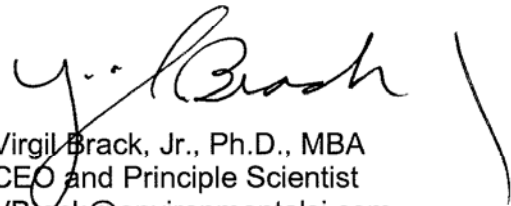
The mussel studies also included a September 2005 translocation effort of four grids where mussels occurred. One of the four relocation grids (Grid 9/10 [11,250 m² in area]) overlaps the currently proposed offloading project area, including the location of the proposed spud barge and four H pilings (see Figure 1). Approximately 75 individuals of 8 species (*A. plicata*, *L. cardium*, *L. complanata*, *L. recta*, *O. reflexa*, *P. alatus*, *Q. metanevra*, *Q. pustulosa*) were collected from Grid 9/10 and translocated out of the project area. Because mussels were previously removed from this area, ESI has concluded that the implementation of four H pilings should not adversely impact native mussels.

ESI, on behalf of AEP and DOE, respectfully requests concurrence that federally endangered and native freshwater mussels would not be directly impacted by the placement of the four H pilings on the river bottom. Therefore, additional mussel surveys would not be required for this project as currently proposed. If you need additional information please do not hesitate to contact me at (513) 451-1777 or VBrack@EnvironmentalSI.com.

Sincerely,



Casey Swecker
Aquatic Scientist
CSwecker@environmentalsi.com



Virgil Brack, Jr., Ph.D., MBA
CEO and Principle Scientist
VBrack@environmentalsi.com

Enclosures: Figure 1 site map

cc:

M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
J. Magalski, AEP
B. Sherrick, AEP

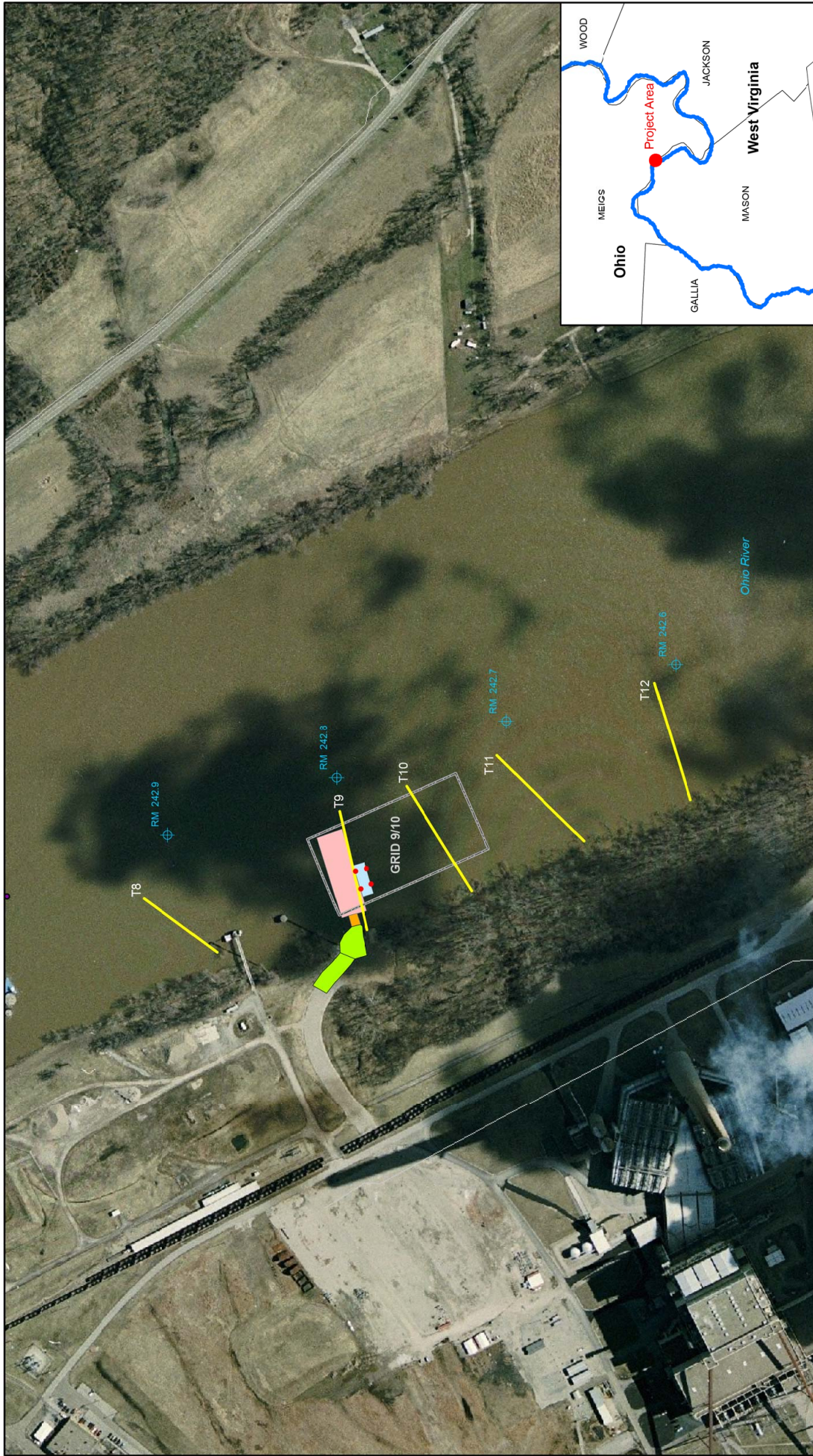






Figure 1. Proposed Equipment Barge Offloading Project at the Mountaineer CO2 Capture Facility, Mason County, West Virginia.

	H piling (approximate)
	2005 Mussel Survey Transect (approximate)
	2005 Mussel Relocation Grid (approximate)
	Area of Potential Disturbance (above water level)

ESI
 ENVIRONMENTAL SOLUTIONS
 & INNOVATIONS, INC.
 Project No. 296.06





ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC.

781 Neeb Road
Cincinnati, OH 45233
Phone: (513) 451-1777; Fax: (513) 451-3321

Pesi 926.01

9 June 2010

Ms. Barbara Sargent
West Virginia Division of Natural Resources
Natural Heritage Program
PO Box 67 Ward Road
Elkins, West Virginia 26241

RE: *Request for Early Coordination/Informal Consultation for AEP's Proposed Mountaineer CCS II Project in Mason County, West Virginia.*

American Electric Power (AEP) and the U.S. Department of Energy (DOE), as lead Federal agency, propose to develop a carbon dioxide capture and storage (CCS) project at AEP's Mountaineer Power Plant in Mason County, West Virginia. The project is referred to as the proposed Mountaineer CCS II Project (or "Project" hereafter in this transmittal). AEP is seeking financial assistance from DOE for the proposed Project. As such, AEP will support DOE's preparation of an environmental impact statement (EIS) and future consultation under Section 7 of the Endangered Species Act (ESA).

The EIS will address all aspects of the Project; however, site selection for characterization wells and potential corridor alignments for the CO₂ pipeline are currently undergoing feasibility considerations by AEP. Preliminary field studies for characterization wells are expected to precede the preliminary development of the Draft EIS. For that reason, Environmental Solutions & Innovations, Inc. (ESI) is writing on behalf of AEP and their consultant Potomac-Hudson Engineering, Inc (PHE), to request early coordination/consultation with West Virginia Division of Natural Resources (WVDNR) regarding threatened and endangered species or their critical habitat in the vicinity of the Project. Our approach is to investigate all such concerns as early in the Project as possible.

The following provides a brief description of the Project and plans for characterization work in support of Project planning and EIS development.

Project Description

The Project will add the infrastructure necessary to capture approximately 1.5 million tonnes of carbon dioxide (CO₂) annually from a 235-megawatt slipstream of flue gas from the existing 1300-megawatt Mountaineer Power Plant located near New Haven, West Virginia. Captured CO₂ will be transported by pipeline (primarily underground) to well injection sites within approximately 12 miles of the plant and injected for permanent storage into geologic formations approximately 1.5 miles underground.

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AEP will conduct geologic and hydrogeologic characterization activities to support preliminary Project engineering and design. As part of these activities, preliminary characterization work is planned at potential injection well sites and within potential pipeline corridors between the Mountaineer Plant and well sites. Up to three deep characterization wells will be developed to characterize subsurface conditions and assess their suitability for injection and storage of CO₂. Four properties owned by AEP have been identified for potential characterization wells and, in order of preference to support characterization activities; they are the (1) Jordan Tract, (2) AEP Landfill Site, (3) Eastern Sporn Tract, and (4) the Western Sporn Tract. Conceptual pipeline corridors to each of the four locations have been preliminarily identified. The final locations and design of the characterization wells, pipeline corridors, access roads, injection and monitoring wells, and potentially other work areas will be refined after completion of associated environmental studies.

Attachment A contains maps depicting the location of the Mountaineer Plant, characterization well properties, and preliminary conceptual pipeline corridors.

Indiana Bat Surveys

ESI has been contracted to conduct Indiana bat surveys within the study area, following guidelines in the 2007 Indiana Bat Draft Recovery Plan. Along with this early coordination letter, ESI is submitting a Project Study Plan for the Indiana bat to your office and to the U.S. Fish and Wildlife Service (USFWS) for review and approval. Based on the acceptability of the Study Plan, fieldwork will be coordinated with your office and with USFWS.

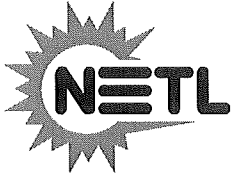
Evaluations for Other Species

ESI is also requesting information from WVDNR about ecologically significant habitats and/or species of special concern present within or near the Project. We are also coordinating with USFWS to see whether they have concerns for any additional protected or unique species or habitats that could be adversely affected. If so, we are seeking to identify appropriate characterization and evaluation needs/studies as a part of our efforts to avoid and minimize adverse impacts and to support our characterization and evaluation of these species and potential Project impacts in the EIS process and applicable documentation.

Ongoing Consultation

On-going coordination and consultation with the WVDNR and USFWS throughout the Project is expected. Updates to your agency will be provided as information becomes available. If you desire, we are available to participate in face-to-face or teleconference meetings to facilitate your review or understanding of the Project.

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August 23, 2010

Ms. Barbara Sargent
West Virginia Division of Natural Resources
Natural Heritage Program
PO Box 67 Ward Road
Elkins, West Virginia 26241

RE: *Continued Consultation for AEP's Proposed Mountaineer CCS II Project in Mason County, West Virginia.*

Dear Ms. Sargent:

The American Electric Power (AEP) and U.S. Department of Energy (DOE), as lead Federal agency, propose to develop a carbon dioxide capture and storage (CCS) project at AEP's Mountaineer Power Plant in Mason County, West Virginia. The project is referred to as the proposed Mountaineer CCS II Project (or "Project" hereafter in this transmittal).

Previous informal consultation has been initiated with your office in a letter dated June 9, 2010, entitled "*Request for Early Coordination/Informal Consultation for AEP's Proposed Mountaineer CCS II Project in Mason County, West Virginia*" which introduced the overall proposed Project, and the initial characterization well studies, as well as requested early coordination/informal consultation with the West Virginia Division of Natural Resources (WVDNR) regarding threatened and endangered species or their critical habitat in the vicinity of the Project. The letter also contained a copy of the "*Study Plan: Endangered Bat Studies for American Electric Power's Proposed Mountaineer CCS II Project: CO₂ Pipeline and Injection Well Sites, Mason County, West Virginia*" for your office's review and comment.

As previously introduced in the June 9, 2010 letter, AEP is seeking financial assistance from DOE for the proposed Project. As such, DOE is preparing an environmental impact statement (EIS) and is continuing informal consultation with the WVDNR under Section 7 of the Endangered Species Act (ESA). The following provides a brief description of the proposed Project to be analyzed within the EIS and methodology that will be followed to characterize the affected environment and assess impacts to resources protected under the ESA and other biological resources within the study area.

Proposed Agency Action

The Proposed Action under consideration by DOE would provide financial assistance to AEP under the Clean Coal Power Initiative (CCPI) Program to support construction and start-up of the Mountaineer CCS II Project. AEP proposes to construct a commercial scale CCS system at their existing Mountaineer Plant near New Haven, West Virginia, as depicted in Figures 1 through 6.

This Project would capture CO₂ from the existing Mountaineer pulverized coal power plant, compress the captured CO₂ to supercritical conditions, and transport the captured CO₂ by pipeline to injection wells for permanent geologic storage in saline reservoir(s) approximately 1.5 miles below the surface.

As part of the proposed project, AEP would construct a carbon capture facility using Alstom's chilled ammonia process (CAP) within the boundaries of the existing 1,300-megawatt (MW) Mountaineer Plant. The system would occupy an area of approximately 500 feet by 1,000 feet, and would process a 235-MW slip-stream of flue gas after it exits the plant's flue gas desulfurization system. Approximately 1.5 million metric tons of CO₂ would be captured annually, treated, and compressed for geologic storage.

The processed CO₂ would be transported by pipeline (primarily underground) to the proposed injection site(s) on two to four of AEP's properties, located within an estimated 12 miles of the Mountaineer Plant (refer to Figure 1). The CO₂ would then be injected for permanent geologic storage into one or more geologic formations approximately 1.5 miles below ground. The Project would be designed to remove 90 percent of the CO₂ from the 235-MW slip stream and would demonstrate a commercial-scale deployment of the CAP for CO₂ capture, as well as demonstrate permanent geologic storage of CO₂ in deep underground saline formations.

Indiana Bat Surveys

Environmental Solutions & Innovations, Inc. (ESI) submitted a *Study Plan* for USFWS and WVDNR approval regarding conducting Indiana Bat surveys within the study area, following guidelines in the 2007 Indiana Bat Draft Recovery Plan (refer to the June 9, 2010 letter and *Study Plan* sent to your office). Bat surveys were recently completed as outlined in the *Study Plan*. No Indiana bats were identified by the study. A final report is being drafted and will be submitted to your office in September 2010. Findings from this study will also be incorporated into the EIS.

Evaluations for Other Species

The study area or region of influence (ROI) for biological resources includes the Mountaineer Plant Site, associated corridors and rights-of-way for the CO₂ transport pipeline, as well as the properties where the CO₂ injection and monitoring wells could be located, as shown in Figure 1. In addition, the ROI includes surface waters that would be crossed by CO₂ transport pipelines or would be influenced by construction or operation of the AEP Project.

The EIS will characterize the existing biological resources within the study area using a combination of online databases and site observations from the 2010 summer field season (including data from the bat surveys and wetland delineation work). This information will be used to provide a holistic view of the potentially affected biological environment in terms of vegetative communities, habitats, and potential species present. Estimates of terrestrial habitat losses will be calculated utilizing GIS systems and land cover data. The following list contains representative questions which will be reviewed when developing the affected environment and analyzing the potential effects of the Proposed Action on biological resources within the EIS document:

- What acreage of land cover types (i.e., vegetative communities) will be permanently disturbed (converted to another community type) or lost?
- Are invasive species abundant within the ROI?
- What measures will be used to repair/restore temporarily disturbed areas (including vegetation and riparian areas)?
- What indirect effects to biological resources could occur (i.e., noise, fragmentation, traffic)?
- Are threatened and endangered (T&E) species present, or have the potential to be present within areas impacted by the Project?
- Does critical habitat occur within or adjacent to these areas?
- Are there any candidate T&E species or species of concern?
- Would construction, operation, and maintenance of the Proposed Action affect T&E species or their habitat? (i.e., “no effect”, “may affect, but not likely to adversely affect”, or “may affect, and is likely to adversely affect”)

The following is a list of representative impact criteria assessment which will be used to determine the level of impact to biological resources resulting from the Proposed Action:

- Potential to cause substantial loss of vegetation communities within the ROI (i.e., unique communities not in regional abundance or ecologically important communities such as wetlands).
- Potential to substantially alter existing vegetation communities within the ROI including fragmentation or loss of habitat.
- Potential to cause a decline in native wildlife populations.
- Potential to promote the spread of invasive, non-native species.
- Potential to cause substantial mortality or displacement of species, or interfere with the movement of native or migratory species.
- Potential to encroach upon or degrade critical or protected habitat, or impact sensitive and T&E species.
- Potential for the Proposed Action to violate Federal and State regulations governing biological resources including the ESA, Executive Order 11990, the Migratory Bird Treaty Act (MBTA) and Executive Order 13186.
- Potential to alter drainage patterns causing the displacement of fish species.
- Potential to diminish the value of habitat available for fish species or cause a decline in native fish populations.
- Potential to interfere with the movement of native resident or migratory fish species.

Ongoing Consultation

DOE anticipates on-going coordination and consultation with the USFWS and WVDNR throughout the EIS process. DOE will provide your office a copy of the Draft EIS for review and comment. The Draft EIS is anticipated to be released in January 2011.

At this time, DOE is requesting information from USFWS about ecologically significant habitats and/or species of special concern that may be present within or near the Project. Such information would be included for consideration within the EIS. DOE is also seeking comments regarding the characterization and evaluation of these species and potential Project impacts in the EIS process.

We appreciate any comments as soon as practical within the next 30 days to help us more quickly identify and focus on potential impacts to protected species.

If you need additional information please do not hesitate to contact me at (304) 285-4145 or Mark.Lusk@NETL.DOE.gov.

