

ARCADIS

Appendix B

Field Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: U1-1
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): CONVEX
 Slope (%): 0 Lat: 41.678893 Long: -73.581119 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: SU – SUN SILT LOAM NWI classification: PSS1E/PEM1E
 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? NO Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? NO (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 type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		If yes, optional Wetland Site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>JUNIPERUS VIRGINIANA</u>	<u>100</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)
4. _____	_____	_____	_____		
5. _____	<u>100</u>	= Total Cover	_____		
Sapling/Shrub Stratum (Plot Size: 15 FT.)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of: <u>0</u> Multiply by: <u>0</u>	
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>	
4. _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>	
5. _____	_____	_____	_____	FACU species <u>100</u> x 4 = <u>400</u>	
			= Total Cover	UPL species <u>0</u> x 5 = <u>0</u>	
				Column Totals:	<u>100</u> (A) <u>400</u> (B)
				Prevalence Index = B/A = <u>4</u>	
Herb Stratum (Plot size: 5 FT.)				Hydrophytic Vegetation Indicators:	
1. <u>UNKNOWN GRASS</u>	<u>20</u>	<u>Y</u>	<u>--</u>	Rapid Test for Hydrophytic Vegetation	
2. <u>TUSSILAGO FARFARA</u>	<u>>5</u>	_____	<u>FACU</u>	Dominance Test is >50%	
3. _____	_____	_____	_____	Prevalence index is ≤ 3.0'	
4. _____	_____	_____	_____	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	<u>20</u>	= Total Cover	_____		
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. _____	<u>0</u>	= Total Cover	_____		
Remarks: (Include photo numbers here or on a separate sheet.)					

SOIL

Sampling Point: UPLAND AT U1-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-5	ORGANIC						CONTAINS DETRITUS
5-8	10 YR 3/3	100				SAND	
8-12	10 YR 5/1	100				FINE SAND	

¹Type: C= Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	Hydric Soil Present: Yes _____ No <u>X</u>
Depth (inches): _____	

Remarks:

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"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches)	<u>0</u>	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches)	<u>4"</u>	
Saturation Present? (includes capillary fringe)	Yes _____ No <u>X</u>	Depth (inches)	<u>0"</u>	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: U2-1
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): CONVEX
 Slope (%): ~0 Lat: 41.677429 Long: -73.578702 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: SU – SUN SILT LOAM NWI classification: PEM1E/EM5F
 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 <u>X</u>	No _____			
Wetland Hydrology Present?	Yes _____	No <u>X</u>		If yes, optional Wetland Site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 30 FT.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>JUNIPERUS VIRGINIANA</u>	<u>90</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>0</u> (A)
2. <u>PRUNUS SEROTINA</u>	<u><5</u>		<u>FACU</u>	Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)
4. _____					
5. _____	<u>90</u>	= Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot Size: 15 FT.)				Prevalence Index worksheet:	
1. <u>LONICERA TATARICA</u>	<u>20</u>	<u>Y</u>	<u>FACU*</u>	<u>Total % Cover of:</u>	
2. <u>XANTHOXYLUM AMERICANUM</u>	<u>5</u>		<u>UPL</u>	OBL species	<u>0</u> x 1 = <u>0</u>
3. _____				FACW species	<u>0</u> x 2 = <u>0</u>
4. _____				FAC species	<u>0</u> x 3 = <u>0</u>
5. _____				FACU species	<u>110</u> x 4 = <u>440</u>
	<u>25</u>	= Total Cover		UPL species	<u>10</u> x 5 = <u>50</u>
<u>Herb Stratum</u> (Plot size: 5 FT.)				Column Totals:	<u>120</u> (A) <u>490</u> (B)
1. <u>UNKNOWN GRASS</u>	<u>20</u>	<u>Y</u>	<u>--</u>	Prevalence Index = B/A = <u>4.1</u>	
2. <u>DANDELION - TARAXACUM OFFICINALE</u>	<u><5</u>		<u>FACU-</u>		
3. <u>RUE ANEMONE - ANEMONELLA THALICTROIDES</u>	<u><5</u>		<u>UPL</u>	Hydrophytic Vegetation Indicators:	
4. <u>PRICKLEY ASH - ANTHOXYCUM AMERICANUM</u>	<u>5</u>		<u>UPL</u>	Rapid Test for Hydrophytic Vegetation	
5. <u>CLEAVERS BEDSTRAW - GALIUM APARINE</u>	<u><5</u>		<u>FACU</u>	Dominance Test is >50%	
6. _____				Prevalence index is ≤ 3.0'	
7. _____				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
8. _____				Problematic Hydrophytic Vegetation ¹ (Explain)	
9. _____					
10. _____	<u>25</u>	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<u>Woody Vine Stratum</u> (Plot size: 30 FT.)				Hydrophytic Vegetation Present?	
1. _____				Yes _____	No <u>X</u>
2. _____	<u>0</u>	= Total Cover			
Remarks: (Include photo numbers here or on a separate sheet.)					
UNKNOWN SPECIES NOT USED IN DOMINANCE AND PREVALENCE TESTS FOR HYDROPHYTIC VEGETATION.					

