Sampling Point: (JAS-29

	Absoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
				Number of Dominant Species D (A)
1				That Are OBL, FACW, or FAC: (A)
2			<u></u>	Total Number of Dominant
3				Species Across All Strata: (B)
4. NA				
				Percent of Dominant Species That Are OBL_FACW_or_FAC: 0.0 (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
	·	Total Cove	er	Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:_)				FACW species x 2 =
1. Eleagnus um bellata	D	/	NE	FAC species x 3 =
				FACU species x 4 =
2				
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				D
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is $\leq 3.0^{1}$
	10 =	Total Cove	r	
50% of total cover: 5				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 574)				data in Remarks or on a separate sheet)
			201.1	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Andropogen virginicus	10		FACU	
2. Ambrosia artcinisiEolia	45	$ \longrightarrow $	FACU	¹ Indicators of hydric coil and watered hydrology must
3. Solidayo canadensis	20		FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Rosa multiFlora	8		FACU	
5. Cirsium Julgare.	6		FALU	Definitions of Four Vegetation Strata:
			UPL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Elengous umbellata	A.		012	more in diameter at breast height (DBH), regardless of
7				height.
8				Perline/Chruh Mendu plante evoluting vines loss
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	(A))			Herb – All herbaceous (non-woody) plants, regardless
115	=	Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: _4ぢ	20% of	total cover:_	10	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
2				
io M				
4				Hydrophytic
5				Vegetation
	=	Total Cove	r	Present? Yes No V
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate st	neet.)	_		
	1001.)			
				7

Sampling Point: <u>UAS-29</u>

inches)	Matrix Color (moist)	% 0	Redox Fe Color (moist)	atures %Type ¹ Loc	2 Textu	re	Remarks
3-4	10484/2			<u>//</u>		<u> </u>	Homano
			<u>[1]]</u>				
	10184/6	15					
		·					
					23		
					-(i)		
		· ··			-		
vpe: C=Co	oncentration, D=Depl	letion RM=Red	uced Matrix MS=M	asked Sand Grains	² l ocatio	n: PL=Pore Lining	n M=Matrix
	ndicators:						blematic Hydric Soils ³
Histosol			_ Dark Surface (S7)			10) (MLRA 147)
	ipedon (A2)	_) Surface (S8) (MLRA 1	47, 148)	Coast Prairie F	
Black His		_		e (S9) (MLRA 147, 14		(MLRA 147	
	n Sulfide (A4)		Loamy Gleyed Ma		-,		dplain Soils (F19)
	Layers (A5)		_ Depleted Matrix (I		-	(MLRA 136	
	ck (A10) (LRR N)	-	Redox Dark Surfa	122 June 10 Ju			Dark Surface (TF12)
	Below Dark Surface	e (A11) —	_ Depleted Dark Su		-	Other (Explain	
	rk Surface (A12)		_ Redox Depression				
-	lucky Mineral (S1) (L	.RR N,		Masses (F12) (LRR N	3		
	147, 148)		MLRA 136)				
	leyed Matrix (S4)	_		-13) (MLRA 136, 122)		³ Indicators of hyd	prophytic vegetation and
	edox (S5)	_		ain Soils (F19) (MLR			gy must be present,
	Matrix (S6)			ial (F21) (MLRA 127,		unless disturbed	d or problematic.
estrictive L	ayer (if observed):				1		
Type: Gr	and layer						
Depth (inc					Hydric	Soil Present?	Yes No
emarks:							Y
SINGINS.							
							2
							à
							à
							à
							à
						3	
						3	
						3	

WETLAND DETERMINATION DATA FORM -	Eastern Mountains and I	Piedmont Region
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Soil Map Unit Name: <u>FiF:Fiveblack</u> , Fairpoint, Kaymine soils, 30-8090 slope Stond Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u> Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> ? Are "Norma Are Vegetation <u>Soil</u> , or Hydrology <u>naturally problematic</u> ? (If needed, SUMMARY OF FINDINGS – Attach site map showing sampling point locati	Datum: NADB3 (MYP) Datum: NADB3 (MYP) Image: No in the second
Hydrophyde vegetation reserver res No Is the Sampled Area Hydric Soil Present? Yes No Is the Sampled Area Wetland Hydrology Present? Yes No Vo Remarks: Closed ponded depressions in open Field Wethand Q	Yes No
	PEM
HYDROLOGY	
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1)	 Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches): O Water Table Present? Yes No Depth (inches): O Saturation Present? Yes No Depth (inches): Wetland I (includes capillary fringe) Yes No Depth (inches): Wetland I Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available Wetland I	Hydrology Present? Yes <u>No</u> No
Remarks:	

Sampling Point: (JAG-30

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
I. NIA				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
				FACU species x 4 =
2				UPL species x 5 =
3				
4 5N				Column Totals: (A) (B)
5. N A				Developer Index D(A
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Scirpus cyperinus	15		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2 And magging wind aires	15		FACU	
2. And ropogan vinginicus 3. Posci multiFland	5			¹ Indicators of hydric soil and wetland hydrology must
3. Nosa multifiona			FAU	be present, unless disturbed or problematic.
4. Symphiotrichium dumosum				Definitions of Four Vegetation Strata:
5. Anlansia artemis: Edia	10		FACU	
6. CUPENS Striggsus	2		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				in synth
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100 =	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	Weedening Allowed wines exclose the 2.00 ft in
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2				
3				
4				Hydrophytic
5				Vegetation
	=	Total Cove	er	Present? Yes V No
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s				
	1000.7			

Sampling Point: UAS-30

	cription: (Describe	to the dep				or confirn	n the absence of	indicators.)	
Depth (inches)	Color (moist)	%	Color (moist)	ox Feature %	Type ¹	Loc ²	Texture	Remarks	
0-1	101 R 3/2	100					SiL	rtemarko	
			un dl.	~					
1-5	104B3/1	95	7.5 4R4/6	<u> </u>	<u> </u>	<u> </u>	SICL _		
	N9								
		-							
i) 	0.9				-				
						· ——	·		
-	-					· <u> </u>		11250-0	
	Concentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	Location: PL=F	Pore Lining, M=Matrix.	-ile ³ .
-	Indicators:			(07)					
Histoso			Dark Surface		an (CO) (N		2	Muck (A10) (MLRA 147)	
	Epipedon (A2) Histic (A3)		Polyvalue Be Thin Dark Su					st Prairie Redox (A16) I LRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye			47, 140)		mont Floodplain Soils (F19)	
	ed Layers (A5)		Depleted Ma		/			ILRA 136, 147)	
	luck (A10) (LRR N)		Redox Dark		-6)			Shallow Dark Surface (TF12	2)
	ed Below Dark Surfac	e (A11)	Depleted Da	rk Surface	e (F7)			r (Explain in Remarks)	
	ark Surface (A12)		Redox Depre						
	Mucky Mineral (S1) (I	_RR N,	Iron-Mangan		es (F12) (I	LRR N,			
	A 147, 148)		MLRA 13				3		
	Gleyed Matrix (S4)		Umbric Surfa					ors of hydrophytic vegetation	
	Redox (S5)		Piedmont Flo					nd hydrology must be present s disturbed or problematic.	τ,
	d Matrix (S6) Layer (if observed):		Red Parent I	viateriai (r		A 121, 141		disturbed of problematic.	_
Type:	bravel your							/	
			-				Hydric Soil Pre	esent? Yes No	
Depth (ir	icnes):						Hyunc Son Pre		
Remarks:									
						<			
							14.1		