Sincerely,

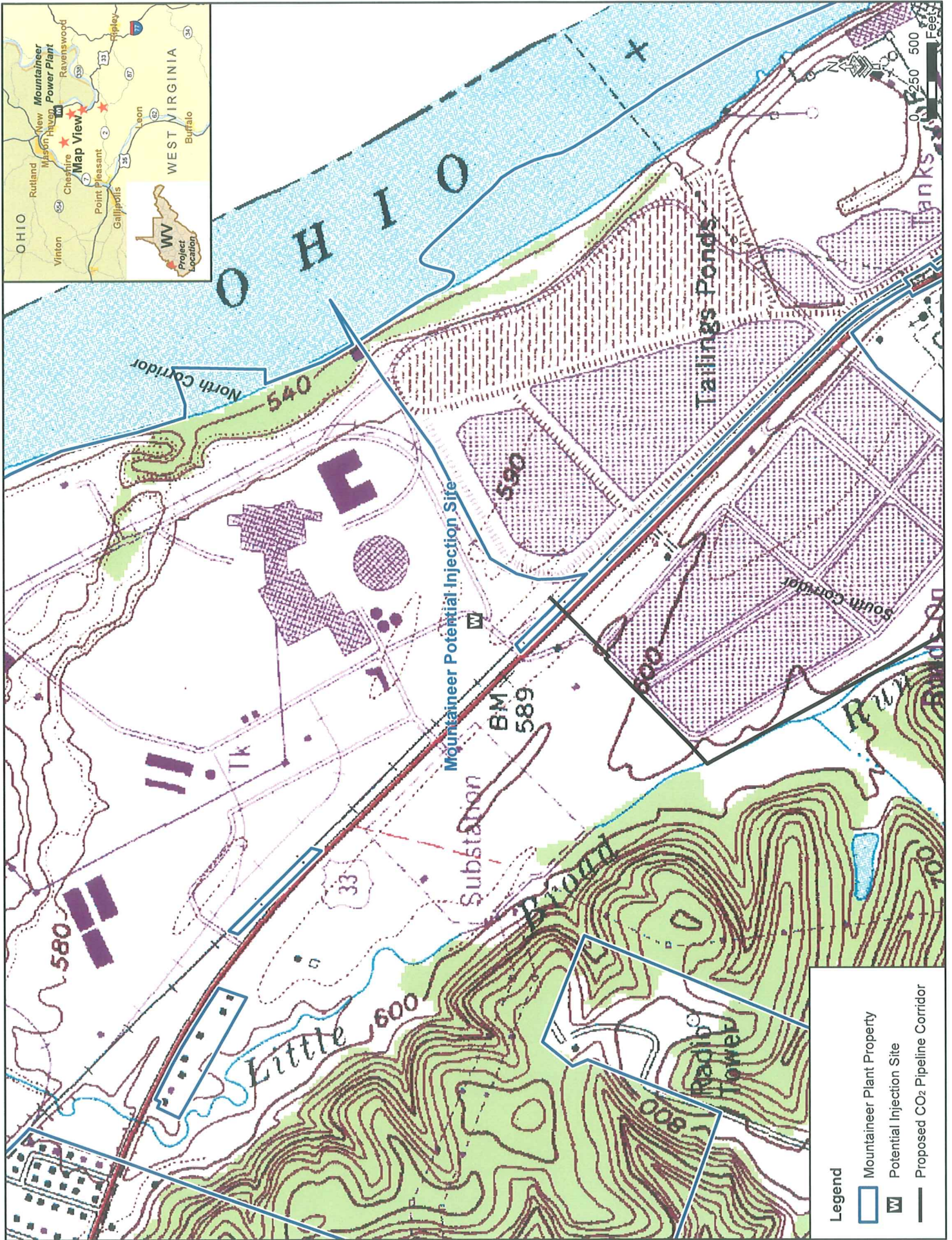


Mark W. Lusk
NEPA Document Manager
National Energy Technology Laboratory

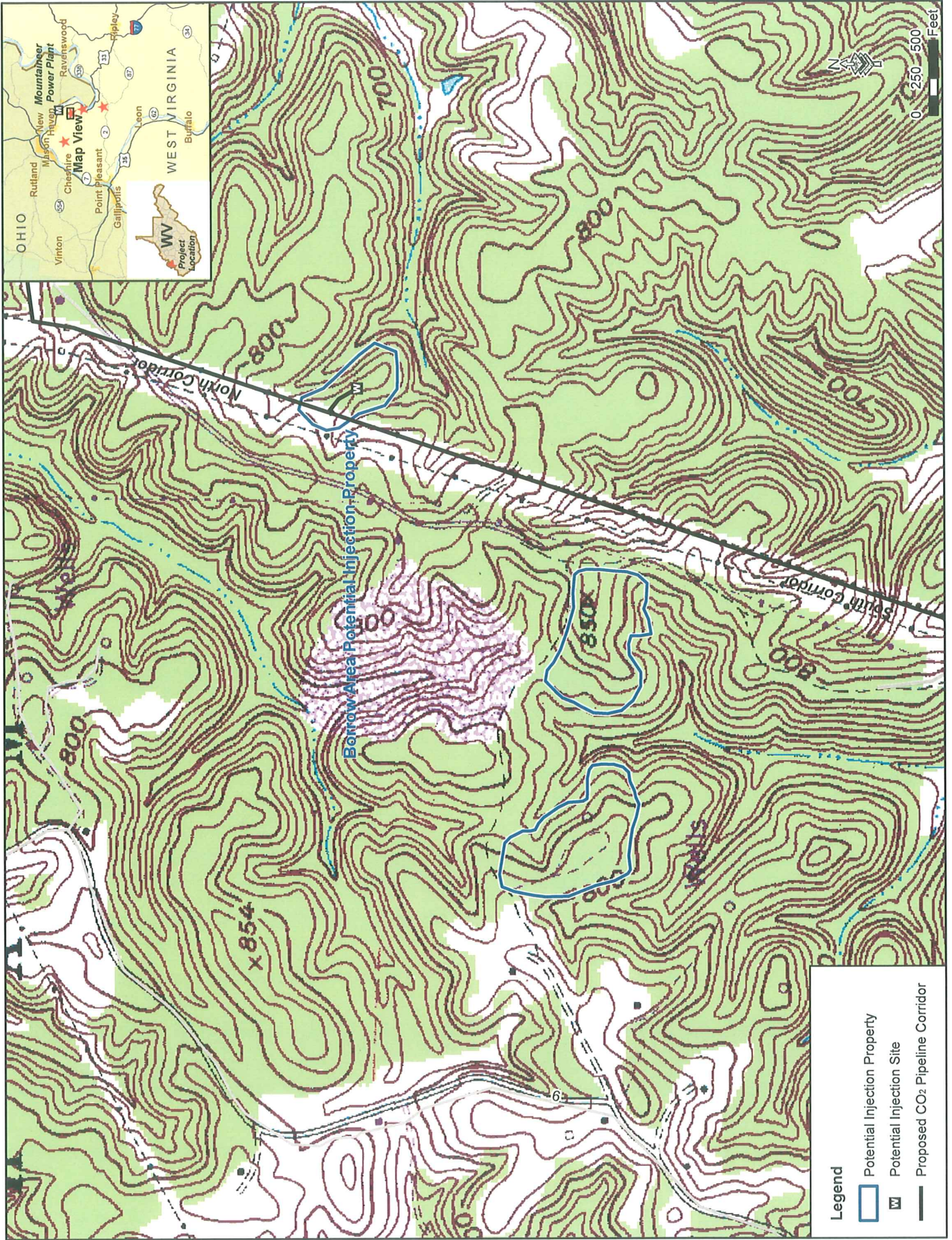
cc: M. McMillian, DOE/NETL
F. Blake, AEP
B. Sherrick, AEP
B. Whipple, PHE
V. Brack, ESI

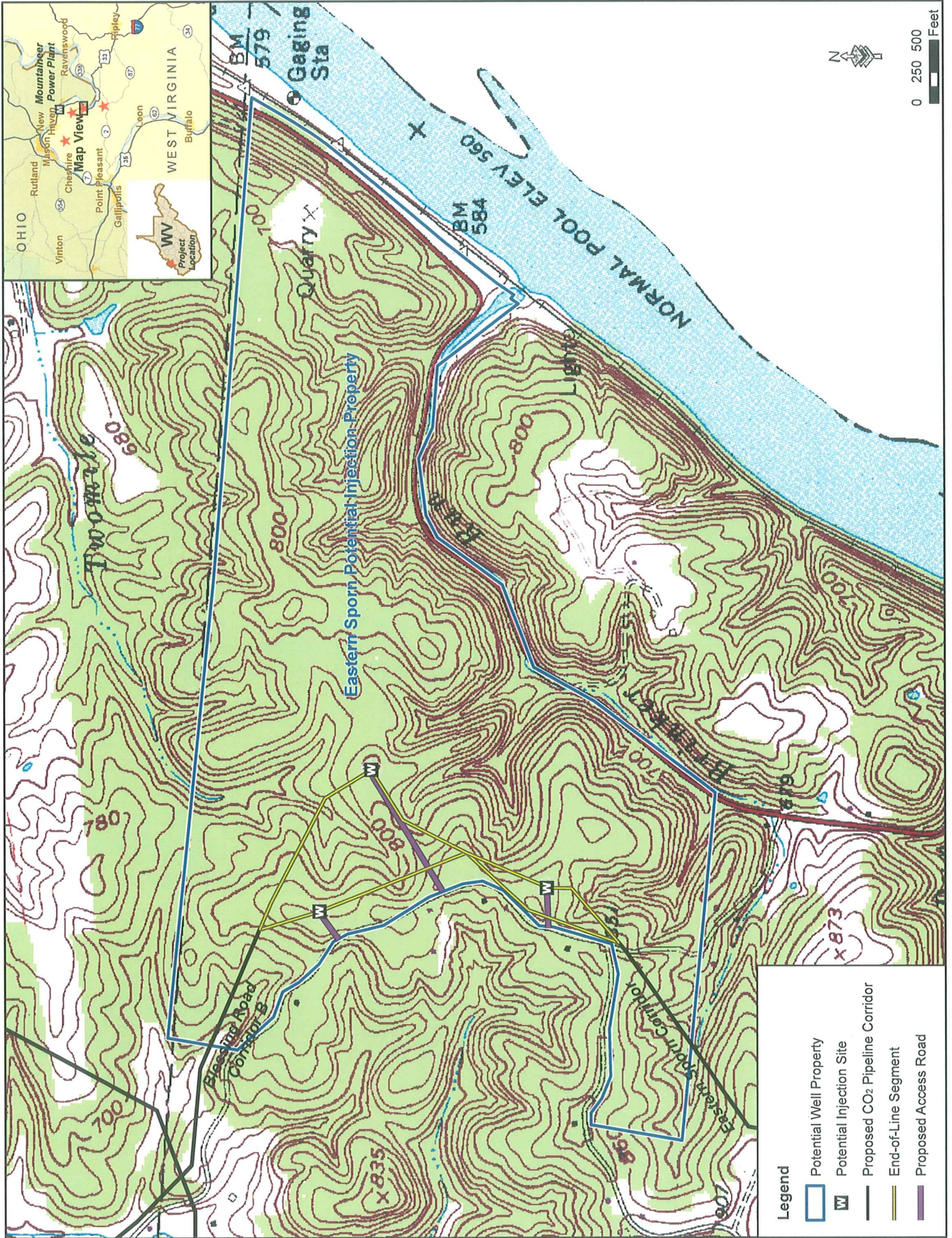
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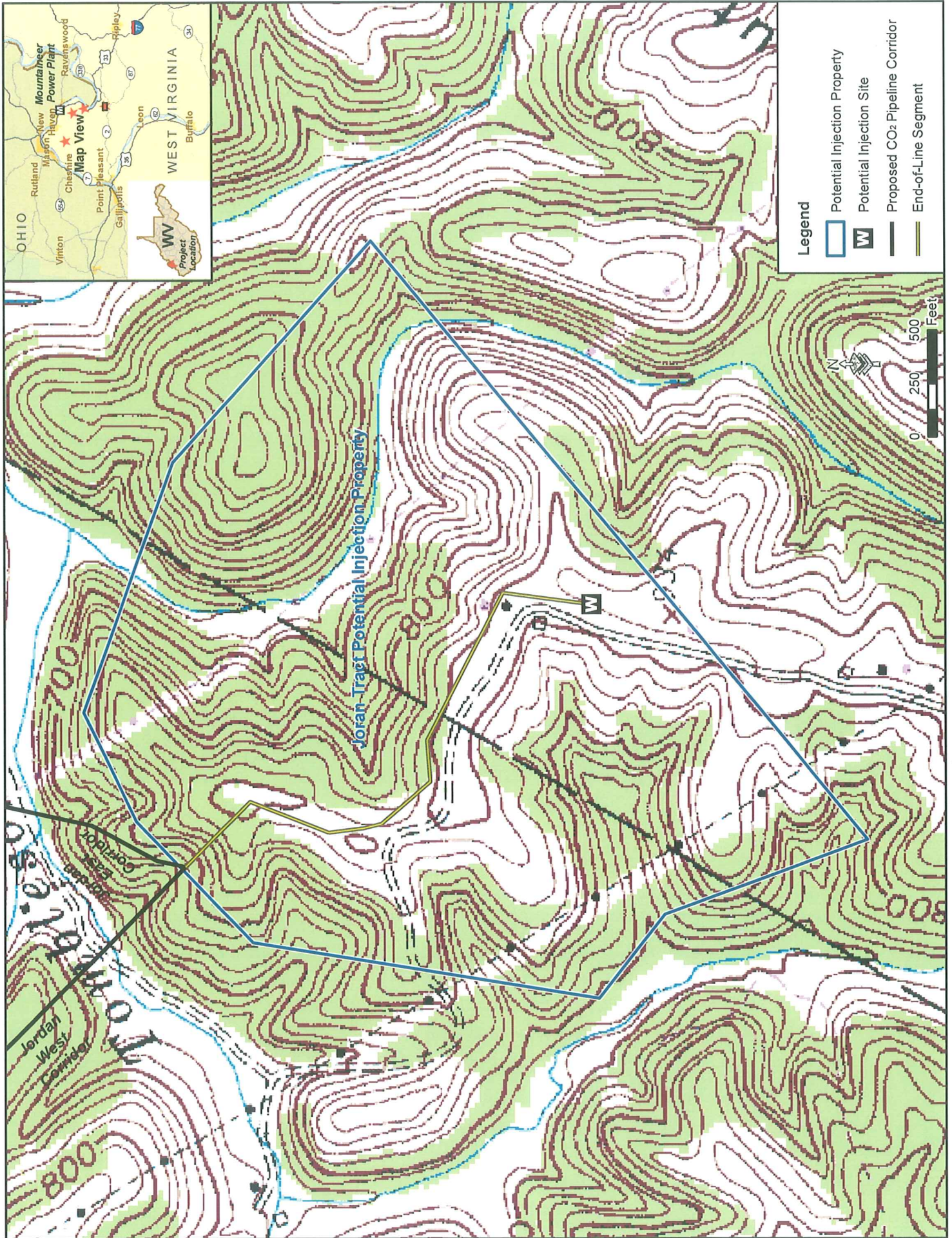




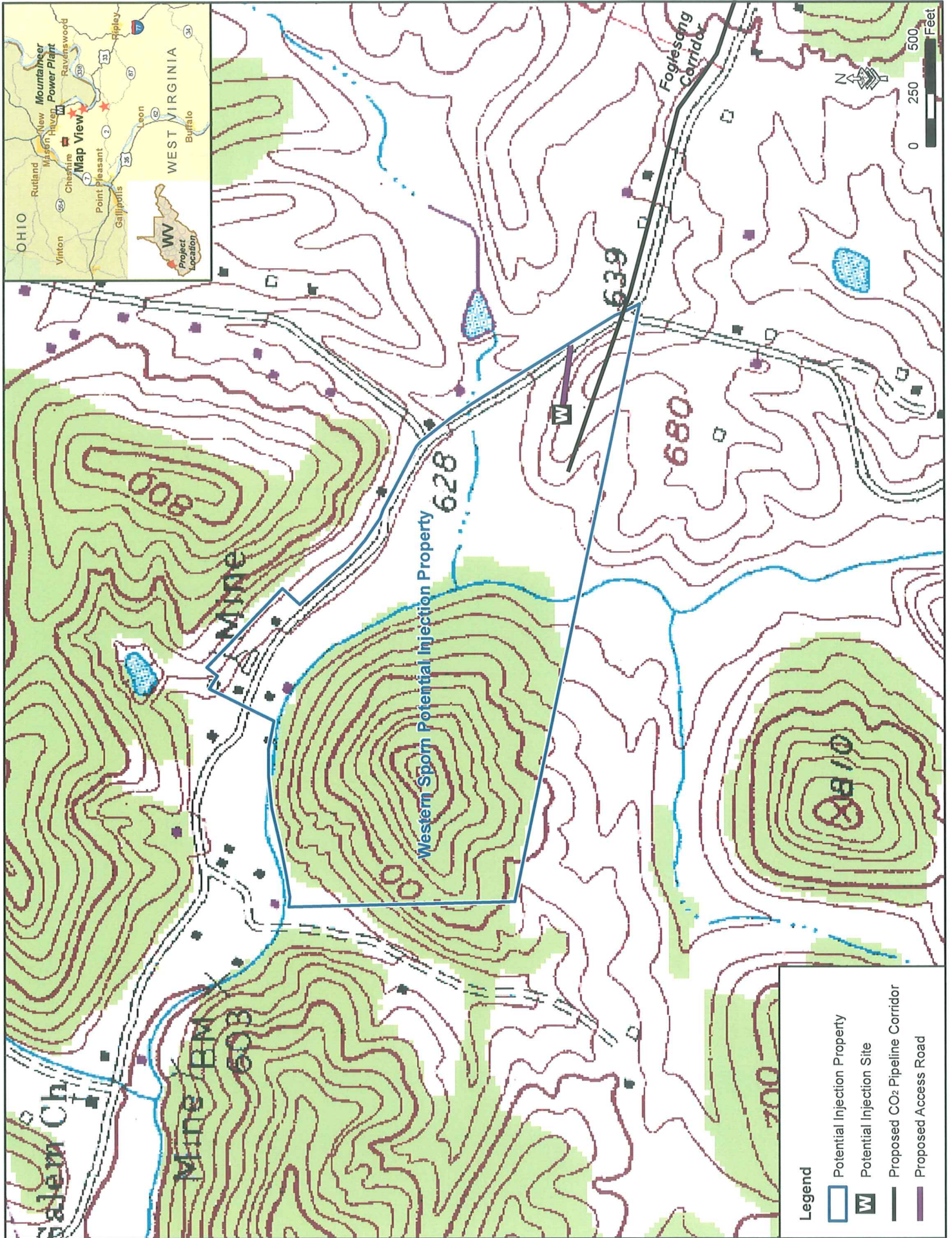
- Legend**
- Mountaineer Plant Property
 - Potential Injection Site
 - Proposed CO₂ Pipeline Corridor







Jordan West Pipeline Corridor



**APPENDIX C3
CULTURAL RESOURCES CONSULTATION**

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4425 Forbes Boulevard
Lanham, Maryland 20706

Main 301-306-6981
Fax 301-306-6986

June 1, 2010

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
The Cultural Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300

RE: *Request for Consultation Regarding Proposed Project in Mason County, West Virginia.*

TRC Environmental, Inc. (TRC), in association with Potomac-Hudson Engineering, Inc. (PHE) invites initial consultation with the West Virginia State Historic Preservation Office (WVSHPO) on a proposed project in Mason County, West Virginia. Our client, American Electric Power (AEP) and the lead federal agency, the U.S. Department of Energy (DOE), propose to develop a carbon dioxide capture and storage (CCS) project at the AEP Mountaineer Power Plant. The project is referred to as the Mountaineer CCS II Project (Project).

AEP is seeking financial assistance from the DOE for the Mountaineer CCS II Project. As such, AEP will be supporting DOE in the preparation of an Environmental Impact Statement (EIS), as well as future consultation that will be conducted under Section 106 of the National Historic Preservation Act. The EIS and DOE's consultation will address all aspects of the Mountaineer CCS II Project. However, as characterization wells and corridor selection efforts are being undertaken by AEP for feasibility considerations, preliminary studies are expected to precede the EIS and formal Section 106 consultation. For that reason, early consultation to obtain your input on potential cultural resources in these areas and our approach to investigating these areas is sought before undertaking the efforts.

The proposed consultation is with regard to cultural resource studies supporting the National Environmental Policy Act (NEPA) EIS and any other applicable approvals. The consultation is proposed to ensure properly focused pre-project site characterizations and subsequent project compliance with all applicable federal and state historic preservation laws over the course of the project. Following is a brief description of the Project and plans for characterization work in support of project planning and EIS development.

Project Description

The Project would capture approximately 1.5 million tonnes of carbon dioxide (CO₂) annually from a 235 megawatt slipstream of flue gas from the existing 1300 megawatt Mountaineer Power Plant located near New Haven, West Virginia. The captured CO₂ would be transported by pipeline to injection sites located within approximately 12 miles of the plant. The captured CO₂ would be injected for permanent storage into geologic formations located approximately 1.5 miles underground. AEP will conduct geologic and hydrogeologic characterization activities to support preliminary project engineering and design. As part of these ac

tivities, preliminary characterization work is planned at potential injection well sites and within potential pipeline corridors between the Mountaineer plant and the well sites. Up to three deep characterization wells will be developed to characterize subsurface conditions and assess their suitability for the injection and storage of CO₂. Four properties owned by AEP have been identified for potential characterization wells. In order of preference to support characterization activities, they are: (1) the Jordan Tract; (2) the AEP Landfill property; (3) the Eastern Sporn Tract; and (4) the Western Sporn Tract. Conceptual pipeline corridors to each of these four locations have been preliminarily identified. The final locations and design of the proposed corridors, characterization wells and access roads for these sites will be refined upon completion of associated environmental studies.

Attachment A contains maps depicting the location of the Mountaineer Plant, characterization well properties, and preliminary conceptual corridors.

