

*Brunstetter Connector*  
*Photographed November 15, 2012*



Photo 7. Wetland 1b facing east.



Photo 8. Wetland 2 facing west.



*Brunstetter Connector*  
*Photographed November 15, 2012*



Photo 9. Wetland 3 facing east.



Photo 10. Wetland 4 facing south.



*Brunstetter Connector*  
*Photographed November 15, 2012*



Photo 11. S-1 facing northeast upstream.



Photo 12. S-1 facing south downstream.



*Brunstetter Connector*  
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Photo 13. Stream 1 substrate.



Photo 14. Stream 2a facing northwest upstream.



*Brunstetter Connector*  
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Photo 15. Stream 2a facing southeast downstream.



Photo 16. Stream 2a substrate.



*Brunstetter Connector*  
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Photo 17. Stream 2b facing southwest upstream.



Photo 18. Stream 2b facing northeast downstream.



*Brunstetter Connector*  
*Photographed November 15, 2012*



Photo 19. Stream 2b substrate.

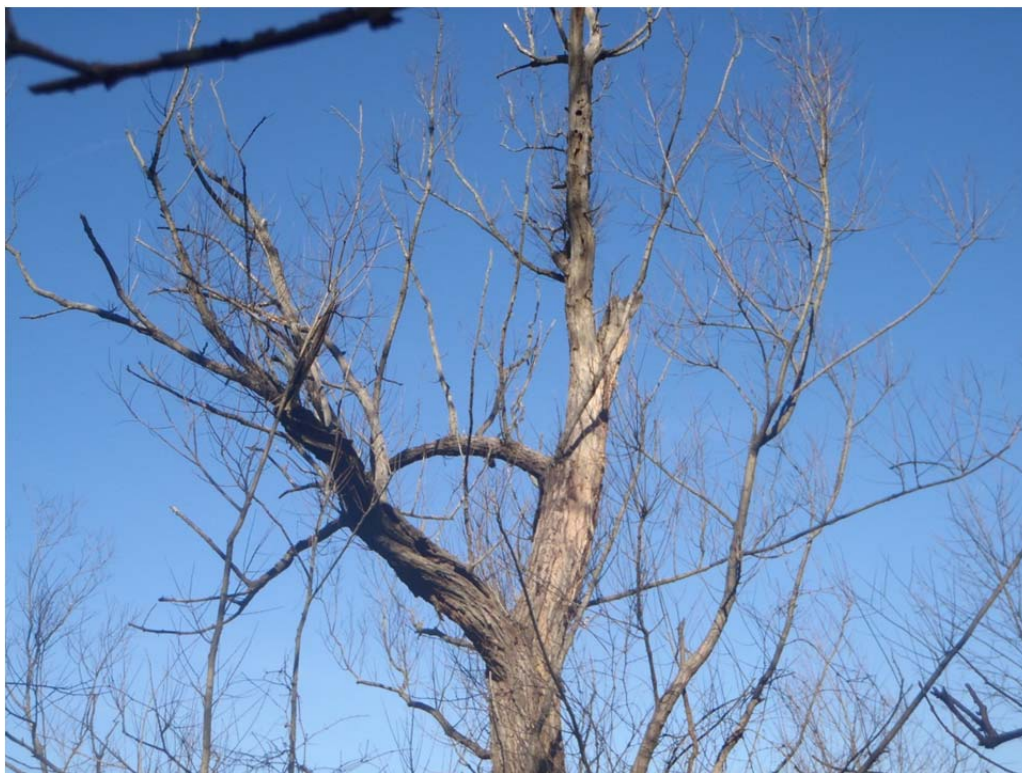


Photo 20. Typical Potential roost tree, black willow.



*Brunstetter Connector*  
*Photographed November 15, 2012*



Photo 21. Typical potential roost tree, standing dead.