Project/Site: Martin County Solar	City/County: Martin County Sampling Date: 11220
Applicant/Owner: _	State: K1 Sampling Point: WAS-31
Investigator(s): S.Kelley, C. Knabel	
	Local relief (concave, convex, none): <u>Convex</u> Slope (%): <u>2</u>
Subregion (LRR or MLRA): LBRM Lat: _37.7680	
	oils, 30-20% slape, Storay NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	y problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	— within a Wetland? Yes No
Remarks:	
Upland point	associated w/ wetland Q
op p.	
HYDROLOGY	Constructions (Indianteen (Antoine of the second and)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that app	
	tic Plants (B14) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
	hizospheres on Living Roots (C3) Moss Trim Lines (B16)
	of Reduced Iron (C4) Dry-Season Water Table (C2)
	n Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck	Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Expl	lain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
	2hes):
	ches): Wetland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inc (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Remarks:	

Sampling Point: محمد 31

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	12 CT	Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3	·			Species Across All Strata: (B)
4NA				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: O, O (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15		/		FACW species x 2 =
1. Eleagnus umbellata			UPL	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6	-			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:)		1		data in Remarks or on a separate sheet)
1. Ambrosia artemisifolia	50		FALU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Andropogon virginicus		•	FACU	0
3. Solidayo carriders's			MARIA	¹ Indicators of hydric soil and wetland hydrology must
4. Plantego major				be present, unless disturbed or problematic.
5. Symphio trichum dumosum			FAC	Definitions of Four Vegetation Strata:
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
7				neight.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				ing tak.
11	95			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: <u>47.5</u>		= Total Cover:		of size, and woody plants less than 3.28 ft tall.
	20% 01	total cover.	-0	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1	S .			
2				5
3NR	-			
41				Hydrophytic
5	1. 			Vegetation Present? Yes No
		= Total Cov		
50% of total cover:		total cover:		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	ription: (Describe	to the depth	needed to docum	ent the l	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix		Redox	Feature	s		
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-2)	101R4/2	75	54R 4/6	5	PL	M	SICL
	1071 5/6	20					
	10 111 700		-		<u></u>		
							• • • • • • • • • • • • • • • • • • •
2							
		·· ·					·
8							
				<u> </u>			(
	-						
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, MS	=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Bel	ow Surfac	ce (S8) (M	LRA 147,	, 148) Coast Prairie Redox (A16)
Black His	stic (A3)		Thin Dark Sur	face (S9)	(MLRA 1	47, 148)	(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleyed		F2)		Piedmont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Matr				(MLRA 136, 147)
A Proce Associate Association	ck (A10) (LRR N)		Redox Dark S		•		Very Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dark				Other (Explain in Remarks)
	ark Surface (A12)		Redox Depres				
	lucky Mineral (S1) (L	.RR N,	Iron-Mangane		es (F12) (l	RR N,	
	147, 148)		MLRA 136				3
	leyed Matrix (S4)		Umbric Surfac	• • •			³ Indicators of hydrophytic vegetation and
	edox (S5)		Piedmont Floo		and the second sec		
	Matrix (S6)		Red Parent M	aterial (F:	21) (MLR/	A 127, 147	7) unless disturbed or problematic.
	ayer (if observed):						
Type: <u>Go</u>							
Depth (inc	ches): <u> </u>		_				Hydric Soil Present? Yes No
Remarks:							

-

Project/Site: Martin Cou	inty Sol	ar	City	y/County:	rtin Cu	unity	_ Sampling Date	e: 11/2/20	
Applicant/Owner: Scurion						_ State: KY	Sampling P	oint: WAS-30	8
Investigator(s): 5.Kelley	C. Knak	sel	Sec	ction, Township	, Range:				
Landform (hillslope, terrace, e						ne): Concor	د s	Slope (%):	
Subregion (LRR or MLRA):			37.765396			2.462681		tum: NAD93/14	(YEIRS)
Soil Map Unit Name: FIF:				20-202-5	•		1.		
	/			. /		1			
Are climatic / hydrologic condi			1						
Are Vegetation, Soil			significantly dist				" present? Yes		
Are Vegetation, Soil	, or Hy	drology	naturally proble	matic?	(If needed,	explain any ansv	vers in Remarks.)		
SUMMARY OF FINDIN	GS – Atta	ach site m	ap showing sa	ampling poi	nt locatio	ons, transec	ts, important	features, etc.	
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?		Yes Yes	No No No	Is the Sam within a W	The second second	Yes 🔽	No	_	
Remarks:			Sc. 447.4						
Closed poor	ded dep	ression i	n open Field	k					
N	1.1		Wetland R						
			wernent it				C	EM	
		-			_		ţ	Ert	
HYDROLOGY									
Wetland Hydrology Indicate	ors:					Secondary Indi	cators (minimum	of two required)	
Primary Indicators (minimum	of one is re-						il Cracks (B6)		
Surface Water (A1)			True Aquatic Plants			Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)			Hydrogen Sulfide C			Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)			
Saturation (A3)			Oxidized Rhizosphe	-	ROOTS (C3)				
Water Marks (B1) Sediment Deposits (B2)			Presence of Reduct Recent Iron Reduct		ils (C6)		urrows (C8)	²)	
Drift Deposits (B3)			Thin Muck Surface		(00)	-	Visible on Aerial I	Imagery (C9)	
Algal Mat or Crust (B4)			Other (Explain in R			(Stressed Plants (
Iron Deposits (B5)							ic Position (D2)		
Inundation Visible on Ae	rial Imagery	(B7)				Shallow Ac	uitard (D3)		
Water-Stained Leaves (B	39)						raphic Relief (D4))	
Aquatic Fauna (B13)						FAC-Neutr	al Test (D5)		
Field Observations:									
Surface Water Present?		No	Depth (inches):	2					
Water Table Present?		-	Depth (inches):						
Saturation Present? (includes capillary fringe)	Yes	No	Depth (inches):		Wetland H	lydrology Pres	ent? Yes	<u>No</u>	
Describe Recorded Data (str	eam gauge,	monitoring w	ell, aerial photos, p	previous inspect	ions), if ava	ilable:			
Remarks:									
			-						

Sampling Point: WAS-32

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Demisert
3				Total Number of Dominant Species Across All Strata: (B)
4. N/A				
r				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
500/ - 54-4-1	Concernence of the second s	= Total Cove		OBL species x1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5NA				
6N[A				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
			<u> </u>	1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5//)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Scippus cyperinus	45	$ \rightarrow $	FACW	
2. Lypha angust tolia	10		OBL	Indicators of hudris call and water d hudrals or must
3. JUNCOS EFRISOS	20	$ \rightarrow $	FAU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Symphiatrichum Jumasum	8		FAC	Definitions of Four Vegetation Strata:
5. Biding Frondosa	15		FACU	Deminions of Four Vegetation Stata.
6. Scharic Ourila	2		FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				neight.
				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11				Herb - All herbaceous (non-woody) plants, regardless
		 Total Cove 		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>50</u>	20% of	total cover:_	0.0	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3NA				
4				Hydrophytic
5				
	-	Total Cove	r	Vegetation Present? Yes No
50% of total cover:	20% of	total cover:_		~
Remarks: (Include photo numbers here or on a separate s	heet.)			
	1001.)			
				2