Cultural Resources Studies

Our initial focus is to conduct cultural resources studies (literature review and fieldwork) in order to determine if any potentially significant cultural resources would be impacted by the characterization activities and, ultimately, the overall Project. TRC/PHE proposes to conduct both a Phase I Archaeological Survey and a Historic Architectural Resources Survey to identify cultural resources that are listed or are eligible for listing in the National Register of Historic Places (National Register), and to determine the potential effects of the characterization well development or corridor location on those properties. This work will be conducted in accordance with all applicable federal and WVSHPO guidelines and is summarized below.

Literature Review and Site File Search

A literature review and site file search will be conducted at the WVSHPO and Archives in Charleston prior to initiation of field surveys. Local histories, cartographic data, and other relevant documentation on the prehistoric and historical resources in the area will be reviewed. For the purposes of this research, TRC/PHE will conduct a review of state archaeological site files, National Register-listed and -eligible properties, previously surveyed historic structures, and associated GIS-based maps of archaeological and historic architectural sites within a one-mile radius of the characterization well sites, access roads and potential pipeline corridors. Any other relevant sources

that may contain information on historical and archaeological sites in the project sites' vicinities will also be consulted.

Archaeological Survey

The Phase I Archaeological Survey will be conducted in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and the *WVSHPO Guidelines for Phase I, II, and III Archaeological Investigations and Technical Report Preparation* (n.d.). Field methods will consist of both pedestrian and shovel test survey to locate archaeological resources. Per *Guidelines*, shovel test pits (STPs) will be excavated at an interval of 15 meters within all proposed impact areas of the Project once those locations are known. Guidelines regarding single or multiple transects in the corridors will be followed based on potential corridor widths. A pedestrian survey will be conducted in lieu of shovel testing where steep slope, exposed bedrock, and/or ground disturbance precludes the utility of shovel testing. The archaeological survey will initially focus on sites selected for initial characterization wells, access roads to these sites, and potential pipeline corridors. Further field studies of the overall Project, including selected proposed corridors and injection well locations will be conducted as the Project design is developed. Technical Reports following the *WVSHPO Guidelines* will be produced and submitted for WVSHPO review to document the background research and results of fieldwork. The initial Technical Report will document the background research and results of fieldwork for the characterization well sites and associated access roads. A follow-on Technical Report submitted at a later date will document the field results of the corridor investigations and remaining project sites.

Architectural Survey

TRC will conduct a survey of architectural resources according to all applicable federal and WVSHPO standards within an Area of Potential Effect (APE) of 500 feet from the proposed characterization well sites and pipeline corridors. The proposed characterization well sites' surroundings are heavily wooded and the characterization activity is not expected to be visible beyond 500 feet. The potential pipeline corridors generally follow existing developed transmission and/or road rights-of-way, and the pipeline is expected to have minimal visibility. The survey will record resources 50 years and over, identify all resources listed in or eligible for listing in the National Register, and assess any potential effects to these resources from the project. The results of the identification process, along with recommendations of National Register eligibility for historic architectural resources within the APE will be submitted to the WVSHPO for review. Following WVSHPO concurrence with the National Register eligibility recommendations, TRC/PHE will assess any effects to these resources from the characterization well sites and present these findings in a separate report.

Ongoing Consultation

It is proposed that consultation with the WVSHPO will be ongoing as design, NEPA EIS scoping, and other activities in support of the Project are advanced. It is understood that further refinement of the APE for architectural resources and for the cultural resources field studies may be required to determine the effects to potentially significant historic properties in the Project area. In that regard, while we are not yet formally proposing an APE for any of the other project components, any

thoughts you may wish to share in advance on that topic would be welcomed. On behalf of AEP and the DOE, TRC/PHE will continue to provide your office with updated Project design plans for your review. The project team is available to participate in one or more face-to-face meetings or teleconferences with your office to facilitate your review of the Project if necessary.

Your response to this letter, acknowledging your interest in participating in this consultation, and in commenting on our determination of the APE, for the proposed characterization well investigations is greatly appreciated. We would appreciate a response as soon as practical within the 30 day review period, in order to help more quickly focus on potential impacts to cultural resources as the Project moves forward.

Should you require any additional information please do not hesitate to contact me at (301) 306-6981, or tsara@trcsolutions.com. For questions concerning Architectural History, please contact Mr. Geoffrey Henry at (202) 352-2109, ghenry@trcsolutions.com.

Sincerely yours,
Timothy R. Sara, RPA



Senior Archaeologist and
Program Manager

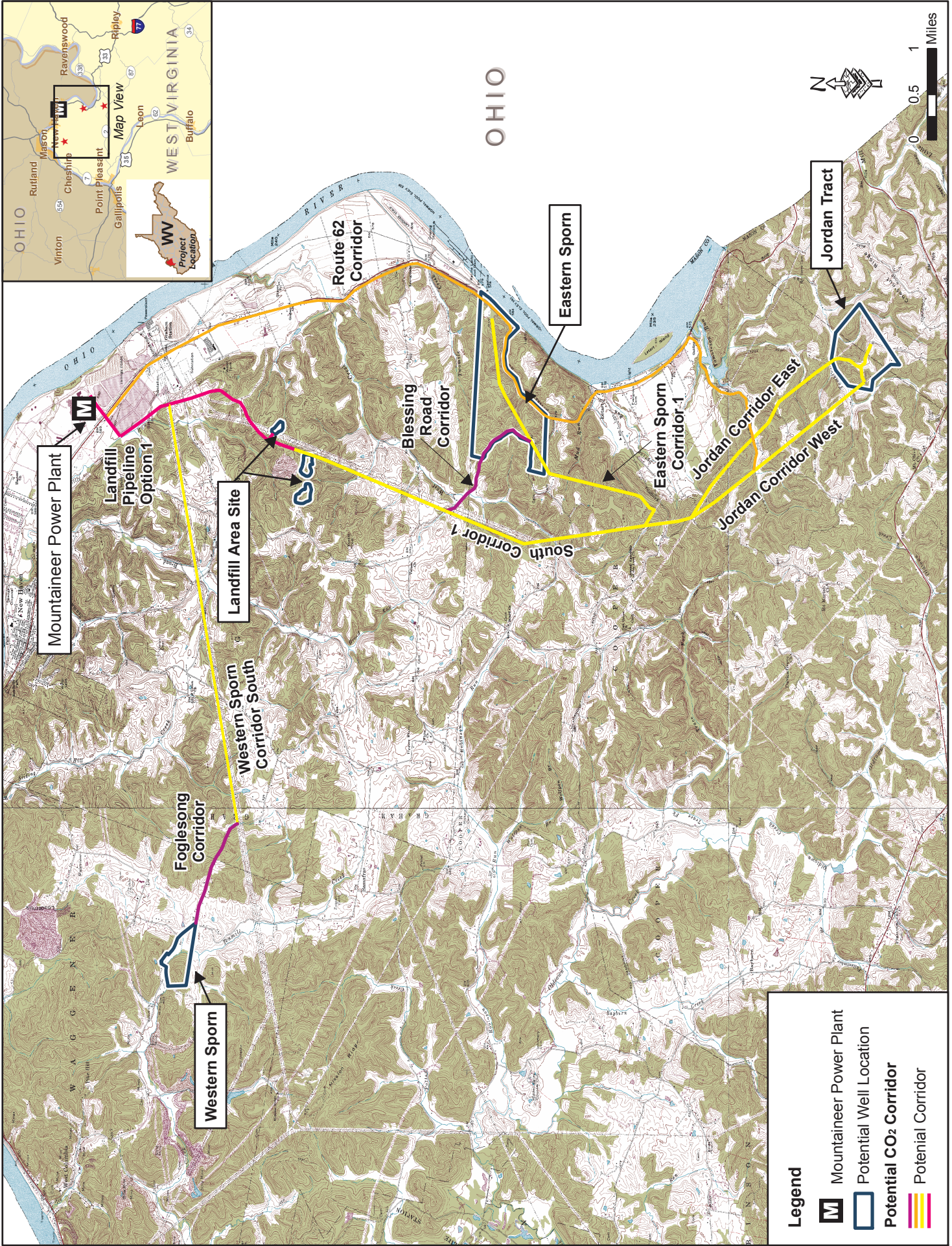
cc: M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
C. Cooper TRC
G. Henry, TRC

enclosures

ATTACHMENT A

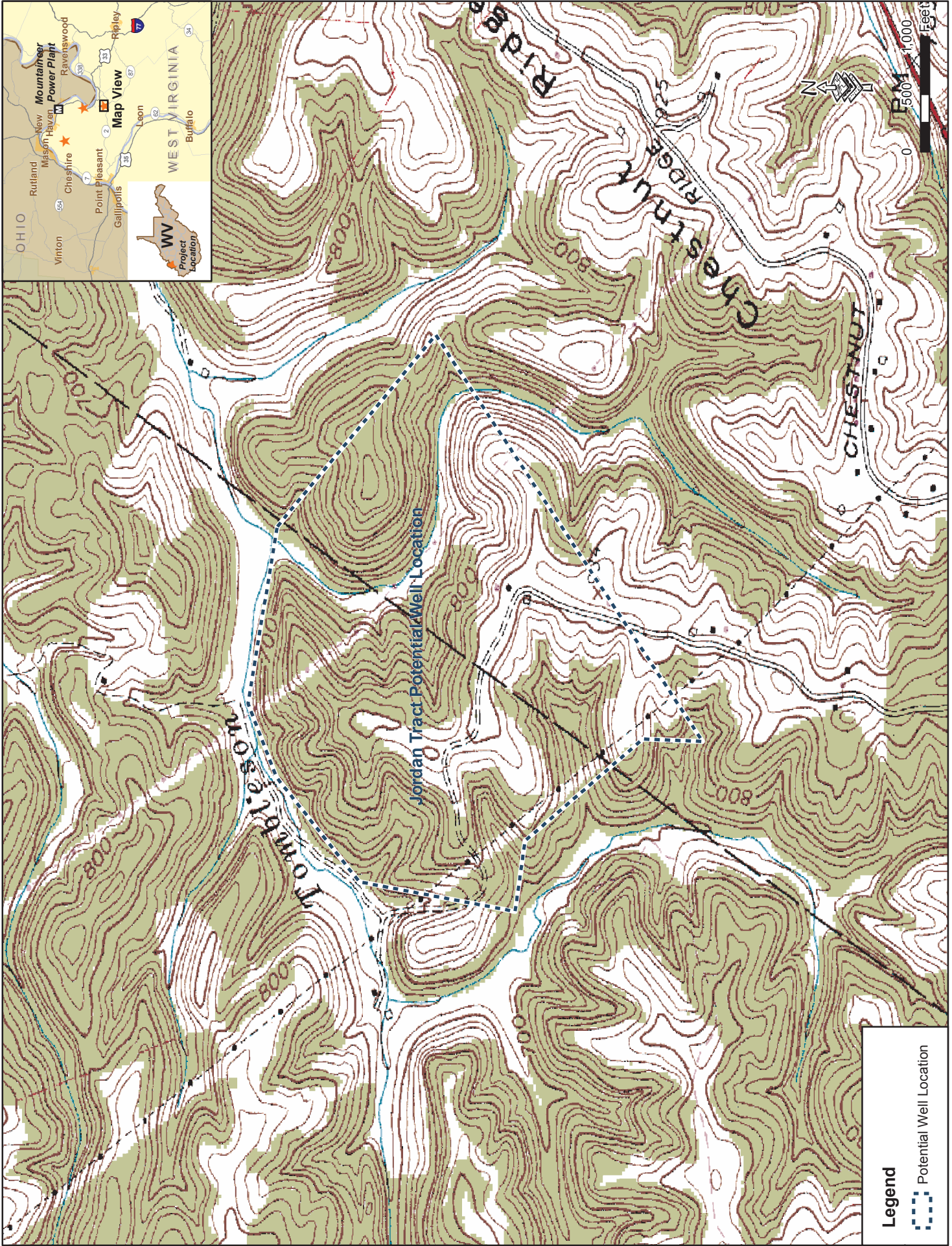
(Project Location Figures on Topographic Maps)

- **Mountaineer Power Plant, Potential Well Locations & Corridors**
- **Jordan Tract**
- **AEP Landfill Property**
- **Eastern Sporn Tract**
- **Western Sporn Tract**

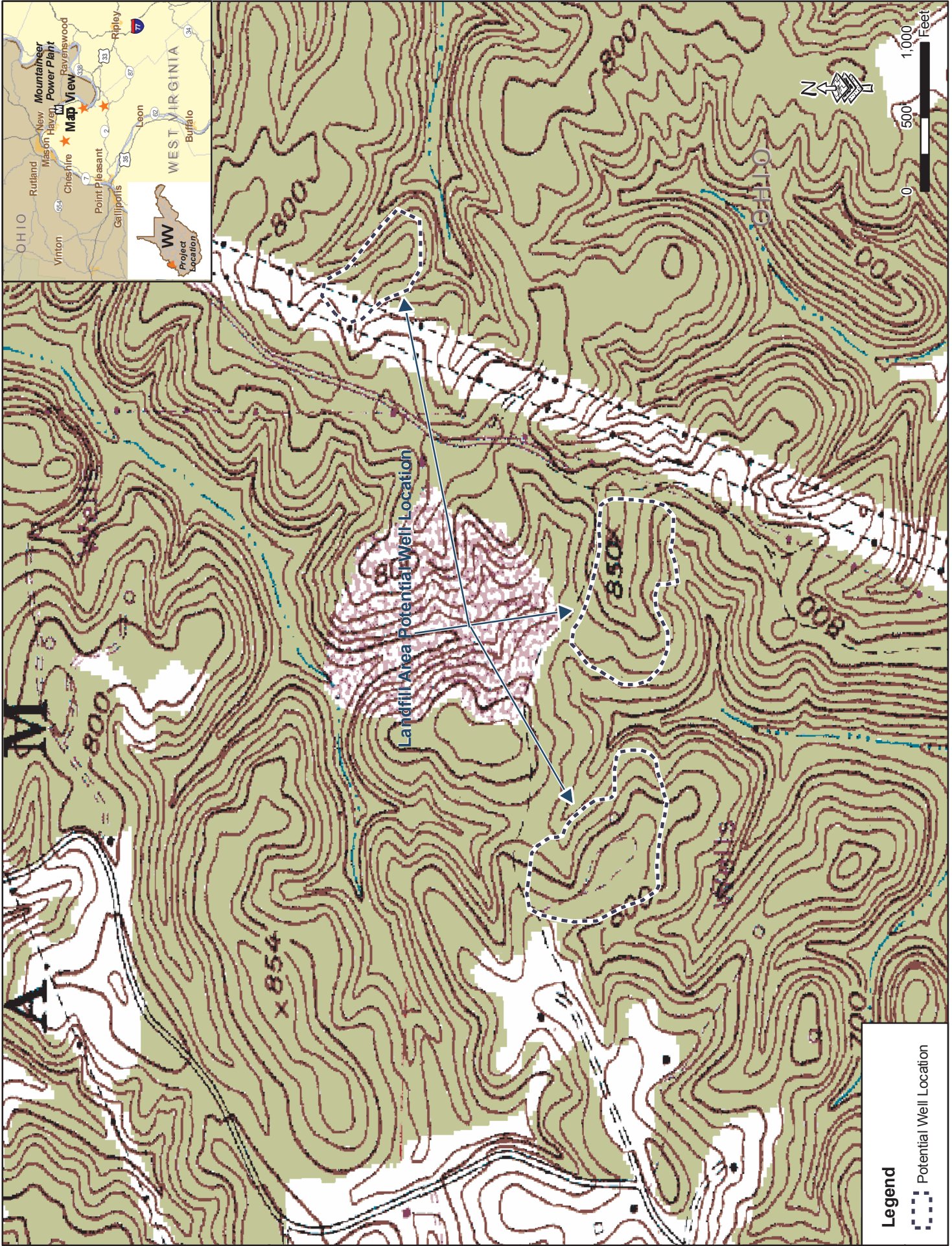


Mountaineer Power Plant and Potential Well Locations and Corridors Topographic Map

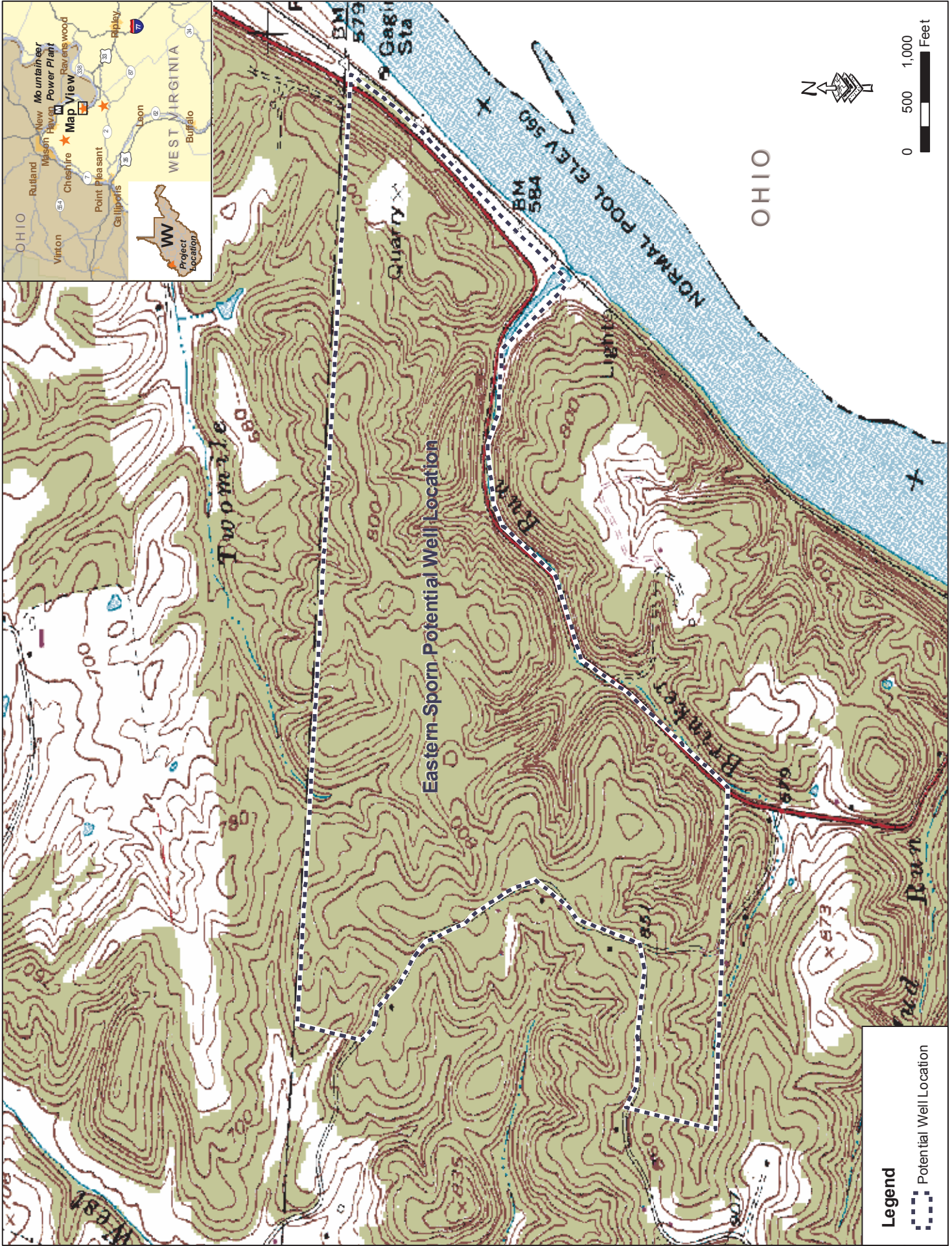
USGS 1:24,000 Topographic Quadrangles: Cheshire (38082-H1), Mount Alto (38081-G8), and New Haven (38081-H8)