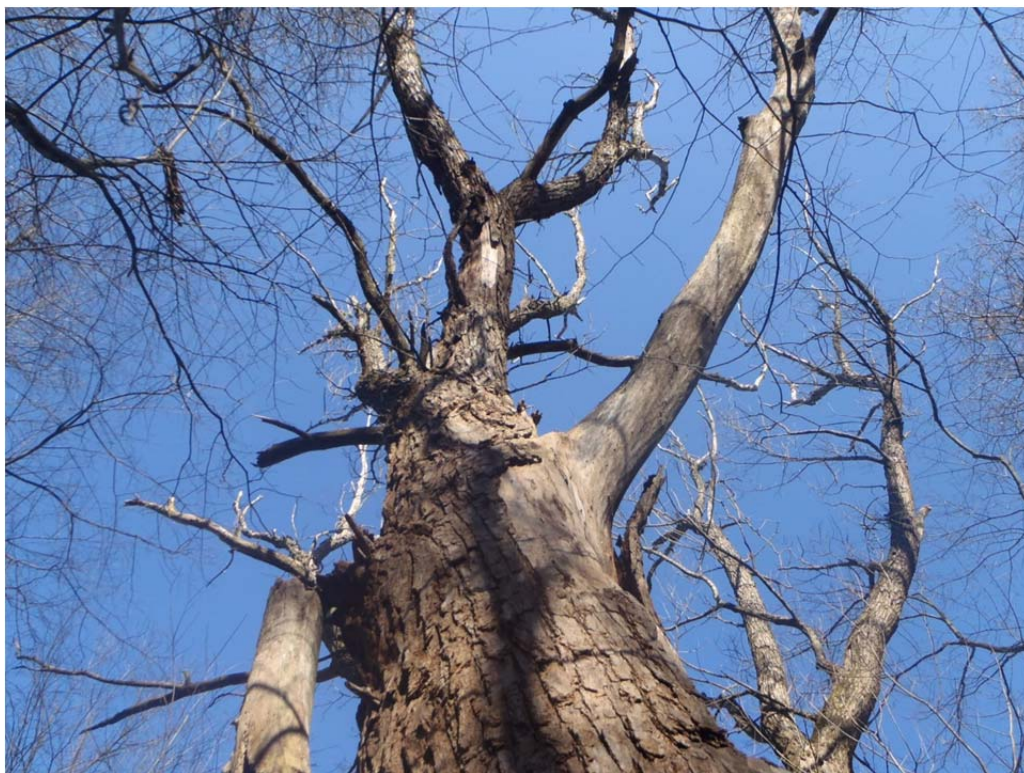


Photo 22. Typical potential roost tree, red oak.



**Appendix C:**  
**Routine Wetland Determination Data Forms**



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Brunstetter City/County: Lorastown Trumbull Sampling Date: 11/10/12  
 Applicant/Owner: The East Ohio Gas Co. State: OH Sampling Point: 1  
 Investigator(s): L. Sayre Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): 2 Lat: 41.180994 Long: -80.838115 Datum: NAD 1984  
 Soil Map Unit Name: Sb NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	If yes, optional Wetland Site ID: <u>N-1 a</u>
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.)	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<u>X</u> Drainage Patterns (B10)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Moss Trim Lines (B16)
<u>X</u> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<u>X</u> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____	Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>9-12</u>	Wetland Hydrology Present? Yes <u>X</u> No _____
Saturation Present? (includes capillary fringe) Yes <u>X</u> No _____ Depth (inches): <u>9-12</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		







# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Brunstetter City/County: Lorain Trumbull Sampling Date: 11/16/12  
 Applicant/Owner: The East Ohio Gas Co. State: OH Sampling Point: 2  
 Investigator(s): L. Sagre Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): 2 Lat: 41.181148 Long: -80.835437 Datum: NAD 1984  
 Soil Map Unit Name: R8B NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
____ Surface Water (A1)	____ Water-Stained Leaves (B9)	____ Drainage Patterns (B10)
____ High Water Table (A2)	____ Aquatic Fauna (B13)	____ Moss Trim Lines (B16)
____ Saturation (A3)	____ Marl Deposits (B15)	____ Dry-Season Water Table (C2)
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Crayfish Burrows (C8)
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	____ Saturation Visible on Aerial Imagery (C9)
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Stunted or Stressed Plants (D1)
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Geomorphic Position (D2)
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	____ Shallow Aquitard (D3)
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	____ Microtopographic Relief (D4)
____ Sparsely Vegetated Concave Surface (B8)		____ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes _____ No <u>X</u>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



SOIL	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)	

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Dominant Indicator Status
1. PINUS STROBUS	40	Y	FACU
2. PICEA ABIES	30	Y	FACU
3.			
4.			
5.			
6.			
7.			