Sampling Point: WA7-32

Profile Description: (Describe to the depth	needed to document t	he indicator	or confirm	the absence of	indicators.)
Depth <u>Matrix</u>	Redox Feat	ures			
(inches) Color (moist) %	Color (moist) %		Loc ²	Texture	Remarks
0-5 104R 3/2 95	5YR 4/10 5		PL		
			·		
	2	-		<u> </u>	
· · · · · · · · · · · · · · · · · · ·					
· · · · · · · · · · · · · · · · · · ·					
······································					
		_			
			·	2	
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Mas	ked Sand Gra	ins.		ore Lining, M=Matrix,
Hydric Soil Indicators:					s for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)				Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Su		an ann an an annai		t Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (Loamy Gleyed Matr		47, 148)		LRA 147, 148)
Hydrogen Sulfide (A4) Stratified Layers (A5)	Depleted Matrix (F3				nont Floodplain Soils (F19) LRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface				Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surf				(Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions				(Explain in Contanto)
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Ma		.RR N,		
MLRA 147, 148)	MLRA 136)				
Sandy Gleyed Matrix (S4)	Umbric Surface (F1	3) (MLRA 13	6, 122)	³ Indicate	ors of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplai	n Soils (F19)	(MLRA 14	8) wetlan	d hydrology must be present,
Stripped Matrix (S6)	Red Parent Materia	I (F21) (MLR/	A 127, 147) unless	disturbed or problematic.
Restrictive Layer (if observed):					
Type: Gravel layer	-				
Depth (inches):				Hydric Soil Pre	sent? Yes No
Remarks:					·
8					
					58

Project/Site: Martin County Solar- City/C	County: Martin County Sampling Date: 11/2/20
Applicant/Owner: Savion	State: KY Sampling Point: WAS-33
Investigator(s): 5. Kelley C. Knabel Section	on, Township, Range:N A
Landform (hillslope, terrace, etc.): Hill top Local reli	ief (concave, convex, none): Convex Slope (%): 0-5
Subregion (LRR or MLRA): LRKN Lat: 37.76545	Long: -82,462686 Datum: NAD83 (K-1=185)
Soil Map Unit Name: _ FiF: Fiveback, Forcepoint, Kauguine Soil, 30-	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Area within a Wetland? Yes No
Upland point associated	w/ Wettand R
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) True Aquatic Plants (I	
High Water Table (A2) Hydrogen Sulfide Odd Saturation (A3) Oxidized Rhizosphere	or (C1) Drainage Patterns (B10) es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	
Sediment Deposits (B2)	
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Rem	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	Wetland Hydrology Present? Yes <u>No</u>
Describe Recorded Data (stream gauge, monitoring weil, aenai protos, pre-	
Remarks:	
	1 C

Sampling Point: نام - 35

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				
				Total Number of Dominant
3	3 			Species Across All Strata: (B)
4N\A 5.				Percent of Dominant Species
5		s		That Are OBL, FACW, or FAC:
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove		OBL species x1 =
50% of total cover:	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 5M)				FACW species x 2 =
1. Eleagnus unhellata	5		UR	FAC species x 3 =
20				FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Devictor of Index . D/A
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8			·	2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	5 :	Total Cove	er	
50% of total cover:	20% of	total cover:		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: _ 5M)	0.05550.0.020			data in Remarks or on a separate sheet)
1. Solilago cavarenzis	40	1	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ambrasia artemisiFolia	30		FAW	¹ Indicators of hydric soil and wetland hydrology must
3. Bosa multiflora	10		FACU	be present, unless disturbed or problematic.
4. Elevanos umbellada	5		UPL	
				Definitions of Four Vegetation Strata:
842 ·				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Carling/Chrub Mandu slasts avaluding vises loss
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
10				,
11	0			Herb – All herbaceous (non-woody) plants, regardless
		 Total Cove 		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	20% of	total cover:_	11	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2. 1				
NIA				
3			<u> </u>	
4	<u> </u>			Hydrophytic
5				Vegetation /
		Total Cove	r	Present? Yes No 📈
50% of total cover:				
Remarks: (Include photo numbers here or on a separate s	neet.)			

Sampling Point: WAS-33

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absenc	e of indicators.)	
Depth	Matrix			ox Features					
(inches)	Color (moist)	%	Color (moist)	%	<u>Type</u> ¹	Loc ²	<u>Texture</u>	Re	marks
0-6	104B 4/2	90					SL		
	104R5/6	10						Fill laver	distubled sail
		· · · · ·) (- 2 d	
-		30						- (i)	
	4						//	1 (<u> </u>	
								<u> </u>	
+					2		(
	oncentration, D=Dep	letion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=	
Hydric Soil	ndicators:						India	cators for Problem	atic Hydric Soils ³ :
Histosol	(A1)		Dark Surface					2 cm Muck (A10) (N	ILRA 147)
Histic Ep	ipedon (A2)		Polyvalue Be	elow Surfac	ce (S8) (M	LRA 147,	148)	Coast Prairie Redo	k (A16)
Black Hi	stic (A3)		Thin Dark Su					(MLRA 147, 148)	
Hydroge	n Sulfide (A4)		Loamy Gleye		S			Piedmont Floodplai	
Stratified	Layers (A5)		Depleted Ma	trix (F3)				(MLRA 136, 147)	
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (F	6)		·	Very Shallow Dark	Surface (TF12)
Depleted	Below Dark Surfac	e (A11)	Depleted Da	rk Surface	(F7)		1	Other (Explain in Re	emarks)
Thick Da	rk Surface (A12)		Redox Depression	essions (F8	3)				
Sandy N	lucky Mineral (S1) (I	_RR N,	Iron-Mangan	ese Masse	es (F12) (L	_RR N,			
MLRA	147, 148)		MLRA 13	6)					
Sandy G	leyed Matrix (S4)		Umbric Surfa	ice (F13) (I	MLRA 13	6, 122)	³ ln	dicators of hydrophy	ytic vegetation and
Sandy R	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	8) w	etland hydrology m	ust be present,
	Matrix (S6)		Red Parent I	Material (F2	21) (MLR/	A 127, 147	') ui	nless disturbed or p	roblematic.
Restrictive L	ayer (if observed):	6							
Type: <u>G</u>	wel layor								
Depth (inc	hes): (e						Hydric Soi	il Present? Yes	No
Remarks:	14.0		17						
			.0						

Project/Site: Martin County Solar City/County: Martin	County Sampling Date: 11/2/20
Applicant/Owner: Savion	State: KI Sampling Point: WAS - 34
Investigator(s): 5. Kelley, C. Krabel Section, Township, Range	
Landform (hillstope, terrace, etc.): Deptimision Local relief (concave, convex	
Subregion (LRR or MLRA): LRRN Lat: 3),764956 Long:	
Soil Map Unit Name: FiF: Forestor, Forestor, Kaymine soils, 30-8000 slope, Store	1
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "No	rmal Circumstances" present? Yes Ves No
Are Vegetation, Soil, or Hydrology naturally problematic? (If need	ed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point loc	ations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled A	
Hydrophytic Vegetation resent: Tes No Is the Sampled Ar Hydric Soil Present? Yes No Within a Wetland?	
Wetland Hydrology Present? Yes No	
Remarks: Closed ponded depression in open Field	
Wetland S	Der Der
	PSSIPEM
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) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C Water Marks (B1) Presence of Reduced Iron (C4)	
Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches); O Saturation Present? Yes No Depth (inches); O	nd Hydrology Present? Yes No
Saturation Present? Yes Ves Depth (inches): U Wetlan (includes capillary fringe)	No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if	available:
Remarks:	