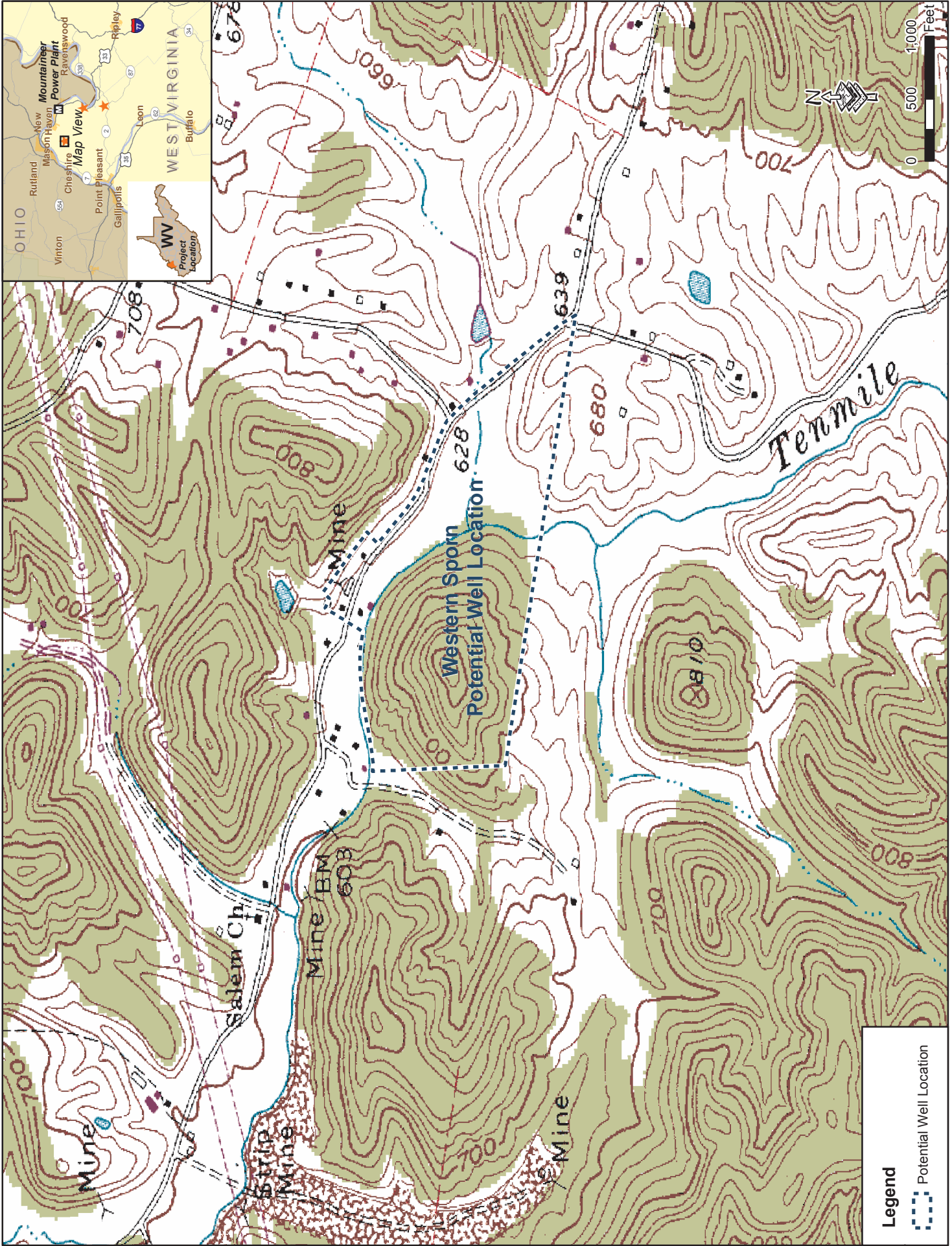
Jordan Tract Potential Well Location and Topographic Map
 USGS 1:24,000 Topographic Quadrangle: Mount Alto (38081-G8)



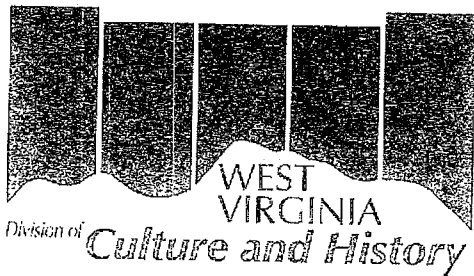
Landfill Area Potential Well Location and Topographic Map
 USGS 1:24,000 Topographic Quadrangle: New Haven (38081-H8)



Eastern Sporn Potential Well Location and Topographic Map
 USGS 1:24,000 Topographic Quadrangle: New Haven (38081-H8)



Western Sporn Potential Well Location and Topographic Map
 USGS 1:24,000 Topographic Quadrangle: Cheshire (38082-H1)



July 1, 2010

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

FOIAA Fripp over

Mr. Timothy R. Sara
Senior Archaeologist
TRC
4425 Forbes Boulevard
Lanham, MD 20706

RE: Mountaineer CCS II Project
FR#: 10-1133-MS

Dear Mr. Sara:

We have reviewed the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, American Electric Power (AEP) and the U.S. Department of Energy (DOE) propose to develop a carbon dioxide capture and storage (CCS) project at the AEP Mountaineer Power Plant in Mason County. It is our understanding that four properties have been identified for potential location of characterization wells. In addition, the proposed project will also involve the construction of a pipeline and access roads associated with each characterization well.

Archaeological Resources:

The submitted document indicates that a literature review, site file search and Phase I archaeological survey will be conducted for the proposed project area. The Phase I survey will consist of pedestrian survey and shovel pit excavation at 15 meter intervals and will initially focus on sites selected for characterization wells, access road and potential pipeline corridors. Additional field work will be conducted for selected corridors and injection well locations as project design is developed. Technical reports presenting the results of the survey will be submitted for our review. All work will be conducted in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* and this office's *Guidelines for Phase I, II, and III Archaeological Investigations and Technical Report Preparation* (2001). We concur with this proposal and will provide further comment upon receipt of the resulting technical report or as requested.

July 1, 2010

Mr. Sora

FR#: 10-1133-MS

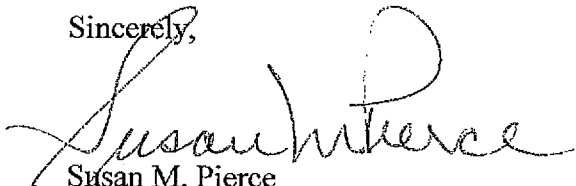
Page 2

Architectural Resources:

Submitted information indicates that TRC will conduct a literature review, site file search of National Register and architectural survey files and complete an architectural survey of the project area. TRC has tentatively defined the area of potential effect (APE) as 500 feet from the proposed characterization well sites and pipeline corridors. According to submitted information, the proposed characterization well sites will be placed in areas that are heavily wooded and the pipeline corridors generally follow existing developed transmission and/or road rights-of-way. Submitted information states that it is expected that the project will have minimal visibility. The survey will record all resources 50 years and older, identify all resources listed in or eligible for listing in the National Register and assess any potential effect to these resources. We also request that when submitting the architectural survey report that you forward the dimensions of all above ground components of this project. Additionally, we would request that you use a viewshed analysis to assist you in finalizing an appropriate APE. With these two additions, we concur with this proposal and will provide further comment upon receipt of the resulting architectural survey report, or as requested.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre, Senior Archaeologist, or Shirley Stewart Burns, Structural Historian, at (304) 558-0240.*

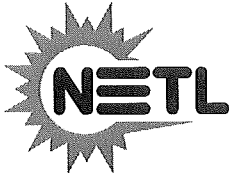
Sincerely,



Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/LAL/SSB



August 23, 2010

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
The Cultural Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300

RE: Request for Consultation, Mountaineer CCS II Project, Mason County, WV, FR # 10-1133-MS

Dear Ms. Pierce:

The American Electric Power (AEP) and U.S. Department of Energy (DOE), as lead Federal agency, propose to develop a carbon dioxide (CO₂) capture and storage (CCS) project at AEP's Mountaineer Power Plant located near New Haven, in Mason County, West Virginia. The proposed project is referred to as the Mountaineer CCS II Project (or "Project" hereafter in this transmittal).

Previous consultation has been initiated with your office by TRC Environmental Corp. (TRC) and Potomac Hudson Engineering (PHE) on behalf of AEP and DOE in a letter dated June 1, 2010, entitled "*Request for Consultation Regarding Proposed Project in Mason County, West Virginia.*" The previous request for consultation introduced the overall proposed Project and the initial characterization well studies, as well as requested early coordination/consultation with the West Virginia Division of Culture & History, State Historic Preservation Office (WVSHPO) regarding proposed cultural resource investigations in the vicinity of the characterization well sites and associated access roads. In a letter dated July 1, 2010, your office concurred with the proposed Phase I archaeological survey, the definition of the Area of Potential Effect (APE), and the methodology for the historic architectural investigation.

As previously introduced in the June 1, 2010 letter, AEP is seeking financial assistance from DOE for the proposed Project. As such, DOE is preparing an environmental impact statement (EIS) and is continuing consultation with the WVSHPO under Section 106 of the National Historic Preservation Act (NHPA) of 1966 regarding the proposed Project and the EIS process. The following provides a brief description of the proposed Project to be analyzed within the EIS and the methodology that will be followed to characterize the affected environment and assess potential impacts to cultural resources. The study area or APE for cultural resources includes the AEP Mountaineer Power Plant Site, associated corridors and rights-of-way for the CO₂ transport pipeline, as well as the properties where the CO₂ injection and monitoring wells could be located, as shown in Figures 1 through 6.

Proposed Agency Action

The Proposed Action under consideration by DOE would provide financial assistance to AEP under the Clean Coal Power Initiative (CCPI) Program to support construction and start-up of the Mountaineer CCS II Project. AEP proposes to construct a commercial scale CCS system at their existing Mountaineer Power Plant near New Haven, West Virginia, as depicted in Figure 1. This Project would capture CO₂ from the existing Mountaineer pulverized coal power plant, compress the captured CO₂ to supercritical conditions, and transport the captured CO₂ by pipeline to injection well(s) for permanent geologic storage in saline reservoir(s) approximately 1.5 miles below the surface.

As part of the proposed Project, AEP would construct a carbon capture facility using Alstom's chilled ammonia process (CAP) within the boundaries of the existing 1,300-megawatt (MW) Mountaineer Plant. The facility would occupy an area of approximately 500 feet by 1,000 feet, and would process a 235-MW slip-stream of flue gas after it exits the plant's flue gas desulfurization system. Approximately 1.5 million metric tons of CO₂ would be captured annually, treated, and compressed for geologic storage.

The processed CO₂ would be transported by pipeline (primarily underground) to the proposed injection site(s) on two to four of AEP's properties, located within an estimated 12 miles of the Mountaineer Plant (refer to Figure 1). The CO₂ would then be injected for permanent geologic storage into one or more geologic formations approximately 1.5 miles below ground. The Project would be designed to remove 90 percent of the CO₂ from the 235-MW slip stream and would demonstrate a commercial-scale deployment of the CAP for CO₂ capture, as well as demonstrate permanent geologic storage of CO₂ in deep underground saline formations.

Cultural Resources Studies

Cultural resource studies are currently being conducted for the characterization well sites in accordance with the previous consultation initiated by PHE/TRC. The results of these studies will be reported to your office in September 2010 and will be incorporated into the EIS document.

Cultural resources studies (literature review and fieldwork) will also be conducted in support of the Project to determine if any potentially significant cultural resources would be impacted by the overall Project. DOE proposes to conduct both a Phase I Archaeological Survey and a Historic Architectural Resources Survey to identify cultural resources listed or eligible for listing in the National Register of Historic Places (National Register), and to determine the potential effects of the Project on those resources. This work will be conducted in accordance with all applicable federal and WVSHPO guidelines and is summarized below. The results of these additional studies will be reported to your office in September 2010 along with the results of the characterization well studies.

Literature Review and Site File Search

DOE has previously conducted a literature review and site file search at the WVSHPO and Archives in Charleston as part of the cultural resources investigations of the characterization well

sites and pipeline corridors. Local histories, cartographic data, and other relevant documentation on the prehistoric and historical resources in the area have been reviewed. DOE conducted a review of state archaeological site files, National Register-listed and -eligible properties, previously surveyed historic structures, and associated GIS-based maps of archaeological and historic architectural sites within a one-mile radius of the potential characterization well sites, well site access roads, and potential pipeline corridors. Other relevant sources containing information on historical and archaeological sites in the vicinity of the Project were also consulted. DOE is expanding the literature review and site file search to include information on the entire APE associated with the Project, including the AEP Mountaineer Plant Site, as well as the proposed CO₂ injection sites.

Archaeological Survey

DOE conducted a Phase I Archaeological Survey of the potential characterization well sites and the pipeline corridors in accordance with the consultation initiated with your office in June 2010, and your letter of response dated July 1, 2010. DOE is currently preparing a Technical Report following the *WVSHPO Guidelines* that will document the background research, results of fieldwork for the characterization well sites, and results of additional fieldwork to be conducted within the Project area, as detailed below. This report will be submitted in September 2010.

The guidelines followed for the Phase I Archaeological Survey of the characterization well sites will also be followed for the Phase I Archaeological Survey for the remaining APE of the Project, including the Mountaineer Plant Site, the proposed injection well sites and the proposed pipeline corridors not already surveyed. The Phase I survey will be conducted in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and the *WVSHPO Guidelines for Phase I, II, and III Archaeological Investigations and Technical Report Preparation* (1995). Field methods will consist of both pedestrian and shovel test surveys to locate archaeological resources. Per the guidelines, shovel test pits (STPs) will be excavated at an interval of 15 meters within all proposed impact areas of the Project. Guidelines regarding single or multiple transects in the corridors will be followed based on potential corridor widths. A pedestrian survey will be conducted in lieu of shovel testing where steep slope, exposed bedrock, and/or ground disturbance precludes the utility of shovel testing.

Architectural Survey

DOE conducted an architectural survey of the potential characterization well sites and the pipeline corridors in accordance with the informal consultation initiated with your office in June 2010 and your letter of response dated July 1, 2010. DOE is currently preparing a Technical Report for Historic Architectural Resources that will document the background research, results of architectural fieldwork for the characterization well sites and results of additional fieldwork to be conducted within the Project area, as detailed below. This report will be submitted in September 2010.

DOE will conduct additional surveys of architectural resources according to all applicable federal and WVSHPO standards within an APE of 500 feet from the CO₂ injection well sites and all proposed CO₂ pipeline corridors. As stated in the June 1, 2010 letter to your office, the AEP-owned properties where the CO₂ injection wells would be located are either already developed (AEP Mountaineer Plant Site and AEP Borrow Site) or are heavily wooded and not expected to

be visible beyond 500 feet. The potential pipeline corridors generally follow existing developed transmission corridors and/or road rights-of-way and the pipeline is expected to be constructed primarily underground and have minimal visibility. In accordance with your letter dated July 1, 2010, the location and dimensions of all Project-related aboveground resources along the CO₂ pipeline corridors or at the CO₂ injection sites will be included in the Technical Report for Historic Architectural Resources, mentioned previously.

For the Project-related facilities that would be constructed on the existing AEP Mountaineer Plant Site, the APE is defined as the footprint of these proposed facilities, as well as those areas immediately adjacent to the proposed site. Current facilities at the Mountaineer Plant Site include large buildings, an approximately 400-foot-tall cooling tower, and two approximately 1,000-foot-tall stacks on the northwest end of the property. The view shed of any proposed aboveground Project-related facilities at the Mountaineer Plant was not used to define the APE, as the presence of existing facilities generates a greater visual impact than the proposed facilities, which would be considerably smaller. Based on preliminary field reconnaissance, no resources beyond the adjacent properties would fall within the view shed of the proposed site.

The architectural survey will record resources 50 years and over, identify all resources listed in or eligible for listing in the National Register, and assess any potential effects to these resources from the Project. The results of the identification process, along with recommendations of National Register eligibility for historic architectural resources within the APE will be submitted to the WVSHPO for review. Following WVSHPO concurrence with the National Register eligibility recommendations, DOE will assess any effects to these resources from any aboveground facilities constructed at the Mountaineer Plant Site, along the pipeline corridors, and at the proposed CO₂ injection well sites and present these findings in the Technical Report.

Ongoing Consultation

DOE proposes that consultation with the WVSHPO will be ongoing as design and other activities in support of the Project are advanced. DOE will provide your office a copy of the Draft EIS for review and comment. The Draft EIS is anticipated to be released in January 2011. Your response to this letter, acknowledging your interest in participating in the Section 106/NHPA consultation, and in commenting on our determination of the APE for the architectural investigations would be greatly appreciated.

We would appreciate a response as soon as practical within the 30-day review period in order to help us more quickly focus on potential impacts to cultural resources as the Project moves forward.

If you need additional information please do not hesitate to contact me at (304) 285-4145 or Mark.Lusk@NETL.DOE.gov.

Sincerely,

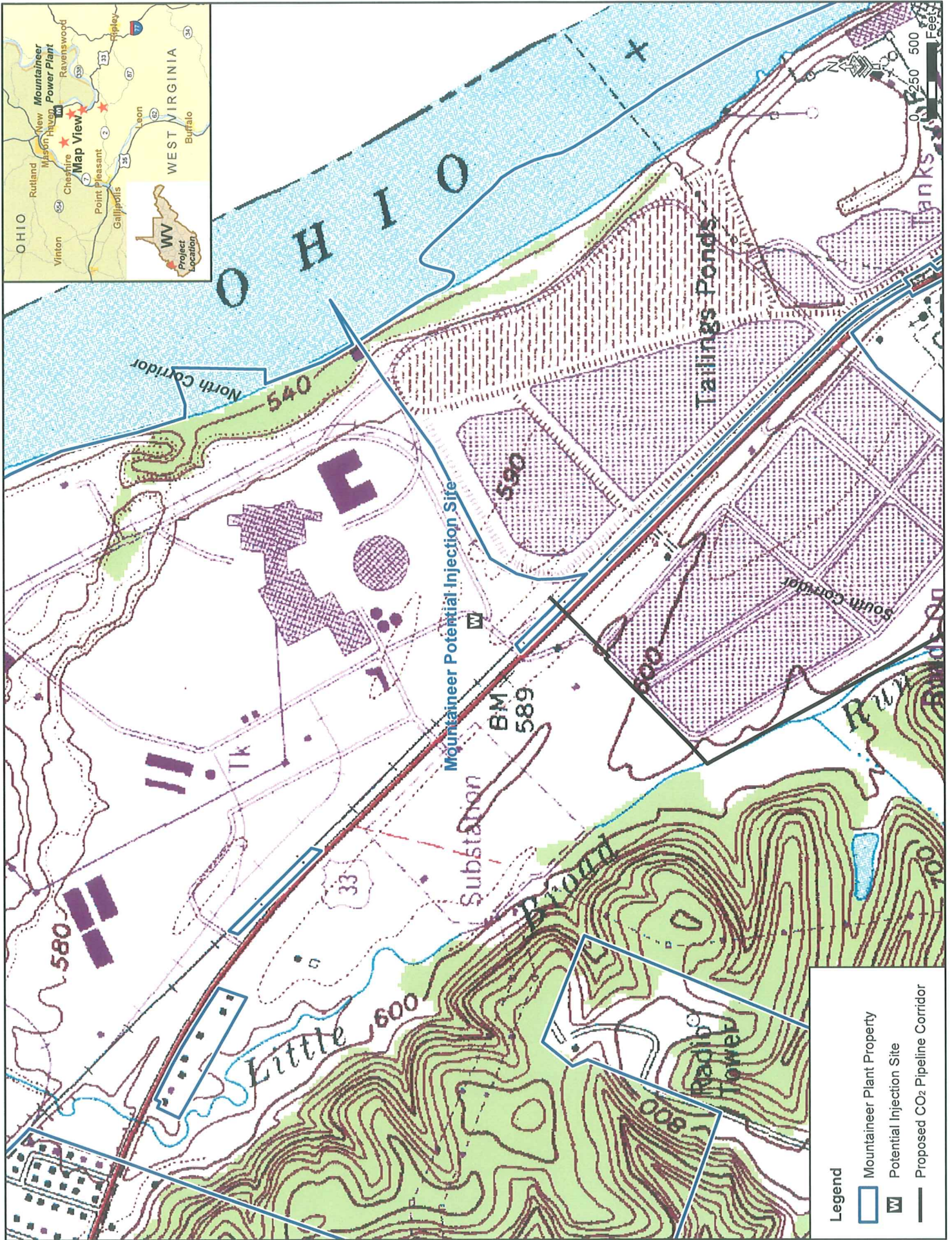
A handwritten signature in cursive script that reads "Mark W. Lusk".