SOIL

Sampling Point: UPLAND AT U2-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-5	10 YR 3/3	100				SANDY LOAM	
5-12	10 YR 7/1	100				COARSE SAND	

¹Type: C= Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	
Depth (inches): _____	Hydric Soil Present: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks:

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"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches) _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches) _____	
Saturation Present? (includes capillary fringe)	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches) _____	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W1-1
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): NONE
 Slope (%): ~5 Lat: 41.678893 Long: -73.581119 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: FcD - FARMINGTON-GALWAY COMPLEX, HILLY, VERY ROCKY 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>		If yes, optional Wetland Site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>JUNIPERUS VIRGINIANA</u>	<u>75</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>0</u> (A)
2. <u>PLATANUS OCCIDENTALIS</u>	<u><5</u>		<u>FACW-</u>	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. <u>PRUNUS SEROTINA</u>	<u><5</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)
4. <u>ACER RUBRUM</u>	<u><5</u>		<u>FAC</u>		
5. <u>POPULUS DELTOIDES</u>	<u>10</u>		<u>FAC</u>		
	<u>85</u>	= Total Cover			
Sapling/Shrub Stratum (Plot Size: 15 FT).				Prevalence Index worksheet:	
1. <u>TARTARIAN HONEYSUCKLE - LONICERA TATARICA</u>	<u>10</u>		<u>FACU*</u>	Total % Cover of:	Multiply by:
2. _____				OBL species <u>0</u> x 1 = <u>0</u>	
3. _____				FACW species <u>0</u> x 2 = <u>0</u>	
4. _____				FAC species <u>10</u> x 3 = <u>30</u>	
5. _____				FACU species <u>85</u> x 4 = <u>340</u>	
	<u>10</u>	= Total Cover		UPL species <u>0</u> x 5 = <u>0</u>	
				Column Totals: <u>95</u> (A) <u>370</u> (B)	
				Prevalence Index = B/A =	<u>3.58</u>
Herb Stratum (Plot size: 5 FT.)				Hydrophytic Vegetation Indicators:	
1. _____				Rapid Test for Hydrophytic Vegetation	
2. _____				Dominance Test is >50%	
3. _____				Prevalence index is ≤ 3.0'	
4. _____				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____				Problematic Hydrophytic Vegetation ¹ (Explain)	
6. _____					
7. _____					
8. _____					
9. _____					
10. _____	<u>0</u>	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?	
1. _____				Yes _____	No <u>X</u>
2. _____	<u>0</u>	= Total Cover			
Remarks: (Include photo numbers here or on a separate sheet.)					

SOIL

Sampling Point: UPLAND AT W1-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 3/3	100					SILTY LOAM	

¹Type: C= Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	Hydric Soil Present: Yes _____ No <u>X</u>
Depth (inches): _____	
Remarks:	