Sampling Point: WAS-34

Tree Stratum (Pior size:		Absolute	Dominant	Indicator	Dominance Test worksheet:
1. DitAbaus, Occilentalis Ib CRAIL 2. Solver new IS O 3. O IS O 4. IS O 5. IS IS 6. IS IS 7. IS O 8. IS IS 9. IS O 1. Solid writere IS IS 1. Solid vritere IS IS 2. V IS IS 1. Solid vritere ID O 2. V IS O 3. Solid vritere ID O 4. IS IS 5. IS IS 6. IS IS 7. IS O 8. IS IS 9. IS IS 1. Solve of total cover 20% of total cover 20% of total cover 20% of total cover 20% of total cover IS 1. Total Solve of total cover IS 2. Softout Solve of total cover <td>Tree Stratum (Plot size: 30m.)</td> <td>% Cover</td> <td>Species?</td> <td>Status</td> <td>Number of Dominant Species</td>	Tree Stratum (Plot size: 30m.)	% Cover	Species?	Status	Number of Dominant Species
2 50.14 misre 15 00 3 0 0 Percent of Dominant Species (B) 5 0 Percent of Dominant Species (AB) 7 25 = Total Cover (AB) 5 50% of total cover. 12.5 20% of total cover. (B) 2 0 15 20% of total cover. (Cover d) Multiply by: 3 1 2.015 20% of total cover. (Cover d) Multiply by: 3 1 2.015 20% of total cover. (Cover d) Multiply by: 4 1 2.015 2.024 (B) Prevalence index worksheet: (A) 5 1 2.015 2.024 (Courn Totals: (A) (B) 6 1 1 2.020 (B) Prevalence index worksheet: (A) (B) 7 2 2.004 (Courn Totals: (A) (B) (B) 8 2 2.005 (A) (A) (B) (B) 9 2 50% of total cover: 20% of total cover:	1 Platomis Accidentalis	ID	./	FACLI	
3. 0 4.					
4	0				Total Number of Dominant
5.	3	-	°		Species Across All Strata: (B)
5.	4	_			
6	5				
7. 2.5 = Total Cover Prevalence Index worksheet: SaptingShub_Stratum (Plot size: 15 A 10 20% of total cover: 5 7.4 1. Scalis viaro- 10 20% 064 2. 10 20% 064 3. 10 20% 064 5. 10 20% 064 6. 10 20% 064 7. 10 20% 064 8. 9. 10 20% 9. 3 10 20% of total cover 9. 3 10 20% of total cover 1. TypeInce Index is 3.0° 3 10 20% of total cover 1. TypeInce Index is 3.0° 3 3 10 1. TypeInce Index is 3.0° 3 3 10 1. TypeInce Index is 3.0° 3 10 20% of total cover 2. Stripuis Cuptoridus 35 7 10 2. Stripuis Cuptoridus 35 7 10 2. Stripuis Cuptoridus 35 7 10 2. Stripuis Cuptoridus 10 <t< td=""><td></td><td></td><td></td><td></td><td>I hat Are OBL, FAGW, or FAC: (A/B)</td></t<>					I hat Are OBL, FAGW, or FAC: (A/B)
2.5 = Total Cover Total % Cover of: Multiply by: 50% of total cover: 12.5 20% of total cover: C 3.4 10 064 FACW species x 2 =	6				Brousiones Index worksheet:
50% of total cover: 20% of total cover: OBL species x1 = Sapting/Shub_Stratum (Plot size: 1D 0BL FACW species x2 = 1. Gall's viarce 1D 0BL FACW species x2 = 3. 1 0BL Species x4 = 3. 1 0BL Species x4 = 4. 1 0BL Species x4 = 5. 1 Name (A) (B) 7. 1 Name (A) (B) 9. 1 Name (A) (B) 9. 1 Species x4 = (B) 1 Name 1 Reparts (B) 9. 1 Name 1 Name (B) 1 1 Name 1 Name (B) 1 1 Name 1 Name (B) (C) 1 1 Name 1 Name (C) (C) (C) 2 1 Nam Nam Name (C)	7				
Solve of total cover: [2.5] 20% of total cover: [ACW species		25	= Total Cov	er	Total % Cover of:Multiply by:
SapinalShrub Stratum (Plot size: 15 A 1 A	50% of total cover: 10.5	20% of	total cover:	5	OBL species x 1 =
1		2070 01	total cover.		
2 FACU species x 4 = 3					
3	1. Salit nigra	10	$ \rightarrow $	OBL	
3	2 1				FACU species x 4 =
4					
5					
5	4				Column Totals: (A) (B)
6. Thydrophytic Vegetation Indicators: 7.					
7.	36				Prevalence Index = B/A =
7.	ō				Hydrophytic Vegetation Indicators:
8.	7		-		
9	8				(and the second s
3 - Frevalence index is \$3.0° 50% of total cover: 20% of total cover: 4 - 5 - 1 - 1 - 2 - 2 - 3 - 4 - 5 - 6 - 7 - 6 - 7 - 6 - 7 - 8 - 9 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -				-	2 - Dominance Test Is >50%
	9				3 - Prevalence Index is ≤3.0 ¹
Subs of total cover: 20% of total cover: Herb Stratum (Plot size: 5 1. Tupho 25 2. Scrous Cuperious 25 3. Scrous Cuperious 25 3. Scrous Cuperious 20% of total cover:			= Total Cove	er	
Herb Stratum (Plot size: 5	50% of total cover:	20% of	total cover:		
1. Type and an autoritifedim TD DBL 2. Scrous Cuperious D5 Problematic Hydrophytic Vegetation (Explain) 1. dicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 4.			-		data in Remarks or on a separate sheet)
1. 10. 10. 11. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13			1	a.21	Problematic Hydrophytic Vegetation ¹ (Explain)
3.	1. lypha angustitolia	-10		OPL	
3.	2. SCIPOUS CUDERINUS	25		FAYW	
4				• • • • • • • • • • • • • • • • • • • •	Indicators of hydric soil and wetland hydrology must
5.					be present, unless disturbed or problematic.
6	4				Definitions of Four Vegetation Strata:
6	5				
7					
8.					
9	1				height.
9	8				One lie of Ohen has Mine the share to share the state of
10. m) tall. 11. 95 = Total Cover 50% of total cover: 47.5 20% of total cover: 19 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:)) 1.			*		
11					
$\frac{95}{20\% \text{ of total cover:} \underline{47.5}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover:} \underline{19}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover:} \underline{19}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover:} \underline{19}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover:} \underline{19}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover:} \underline{19}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover:} \underline{19}} = \text{Total Cover}$					ing tait.
95 = Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:)) 1	11,				Herb All herbaceous (non-woody) plants, regardless
50% of total cover: 47.5 20% of total cover: 19 Woody vine - All woody vines greater than 3.28 ft in height. 1		95 -	= Total Cove	er	
Woody Vine Stratum (Plot size:) 1	50% of total cover: 47.5	20% of	total cover:	19	
1 2 3N A 4 5		2070 01			Woody vine - All woody vines greater than 3.28 ft in
4	woody vine Stratum (Plot size:)				height.
4	1				
4	2 1				×
4					
5	3NA		-		
5	4				Hydrophytic
= Total Cover Present? Yes No	5.				
50% of total cover: 20% of total cover:			T-1-1.0-		
Remarks: (Include photo numbers here or on a separate sheet.)	50% of total cover:	20% of	total cover:_		
	Remarks: (Include photo numbers here or on a separate s	heet.)			
r					
F					
κ					
r					
r					
ĸ					
E					
			*:		