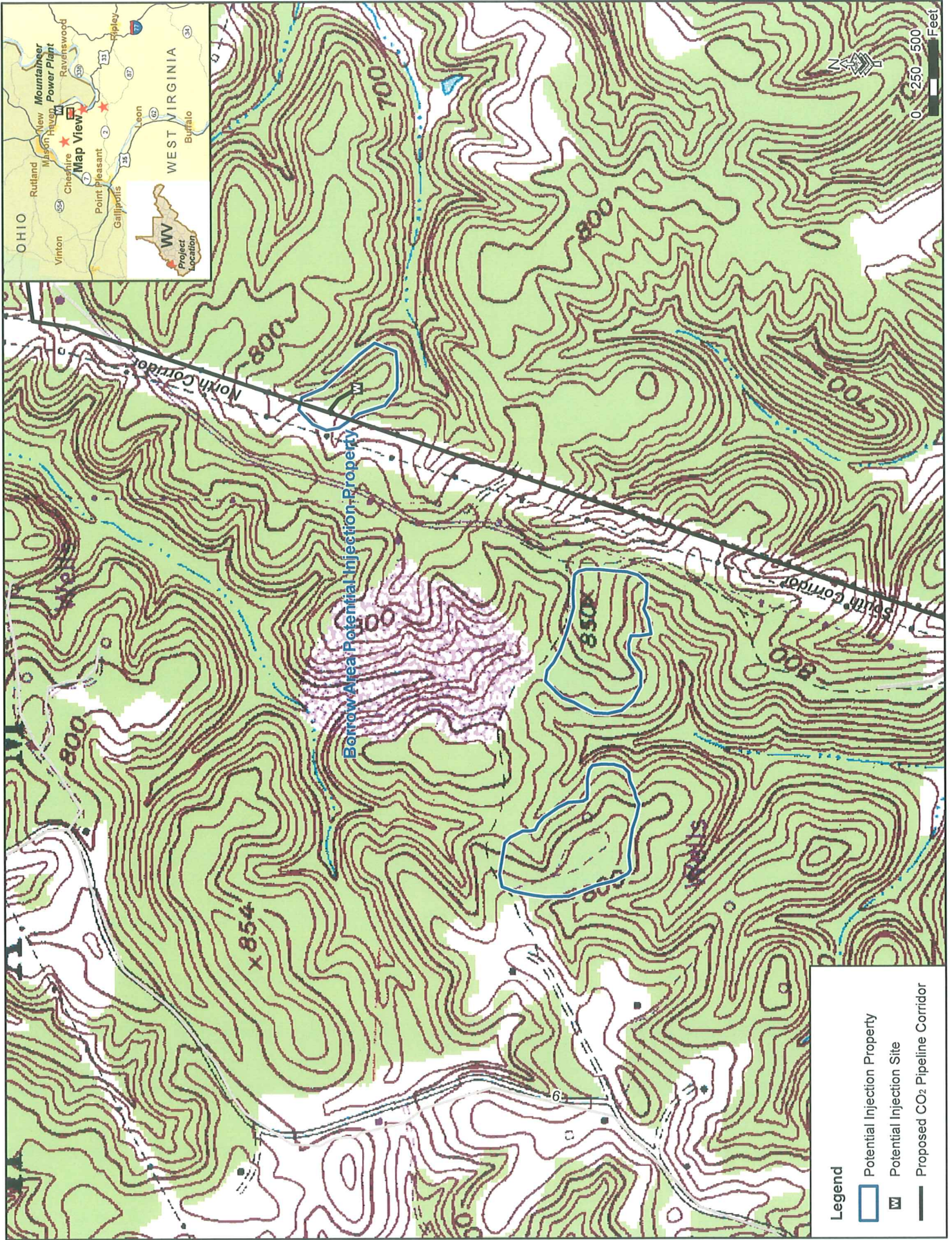
Mark W. Lusk
NEPA Document Manager
National Energy Technology Laboratory

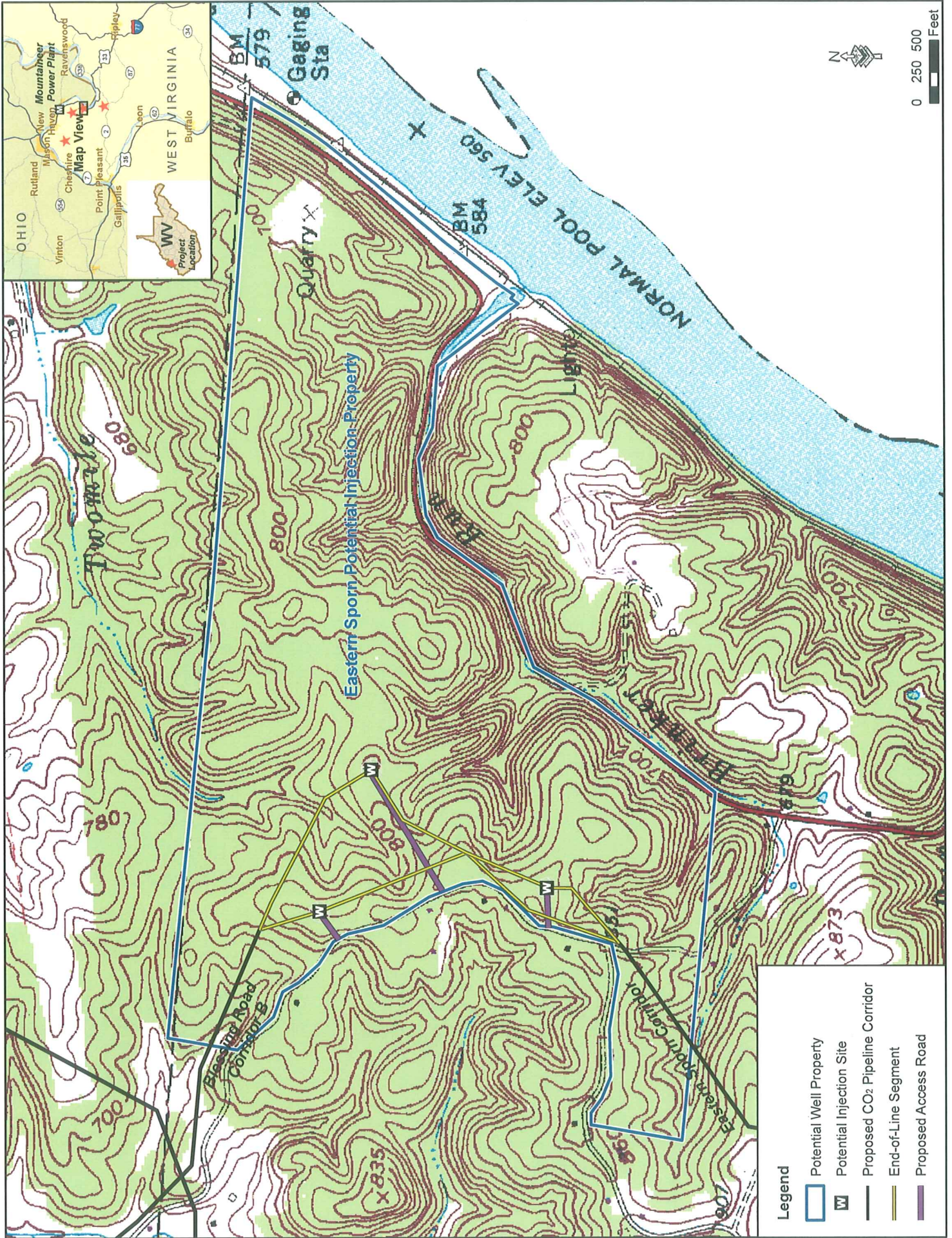
cc: M. McMillian, DOE/NETL
F. Blake, AEP
B. Sherrick, AEP
B. Whipple, PHE
T. Sara, TRC

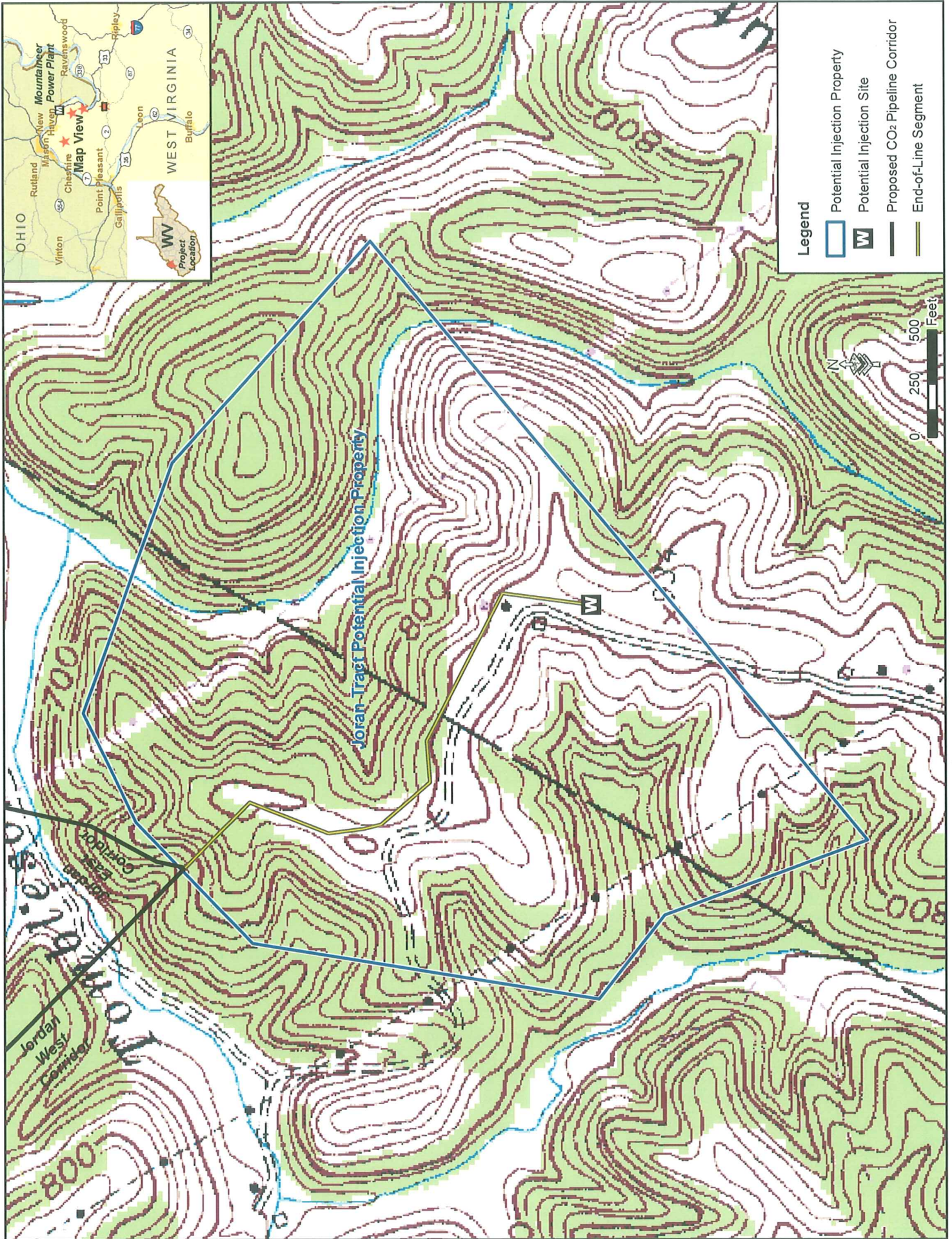
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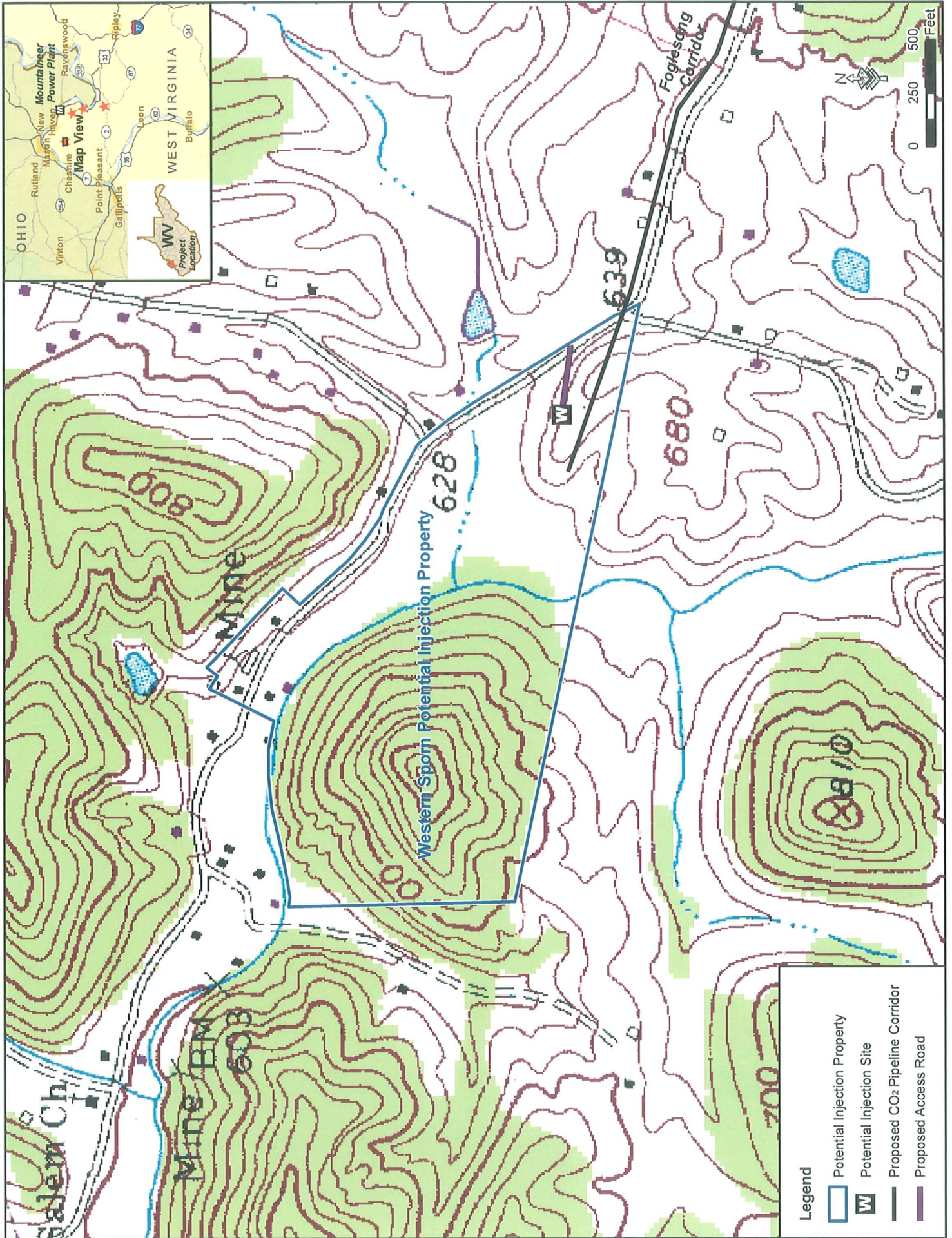




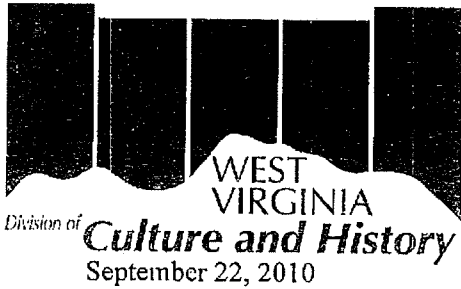








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The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562
EEO/AA Employer

Mr. Mark W. Lusk
NEPA Document Manager
US Department of Energy
3610 Collins Ferry Road
PO Box 880
Morgantown, WV 26507

RE: Mountaineer CCS II Project
FR#: 10-1133-MS-1

Dear Mr. Lusk:

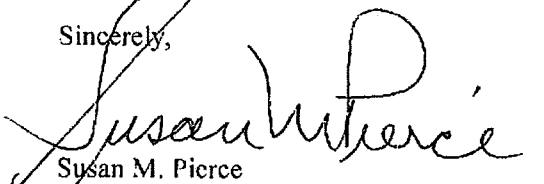
We have reviewed the information submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Thank you for providing updated information regarding the proposed project and the status of cultural resource studies. Your letter indicates that we will receive a technical report for survey conducted within areas proposed for construction of the characterization well and that the results of additional field work to be conducted within the project area will be submitted at a later date.

On August 30, 2010, we received a letter report from Mr. Timothy Sera of TRC documenting cultural resource work for the characterization. Recently, we provided our comments in a letter dated September 20. A copy of this letter is enclosed. It is our understanding that cultural resource work is currently ongoing in the remainder of the proposed project area. We will provide comments regarding that work upon receipt the resulting technical report(s). We also understand that you plan to submit a draft environmental impact statement for the project in January 2011. We will do our best to review that document as soon as possible. We look forward to continuing the consultation process.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre, Senior Archaeologist, or Shirley Stewart Burns, Structural Historian, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL/SSB

enclosure

August 24, 2010

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
The Cultural Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300

RE: Mountaineer CCS II Project, Mason County, West Virginia – Request for SHPO Approval to Install a Characterization Well at the Location of the AEP Borrow Area No. 1 (FR # 10-1133-MS)

Dear Ms. Pierce:

Previous informal consultation has been initiated with your office by TRC Environmental Corp. (TRC) and Potomac Hudson Engineering (PHE) on behalf of American Electric Power Service Corporation (AEP) and the Department of Energy (DOE) in a letter dated June 1, 2010, titled “*Request for Consultation Regarding Proposed Project in Mason County, West Virginia*” which introduced the overall proposed Project and the initial characterization well studies, and requested early coordination/informal consultation with your office regarding proposed cultural resource investigations in the vicinity of the characterization well sites and associated access roads. By letter dated July 1, 2010, your office concurred with the proposed Phase I archaeological survey and with the definition of the Area of Potential Effect (APE) and methodology for the historic architectural investigation.

Since July 2010, TRC has been conducting cultural resources surveys (archaeological and historic architectural) of all proposed impact areas and within the APE of the Project including the proposed characterization well sites, pipeline corridors, and carbon dioxide capture and injections sites. The cultural resource surveys will be completed in September 2010, at which time a Technical Report will be prepared and submitted to your office. The Technical Report will address all fieldwork conducted in support of the Project and will be completed in accordance with West Virginia State Historic Preservation Office (*WVSHPO*) *Guidelines*. In advance of your review of the Technical Report, AEP is seeking your approval to install a characterization well and associated access road to the well site on AEP property.