Sapling/Shrub Stratum (Plot size: 15)	Absolute % Cover	Dominant Species?	Dominant Indicator Status
1. RHAMNUS FRANGULA	30	Y	FACU
2. ROSA MULTIFLORA	20	Y	FACU
3. RUBUS ALLEGANIENSIS	10		FACU
4. QUERCUS PALUSTRIS	5		FACU
5.			
6.			
7.			

Herb Stratum (Plot size: 5)	Absolute % Cover	Dominant Species?	Dominant Indicator Status
1. DACTYLIS GLOMERATA	60	Y	FACU
2. ASTER SP.	20		
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Dominant Indicator Status
1.			
2.			
3.			
4.			

Dominance Test worksheet:			
Number of Dominant Species That Are OBL, FACW, or FAC:	(A)		
Total Number of Dominant Species Across All Strata:	(B)		
Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)		

Prevalence Index worksheet:			
Total % Cover of:	Multiply by:		
OBL species	x 1 =		
FACW species	x 2 =		
FAC species	x 3 =		
FACU species	x 4 =		
UPL species	x 5 =		
Column Totals:	(A)	(B)	
Prevalence Index = B/A =			

Hydrophytic Vegetation Indicators:			
Rapid Test for Hydrophytic Vegetation			
Dominance Test is >60%			
Prevalence Index is >3.0			
Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)			
Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			

Indicators of hydric soil and wetland hydrology must be used when determining hydrophytic vegetation			
Definitions of Vegetation Strata:			
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
Woody vines – All woody vines greater than 3.28 ft in height.			

Hydrophytic Vegetation Present?	
Yes	No

Northcentral and Northeast Region – Interim Version

Northcentral and Northeast Region – Interim Version

US Army Corps of Engineers

# WETLAND DETERMINATION DATA FORM -- Northcentral and Northeast Region

Project/Site: Brunstetter City/County: Lorain/Trumbull Sampling Date: 11/16/12  
 Applicant/Owner: The East Ohio Gas Co. State: OH Sampling Point: 3  
 Investigator(s): L. Sayre Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): 2 Lat: 41.181174 Long: -80.832357 Datum: NAD 1984  
 Soil Map Unit Name: R8B NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_____ Surface Soil Cracks (B6)
_____ Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ Drainage Patterns (B10)
_____ High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Moss Trim Lines (B16)
_____ Saturation (A3)	_____ Marl Deposits (B15)	_____ Dry-Season Water Table (C2)
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Crayfish Burrows (C8)
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Saturation Visible on Aerial Imagery (C9)
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Stunted or Stressed Plants (D1)
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Geomorphic Position (D2)
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	_____ Shallow Aquitard (D3)
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Microtopographic Relief (D4)
_____ Sparsely Vegetated Concave Surface (B8)		_____ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____	
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present? Yes _____ No <u>X</u>	Depth (inches): _____	
(Includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute Dominant Indicator % Cover Species? Status	Dominant Test Worksheet Number of Dominant Species That Are OBL, FACW, or FAC:	Sampling Point: <u>3</u>
1. _____	_____	_____ (A)	<p>Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)</p> <p>Depth (Inches): <u>0-12</u> Matrix: <u>10/25/13</u> Color (moist): <u>70</u> Redox Features: <u>10/25/13</u> Texting: <u>10/25/13</u> Remarks: <u>10/25/13</u></p>
2. _____	_____	_____ (B)	
3. _____	_____	_____ (A/B)	
4. _____	_____	_____	
5. _____	_____	_____	
6. _____	_____	_____	
7. _____	_____	_____	
Sapling/Shrub Stratum (Plot size: _____)	_____ = Total Cover	_____	
1. _____	_____ x1 = _____	_____	
2. _____	_____ x2 = _____	_____	
3. _____	_____ x3 = _____	_____	
4. _____	_____ x4 = _____	_____	
5. _____	_____ x5 = _____	_____	
6. _____	Column Totals: _____ (A) _____ (B)	_____	
7. _____	Prevalence Index = B/A = _____	_____	
Herb Stratum (Plot size: _____)	_____ = Total Cover	_____	<p>Hydrophytic Vegetation Indicators:</p> <p>— Rapid Test for Hydrophytic Vegetation</p> <p>— Dominance Test is &gt;50%</p> <p>— Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)</p> <p>— Problematic Hydrophytic Vegetation? (Explain)</p> <p>Indicators of hydrophytic soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Definitions of Vegetation Strata:</p> <p>Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p>Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines - All woody vines greater than 3.28 ft in height.</p>
1. <u>200 matus</u>	<u>50</u> <u>4</u> <u>UPL</u>	_____	
2. <u>200 matus</u>	<u>35</u> <u>4</u> <u>FACW</u>	_____	
3. <u>Taxodium officinale</u>	<u>5</u> <u>UPL</u>	_____	
4. <u>Taxodium repens</u>	<u>5</u> <u>FACW</u>	_____	
5. <u>Quercus rubra</u>	<u>5</u> <u>FACW</u>	_____	
6. _____	_____	_____	
7. _____	_____	_____	
8. _____	_____	_____	
9. _____	_____	_____	
10. _____	_____	_____	
11. _____	_____	_____	
12. _____	_____	_____	
Woody Vine Stratum (Plot size: _____)	_____ = Total Cover	_____	<p>Hydrophytic Vegetation Present? Yes <u>X</u> No _____</p>
1. _____	_____	_____	
2. _____	_____	_____	
3. _____	_____	_____	
4. _____	_____	_____	Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 3