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Sampling Point: WAS-34

	cription: (Describe	to the de				or contirn	n the absence o	i indicators.)	
epth nches)	Color (moist)	%	Color (moist)	ox Features %	Type ¹	Loc ²	Texture	Rem	arks
-8	10485/1	92	10 VR 5/8	8	<u>C</u>	M	SILL		
				_					
dric Soil	Indicators:	letion, RM	=Reduced Matrix, M		Sand Gra		Indicate		tic Hydric Soils ³ :
Black Hi Hydroge	pipedon (A2) istic (A3) en Sulfide (A4)		Dark Surfac Polyvalue B Thin Dark S Loamy Gley	elow Surfac urface (S9) ed Matrix (F	(MLRA 1		148) Coa (1 Pie	n Muck (A10) (ML ast Prairie Redox (MLRA 147, 148) dmont Floodplain	(A16)
2 cm Mu Deplete Thick Da	d Layers (A5) uck (A10) (LRR N) d Below Dark Surfac ark Surface (A12)		Depleted Ma Redox Dark Depleted Da Redox Depr Redox Depr	Surface (F6 irk Surface (essions (F8	(F7))		Ver	MLRA 136, 147) y Shallow Dark Si er (Explain in Ren	
MLR/ Sandy G Sandy F	Mucky Mineral (S1) (I A 147, 148) Gleyed Matrix (S4) Redox (S5) I Matrix (S6)	LRR N,	Iron-Mangar MLRA 13 Umbric Suff Piedmont FI Red Parent	86) ace (F13) (N oodplain So	/ILRA 13 (ils (F19) (6, 122) (MLRA 14	18) wetla	ators of hydrophyt Ind hydrology mus is disturbed or pro	st be present,
Type:	Layer (if observed) rave langer ches): 8						Hydric Soil P	resent? Yes	No
marks:									

Project/Site: Martin County Solar City/	County: Martin County Sampling Date: 11/2/20
Applicant/Owner: Sauten	State: KY Sampling Point: UAS-35
	ion, Township, Range: NA
	lief (concave, convex, none): <u>Convet</u> Slope (%):
Subregion (LRR or MLRA): Lat: Lat:	
Soil Map Unit Name: FIF: Firdolock, Fuirpoint, Kaymine Soils 30	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sar	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
had a set of the set of the	al working 5
Upland point associated	w/ werland -
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) True Aquatic Plants	(B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Oc	
Saturation (A3) Oxidized Rhizospher	res on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduce	d Iron (C4) Dry-Season Water Table (C2)
	on in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (_
Algal Mat or Crust (B4) Other (Explain in Rei	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
	5

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VEGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: WP6-35	
		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: <u>30M</u>)		Species?		Number of Dominant Species	
1. Platanus occidentalis			FACW	That Are OBL, FACW, or FAC:	(A)
				Total Number of Dominant	
3				Species Across All Strata:	(B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 20	
5				That Are OBL, FACW, or FAC:	(A/B)
6				Prevalence Index worksheet:	
7	20	= Total Cov		Total % Cover of:Multiply by:	
50% of total cover: 15	= 20% of	total cover:	er	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15m)				FACW species x 2 =	
1. Eleganus umbellata	80		UPL	FAC species x 3 =	
2				FACU species x 4 =	
3				UPL species x 5 =	
4				Column Totals: (A)	(B)
5					
6				Prevalence index = B/A =	
7				Hydrophytic Vegetation Indicators:	
8				1 - Rapid Test for Hydrophytic Vegetation	
9.			-	2 - Dominance Test is >50%	
	80 -	Total Cove		3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: _40				4 - Morphological Adaptations ¹ (Provide suppo	orting
Herb Stratum (Plot size: 5m)		2 <u>1</u> 29		data in Remarks or on a separate sheet)	
1. Polistichum aristichroidles	5		FAW	Problematic Hydrophytic Vegetation ¹ (Explain)	
2. Lonicera japanica		1	FAW		
3. Viola Socaria	15	Ľ		¹ Indicators of hydric soil and wetland hydrology mu be present, unless disturbed or problematic.	ıst
4. Botrypus virginianus	5		FALU		
5. Elegands umbellista	10	/		Definitions of Four Vegetation Strata:	
6. Asdenium platerneuron				Tree - Woody plants, excluding vines, 3 in. (7.6 cn	n) or
7				more in diameter at breast height (DBH), regardles height.	sof
8					
9				Sapling/Shrub – Woody plants, excluding vines, le	
10				than 3 in. DBH and greater than or equal to 3.28 ft m) tall.	0
11.					
	47 =	Total Cove		Herb – All herbaceous (non-woody) plants, regardl of size, and woody plants less than 3.28 ft tall.	less
50% of total cover: <u>23.5</u>					
Woody Vine Stratum (Plot size:)	-	_		Woody vine – All woody vines greater than 3.28 ft height.	in
1				- Toight.	
2.					
3. NIA					
4.					
5.				Hydrophytic Vegetation	
		Total Cove	er .	Present? Yes No	
50% of total cover:					
Remarks: (Include photo numbers here or on a separate sl					-

73

Profile Description: (Describe to the depth	n needed to document the indicator or confi	rm the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	Texture
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	
0-4 101B4/3 100		Sil
······································		
s <u></u> ss		
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		
·		
······································		
¹ Type: C=Concentration, D=Depletion, RM=F Hydric Soil Indicators:	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histosof (A1) Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 14	
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148)	MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 1	47) unless disturbed or problematic.
Restrictive Layer (if observed):		
Type: Gravel layer	-	
Depth (inches): 4	-	Hydric Soil Present? Yes No
Remarks:		

Project/Site: Martin County Solar City/C	ounty: Martin County Sampling Date: 11/2/20
Applicant/Owner: owner owner owner	State: _ KY Sampling Point: WAS- 36
	on, Township, Range: N/A
	ef (concave, convex, none): <u>Cancaule</u> Slope (%): <u>2</u>
Subregion (LRR or MLRA): <u>LRR P</u> Lat: <u>37.764704</u>	Long: -82,469735 Datum: NAD83(KMRP>)
Soil Map Unit Name: FiB: Five black, Foirpoint, Kaymine soils,	0-696510900, Storup NWI classification: MA
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Closed Jepression in open Field	
Wetland T	PEM
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) True Aquatic Plants (
High Water Table (A2) Hydrogen Sulfide Odd	
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Ren	and a second secon
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): D	
Water Table Present? Yes No Depth (inches):	_ / /
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
Doron () () () ()	

	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)
	Percent of Dominant Species
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
 Better Andrew States and the states 	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:
	1 - Rapid Test for Hydrophytic Vegetation
	2 - Dominance Test is >50%
	General S - Prevalence Index is ≤3.0 ¹
	4 - Morphological Adaptations ¹ (Provide supporting
	data in Remarks or on a separate sheet)
5 DRI	Problematic Hydrophytic Vegetation ¹ (Explain)
Che Prices	¹ Indicators of hydric soil and wetland hydrology must
EAU.	be present, unless disturbed or problematic.
n <u>Pracus</u>	Definitions of Four Vegetation Strata:
	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
	more in diameter at breast height (DBH), regardless of
	height.
	Sapling/Shrub – Woody plants, excluding vines, less
	than 3 in. DBH and greater than or equal to 3.28 ft (1
	m) tall.
	Herb – All herbaceous (non-woody) plants, regardless
= Total Cover	of size, and woody plants less than 3.28 ft tall.
20% of total cover:	Woody vine – All woody vines greater than 3.28 ft in
	height.
	e.
	8
· · ·	Hydrophytic
	Vegetation
= Total Cover	Present? Yes No No
	20% of total cover:

Tree Stratum (Plot size: _____)

Sampling Point: WAS-36

Absolute Dominant Indicator Dominance Test worksheet:

% Cover Species? Status

Sampling Point: WAS-36

Profile Desc	cription: (Describe t	to the depth	needed to docur	nent the in	ndicator	or confirm	n the absence	of indicators.)	
Depth	Matrix	Redox Features							
(inches)	Color (moist)	_%	Color (moist)	%	Type ¹	Loc	<u>Texture</u>	Rei	marks
0-6	104B 3/2	45 -	54R 3/4	5	C	M	SIL		
(a)									
		98							
								-	
				-					
<u></u>	<u>.</u>							-	
			· · · · · · · · · · · · · · · · · · ·						
¹ Type: C=Co	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL	=Pore Lining, M=	Matrix.
Hydric Soil									atic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (M	LRA 147)
	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (M	LRA 147,		oast Prairie Redox	
Black Hi	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)	
	n Sulfide (A4)		Loamy Gleye		-2)			edmont Floodplair	19 D
	Layers (A5)		Depleted Mat					(MLRA 136, 147)	
	ick (A10) (LRR N)		Redox Dark S					ery Shallow Dark S	
	Below Dark Surface	(A11)	Pepleted Dar				Ot	ther (Explain in Re	emarks)
the second se	ark Surface (A12)		Redox Depre			00.1			
	lucky Mineral (S1) (L	KK N,	Iron-Mangan		is (F12) (I	LKK N,			
	147, 148) ileyed Matrix (S4)		MLRA 130			6 422)	³ Indi	actors of hydrophy	tic vegetation and
and a second	edox (S5)		Piedmont Flo					land hydrology mu	
American Street and American Street	Matrix (S6)		Red Parent M					ess disturbed or p	
	ayer (if observed):								
Type: 6									
A Read of the second se	ches): 10						Hydric Soil I	Present? Yes	No
Remarks:							Inyune Sonn	resent: res_	
Remarks.									

Project/Site: Martin County Solar City/Co	bunty: Martin Count-1 Sampling Date: (1/2/20
Applicant/Owner: Souten	State: KY Sampling Point: WAS-37
Investigator(s): S. Kelley C. Knabel Sectio	
Landform (hillslope, terrace, etc.):Local relie	
Subregion (LRR or MLRA): LRAN Lat: באראסה רבי Lat: באראסה רבי באראסה באראס באראסה באראסה ב	
Soil Map Unit Name: FIB: Fiveblock, Fairpoint, Kaymine soil ,0-69.	
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	
Are Vegetation, Soil, or Hydrology significantly disturb	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
to a land a second led	with woldend T
Upland point associated	WHAT OPENANDE I
and the second s	
Upland point associated In a recently cleared powerline	
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) True Aquatic Plants (E	
High Water Table (A2) Hydrogen Sulfide Odo	
	s on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Rem	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No <u>/</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	ious inspections), if available:
Remarks:	

Set in a lot

Sampling Point: WAS-37

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	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1)	<u>% Cover Species? Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:
2 3		Total Number of Dominant Species Across All Strata:
3 4N/K 5		Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
6		Prevalence Index worksheet:
7		Total % Cover of:Multiply by:
	= Total Cover	OBL species
	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
1		FACU species x 4 =
2		UPL species x 5 =
3		
4		Column Totals: (A) (B)
5. N A		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9		3 - Prevalence Index is $\leq 3.0^{1}$
	= Total Cover	
	20% of total cover:	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5A)		data in Remarks or on a separate sheet)
1. Androproven virginicus	10 FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ambrosia artemisifilia		
3. Seturia pumila		¹ Indicators of hydric soil and wetland hydrology must
4. Digitania sanguinalis	15 1 FAUL	be present, unless disturbed or problematic.
5		Definitions of Four Vegetation Strata:
•		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		more in diameter at breast height (DBH), regardless of
		height.
8		Sapling/Shrub – Woody plants, excluding vines, less
9	· · · · · · · · · · · · · · · · · · ·	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11	- (l	Herb – All herbaceous (non-woody) plants, regardless
	<u> </u>	of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)	<u>5</u> 20% of total cover: 9,4	Woody vine – All woody vines greater than 3.28 ft in height.
1		
2	ni(
3NA	· · · · · · · · · · · · · · · · · · ·	
4		Hydrophytic
5		Vegetation
	= Total Cover	Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate	sheet.)	a ²

Profile Desc	ription: (Describe	to the dept	th needed to docum	nent the i	ndicator	or confirm	n the absen	ce of indicate	ors.)	
Depth	Matrix	N /		x Features		1 2	÷		D	
(inches)	Color (moist)		Color (moist)	%	_Type ¹	_Loc ²	<u>Texture</u>	-	Remarks	
0-5	10 YR 3/2	99	54R 5/8		C	M	SL	-		_
	-		· · · · · · · · · · · · · · · · · · ·) (2			
					-		-			
								_	_	
				2000-000			0			
			÷				-	-		
								_		
	*	· · · · · · · · · · · · · · · · · · ·	·		-		-	_		
17 0.0							24			
Hydric Soil	ncentration, D=Dep	letion, RM=	Reduced Matrix, MS	s=masked	Sand Gra	ains.		PL=Pore Lini icators for Pr		
			Devis Durfees	(07)			ina			-
Histosol			Dark Surface Polyvalue Be		(SQ) /M	0 0 4 4 4 7	149)	2 cm Muck (/		
Black His	bipedon (A2)		Thin Dark Su				140)	Coast Prairie (MLRA 14		
	n Sulfide (A4)		Loamy Gleye			47, 140)		Piedmont Flo		(F19)
	Layers (A5)		Depleted Mat		2)			(MLRA 13		(113)
	ck (A10) (LRR N)		Redox Dark S		6)			Very Shallow		e (TF12)
	Below Dark Surface	e (A11)	Depleted Dar				_	Other (Expla		
	rk Surface (A12)	- ()	Redox Depre				_			-7
	lucky Mineral (S1) (L	.RR N,	Iron-Mangane			RR N,				
	147, 148)	,	MLRA 130							
	leyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	3	ndicators of hy	/drophytic ver	getation and
	edox (S5)		Piedmont Flo	odplain Sc	oils (F19)	(MLRA 14	l8)	wetland hydro	logy must be	present,
	Matrix (S6)		Red Parent M					unless disturb	ed or problem	natic.
	ayer (if observed):									
Type: <u>G</u>	raud layer									/
Depth (inc	ches): _5						Hydric Se	oil Present?	Yes	No 🔨
Remarks:							4.			

Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 11/2/20
Applicant/Owner: Saujon	State: KY Sampling Point: UAS - 38
Investigator(s): S.Kelley C. Knabel Secti	
Landform (hillslope, terrace, etc.): Local rel	
· · · · ·	Long: -82, 473463 Datum: NAD83(KYFP)
Soil Map Unit Name: F:B: Fivedolock, Foispoint Kontinie soil, 0-	1
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the Converted Area
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks: Closed depression in cleared area	
Wetland	0
In cleared power-line	PEM
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) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Od	
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	
Sediment Deposits (B2) Recent Iron Reductio Drift Deposits (B3) Thin Muck Surface (0	
Algal Mat or Crust (B4) Other (Explain in Rer	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): O	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	
Saturation Present? Yes Ves No Depth (inches): ()	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

3

Sampling Point: WAS-38

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1)	Contraction of the second s	Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4N\R 5				Percent of Dominant Species That Are OBL, FACW, or FAC:(00 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
50% of total cover:		= Total Cov		OBL species x 1 =
	20% 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				FACU species x 4 =
2				UPL species x 5 =
3				
4		. <u> </u>		Column Totals: (A) (B)
5. N A				Prevalence Index = B/A =
6	. <u> </u>			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Comparison of Hydrophytic Vegetation
9				
		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5m)				data in Remarks or on a separate sheet)
1. Carex Franki	25	./	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. JUNIUS OFFICIENS	8		FACUD	
3. Sciepus cyperinus			FACIN	¹ Indicators of hydric soil and wetland hydrology must
4. Symphiatrichum Junisum			FACW	be present, unless disturbed or problematic.
			FACUS	Definitions of Four Vegetation Strata:
5. Cyperus strigosus				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Seturia punila		\neg	FAL	more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9		. <u> </u>	. <u> </u>	than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	20% of	total cover:		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3. NA	-			
4				
5			-	Hydrophytic Vegetation
		Total Cove		Present? Yes No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate s				