AEP identified four potential sites, all on AEP-owned properties, for the location of the characterization wells. AEP later determined that the preferred location for the characterization well would be at AEP’s Little Broad Run Landfill, specifically within an area identified as Borrow Area No. 1. An alternate site was also identified on an AEP property known as the Jordan Tract. This alternate site would only be considered after the first characterization well and associated geologic study is completed. Borrow Area No. 1 was selected as the preferred site, because the entire site is previously disturbed and no wetlands or biological resources are present.

The purpose of this letter is to provide you with a description of Borrow Area No. 1, report on the cultural resources background and field investigation undertaken of the this proposed characterization well site, and seek your concurrence with our recommendation of no effect to cultural resources. The alternate characterization well site (Jordan Tract) is not addressed in this correspondence as it will be addressed in the Technical Report that addresses the entire Project. The purpose for consulting with your office regarding the preferred site (Borrow Area No. 1) at this time is to ensure that ample time is afforded for consultation with your office before fieldwork begins at the site.

Borrow Area Project Area Description

The characterization well site is identified as AEP Borrow Area No. 1 and is located within the property boundary of AEP's Little Broad Run Landfill. The landfill commenced operation with the inception of operations of the Mountaineer Plant in 1980 and was originally used to receive ash from both the Mountaineer Plant the adjacent AEP Sporn Plant. More recently, this area has also received gypsum, another plant activity byproduct. The Little Broad Run Landfill property has a footprint area of approximately 325 acres (**Figures 1 and 2**).

Borrow Area No. 1 is one of three borrow areas that was considered as a potential location for a characterization well. The other two borrow areas are no longer being considered as potential characterization well sites. All three borrow areas and the proposed access road to Borrow Area No. 1 are shown on **Figure 2**. All three borrow areas fall within the existing clay borrow pits that have been actively mined for clay for use in lining disposal cells within the landfill. Generally, this area consists of upland ridge finger landforms and steep slope at elevations ranging from 700 to 840 ft. AMSL; however, the landscape has been heavily denuded of vegetation and modified from prior extraction and disposal activities. Where vegetation exists, it has populated previously disturbed areas and consists of expanses of short grasses or briars, and scrub undergrowth.

Literature Review and Site File Search

TRC has conducted a literature review and site file search at the WVSHPO and Archives in Charleston as part of the cultural resources investigations of the overall Project. Local histories, cartographic data, and documentation on the prehistoric and historical resources in the area have been reviewed. Based on this review there are no National Register-listed or eligible properties or historic structures within a one-mile radius of Borrow Area No. 1. Two previously recorded archaeological sites have been recorded within a one-mile radius of the borrow area. Both sites (46MS275 and 46MS276) are reported as remnants of prehistoric mounds located approximately one-mile east of the Borrow Area on the Ohio River floodplain, adjacent to Route 62. Neither site has been evaluated for National Register eligibility.

Field Methods and Results

A Phase I archaeological survey was conducted at all three of the borrow areas and the land adjacent to the borrow areas. The survey was largely limited to visual inspection and pedestrian survey due to a high degree of prior ground disturbances (**Photos 1 and 2**). Soils in the three borrow areas are primarily mapped as Gilpin-Upshur complex (GpC and GpD), a well-drained soil series found primarily on hill slope shoulders, with smaller contributing areas of Landfill (Ld) soils on the northern and western boundaries of the borrow areas. Pedestrian survey and shovel test excavation in these areas indicated that the original surficial deposits have been largely removed or altered.

Borrow Area No. 1 (ca. 7 acres), as well its associated access road, was subjected to close visual inspection and pedestrian survey and was found to have been subjected to extensive ground disturbance associated with clay mining (**Photo 3**). Recently planted grasses are present in this area. No shovel test pits (STPs) were excavated in this area due to the ground disturbance and past removal of soil deposits. No cultural material was observed or recovered from this area. Similar disturbed conditions are present in Borrow Area 7, an 8-acre area located to the east. Borrow Area 8 is a 5-acre area located east of the active mining area adjacent to an existing transmission corridor (**Photo 4**). This area is dominated by a thin ridge finger and steeply sloping gradient extending southeast from the transmission line. At Borrow Area 8, due to limited surface visibility atop the ridge finger, seven STPs were excavated along a single transect at 15-m intervals (**see Figure 2**). Each STP excavated showed mixed and graded soils evident of past disturbance. For example, ST A-3, located approximately 15 m east of the existing transmission line, displayed a light brown (10YR 6/3) mottled with strong brown (7.5YR 5/6) highly compacted clay soil with a mixture of sandstone and gravel. All STPs

exhibited similar soil characteristics, and visual inspection of the landform clearly indicated that past industrial activity has altered the landscape. No cultural material was observed or recovered.

In sum, all three of the borrow areas have been highly impacted from past and ongoing land alteration activities. Examples of graded areas where large volumes of original ground surface have been removed are ubiquitous. As such, the potential for identifying undisturbed archaeological resources within this area is non-existent and we recommend that construction activity associated with installation of the characterization well within Borrow Area No. 1 and access road to the site will have no impact on archaeological resources.

On July 27, 2010, TRC conducted a visual analysis and historic architectural survey within the 500-foot APE of Borrow Area No. 1. There are no architectural resources 50 years or older within the APE; therefore, the construction of the characterization well and access road will have no impact on architectural resources.

We look forward to your concurrence with this recommendation in order for AEP to move forward with installation of the characterization well in Borrow Area No. 1. Should you have any questions or require any additional information please do not hesitate to contact me at (301) 306-6981, or tsara@trcsolutions.com. For questions concerning Architectural History, please contact Mr. Geoffrey Henry at (202) 352-2109, ghenry@trcsolutions.com.

Sincerely yours,
Timothy R. Sara, RPA



Senior Archaeologist and
Program Manager

cc: M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
C. Cooper TRC
G. Henry, TRC

enclosures

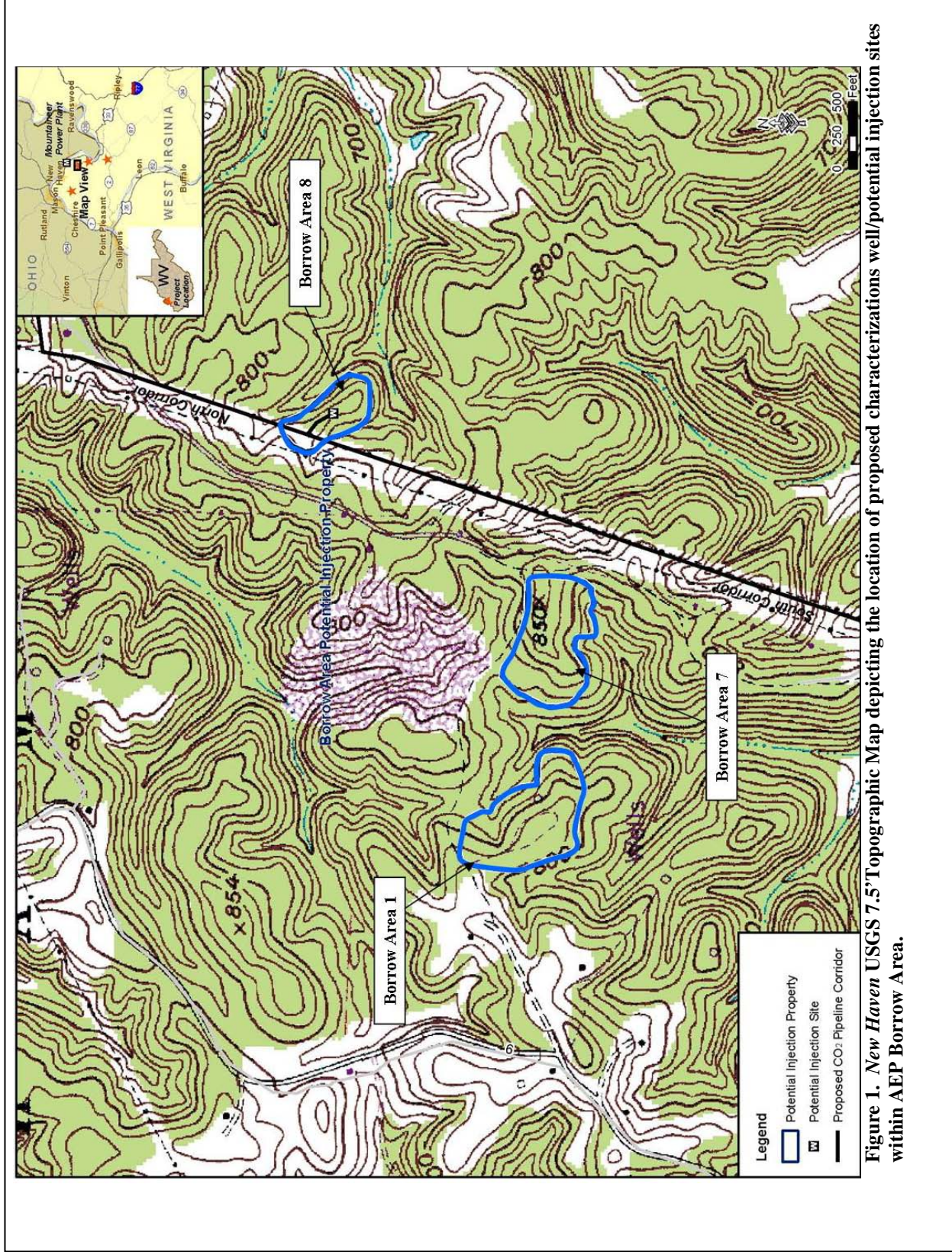
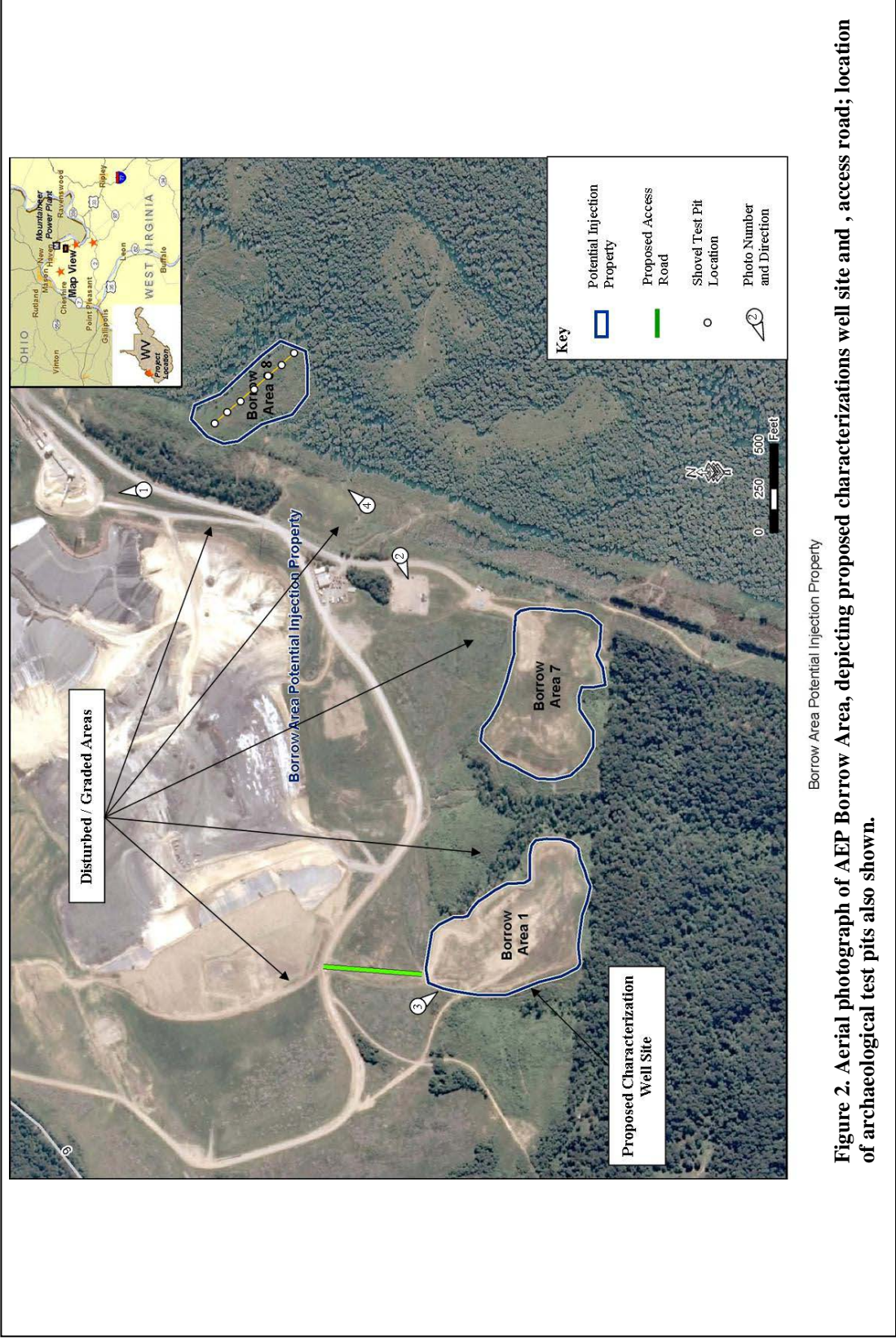


Figure 1. New Haven USGS 7.5' Topographic Map depicting the location of proposed characterizations well/potential injection sites within AEP Borrow Area.



Borrow Area Potential Injection Property

Figure 2. Aerial photograph of AEP Borrow Area, depicting proposed characterizations well site and , access road; location of archaeological test pits also shown.



Photo 1. General conditions of Little Broad Run landfill; view to north.



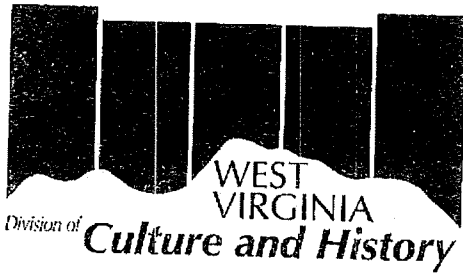
Photo 2. Ash and gypsum disposal cell within Little Broad Run landfill, showing general disturbance conditions; view to southwest.



Photo 3. View to southeast of Borrow Area 1, location of proposed characterization well site.



Photo 4. Overview of western portion of Borrow Area 8 showing disturbed, graded area; view to northeast.



September 20, 2010

The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EPC/AA Employer

Mr. Timothy R. Sera
Senior Archaeologist & Program Manager
TRC
4425 Forbes Boulevard
Lanham, MD 20706

RE: Mountaineer CCS II Project
Characterization Well Installation at AEP Borrow Area
FR#: 10-1133-MS-2

Dear Mr. Sera:

We have reviewed the information submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the submitted information, American Electric Power (AEP) is seeking approval to install a characterization well and associated access road at the existing AEP Mountaineer Plant. This request is being made in advance of our review of the full technical report documenting the results of cultural resource surveys for the proposed Mountaineer CCS II Project. Three proposed locations, known as Borrow Areas 1, 7 and 8, were considered. It is our understanding that the characterization well will be constructed within an area identified as Borrow Area #1 (BA-1).

Archaeological Resources:

According to the submitted information, all three proposed characterization well locations were subjected to Phase I survey. Borrow Areas 1 and 7 were subjected to visual inspection and pedestrian survey and found to have been extensively disturbed by past activities associated with clay mining. Borrow Area 8 underwent shovel probe excavation in addition to visual inspection. Soils observed in the shovel probes were mixed indicating past disturbance. No cultural materials were recovered from any of the borrow areas. As a result, we concur that the likelihood of encountering intact archaeological resources within these areas is very limited. No further archaeological work is warranted for this portion of the proposed project area. We ask that the survey results for this portion of the project be included in the final report.

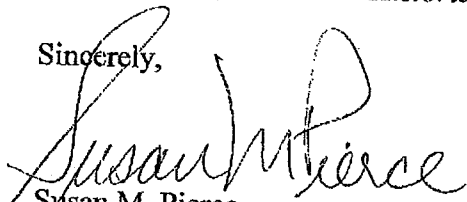
September 20, 2010
Mr. Sara
FR#: 10-1133-MS-2
Page 2

Architectural Resources:

A telephone conversation between you and Shirley Stewart Burns of my staff confirmed that there are no above ground components to this project and that all proposed activities will occur underground and will not directly or indirectly impact any buildings and/or structures. With this understanding, it is our opinion that the proposed installation of this characterization well will have no impact to architectural resources eligible for or included in the National Register of Historic Places. No further consultation regarding architectural resources is necessary.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre, Senior Archaeologist, or Shirley Stewart Burns, Structural Historian, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL/SSB

4425 Forbes Boulevard
Lanham, Maryland 20706

Main 301-306-6981
Fax 301-306-6986

October 14, 2010

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
The Cultural Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300

RE: Mountaineer CCS II Project, Mason County, West Virginia – Request for SHPO Concurrence of No Significant Impacts Related to Geologic Characterization Activities at the Jordan Property (FR # 10-1133-MS)

Dear Ms. Pierce:

The following letter respectfully requests your concurrence of no significant impact to cultural resources due to planned activities on a five-acre plot located at the AEP Jordan property. As described further below, the Phase I/II survey of the Jordan Property did not identify any NRHP-eligible archaeological or architectural resources.

On June 1, 2010, informal consultation was initiated with your office regarding the proposed Mountaineer Carbon Dioxide Capture and Sequestration II Project in Mason County, West Virginia. That letter requested early coordination/informal consultation specific to proposed fieldwork related to initial geologic characterization studies. By letter of July 1, 2010, your office concurred with the proposed Phase I archaeological survey and with the definition of the Area of Potential Effect (APE) and methodology for the historic architectural investigation.

The cultural resource surveys were completed in July and August, 2010. A complete Technical Report of the surveys for the entire project area is currently being prepared in accordance with all West Virginia State Historic Preservation Office guidelines. The full report is expected to be submitted to your office within the next two weeks. Prior to submittal of the full Technical Report and as a follow up to my call with Shirley Stewart-Burns of your staff on October 12, your advanced concurrence of no significant cultural resource impacts is respectfully requested for a five-acre area at the Jordan Property, which is proposed for performing preliminary geologic characterization studies. (see Attachment A)

Similar advanced concurrence of no significant cultural resource impacts was previously received from your office on September 20, 2010 for a five-acre plot at the AEP Borrow Area. The advanced concurrence at the Borrow Area, and as now requested for the Jordan Property will permit geologic characterization studies to commence in a timely manner. Concurrence on the balance of the project area will be requested with submittal of the full Technical Report.

The following provides a description of the Jordan Property, along with a report on the cultural resources background and prior field investigations.

Jordan Property - Project Area Description

The Jordan Property is a 170-acre parcel of land located approximately 10.5 miles south of the AEP Mountaineer Plant. The land is mostly undeveloped and partially forested. The characterization well project area is approximately 5 acres, which can be described as developed/disturbed open space. Shirley Road/County Road 62/19 crosses the property and will be used to access the project area. The proposed pipeline corridor and access road at the Jordan Property are also located in developed/disturbed open space.

Literature Review and Site File Search

TRC conducted a literature review and site file search in June 2010 at the WVSHPO and Archives in Charleston as part of the cultural resources investigations of the overall Project. Local histories, cartographic data, and documentation on the prehistoric and historical resources in the area have been reviewed. Based on this review, no NRHP-listed or eligible historic resources were identified within a one-mile radius of the Jordan Property. Likewise, no previously identified resources were found within the 500-foot APE defined for assessment of indirect effects to architectural resources. In addition, no previously identified archaeological sites were found at the Jordan Property.

Field Methods and Results - Archaeology

The landform of the Jordan Property slopes sharply away from the 5-acre characterization well site to the west and east. An immature growth conifer forest dominates the ridge back, and it appears that much of the survey area has been clear-cut and replanted. As a result, many of the shovel test pits (STP) excavated in the area displayed little topsoil overlaying compact clay.