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? (includes capillary fringe)	Yes _____ No <u>X</u>	Depth (inches) _____	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W1-1
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): WETLAND - EMERGENT Local relief (concave, convex, none): CONCAVE
 Slope (%): ~0 Lat: 41.678893 Long: -73.581119 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: SU – SUN SILT LOAM NWI classification: PSS1E/PEM1E
 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____	If yes, optional Wetland Site ID:	<u>W1-1</u>	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>POPULUS DELTOIDES</u>	<u><5</u>	_____	<u>FAC</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>3</u> (A)
2. <u>BETULA POPULIFOLIA</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____		
5. _____	<u>25</u>	<u>= Total Cover</u>	_____		
Sapling/Shrub Stratum (Plot Size: 15 FT.)				Prevalence Index worksheet:	
1. <u>BETULA POPULIFOLIA</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of:	Multiply by:
2. <u>LONICERA TATARICA</u>	<u>10</u>	_____	<u>FACU*</u>	OBL species _____	x 1 = _____
3. <u>CORNUS AMOMUM</u>	<u><5</u>	_____	<u>FACW</u>	FACW species _____	x 2 = _____
4. _____	_____	_____	_____	FAC species _____	x 3 = _____
5. _____	_____	_____	_____	FACU species _____	x 4 = _____
	<u>35</u>	<u>= Total Cover</u>	_____	UPL species _____	x 5 = _____
				Column Totals: _____	(A) _____ (B)
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = _____	
1. <u>PHRAGMITES AUSTRALIS</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:	
2. <u>SYMPLOCARPUS FOETIDUS</u>	<u><5</u>	_____	<u>OBL</u>	Rapid Test for Hydrophytic Vegetation	
3. _____	_____	_____	_____	<u>X</u> Dominance Test is >50%	
4. _____	_____	_____	_____	Prevalence index is ≤3.0'	
5. _____	_____	_____	_____	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	<u>80</u>	<u>= Total Cover</u>	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes <u>X</u>	No _____
2. _____	<u>0</u>	<u>= Total Cover</u>	_____		
Remarks: (Include photo numbers here or on a separate sheet.)					

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W2-7
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): NONE
 Slope (%): ~5 Lat: 41.677429 Long: -73.578702 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: FcB – FARMINGTON-GALWAY COMPLEX, UNDULATING, VERY ROCKY 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>		If yes, optional Wetland Site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>CARPINUS CAROLINIANA</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>1</u> (A)
2. <u>FRAXINUS AMERICANA</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
3. <u>PRUNUS SEROTINA</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>20</u> (A/B)
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
	<u>80</u>	= Total Cover			
Sapling/Shrub Stratum (Plot Size: 15 FT.)				Prevalence Index worksheet:	
1. <u>LONICERA TATARICA</u>	<u>50</u>	<u>Y</u>	<u>FACU*</u>	<u>Total % Cover of:</u>	<u>Multiply by:</u>
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>	
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>	
4. _____	_____	_____	_____	FAC species <u>10</u> x 3 = <u>30</u>	
5. _____	_____	_____	_____	FACU species <u>145</u> x 4 = <u>580</u>	
	<u>50</u>	= Total Cover		UPL species <u>0</u> x 5 = <u>0</u>	
				Column Totals: <u>155</u> (A)	<u>610</u> (B)
				Prevalence Index = B/A =	<u>3.94</u>
Herb Stratum (Plot size: 5 FT.)				Hydrophytic Vegetation Indicators:	
1. <u>LONICERA TATARICA</u>	<u>20</u>	<u>Y</u>	<u>FACU*</u>	Rapid Test for Hydrophytic Vegetation	
2. <u>RUBUS ALLEGHENIENSIS</u>	<u>5</u>	_____	<u>FACU-</u>	Dominance Test is >50%	
3. <u>ONOCLEA SENSIBILIS</u>	<u><5</u>	_____	<u>FACW</u>	Prevalence index is ≤ 3.0 ¹	
4. _____	_____	_____	_____	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
	<u>25</u>	= Total Cover			
Woody Vine Stratum (Plot size:) 30 FT.				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes _____	No <u>x</u>
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
Remarks: (Include photo numbers here or on a separate sheet.)					

SOIL

Sampling Point: UPLAND AT W2-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-1	ORGANIC					ORGANIC	
1-16	10 YR 3/3	100				SILTY CLAY LOAM	

¹Type: C= Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	Hydric Soil Present: Yes _____ No <u>X</u>
Depth (inches): _____	

Remarks:

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"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W2-7
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): WETLAND – EMERGENT/FORESTED Local relief (concave, convex, none): CONCAVE
 Slope (%): ~0 Lat: -73.578702 Long: 41.677429 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: SU – SUN SILT LOAM NWI classification: PEM1/EM5F
 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____	If yes, optional Wetland Site ID:	<u>W2-7</u>	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																												
1. <u>ACER SACCHARINUM</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That are OBL, FACW, or FAC <u>4</u> (A)																												
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)																												
3. _____	_____	_____	_____																													
4. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80</u> (A/B)																												
5. _____	<u>20</u>	= Total Cover	_____																													
Sapling/Shrub Stratum (Plot Size: 15 FT.)				Prevalence Index worksheet:																												
1. <u>CORNUS AMONUM</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	<table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center">_____</td> <td align="center">x 1 =</td> <td align="center">_____</td> </tr> <tr> <td>FACW species</td> <td align="center">_____</td> <td align="center">x 2 =</td> <td align="center">_____</td> </tr> <tr> <td>FAC species</td> <td align="center">_____</td> <td align="center">x 3 =</td> <td align="center">_____</td> </tr> <tr> <td>FACU species</td> <td align="center">_____</td> <td align="center">x 4 =</td> <td align="center">_____</td> </tr> <tr> <td>UPL species</td> <td align="center">_____</td> <td align="center">x 5 =</td> <td align="center">_____</td> </tr> <tr> <td>Column Totals:</td> <td align="center">_____</td> <td align="center">(A)</td> <td align="center">(B)</td> </tr> </table>	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)
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)																													
2. <u>JUNIPERUS VIRGINIANA</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>																													
3. <u>LONICERA TATARICA</u>	<u><5</u>	_____	<u>FACU*</u>																													
4. _____	_____	_____	_____																													
5. _____	<u>10</u>	= Total Cover	_____																													
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = _____																												
1. <u>SYMPLOCARPUS FOETIDUS</u>	<u>5</u>	_____	<u>OBL</u>																													
2. <u>PHRAGMITES AUSTRALIS</u>	<u>85</u>	<u>Y</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is >50% <u>X</u> Prevalence index is ≤3.0' Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)																												
3. <u>TYPHA LATIFOLIA</u>	<u>10</u>	<u>Y</u>	<u>OBL</u>																													
4. <u>UNKNOWN SEDGE</u>	<u><5</u>	_____	<u>--</u>																													
5. _____	_____	_____	_____																													
6. _____	_____	_____	_____																													
7. _____	_____	_____	_____																													
8. _____	_____	_____	_____																													
9. _____	_____	_____	_____																													
10. _____	<u>100</u>	= Total Cover	_____																													
Woody Vine Stratum (Plot size:) 30 FT.					Hydrophytic Vegetation Present? Yes <u>X</u> No _____																											
1. _____	_____	_____	_____																													
2. _____	<u>0</u>	= Total Cover	_____																													
Remarks: (Include photo numbers here or on a separate sheet.)																																

SOIL

Sampling Point: WETLAND AT W2-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-6	10 YR 3/1	100				SANDY SILT	
6-15	10 YR 4/4	50				SILTY CLAY	
	10 YR 3/1	50				SILTY CLAY	

¹Type: C = Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input checked="" type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	
Depth (inches): _____	Hydric Soil Present: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches) <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches) <u>3</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No _____	Depth (inches) <u>0</u>	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W3-32
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): NONE
 Slope (%): ~5 Lat: 41.674716 Long: -73.581556 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: FcB – FARMINGTON-GALWAY COMPLEX, UNDULATING, VERY ROCKY 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>		If yes, optional Wetland Site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>JUNIPERUS VIRGINIANA</u>	<u>0</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>1</u> (A)
2. <u>POPULUS DECTOIDES</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata:	<u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>25</u> (A/B)
4. _____	_____	_____	_____		
5. _____	<u>90</u>	= Total Cover	_____		
Sapling/Shrub Stratum (Plot Size: 15 FT.)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by:	
2. _____	_____	_____	_____	OBL species	<u>0</u> x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species	<u>0</u> x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species	<u>10</u> x 3 = <u>30</u>
5. _____	_____	_____	_____	FACU species	<u>90</u> x 4 = <u>360</u>
	<u>0</u>	= Total Cover	_____	UPL species	<u>10</u> x 5 = <u>50</u>
Herb Stratum (Plot size: 5 FT.)				Column Totals:	<u>110</u> (A) <u>440</u> (B)
1. <u>TUSSILAGO FARFARA</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index = B/A = <u>4.0</u>	
2. <u>ANEMONELLA THALICTROIDES</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>		
3. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
4. _____	_____	_____	_____	Rapid Test for Hydrophytic Vegetation	
5. _____	_____	_____	_____	Dominance Test is >50%	
6. _____	_____	_____	_____	Prevalence index is ≤ 3.0 ¹	
7. _____	_____	_____	_____	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
8. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
9. _____	_____	_____	_____		
10. _____	<u>20</u>	= Total Cover	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes _____	No <u>X</u>
2. _____	<u>0</u>	= Total Cover	_____		

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: UPLAND @ W3-32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	ORGANIC							
4-8	10 YR 3/2	80					SANDY LOAM	
	10 YR 5/2	20					COARSE SAND	
8-12	10 YR 6/2	80					COARSE SAND	
	10 YR 4/3	20					COARSE SAND	