Profile Desc	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
0-5	104R 4/1	95	54R 3/4	5	<u> </u>	M	CL	
								5×1 ×
							-	
								· (7
			17					
	1 					<u> </u>		
						<u> </u>		
1Tupo: C-C	oncentration, D=Depl	otion PM-P	aduced Matrix MS	Maskad	Sand Gr		² Location: E	PL=Pore Lining, M=Matrix.
Hydric Soil			eudee matrix, mo	-wasked		1113.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(\$7)				2 cm Muck (A10) (MLRA 147)
	bipedon (A2)		Polyvalue Bel		ce (S8) (M	LRA 147.		Coast Prairie Redox (A16)
Black Hi			Thin Dark Sur					(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			,,	F	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat		,		_	(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F	6)		_ \	/ery Shallow Dark Surface (TF12)
Depleted	Below Dark Surface	(A11)	Depleted Darl	 Surface 	(F7)			Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depres	Contraction of the second				
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (I	.RR N,		
	147 , 148)		MLRA 136					
· · · · · ·	ileyed Matrix (S4)		Umbric Surfac					licators of hydrophytic vegetation and
	edox (S5)		Piedmont Floo				·	etland hydrology must be present,
	Matrix (S6)		Red Parent M	aterial (F	21) (MLR/	A 127, 147	7) ur	less disturbed or problematic.
	ayer (if observed):							
	revel layer							
Depth (ind	ches): 5						Hydric Soi	Present? Yes No
Remarks:								

Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 11 2 20
Applicant/Owner: Source	State: KY Sampling Point: (JAS-39
Investigator(s): S. Kelley, C. Knabel Section	
Landform (hillslope, terrace, etc.): Terrace Local reli	
Subregion (LRR or MLRA): LARN Lat: 37.765779	Long: -82, 473478 Datum: NA083 (KYFIPS)
Soil Map Unit Name: FiB: Fireblock, Fairpoint Keywine soils, 0-69,	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
Upland point Associ Area recently cleared entirely of Eleagnus	ated w/ Wettand U
opiere point for	
Area recently cleared entirely of Eleagnus 1	umbellata
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) True Aquatic Plants (I	B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odd	
Saturation (A3) Oxidized Rhizosphere	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	I Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction	n in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Ren	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No V Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), if available:
Remarks:	

Sampling Point: WA5-39

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:
2				
				Total Number of Dominant
3		(Species Across All Strata: (B)
4. NA				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				
		-		Prevalence Index worksheet:
7	505 C			Total % Cover of:Multiply by:
		= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:_		
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1,				FAC species x 3 =
2				FACU species x 4 =
				UPL species x 5 =
3			·	Column Totals: (A) (B)
4N P	·		<u> </u>	(A)(B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	r	
50% of total cover:	20% of	total cover:_		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5n.)				data in Remarks or on a separate sheet)
1. Aposining connabinum	1.0	/	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
. HDOSINING COMPOLITIONI		\sim		
2. Solidago canadensis			FAU	¹ Indicators of hydric soil and wetland hydrology must
3. Phytolaccia canericana		\checkmark	FACU	be present, unless disturbed or problematic.
4. Ambrosia artomisifolia	5		FACU	Definitions of Four Vegetation Strata:
5				Deminions of Pour Vegetation Strata.
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6	·		Ŧ	more in diameter at breast height (DBH), regardless of
7,				height.
8	·			Sarling/Shrub Woody plants evoluting visco loss
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				main o mit BBH and greater than or equal to 0.20 it (i
11	0.000			Herb – All herbaceous (non-woody) plants, regardless
. frm		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:	5 20% of	total cover:	19	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1.			1	
о Э				
2		.		
3				
4		 00		Hydrophytic
5				Vegetation
		= Total Cove	r	Present? Yes No
50% of total cover:				1
Remarks: (Include photo numbers here or on a separate s	sneet.)			
				/
				1.
				1°

Sampling Point: WAS-39

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Features			
<u>(inches)</u>	Color (moist)		Color (moist)	%	Type ¹	_Loc ²	Texture Remarks
0-4.5	104R5/6	70					Gic
	104R 4/3	30					5:6
) 			
							· · · · · · · · · · · · · · · · · · ·
					1		
		<u> </u>			, 		
				19 10			
		, 			<u> </u>		
		78. 12:50 8	r of the lat the		<u> </u>		
	ncentration, D=Depl	etion, RM=F	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I							Indicators for Problematic Hydric Soils ³ :
Histosol	A. 16		Dark Surface				2 cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be				
Black His			Thin Dark Su	÷ .		47, 148)	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye	10 100000-000	-2)		Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat		~		(MLRA 136, 147) Very Shallow Dark Surface (TF12)
	ck (A10) (LRR N) Below Dark Surface	(A11)	Redox Dark S Depleted Dar		-		Other (Explain in Remarks)
	rk Surface (A12)	(ATT)	Redox Depre				Other (Explain In Remarks)
	ucky Mineral (S1) (L		Iron-Mangane			DDN	
	147, 148)	nn n,	MLRA 136		5 (I 12) (I	-NN N,	
	leyed Matrix (S4)		Umbric Surfa			6 122)	³ Indicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo			-	
	Matrix (S6)		Red Parent M	-		-	-
	ayer (if observed):				., (,	
	ravel layer						
	hes): 4.5		_				Hydric Soil Present? Yes No
· · · · · · ·	nes).			_			
Remarks:							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region Project/Site: Martin County Solar City/County: Martin County Sampling Date: 11/2 Applicant/Owner: Savien State: Ky Sampling Point: WAS - 40 Investigator(s): S.Kelley, C. Knale) Section, Township, Range: NA Landform (hillslope, terrace, etc.): Hilltop Local relief (concave, convex, none): Concave Slope (%): D Subregion (LRR or MLRA): LRRN Lat: 37.778921 Long: -82.475016 Datum: NAD83 (K-IFIPS) Soil Map Unit Name: FiB: Fiveblack Fairpoint, Kay mine Soils, 0-690 5/000, NWI classification: N/A 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 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 Is the Sampled Area Yes / No_ Yes No No Hydric Soil Present? within a Wetland? Yes No Wetland Hydrology Present? Remarks: Closed depression in open Field. , Wetland V Vey disturbed due to cottle grazin PEM HYDRÖLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) ____ Surface Soil Cracks (B6) ____ True Aquatic Plants (B14) ____ Sparsely Vegetated Concave Surface (B8) Surface Water (A1) ___ Hydrogen Sulfide Odor (C1) ___ High Water Table (A2) ___ Drainage Patterns (B10) ___ Oxidized Rhizospheres on Living Roots (C3) ____ Moss Trim Lines (B16) Saturation (A3) Presence of Reduced Iron (C4) Water Marks (B1) Dry-Season Water Table (C2) ____ Recent Iron Reduction in Tilled Soils (C6) Sediment Deposits (B2) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) ___ Other (Explain in Remarks) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aguitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: No ____ Depth (inches): 0 Surface Water Present? Yes _____ No ____ Depth (inches):____ Water Table Present? Wetland Hydrology Present? Yes / No Saturation Present? _ No _____ Depth (inches):__ Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Sampling Point: الماج- 40