In total, 70 STPs were excavated at 15-meter intervals along five survey transects. A ca. 1940 house (described more fully in the architectural section below), abandoned at an unknown date, along with associated outbuildings were encountered near Shirley Road in the central portion of the archaeological survey area. Several pieces of modern trash (glass, plastic, etc.) were noted in the shovel tests in this area. No additional cultural material was recovered in the survey area. As such, the potential for identifying undisturbed archaeological resources within this area is non-existent. Therefore, TRC concludes that construction activity associated with installation of the geologic characterization well at the 5-acre Jordan Property site will have no impact on archaeological resources.

Field Methods and Results – Historic Architecture

In consultation with the WVSHPO, TRC/PHE developed a Project APE, defined as the “geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist.” For assessment of direct effects, the APE is defined as the area of construction of any above-ground structure or building. For indirect effects, such as noise or visual effects, the Project APE was defined as any area within 500 feet from the proposed characterization well sites. The surroundings of the proposed Jordan Property characterization well site are wooded and the characterization well itself will not be visible beyond 500 feet.

On July 27, 2010, TRC conducted a visual analysis and historic architectural survey within the 500-foot APE of the Jordan Property characterization well site. The survey recorded all architectural resources 50 years or older. As a result of this survey, TRC identified two properties with buildings 50 years or older, the Durst House property (MS-0163) and a house and barn on the Jordan Property located on Shirley Road (MS-0164). TRC completed WVSHPO Historic Property Inventory (HPI)

forms for the surveyed resources. The HPI forms, along with labeled black-and-white photographs, and marked USGS Quad maps, are contained in Attachment B of this report.

MS 0163 – Durst House 1086 Shirley Road (CR 62/19)

The historic buildings on this property stand on the east side of Shirley Road (CR 62/19) in a rural, undeveloped setting, consisting of a mixture of farmland, pastures, and woodland. Existing AEP power lines and a transmission tower stand on the property, just south of the main house. The main house on the property is 1-story, 4-bay, frame house with a side-gable roof covered with standing seam metal. There is a 1-story, hip-roofed porch with turned posts on the front elevation and a 1-story porch on the rear elevation. The house has two entrances on the front, each with a single-leaf, 4-paneled wood door. The windows have 6/6 double hung sash. The house is covered with bricktex siding and is in overall poor condition. Also on the property are a ca. 1900 frame hay barn with side gable roof and vertical board siding in poor condition and a ca. 1900 tractor shed with side-gable roof with vertical board siding in fair condition. There is a non-historic mobile home to the rear of the main house.

Based on its architectural characteristics, the house appears to date from the 1870's. No site-specific historical research was conducted on the property, but a building at this location is shown on the 1908 and 1928 USGS 15 minute series maps (Ravenswood Quad).

MS-0164 – Unidentified House, Shirley Road

These buildings are located on the Jordan Property, on either side of Shirley Road (CR 62/19), approximately 2,500 feet north of the property at 1086 Shirley Road. The buildings stand in a rural, undeveloped setting, consisting of a mixture of farmland, pastures, and woodland. The house's immediate surroundings are overgrown. The main house on this property appears to date from the 1940s and is a 1-story, 3-bay, frame house clad with German siding and with a side-gable roof covered with composition shingle and exposed wooden rafter ends. There is a 1-story, shed-roofed porch with posts on the rear elevation. The house has a central entrance with a single leaf wood door. The windows and doors have been mostly removed, although there is a picture window on the front elevation. The house is abandoned and in deteriorated condition. Located to the south of the main house is a derelict gambrel-roofed frame hay barn with an attached 4-bay open tractor shed.

National Register Criteria of Evaluation

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, mandates that Federal agencies consider the effects of Federally funded and permitted undertakings on historic resources listed in or eligible for listing in the NRHP. TRC evaluated the surveyed resources at the Jordan Site for eligibility for listing in the NRHP according to the NRHP Criteria contained in *National Register Bulletin 15-How to Apply the National Register Criteria for Evaluation* (National Park Service, 1997, revised for internet 2002).

In addition to satisfying one or more of the NRHP Criteria, an historic resource must also retain its integrity, defined as the ability of the historic resource to convey its significance. The NRHP recognizes seven aspects of integrity which in combination are essential to conveying its significance. These aspects include integrity of location, design, setting, materials, workmanship, association and feeling.

MS-0163, Durst House

The Durst House is not known to be associated with an historic event or series of events significant on the national, state, or local level and is not NRHP-eligible under Criterion A. The Durst House is not known to be associated with an individual significant on the national, state, or local level and is not NRHP-eligible under Criterion B. The Durst House and outbuildings do not represent the work of a recognized architect or master builder and do not embody the characteristics of a style, method, or period of construction. The Durst House is not NRHP-eligible under Criterion C. The application of bricktex siding to the main house's exterior impacts its integrity of materials.

MS-0164, Unidentified House, Shirley Road

The buildings on this property are not known to be associated with an historic event or series of events significant on the national, state, or local level and are not NRHP-eligible under Criterion A. They are not known to be associated with an individual significant on the national, state, or local level and is not NRHP-eligible under Criterion B. The main house and outbuilding do not represent the work of a recognized architect or master builder and do not embody the characteristics of a style, method, or period of construction. The buildings on this property are not NRHP-eligible under Criterion C. The absence of windows and doors on the main house impacts its integrity of materials and workmanship. The house and outbuildings are abandoned and lack integrity of association.

Assessment of Effects to the Surveyed Architectural Resources at the Jordan Site

Although TRC recommends that both surveyed resources (MS-0163 and MS-0164) are not NRHP-eligible per Criteria A, B, and C, TRC evaluated potential effects from the characterization well activity at the Jordan Property in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, which requires an analysis of the proposed Project to assess its effects to NRHP-listed and -eligible historic resources. Guidelines for this evaluation are set forth in the Advisory Council on Historic Preservation (ACHP)'s regulations at 36 CFR, Part 800. TRC applied the Criteria of Effects to assess direct and indirect (noise and visual) effects from the characterization well activities to the two surveyed architectural resources located in the project APE. There will be no direct effects to the two surveyed resources. The assessment of indirect effects was based on a visual analysis and verification in the field. Because the only aboveground feature that will be installed at the site would be a well casing (approximately 3 feet in height), TRC concluded that the characterization well activities will have no effect on the Durst House (MS-0163) and the unidentified house on Shirley Road (MS-0164).

We look forward to your concurrence with the NRHP recommendations for cultural resources on the Jordan Property and the conclusion that there will be no historic resources affected by the characterization well activities in order for AEP to move forward with installation of the characterization wells on the property.

Should you have any questions or require any additional information please do not hesitate to contact me at (202) 352-2109, ghenry@trcsolutions.com. For questions concerning Archeology, please contact Mr. Tim Sara at (301) 306-6981, or tsara@trcsolutions.com.

Sincerely yours,
Geoffrey B. Henry

Program Manager—Architectural History

cc: M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
C. Cooper TRC
T. Sara, TRC

Attachment A Map of Jordan Property

Attachment B West Virginia HPI forms for MS-0163 and MS-0164



Attachment A: Map of Jordan Property

Attachment B
West Virginia HPI Forms

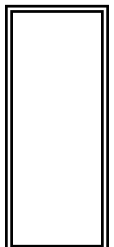


Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

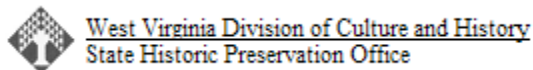
Street Address 1086 Shirley Road (CR 62/19)	Common/Historic Name/Both X O O Durst House	Field Survey #	Site # (SHPO Only) MS 0163
Town or Community Letart vicinity	County Mason	Negative No. (Digital photo) Heavy foliage and sunlight prevented clear photos of the house.	NR Listed Date
Architect/Builder	Date of Construction ca. 1870	Style Vernacular	
Exterior Siding/Materials Bricktex siding	Roofing Material Standing seam metal	Foundation Brick piers	
Property Use or Function Residence X Commercial O Farm X	UTM# 17 0419565E 4300470N (NAD27)	Photograph (2" x 3" Contact)	
Survey Organization & Date TRC Environmental Corp. July 27, 2010	Quadrangle Name Mount Alto (Rev. 1975)		
	Part of What Survey/FR# Mountaineer CCS II Project FR # 10-1133-MS		

Sketch Map of Property
Or Attach Copy of USGS Map



Site No.

Present Owners Carl Durst Phone #	Owners Mailing Address
Describe Setting Buildings stand on the east side of Shirley Road in a rural, undeveloped setting, consisting of a mixture of farmland, pastures, and woodland. Existing AEP power lines and tower stand on property, south of the main house. <div style="text-align: right;"> _____ 112.4 _____ Acres N/A _____ Archaeological Artifacts Present </div>	
Description of Building or Site (Original and Present) _____ 1 _____ Stories _____ 4 _____ Front Bays The main house on the property is 1-story, 4-bay, frame house with a side-gable roof covered with standing seam metal. There is a 1-story, hip-roofed porch with turned posts on the front elevation and a 1-story porch on the rear elevation. The house has two entrances on the front, each with a single-leaf, 4-paneled wood door. The windows have 6/6 double hung sash. The house is in poor condition. <div style="text-align: right;"> <i>(Use Continuation Sheets)</i> </div>	
Alterations <input checked="" type="checkbox"/> <input type="checkbox"/> If yes, describe: The house has non-historic bricktex siding. <div style="display: flex; justify-content: space-around; width: 100%;"> Yes No </div>	
Additions <input type="checkbox"/> <input checked="" type="checkbox"/> If yes, describe: <div style="display: flex; justify-content: space-around; width: 100%;"> Yes No </div>	
Describe All Outbuildings: There is a ca. 1900 frame hay barn with side gable roof and vertical board siding in poor condition. There is a ca. 1900 tractor shed with side-gable roof with vertical board siding in fair condition. There is a non-historic mobile home to the rear of the main house. <div style="text-align: right;"> <i>(Use Continuation Sheets)</i> </div>	
Statement of Significance A building at this location is shown on the 1908 and 1928 USGS 15 minute series maps (Ravenswood Quad). <div style="text-align: right;"> <i>(Use Continuation Sheets)</i> </div>	
Bibliographical References Mason County Tax Assessor USGS Map, Ravenswood Quad (1908 and 1928) <div style="text-align: right;"> <i>(Use Continuation Sheets)</i> </div>	
Form Prepared By: Geoffrey Henry, Program Manager—Architectural History Date: July 10, 2010 Name/Organization: TRC Environmental Corp. Address: 4425 Forbes Blvd., Suite B, Lanham MD 20706 Phone #: 301-306-6981, ext. 14	



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WEST VIRGINIA HISTORIC PROPERTY FORM CONTINUATION SHEET

NAME Durst House

SITE# MS-0163

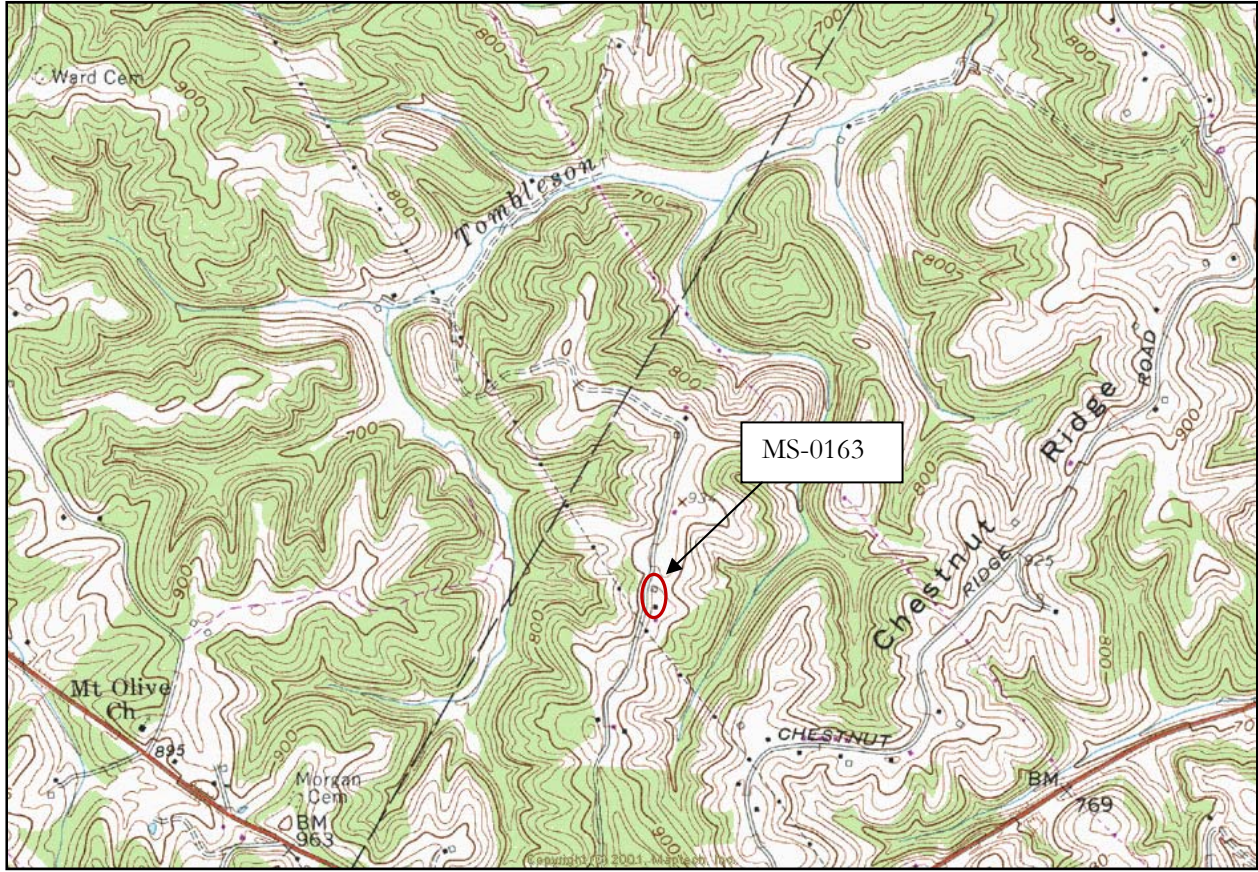


WEST VIRGINIA HISTORIC PROPERTY FORM CONTINUATION SHEET

NAME Durst House

SITE# MS-0163





MS-0163
 Durst House at 1086 Shirley Road (CR 62/19)
 UTM 17 0419565E 4300470N (NAD27)
 USGS Mt. Alto Quadrangle (Rev. 1975)



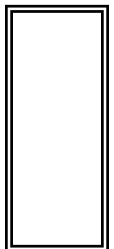


Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address Shirley Road (CR 62/19), 2500 ft. north of 1086 Shirley Rd.	Common/Historic Name/Both X O O	Field Survey #	Site # (SHPO Only) MS 0164
Town or Community Letart vicinity	County Mason	Negative No. Digital photograph	NR Listed Date
Architect/Builder	Date of Construction ca. 1940	Style Vernacular	
Exterior Siding/Materials German siding	Roofing Material Composition shingle	Foundation Poured concrete slab	
Property Use or Function Residence <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Other <input type="checkbox"/>	UTM# 17 0419666E 4300598N (NAD27)	Photograph (2" x 3" Contact)	
Survey Organization & Date TRC Environmental Corp. July 27, 2010	Quadrangle Name Mount Alto		
Part of What Survey/FR# Mountaineer CCS II Project FR # 10-1133-MS			

Sketch Map of Property
Or Attach Copy of USGS Map



Site No.

Present Owners Appalachian Power Company Phone #	Owners Mailing Address
Describe Setting Building stands in a rural, undeveloped setting, consisting of a mixture of farmland, pastures, and woodland. The house's immediate surroundings are overgrown. <div style="text-align: right; margin-top: 10px;"> _____ 24 _____ Acres N/A _Archaeological Artifacts Present </div>	
Description of Building or Site (Original and Present) <div style="text-align: right; margin-bottom: 5px;"> _____ 1 _____ Stories _____ 3 _____ Front Bays </div> The main house on the property is 1-story, 3-bay, frame house clad with German siding and with a side-gable roof covered with composition shingle and exposed rafter ends. There is a 1-story, shed-roofed porch with posts on the rear elevation. The house has a central entrance with a single leaf wood door. The windows have been mostly removed, although there is a picture window on the front elevation. The house is abandoned and in deteriorated condition. <div style="text-align: right; margin-top: 10px;"> <i>(Use Continuation Sheets)</i> </div>	
Alterations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: The house no longer has windows and doors.
Additions	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe:
Describe All Outbuildings Located to the south of the main house is a derelict gambrel-roofed frame hay barn with an attached 4-bay open tractor shed. <div style="text-align: right; margin-top: 10px;"> <i>(Use Continuation Sheets)</i> </div>	
Statement of Significance No building is shown at this location on the 1908 or 1928 USGS 15 minute series map (Ravenswood Quad). <div style="text-align: right; margin-top: 10px;"> <i>(Use Continuation Sheets)</i> </div>	
Bibliographical References Mason County Tax Assessor, Mason County Register of Deeds USGS Map, Ravenswood Quad (1908 and 1928) <div style="text-align: right; margin-top: 5px;"> <i>(Use Continuation Sheets)</i> </div>	
Form Prepared By: Geoffrey Henry, Program Manager—Architectural History Date: July 10, 2010 Name/Organization: TRC Environmental Corp. Address: 4425 Forbes Blvd., Suite B, Lanham MD 20706 Phone #: 301-306-6981, ext. 14	



[West Virginia Division of Culture and History](http://www.wvculture.org)
 State Historic Preservation Office

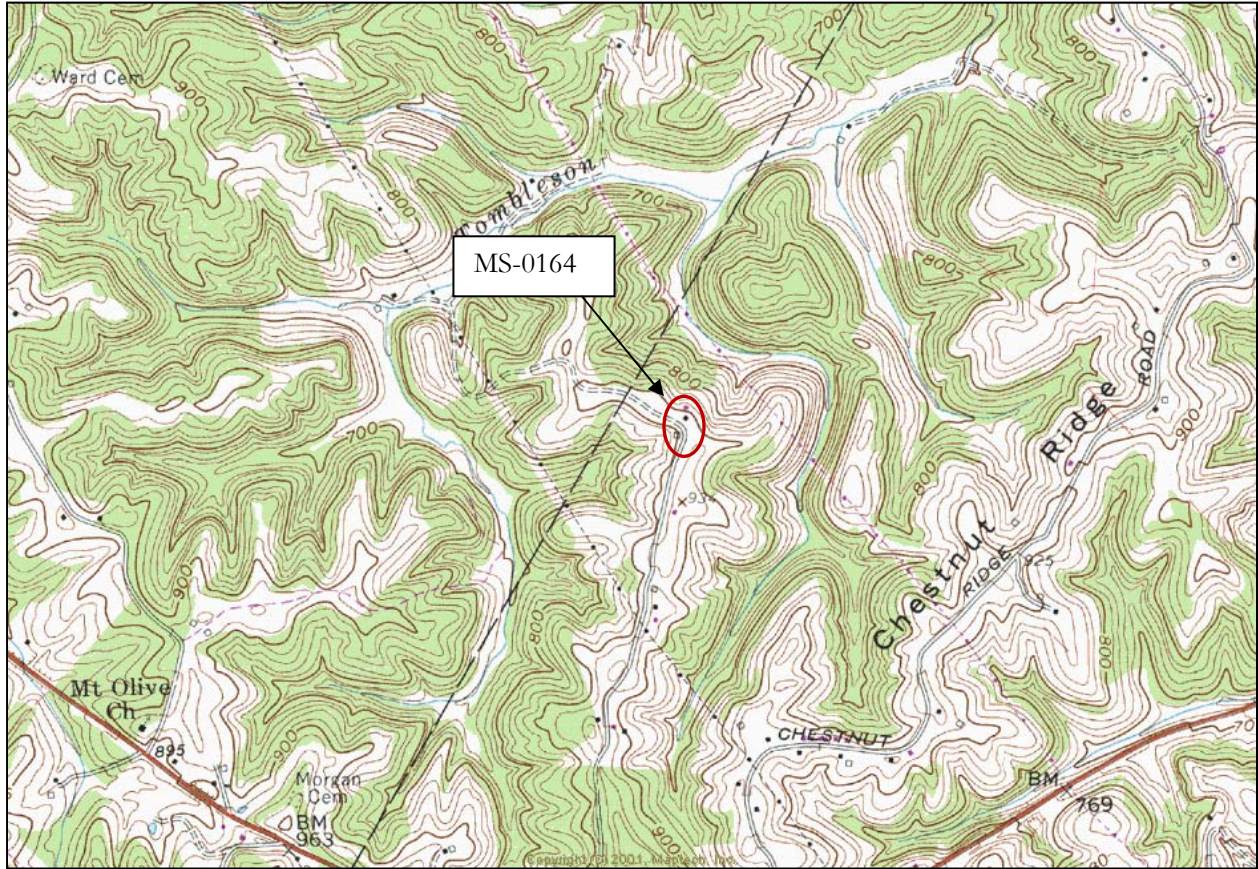
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**WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET**

NAME _____

SITE# MS-0164





MS-0164
House at Shirley Road (CR 62/19), 2500 ft. north of 1086 Shirley Rd.
UTM 17 0419666E 4300598N (NAD27)
USGS Mt. Alto Quadrangle (Rev. 1975)





The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

November 8, 2010

Mr. Geoffrey B. Henry
TRC
4425 Forbes Boulevard
Lanham, MD 20706

RE: Mountaineer CCS II Project
Jordan Property Characterization Activities
FR#: 10-1133-MS-3

Dear Mr. Henry:

We have reviewed the information submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to the submitted information, American Electric Power (AEP) is seeking approval to install a characterization well and associated access road at the AEP Jordan Property. This request is being made in advance of our review of the full technical report documenting the results of cultural resource surveys for the proposed Mountaineer CCS II Project. It is our understanding that the area proposed for construction of the characterization well, pipeline corridor and access consists of five developed acres within the largely undeveloped 170-acre Jordan Property.