¹Type: C = Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	Hydric Soil Present: Yes _____ No <u>X</u>
Depth (inches): _____	

Remarks:

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"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

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:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/22/09

Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W3-32

Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY

Landform (hillslope, terrace, etc.): WETLAND - EMERGENT FORESTED Local relief (concave, convex, none): CONCAVE

Slope (%): ~0 Lat: 41.674716 Long: -73.581556 Datum: NORTH AMERICAN 1983

Soil Map Unit Name: FcB – FARMINGTON-GALWAY COMPLEX, UNDULATING, VERY ROCKY NWI classification: _____

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? NO Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		If yes, optional Wetland Site ID: <u>W3-32</u>

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	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)
1. <u>FRAXIMUS PENNSYLVANICA</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	
2. <u>CRATAEGUS SP.</u>	<u><5</u>		<u>FACW</u>	
3. _____				
4. _____				
5. _____	<u>10</u>	<u>= Total Cover</u>		
Sapling/Shrub Stratum (Plot Size: 15 FT).				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 = _____
1. <u>CORNUS AMOMUM</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	
2. _____				
3. _____				
4. _____				
5. _____	<u>5</u>	<u>= Total Cover</u>		
Herb Stratum (Plot size: 5 FT.)				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is >50% Prevalence index is ≤ 3.0' Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>SYMPLOCARPUS FOETIDUS</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	
2. <u>UNKNOWN GRASS</u>	<u>20</u>	<u>Y</u>	<u>---</u>	
3. <u>PHRAGMITES AUSTRALIS</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____	<u>100</u>	<u>= Total Cover</u>		
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____				
2. _____	<u>0</u>	<u>= Total Cover</u>		

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WETLAND AT W3-32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	ORGANIC						ORGANIC	
1-11	10 YR 3/1	100					SILT	
4-16	10 YR 3/3	100					SANDY SILT	

¹Type: C= Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	Hydric Soil Present: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Depth (inches): _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input checked="" type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches) <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches) <u>3</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No _____	Depth (inches) <u>0</u>	

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

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/23/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W4-1
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): NONE
 Slope (%): ~5 Lat: 41.678074 Long: -73.583804 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: FcB - FARMINGTON-GALWAY COMPLEX, UNDULATING, VERY ROCKY 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 X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 YES
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>		If yes, optional Wetland Site ID: _____	

Remarks: (Explain alternative procedures here or in a separate report.)
 UPLAND DATA COLLECTION AT W4-1 IS LOCATED ADJACENT TO RAILROAD - TRACKS-FILL MATERIAL.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC	<u>0</u>	(A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>4</u>	(B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u>	(A/B)
4. _____	_____	_____	_____			
5. _____	<u>0</u>	= Total Cover	_____			
Sapling/Shrub Stratum (Plot Size: 15 FT).				Prevalence Index worksheet:		
1. JUNIPERUS VIRGINIANA	<u>10</u>	_____	FACU	Total % Cover of:		Multiply by:
2. _____	_____	_____	_____	OBL species	<u>0</u>	x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species	<u>0</u>	x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species	<u>0</u>	x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species	<u>20</u>	x 4 = <u>80</u>
	<u>10</u>	= Total Cover	_____	UPL species	<u>25</u>	x 5 = <u>125</u>
			_____	Column Totals:	<u>45</u>	(A) <u>205</u> (B)
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = <u>4.5</u>		
1. DAUCUS CAROTA	<u>10</u>	Y	UPL	Hydrophytic Vegetation Indicators:		
2. JUNIPERUS VIRGINIANA	<u>10</u>	Y	FACU	Rapid Test for Hydrophytic Vegetation		
3. VERBASCUM THAPSUS	<u>15</u>	Y	UPL	Dominance Test is >50%		
4. _____	_____	_____	_____	Prevalence index is < 3.0'		
5. _____	_____	_____	_____	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)		
7. _____	_____	_____	_____			
8. _____	_____	_____	_____			
9. _____	_____	_____	_____			
10. _____	<u>35</u>	= Total Cover	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?		
1. _____	_____	_____	_____	Yes _____	No <u>X</u>	
2. _____	<u>0</u>	= Total Cover	_____			

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/23/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W4-1
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): WETLAND - FORESTED Local relief (concave, convex, none): NONE
 Slope (%): ~0 Lat: 41.678074 Long: -73.583804 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: SU-SUN SILT LOAM, FcB-FARMINGTON-GALWAY COMPLEX, UNDULATING, VERY ROCKY, AND CuA-COPAKe GRAVELLY SILT LOAM, NEARLY LEVEL NWI classification: PEM1E/PFO1C