Depth (Inches)	Matrix	Color (moist)	%	Type	Loose	Texting	Remarks
0-12	10/25/13	70	10/25/13	20	C M LC		
12-24							
24-36							
36-48							
48-60							
60-72							
72-84							
84-96							
96-108							
108-120							
120-132							
132-144							
144-156							
156-168							
168-180							
180-192							
192-204							
204-216							
216-228							
228-240							
240-252							
252-264							
264-276							
276-288							
288-300							
300-312							
312-324							
324-336							
336-348							
348-360							
360-372							
372-384							
384-396							
396-408							
408-420							
420-432							
432-444							
444-456							
456-468							
468-480							
480-492							
492-504							
504-516							
516-528							
528-540							
540-552							
552-564							
564-576							
576-588							
588-600							
600-612							
612-624							
624-636							
636-648							
648-660							
660-672							
672-684							
684-696							
696-708							
708-720							
720-732							
732-744							
744-756							
756-768							
768-780							
780-792							
792-804							
804-816							
816-828							
828-840							
840-852							
852-864							
864-876							
876-888							
888-900							
900-912							
912-924							
924-936							
936-948							
948-960							
960-972							
972-984							
984-996							
996-1008							
1008-1020							
1020-1032							
1032-1044							
1044-1056							
1056-1068							
1068-1080							
1080-1092							
1092-1104							
1104-1116							
1116-1128							
1128-1140							
1140-1152							
1152-1164							
1164-1176							
1176-1188							
1188-1200							
1200-1212							
1212-1224							
1224-1236							
1236-1248							
1248-1260							
1260-1272							
1272-1284							
1284-1296							
1296-1308							
1308-1320							
1320-1332							
1332-1344							
1344-1356							
1356-1368							
1368-1380							
1380-1392							
1392-1404							
1404-1416							
1416-1428							
1428-1440							
1440-1452							
1452-1464							
1464-1476							
1476-1488							
1488-1500							
1500-1512							
1512-1524							
1524-1536							
1536-1548							
1548-1560							
1560-1572							
1572-1584							
1584-1596							
1596-1608							
1608-1620							
1620-1632							
1632-1644							
1644-1656							
1656-1668							
1668-1680							
1680-1692							
1692-1704							
1704-1716							
1716-1728							
1728-1740							
1740-1752							
1752-1764							
1764-1776							
1776-1788							
1788-1800							
1800-1812							
1812-1824							
1824-1836							
1836-1848							
1848-1860							
1860-1872							
1872-1884							
1884-1896							
1896-1908							
1908-1920							
1920-1932							
1932-1944							
1944-1956							
1956-1968							
1968-1980							
1980-1992							
1992-2004							
2004-2016							
2016-2028							
2028-2040							
2040-2052							
2052-2064							
2064-2076							
2076-2088							
2088-2100							
2100-2112							
2112-2124							
2124-2136							
2136-2148							
2148-2160							
2160-2172							
2172-2184							
2184-2196							