Archaeological Resources:

According to the submitted information, the proposed five acre project area was subjected to Phase I survey. It is our understanding that deflated or eroded soils were encountered. Modern debris was noted within the project area near an extant ca. 1940 house; however, no cultural materials were recovered. As a result, we concur that there is no likelihood of encountering intact significant archaeological resources within this five acre project area. No further archaeological work is warranted for this portion of the proposed project area. We ask that the survey results for this portion of the project be included in the final report.

November 8, 2010
Mr. Henry
FR#: 10-1133-MS-3
Page 2

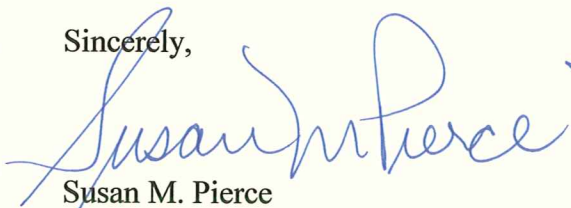
Architectural Resources:

Submitted project information indicates that you have identified two potential historic resources within the area of potential effect (APE) for this aspect of the project. These include an unidentified building located along Shirley Road as well as the Durst House, which also is located on Shirley Road. It is your opinion that neither is eligible for inclusion in the National Register of Historic Places under Criteria A, B, or C. We are unable to concur with this assessment based on the submitted information. The photographs for both potential resources are unclear and the buildings are not adequately discernible in these photographs. In addition, there is no indication that any research occurred to verify that these buildings are not eligible under Criteria A or B. If the buildings retain integrity, which cannot be discerned by the present submission, then additional research would be necessary in order to assert that neither has eligibility under Criteria A or B. In the future, such research would include an exploration of county histories along with the already completed deed exploration. Future assertions of ineligibility under Criteria A and/or B must include such research in order to be a declarative statement rather than a speculative assertion.

Submitted information also included an assessment of effect of the project on the two potential historic resources. Submitted information states that there will be no direct impact to the buildings and that there is the potential of a visual impact. This potential visual impact consists of one well casing, approximately three feet tall. It is your opinion that the potential three foot characterization well casing will have no adverse effect to the buildings. We concur with this assessment. No further consultation regarding architectural resources is necessary with regards to this aspect of the project; however, should your project change or become altered in any way that would additionally impact these two buildings, please contact our office at that time for further consultation.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre, Senior Archaeologist, or Shirley Stewart Burns, Structural Historian, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL/SSB



The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

January 10, 2011

Mr. Timothy R. Sera
Senior Archaeologist & Program Manager
TRC
4425 Forbes Boulevard
Lanham, MD 20706

RE: Mountaineer CCS II Project – Phase I Archaeological Survey
FR#: 10-1133-MS-5

Dear Mr. Sera:

We have reviewed the draft Phase I archaeological survey report that was submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Archaeological Resources:

According to the draft report, a Phase I archaeological survey was conducted in all proposed construction areas of the proposed Mountaineer Carbon Dioxide Capture and Storage (CCS II) Project. In addition, it is our understanding that American Electric Power is proposing to upgrade a barge unloading facility on the Ohio River near the AEP Mountaineer plant and that this area was also reviewed. It is our understanding that one prehistoric isolated find was identified within the proposed CCS II project area. We concur that this resource is not eligible for inclusion in the National Register of Historic Places. However, it appears that a WV Isolated Find form has not been completed. If this is the case, please submit a draft form (which can be downloaded from this web address: <http://www.wvculture.org/shpo/forms.html>) to Kristin Scarr via email so that a trinomial number can be assigned. Ms. Scarr's email address is Kristin.D.Scarr@wv.gov. A hard copy of the form can be submitted with the final report. It is our understanding that certain sections of the proposed project area were not included in the survey due to access denial. The report does not appear to make recommendations regarding these areas. Please ensure that the final report addresses these areas and makes appropriate recommendations.

Cemetery Resources:

According to the report, the Brinker Family Cemetery (46MS355) was documented during the survey. The cemetery contains approximately 10 burials dating from 1884 to 1908 and appears to be typical of its type within the Appalachian region. The report indicates that the cemetery might be eligible for the National Register of Historic Places under Criterion D, but states that it will not be

January 10, 2010
Mr. Sera
FR#: 10-1133-MS-5
Page 2

directly impacted by the proposed project. It is not clear, however, whether the cemetery falls within the proposed project's Area of Potential Effect (APE) as it pertains to indirect effects. If the cemetery falls within the APE for indirect effects, the report should discuss whether it meets Criteria A, B and C and Criteria Considerations C and D as well as Criterion D. If the cemetery is not within the APE, the report need not address eligibility at all.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre-DeMott, Senior Archaeologist, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL



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EEO/AA Employer

January 11, 2011

Mr. Geoffrey B. Henry
TRC
4425 Forbes Boulevard
Lanham, MD 20706

RE: Mountaineer CCS II Project
Jordan Property Characterization Activities
FR#: 10-1133-MS-4

Dear Mr. Henry:

We have reviewed the *Historic Architectural Survey Report* for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Architectural Resources:

Presently, you are requesting review and concurrence with the National Register of Historic Places recommendations for buildings and/or structures within the project's defined Area of Potential Effect (APE). Submitted project information indicates that there are 18 historic resources within the APE. Of these, four have been previously surveyed. These are listed as the B&O Railroad on the west side of State Route 62, the Graham Station Baptist Church, the Graham Station School and the Graham Station Church Cemetery. Correspondence dated February 2, 2006, from this office determined that the B&O Railroad and the Graham Station School were both eligible for inclusion in the National Register of Historic Places. It was our opinion that the Graham Station Baptist Church was not eligible for inclusion in the National Register of Historic Places. Please note that our office *did not* provide comments regarding the eligibility of the Graham Station Church Cemetery. At this time, we request that an assessment of National Register eligibility occur for this resource.

The current submission has provided an evaluation of eligibility for 14 resources, including one cemetery that will be addressed in a separate section. It is your opinion that of these 14 resources, two are eligible for inclusion in the National Register of Historic Places. These two resources include the Lieving Farm and tracks of the B&O Railroad. We concur with this assessment. It is our opinion that the B&O Railroad tracks are eligible under Criterion A as part of the larger B&O Railroad. While we concur that the Lieving Farm is eligible under Criteria B and C, it is our opinion that an adequate explanation is not given to substantiate eligibility under

January 11, 2011
Mr. Henry
FR#: 10-1133-MS-4
Page 2

Criterion A. The information provided attempts to conclude eligibility under Criterion A because of the farm's association with Frank Lieving, a locally prominent coal industrialist, and his involvement in the coal industry. The evidence provided does not validate the assertions. The Historic Property Inventory (HPI) form for this building does not provide an adequate statement of significance. We request that the HPI form for this building be resubmitted with additional information provided for the statement of significance. You may want to incorporate the information found on page 2-8 of the report into the statement of significance. Any reference to eligibility under Criterion A, however, should be omitted.

Cemetery Resources

Although a West Virginia Cemetery Survey Form was submitted for the Brinker Cemetery, no determination of eligibility accompanied this form. We request that you provide a determination of eligibility for this resource to our office at your earliest convenience.

Once the determinations of eligibility have been concluded for the two cemeteries, the process can move forward to assess effects of the project on eligible resource. Please note that any assessment of effect will need to include possible impacts of the proposed wells to foundations of eligible resources.

It is our understanding that archaeological concerns will be addressed separately.

We will provide additional comments upon receipt of the requested information.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Shirley Stewart Burns, Structural Historian, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/SSB

4425 Forbes Boulevard
Lanham, Maryland 20706

Main 301-306-6981
Fax 301-306-6986

January 30, 2011

Ms. Susan Pierce, Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
Capitol Complex, 1900 Kanawha Boulevard East
Charleston, WV 25305-0300

RE: Mountaineer CCSII, Project FR# 10-1133-MS-5

Dear Ms. Pierce:

The following is TRC's response to your letter dated January 10, 2011 to TRC Program Manager Geoffrey Henry with your comments on *Phase I/II Historic Architectural Survey Mountaineer CCSII Project, Mason County, West Virginia* (TRC Environmental 2010).

1. Brinker Cemetery

The Brinker family cemetery is located on the west side of CR 62 north of Letart in a rural section of Mason County and is accessible on foot. The property is within the boundaries of the Mountaineer CCSII Eastern Sporn Tract. The cemetery measures approximately 60 feet wide and 75 feet long and contains 10 headstones. The stones mark the graves of members of the Brinker family and range in date between 1884 and 1910.

The Brinker family cemetery does not possess the exceptional significance required for NRHP Criteria Consideration D. Based on available research, the Brinker family cemetery is not associated with an event or pattern of events significant on the national, state, or local level and is not NRHP-eligible under Criterion A. The Brinker family is not known to be significant on the national, state, or local level and the Brinker family cemetery is not NRHP-eligible under Criterion B. The Brinker family cemetery is not the work of a known designer nor do the stones exhibit any artistic style or design. The Brinker family cemetery does not contain information that is important in history or prehistory and is not NRHP-eligible under Criterion D.

2. Graham Station Cemetery

The Graham Station Cemetery is a community cemetery located on the southwest side of CR 62 approximately three miles southeast of New Haven. It occurs within the Area of Potential Effect (APE) for the AEP Mountaineer power plant. The cemetery contains approximately 1,495 burials, marked by approximately 1,086 stones and/or markers. The burial population consists of local residents of the Graham Station community. The burials date from 1855 to the present, with the overwhelming majority of burials occurring from the 1950s through the 1970s. The cemetery was surveyed by GAI Consultants, Inc. in December 2005 and was field-checked by TRC in July 2010.

The Graham Station Cemetery does not possess the exceptional significance required for Criteria Consideration D of the NRHP. Based on available research, the Graham Station Cemetery is not associated with an event or pattern of events significant on the national, state, or local level and is not NRHP-eligible under Criterion A. Individuals buried in the cemetery are not known to have been significant on the national, state, or local level and the Graham Station Cemetery is not NRHP-eligible

under Criterion B. The Graham Station Cemetery is not the work of a known designer nor do the stones exhibit any artistic style or design. The cemetery does not contain information important in history or prehistory and is not NRHP-eligible under Criterion D.

3. Lieving Farm

The Lieving Farm is located at 2552 Lieving Road (CR 7) east of West Columbia, in a rural hamlet setting, consisting of a mixture of occupied and vacant houses, farmland, pastures, and woodland. The property is within the boundaries of the Mountaineer CCSII Western Sporn Tract.

Your letter stated that the information contained in the HPI form submitted for the Lieving Farm (MS-170) does not justify NRHP eligibility under Criterion A. The HPI form has been modified and is attached. The Lieving Cemetery is not NRHP-eligible under Criterion A; however, it is NRHP-eligible under Criteria B and C.

By separate letter, TRC will be submitting the results of its assessment of potential effects to NRHP-listed and NRHP-eligible resources within the Project APE, including but not limited to any potential effects to building foundations from underground excavation and drilling activity.

Sincerely,



Geoffrey B. Henry
TRC Program Manager—Architectural History

cc: M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
T. Sara, TRC
J. Brandt, TRC

Enclosure—HPI form for MS-170 Lieving Farm

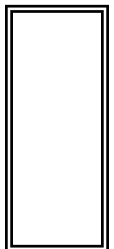


Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

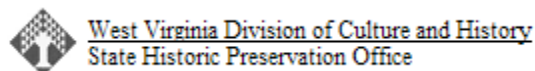
Street Address 2552 Lieving Road	Common/Historic Name/Both <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Lieving Farm	Field Survey # 	Site # (SHPO Only) MS 0170
Town or Community West Columbia vicinity	County Mason	Negative No. Digital photograph	NR Listed Date
Architect/Builder 	Date of Construction Before 1903	Style Colonial Revival	
Exterior Siding/Materials Weatherboard	Roofing Material Standing seam metal	Foundation Rusticated concrete block	
Property Use or Function Residence <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Other Farm; gas station	UTM# 17 0411219E 4313183N (NAD27) 	Photograph (2" x 3" Contact)	
Survey Organization & Date TRC Environmental Corp. July 27, 2010	Quadrangle Name Cheshire (Rev. 1989)		
	Part of What Survey/FR# Mountaineer CCS II Project FR # 10-1133-MS		

Sketch Map of Property
Or Attach Copy of USGS Map



Site No.

Present Owners Appalachian Power Company Phone #	Owners Mailing Address
Describe Setting This complex stands in a rural hamlet setting, consisting of a mixture of occupied and vacant houses, farmland, pastures, and woodland <div style="text-align: right;">_____ Acres</div> <div style="text-align: right;">N/A _Archaeological Artifacts Present</div>	
Description of Building or Site (Original and Present) 2 1/2_Stories ___3___ Front Bays The main building on the property is 2 1/2 -story, 3-bay, frame house with a hipped roof covered with standing seam metal. There is a 1-story, half-hip-roofed, wrap-around porch with tapered posts and knee walls on the front elevation that is enclosed on the east side with 8-pane casement windows. The house has an off-center front entrance with a single leaf glass-and-wood door. The windows mostly have 1/1 or 2/2 double hung sash, although the large front window has a diamond pane transom. There is a 2-story polygonal bay with gable roof on the east and a small porch with turned wooden posts located on the both the west and north elevations. <div style="text-align: right;">(Use Continuation Sheets)</div>	
Alterations <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe:	
Additions <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe:	
Describe All Outbuildings: There is a 1-story, 4-bay concrete block garage/service station (ca. 1925) located immediately to the east, with a porch/service bay on the west. There is a 1-story gable-roofed frame office/outbuilding to the north of the house. There is a large frame stable/ barn with vertical board siding on a hillside to the east of the house. <div style="text-align: right;">(Use Continuation Sheets)</div>	
Statement of Significance: See continuation sheet. <div style="text-align: right;">(Use Continuation Sheets)</div>	
Bibliographical References Mason County Tax Assessor, Mason County Register of Deeds. USGS Map, Point Pleasant Quad (1908 and 1928) (Use Continuation Sheets)	
Form Prepared By: Geoffrey Henry, Program Manager—Architectural History Date: July 10, 2010 rev. January 29, 2010 Name/Organization: TRC Environmental Corp. Address: 4425 Forbes Blvd., Suite B, Lanham MD 20706 Phone #: 301-306-6981, ext. 14	



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WEST VIRGINIA HISTORIC PROPERTY FORM CONTINUATION SHEET

NAME Lieving Farm SITE# MS-0170

Statement of Significance:

A September 15, 1903 deed from Albert Hoffman to Frank B. Lieving for this 55-acre property mentions a pre-existing dwelling and barn. Lieving, who was later Mason County Sheriff, founded the Lieving Coal Company at this location. A coal tipple nearby was built in 1947 but was destroyed by fire in 1960, after which the company and most of the land was sold to Appalachian Power Company and the coal mine abandoned. It is believed Lieving built the present gas station which is mentioned in a 1929 lease (Mason County Deed Book 108, page 407). The house and barn are shown on the 1908 and 1928 USGS 15-minute series maps (Point Pleasant Quad).

The Lieving Farm is NRHP-eligible under Criterion B as the home of Frank B. Lieving, founder and president of the locally important Lieving Coal Company. The Lieving Farm is NRHP-eligible under Criterion C in the area of architecture for embodying the distinctive characteristics of the Colonial Revival style and the late Queen Anne style. The house and outbuildings have retained all aspects of integrity.

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4425 Forbes Boulevard
Lanham, Maryland 20706

Main 301-306-6981
Fax 301-306-6986

February 1, 2011

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia Division of Culture and History
The Cultural Center
Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300

RE: Final Report Submittal: *Phase I Archaeological Survey – Mountaineer CCS II Project Mason County, West Virginia* (FR # 10-1133-MS)

Dear Ms. Pierce:

TRC Environmental, Inc. (TRC), in association with Potomac-Hudson Engineering, Inc. (PHE), and on behalf of American Electric Power Service Corporation (AEP) and the Department of Energy (DOE), is pleased to submit the referenced Final Report.

Per your Draft Report review comments of January 10, 2011, the Final Report includes a trinomial number (46MS365) assigned by your office to the single isolated find recovered from the project, in addition to a completed WV Isolated Find Form provided in Appendix E. This form has also been submitted to Kristin Scarr of your office.

Additionally, as per your comments, we have removed the NRHP eligibility recommendation for the newly recorded Brinker Cemetery (46MS355), as this cemetery is no longer within the APE of the project.

Finally, as per your comments, due to access denial to 2.05 miles of the overall pipeline corridor for archaeological survey, we have added recommendations in the Final Report to conduct Phase I survey of these corridor segments if they were to be selected for construction. As part of the consultation process, the results of these surveys would be reported in a letter report or Addendum to this report.

Please note the back cover of the report includes a sleeve containing a CD of the Final Report in PDF format.

On behalf of our client – AEP – and the DOE, we would like to thank you for your kind assistance with this project over the past year. We look forward to further consultation on this project if necessary, and to working with your office on future projects.

Should you have any further questions, please do not hesitate to contact me at (301) 306-6981, or tsara@trcsolutions.com.

Sincerely yours,
Timothy R. Sara, RPA

A handwritten signature in black ink, appearing to read 'T. Sara', written in a cursive style.

Senior Archaeologist and
Program Manager

cc: M. Lusk, DOE/NETL
M. McMillian, DOE/NETL
B. Whipple, PHE
F. Blake, AEP
B. Sherrick, AEP
C. Cooper TRC
G. Henry, TRC

enclosures