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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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 _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____	If yes, optional Wetland Site ID:	<u>W4-1</u>

Remarks: (Explain alternative procedures here or in a separate report.)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>FRAXINUS PENNSYLVANICA</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>3</u> (A)
2. <u>JUNIPERUS VIRGINIANA</u>	<u>10</u>		<u>FACU</u>	Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
3. <u>BETULA POPULIFOLIA</u>	<u>5</u>		<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>60</u> (A/B)
4. _____					
5. _____	<u>40</u>	= Total Cover			
Sapling/Shrub Stratum (Plot Size: 15 FT).				Prevalence Index worksheet:	
1. <u>LONICERA TATARICA</u>	<u>15</u>	<u>Y</u>	<u>FACU*</u>	Total % Cover of:	
2. <u>ALNUS RUGOSA</u>	<u><5</u>		<u>FACW+</u>	OBL species	<u> </u> x 1 = <u> </u>
3. <u>RHAMNUS CATHARTICA</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	FACW species	<u> </u> x 2 = <u> </u>
4. <u>FRAXINUS PENNSYLVANICA</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	FAC species	<u> </u> x 3 = <u> </u>
5. <u>ROSA MULTIFLORA</u>	<u><5</u>		<u>FACU</u>	FACU species	<u> </u> x 4 = <u> </u>
	<u>70</u>	= Total Cover		UPL species	<u> </u> x 5 = <u> </u>
				Column Totals:	<u> </u> (A) <u> </u> (B)
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = <u>4.0</u>	
1. <u>SKUNK CABBAGE - SYMPLOCARPUS FOETIDUS</u>	<u>5</u>		<u>OBL</u>	Hydrophytic Vegetation Indicators:	
2. <u>MARSH BEDSTRAW - GALIUM PALUSTRE</u>	<u>5</u>		<u>OBL</u>	Rapid Test for Hydrophytic Vegetation	
3. <u>UNKNOWN GRASS</u>	<u>10</u>		<u>--</u>	X Dominance Test is >50%	
4. <u>PHRAGMITES - PHRAGMITES AUSTRALIS</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	Prevalence index is <u>≤</u> 3.0'	
5. <u>WILD GERANIUM - GERANIUM MACULATUM</u>	<u>5</u>		<u>FACU</u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. <u>RUE ANEMONE - ANEMONELLA THALICTROIDES</u>	<u>>5</u>		<u>UPL</u>	Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____					
9. _____					
10. _____	<u>40</u>	= Total Cover			
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?	
1. _____				Yes	<u>X</u> No _____
2. _____	<u>0</u>	= Total Cover			

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WETLAND AT W4-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-1	10 YR 3/1	100				COARSE SAND/ GRAVEL	
1-14	10 YR 3/2	90	10 YR 4/4	10	RM	CLAY LOAM	ORGANIC STREAKING

¹Type: C= Concentration, D = Depletion, RM = Reduced Mix, CS = Covered or Coated Sand Grains.

²Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Stripped Matrix (S6) (Drop in LRR R?)	<input type="checkbox"/> 2 cm Muck (AA10) (LRR, K, L, S)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Dark Surface (S7) (MLRA 149B of LRR S)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR, K, L, R)
<input type="checkbox"/> Black Histic (A3) (except MLRA 143)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, S)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, R, S)	<input type="checkbox"/> Dark Surface (S7) (LRR, K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR, K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR, K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____	Hydric Soil Present: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Depth (inches): _____	

Remarks:

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 checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" 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 <input checked="" type="checkbox"/>	Depth (inches) <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches) <u>6</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No _____	Depth (inches) <u>0</u>	