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Brunstetter City/County: Lorain/Trumbull Sampling Date: 11/16/12  
 Applicant/Owner: The East Ohio Gas Co. State: OH Sampling Point: 4  
 Investigator(s): L. Sagre Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): 2 Lat: 41.180970 Long: 80.831630 Datum: NAD 1984  
 Soil Map Unit Name: FCA NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS** – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: <u>W-4</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input checked="" type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (Inches): _____	
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (Inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (Inches): _____	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		





# WETLAND DETERMINATION DATA FORM -- Northcentral and Northeast Region

Project/Site: Brunstetter City/County: Lorain/Trumbull Sampling Date: 11/10/12  
 Applicant/Owner: The East Ohio Gas Co. State: OH Sampling Point: 5  
 Investigator(s): L. Sayre Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): 5 Lat: 41.180974 Long: 80.831341 Datum: NAD83  
 Soil Map Unit Name: bfc NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS** -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)	

## HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes _____ No <u>X</u>	Depth (Inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Water Table Present? Yes _____ No <u>X</u>	Depth (Inches): _____		
Saturation Present? Yes _____ No <u>X</u>	Depth (Inches): _____		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			





**Appendix D:**  
**Ohio Rapid Assessment Method for**  
**Wetlands v. 5.0 Rating Forms**



## Background Information

Name:	Laura Sayre		
Date:	11/15/12		
Affiliation:	EnviroScience, Inc.		
Address:	3781 Darrow Rd., Stow OH 44224		
Phone Number:	(330) 688-0111		
e-mail address:	LSayre@EnviroScienceInc.com		
Name of Wetland:	W-1		
Vegetation Community(ies):	PEM/PSS		
HGM Class(es):	Riverine		
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.			
See enclosed maps			
Lat/Long or UTM Coordinate	41.181003°N -80.838188°W		
USGS Quad Name	WARREN		
County	Trumbull		
Township	Lordstown		
Section and Subsection	—		
Hydrologic Unit Code	05030103		
Site Visit	11/15/12		
National Wetland Inventory Map	enclosed		
Ohio Wetland Inventory Map	—		
Soil Survey	enclosed		
Delineation report/map	enclosed		

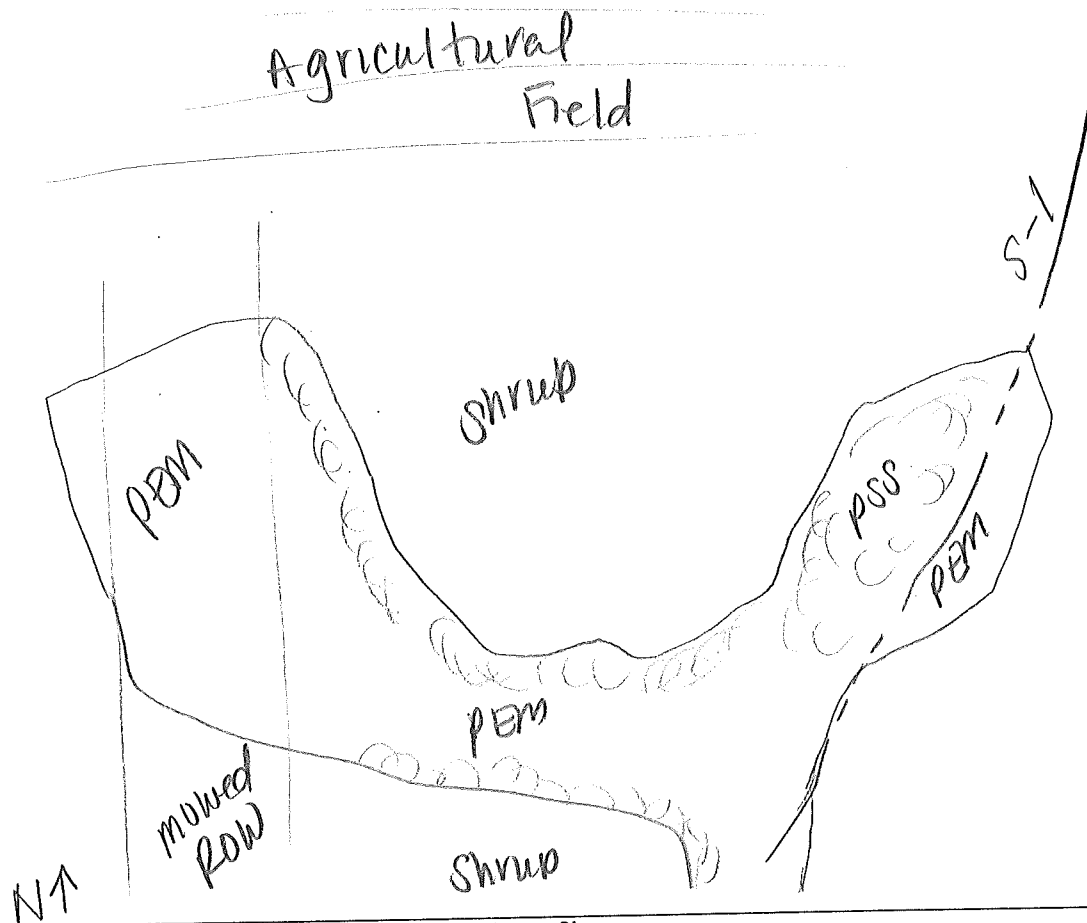
Name of Wetland:

W-1

Wetland Size (acres, hectares):

0.081 ac. onsite approx 6 ac. total

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.



Comments, Narrative Discussion, Justification of Category Changes:

Final score :

41

Category:

Mod 2

## Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland.* In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	✓	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	✓	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	✓	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	✓	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.		✓
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.		✓

**End of Scoring Boundary Determination. Begin Narrative Rating on next page.**



## Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <http://www.dnr.state.oh.us/dnap>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 2	<input checked="" type="radio"/> NO Go to Question 2
2	<b>Threatened or Endangered Species.</b> Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES  Wetland is a Category 3 wetland.  Go to Question 3	<input checked="" type="radio"/> NO Go to Question 3
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES  Wetland is a Category 3 wetland  Go to Question 4	<input checked="" type="radio"/> NO Go to Question 4
4	<b>Significant Breeding or Concentration Area.</b> Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES  Wetland is a Category 3 wetland  Go to Question 5	<input checked="" type="radio"/> NO Go to Question 5
5	<b>Category 1 Wetlands.</b> Is the wetland less than 0.5 hectares (1 acre) in size and hydrologically isolated and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES  Wetland is a Category 1 wetland  Go to Question 6	<input checked="" type="radio"/> NO Go to Question 6
6	<b>Bogs.</b> Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES  Wetland is a Category 3 wetland  Go to Question 7	<input checked="" type="radio"/> NO Go to Question 7
7	<b>Fens.</b> Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral pH (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES  Wetland is a Category 3 wetland  Go to Question 8a	<input checked="" type="radio"/> NO Go to Question 8a
8a	<b>"Old Growth Forest."</b> Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES  Wetland is a Category 3 wetland.  Go to Question 8b	<input checked="" type="radio"/> NO Go to Question 8b

8b	<b>Mature forested wetlands.</b> Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES  Wetland should be evaluated for possible Category 3 status.  Go to Question 9a	<input checked="" type="radio"/> NO Go to Question 9a
9a	<b>Lake Erie coastal and tributary wetlands.</b> Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES  Go to Question 9b	<input checked="" type="radio"/> NO Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 10	NO  Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES  Go to Question 9d	NO  Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES  Wetland is a Category 3 wetland  Go to Question 10	NO  Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 10	NO  Go to Question 10
10	<b>Lake Plain Sand Prairies (Oak Openings)</b> Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES  Wetland is a Category 3 wetland.  Go to Question 11	<input checked="" type="radio"/> NO Go to Question 11
11	<b>Relict Wet Prairies.</b> Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES  Wetland should be evaluated for possible Category 3 status  Complete Quantitative Rating	<input checked="" type="radio"/> NO Complete Quantitative Rating

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**1/30/2013 3:12:41 PM**

**in**

**Case No(s). 13-0203-GA-BNR**

Summary: Correspondence Transmitting for Filing Staff Requested Documents - Part 4  
electronically filed by Teresa Orahod on behalf of Dominion East Ohio Gas