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

Remarks:
HUMMOCK AND HOLLOW TOPOGRAPHY OBSERVED.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/23/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W5-6
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): WETLAND – FORESTED Local relief (concave, convex, none): NONE
 Slope (%): ~0 Lat: 41.673936 Long: -73.582702 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: CuA - COPAKE GRAVELLY SILT LOAM, NEARLY LEVEL NWI classification: PF01A, PFO1E, PEM1E
 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? NO Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? NO (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 <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	If yes, optional Wetland Site ID: <u>W5-6</u>		
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1. <u>JUNIPERUS VIRGINIANA</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>5</u> (A)	
2. <u>PENNSYLVANICA</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>		Total Number of Dominant Species Across All Strata:	<u>6</u> (B)
3. <u>CARPINUS CAROLINIANA</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>			Percent of Dominant Species That Are OBL, FACW, or FAC:
4. <u>ACER SACCHARNUM</u>	<u>10</u>		<u>FACW</u>			
5. <u> </u>	<u>100</u>	<u>= Total Cover</u>				
Sapling/Shrub Stratum (Plot Size: 15 FT).				Prevalence Index worksheet:		
1. <u>CARPINUS CAROLINIANA</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of: <u> </u> Multiply by:		
2. <u>LONICERA TAIARICA</u>	<u><5</u>		<u>FACU*</u>	OBL species	<u> </u> x 1 = <u> </u>	
3. <u> </u>				FACW species	<u> </u> x 2 = <u> </u>	
4. <u> </u>				FAC species	<u> </u> x 3 = <u> </u>	
5. <u> </u>				FACU species	<u> </u> x 4 = <u> </u>	
	<u>15</u>	<u>= Total Cover</u>		UPL species	<u> </u> x 5 = <u> </u>	
				Column Totals:	<u> </u> (A) <u> </u> (B)	
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = <u> </u>		
1. <u>ONOCLEA SENSIBILIS</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:		
2. <u>SYMPLOCARPUS FOETIDUS</u>	<u>5</u>	<u>Y</u>	<u>OBL</u>	Rapid Test for Hydrophytic Vegetation		
3. <u>UNKNOWN GRASS</u>	<u>25</u>	<u>Y</u>	<u>--</u>	Dominance Test is >50% <u>X</u>		
4. <u> </u>				Prevalence index is ≤ 3.0'		
5. <u> </u>				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
6. <u> </u>				Problematic Hydrophytic Vegetation ¹ (Explain)		
7. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8. <u> </u>						
9. <u> </u>						
10. <u> </u>	<u>40</u>	<u>= Total Cover</u>				
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present?		
1. <u> </u>				Yes	<u>X</u>	
2. <u> </u>				No	<u> </u>	
	<u>0</u>	<u>= Total Cover</u>				
Remarks: (Include photo numbers here or on a separate sheet.)						

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/23/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W5-7
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): WETLAND – SCRUB, SHRUB Local relief (concave, convex, none): NONE
 Slope (%): ~0 Lat: 41.673936 Long: -73.582702 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: CuA - COPAKE GRAVELLY SILT LOAM, NEARLY LEVEL NWI classification: PF01A, PFO1E, PEM1E

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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>W5-7</u>		
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. <u>POPULIS DELTOIDES</u>	<u><5</u>		FAC	Number of Dominant Species That are OBL, FACW, or FAC	<u>6</u> (A)		
2. <u>FRAXINUS PENNSYLVANICA</u>	<u>10</u>	Y	FACW		Total Number of Dominant Species Across All Strata:	<u>6</u> (B)	
3. _____						Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____							
5. _____							
	<u>10</u>	= Total Cover					
Sapling/Shrub Stratum (Plot Size: 15 FT).				Prevalence Index worksheet:			
1. <u>CORNUS AMOMUM</u>	<u>60</u>	Y	FACU	Total % Cover of: <u> </u> Multiply by: <u> </u>			
2. <u>ALNUS RUGOSA</u>	<u>20</u>	Y	FACW+	OBL species	x 1 = <u> </u>		
3. <u>FRAXINUS PENNSYLVANICA</u>	<u><5</u>		FACW	FACW species	x 2 = <u> </u>		
4. _____				FAC species	x 3 = <u> </u>		
5. _____				FACU species	x 4 = <u> </u>		
	<u>80</u>	= Total Cover		UPL species	x 5 = <u> </u>		
				Column Totals:	<u> </u> (A) <u> </u> (B)		
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = <u> </u>			
1. <u>SKUNK CABBAGE - SYMPLOCARPUS FOETIDUS</u>	<u>10</u>	Y	OBL	Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is >50% Prevalence index is ≤3.0' Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
2. <u>PHRAOMTES - PHRAGMITOS AUSTRALIS</u>	<u>10</u>	Y	FACW				
3. <u>SENSITIVE FERN - ONOCLEA SENSIBLIS</u>	<u>50</u>	Y	FACW				
4. _____							
5. _____							
6. _____							
7. _____							
8. _____							
9. _____							
10. _____							
	<u>70</u>	= Total Cover					
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____			
1. _____							
2. _____							
	<u>0</u>	= Total Cover					
Remarks: (Include photo numbers here or on a separate sheet.)							

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/23/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W5-50
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): UPLAND Local relief (concave, convex, none): NONE
 Slope (%): ~0 Lat: 41.673936 Long: -73.582702 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: CuA - COPAKE GRAVELLY SILT LOAM, NEARLY LEVEL NWI classification: PF01A, PFO1E, PEM1E
 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 FT)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>PRUNUS SEROTINA</u>	<u><5</u>		<u>FACU</u>	Number of Dominant Species That are OBL, FACW, or FAC	<u>2</u> (A)
2. <u>CARYA OVATA</u>	<u><5</u>		<u>FACU-</u>	Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
3. <u>FRAXINUS PENNSYLVANICA</u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>40</u> (A/B)
4. <u>QUERCUS ALBA</u>	<u>10</u>	<u>Y</u>	<u>FACU-</u>		
5. _____	<u>45</u>	<u>= Total Cover</u>			
Sapling/Shrub Stratum (Plot Size: 15 FT).				Prevalence Index worksheet:	
1. <u>TARTARIAN HONEYSUCKLE – LONICERA TATARICA</u>	<u>60</u>	<u>Y</u>	<u>FACU*</u>	Total % Cover of: _____ Multiply by: _____	
2. <u>SILTY DOGWOOD - CORNUS ANOMUM</u>	<u>>5</u>		<u>FACW</u>	OBL species	<u>0</u> x 1 = <u>0</u>
3. _____				FACW species	<u>70</u> x 2 = <u>140</u>
4. _____				FAC species	<u>0</u> x 3 = <u>0</u>
5. _____				FACU species	<u>70</u> x 4 = <u>280</u>
	<u>60</u>	<u>= Total Cover</u>		UPL species	<u>30</u> x 5 = <u>150</u>
				Column Totals:	<u>170</u> (A) <u>570</u> (B)
Herb Stratum (Plot size: 5 FT.)				Prevalence Index = B/A = <u>3.35</u>	
1. <u>TROUT LILLY-ERYTHRONIUM AMERICANUM</u>	<u>30</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators:	
2. <u>SENSITIVE FERN - ONOCLEA SENSIBILIS</u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	Rapid Test for Hydrophytic Vegetation	
3. <u>UNKNOWN GRASS</u>	<u>10</u>		<u>--</u>	Dominance Test is >50%	
4. _____				Prevalence index is ≤ 3.0'	
5. _____				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6. _____				Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____					
8. _____					
9. _____					
10. _____	<u>75</u>	<u>= Total Cover</u>		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 30 FT.)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
1. _____					
2. _____	<u>0</u>	<u>= Total Cover</u>			

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region (DRAFT)

Project/Site: CRICKET VALLEY/DOVER, NY City/County: DOVER/DUTCHESS Sampling Date: 4/23/09
 Applicant/Owner: CRICKET VALLEY ENERGY CENTER LLC State: NY Sampling Point: W5-50
 Investigator(s): D. CASSEL, A. ESPOSITO Section, Township, Range: DOVER, NY
 Landform (hillslope, terrace, etc.): WETLAND – EMERGENT Local relief (concave, convex, none): NONE
 Slope (%): ~0 Lat: 41.673936 Long: -73.582702 Datum: NORTH AMERICAN 1983
 Soil Map Unit Name: CuA - COPAKE GRAVELLY SILT LOAM, NEARLY LEVEL NWI classification: PF01A, PFO1E, PEM1E
 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? NO Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (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>W5-50</u>		
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: (Explain alternative procedures here or in a separate report.)					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 FT</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	<u>0</u>	= Total Cover	_____	
Sapling/Shrub Stratum (Plot Size: <u>15 FT</u>).				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: <u>X</u> Dominance Test is >50% Prevalence index is ≤ 3.0' Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>CORNUS AMOMUM</u>	<u>5</u>	_____	<u>FACW</u>	
2. <u>SALIX SP.</u>	<u>35</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	<u>40</u>	= Total Cover	_____	
Herb Stratum (Plot size: <u>5 FT</u>).				
1. <u>ONOCLEA SENSIBILIS</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
2. <u>SYMPLOCARPUS FOETIDUS</u>	<u>10</u>	<u>Y</u>	<u>OBL</u>	
3. <u>SPARGANIUM EURYCARPUM</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	<u>70</u>	= Total Cover	_____	
Woody Vine Stratum (Plot size: <u>30 FT</u>).				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	<u>0</u>	= Total Cover	_____	
Remarks: (Include photo numbers here or on a separate sheet.)				