	Absolute Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size:) 1)	<u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species (A)
2 3		Total Number of Dominant Species Across All Strata: 3 (B)
4. N A		
5	·	- Percent of Dominant Species - That Are OBL, FACW, or FAC:(A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
50% of total cover:	= Total Cover 20% of total cover:	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)	20 % 01 10121 00001	FACW species x 2 =
		FAC species x 3 =
		FACU species x 4 =
2		UPL species x 5 =
3		_ Column Totals: (A) (B)
4		
5N/K	·	Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		- 1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9		3 - Prevalence Index is ≤3.0 ¹
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)	05 / 500	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Sctaria pumila		-
2. Persecaria penvisyhanian		¹ Indicators of hydric soil and wetland hydrology must
3. Cynadan dactylon		- be present, unless disturbed or problematic.
4		Definitions of Four Vegetation Strata:
5		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		more in diameter at breast height (DBH), regardless of
7	· · · · · · · · · · · · · · · · · · ·	height.
8		Sapling/Shrub – Woody plants, excluding vines, less
9	······································	than 3 in. DBH and greater than or equal to 3.28 ft (1
10		- m) tall.
11		- Herb - All herbaceous (non-woody) plants, regardless
0.0	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover:5	20% of total cover:	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)		height.
1		-
2	<u> </u>	
3NA		
4		Hydrophytic
5		Vegetation
	= Total Cover	Present? Yes No
50% of total cover:	20% of total cover:	-
Remarks: (Include photo numbers here or on a separate s	heet.)	

SUIL										int: <u>who-to</u>
Profile Desc	cription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirn	n the absence	of indicato	ors.)	
Depth	Matrix		Redo	x Feature	S					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_ Loc ²			Remarks	
D-4	104R 4/1	98	104R 6/8	2	C	M	50	J 		
				_						
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	iins.	² Location: P	L=Pore Lini	ng, M=Matrix.	
Hydric Soil									oblematic Hy	dric Soils ³ :
Histosol Histic Ep Histic Ep Black Hi Hydroge Stratifier 2 cm Mu Depleted Thick Da	(A1) Dipedon (A2)		 Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Iron-Mangane 	low Surfac rface (S9) d Matrix (l rix (F3) Surface (F k Surface ssions (F8	(MLRA 1 F2) 6) (F7) 3)	47, 148)	148) 2 0 P V	cm Muck (A coast Prairie (MLRA 14 riedmont Flo (MLRA 13 rery Shallow	A10) (MLRA 1 4 Redox (A16) 7, 148) podplain Soils (47) (F19) (TF12)
MLRA Sandy G	A 147, 148) Bleyed Matrix (S4)		MLRA 130	5) ce (F13) (MLRA 13	6, 122)			/drophytic vege	
	edox (S5)		Piedmont Flo					-	logy must be p	
	Matrix (S6)		Red Parent M	laterial (F	21) (MLRA	A 127, 147	7) un	ess disturbe	ed or problema	itic.
	_ayer (if observed):									
Type: <u>6</u>	round layer	_)						/	/
Depth (inc	ches): 4		6				Hydric Soil	Present?	Yes	No
Remarks:							1			
							ð			

Project/Site: Martin County Solar City/C	county: Mart's County Sampling Date: 11/2/20
Applicant/Owner: Savina	State: K1 Sampling Point: UA5-41
Investigator(s): 5. Kellen C. Knabel Section	
Landform (hillslope, terrace, etc.): Hillmo	
Subregion (I RR or MIRA): LRBN Lat: 37 764947	Long: <u>-B2.47509</u> Datum: <u>NAp 83 (M</u> FHS)
Soil Map Unit Name: FiB: Fiveblack, Fairpoint Kaynaine soils, 0-	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes <u>Ves</u> No
Remarks:	
lipland point acc	ociated w/ Wetland V
Opposite point cesse	werkand v
Veg disturbed by recent cattle grazing	
HYDRÖLOGY	
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) True Aquatic Plants (I	B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odd	or (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizosphere	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	I Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction	n in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Rem	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:
Remarks:	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant 3 (D)
3				Species Across All Strata: (B)
4NA				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>33.3</u> (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
201 AND 201 ALC 1	20/0 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				
2		. <u></u>		FACU species x 4 =
3				UPL species x 5 =
4. /				Column Totals: (A) (B)
5. NA				
				Prevalence Index = B/A =
6			-	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is $\leq 3.0^{1}$
		= Total Cove	er	25
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: _5k)				data in Remarks or on a separate sheet)
1. Cynadon dachdon	35	1	FALU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Plantage major		-4-	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Sctaria pumila	30		FAC	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9	•			than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	90	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	· · · · · · · · · · · · · · · · · · ·			
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3NA				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No Ves
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s				
Temarka. (include photo numbera nere or on a separate a	sheet.y			

Profile Description: (Describe to the depth	needed to document the indicator or confirm	n the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
0-4 104R4/2 100		SCL
<u>0-+</u> 10 1k 9k 100	······································	
· · · · ·	· ·	· · · · · · · · · · · · · · · · · · ·
<u> </u>		· · · · · · · · · · · · · · · · · · ·
		2
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	148) Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	<u> </u>
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148)	MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147	 unless disturbed or problematic.
Restrictive Layer (if observed):		
Type: Gravel layer		
Depth (inches): _4		Hydric Soil Present? Yes No _/
Remarks:		
		20

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Master County Solar City/Cou	unty: Martin County Sampling Date: 11/3/20
Applicant/Owner: Savion	State: KY Sampling Point: WAS-42
Investigator(s): S.Kelley, C. Knabel Section	
Landform (hillslope, terrace, etc.): Local relief	
Subregion (LRR or MLRA): LRRN Lat: 37,741069	
Soil Map Unit Name: FiF: Fiveblock, Fairpoint, Kaspaine Soil 30-80%	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbe	
Are Vegetation, Soil, or Hydrology naturally problematic	
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	- the Converted Asso
Hudrin Spil Drocent?	s the Sampled Area vithin a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Closed depression in Eleagnus clearing	
Wetland W	
To lated	PEM
Isolated	FERR
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) True Aquatic Plants (B1	
High Water Table (A2) Hydrogen Sulfide Odor	
Saturation (A3) Oxidized Rhizospheres Water Marks (B1) Presence of Reduced Ir	
Valer Marks (B1) Presence of Reduced in Recent Iron Reduced in Recent Iron Reduction i	
Drift Deposits (B3) Thin Muck Surface (C7)	•
Algal Mat or Crust (B4) Other (Explain in Remai	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes V No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	us inspections), if available:
Remarks:	
	I

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover Species? Status</u>	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: 3 (B)
4. NA		
5		Percent of Dominant Species That Are OBL, FACW, or FAC: 6 (A/B)
		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
500/ - 64 - 1	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		
1		FAC species x 3 =
2		FACU species x 4 =
3	·	UPL species x 5 =
4		Column Totals: (A) (B)
- NIA		
		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9	·	3 - Prevalence Index is ≤3.0 ¹
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5A)		
1. Dicanthelium clandestinum	25 FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Juncus effusus		
3. Carex Frankii		¹ Indicators of hydric soil and wetland hydrology must
4. Symphic tricher dumosum		be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
5. Arthmixon hispidis		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Ambrosice artemisifolla		more in diameter at breast height (DBH), regardless of
7		height.
8		Sapling/Shrub – Woody plants, excluding vines, less
9		than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11		
	100 = Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in
1		height.
2 3NA		
3		
4		Hydrophytic
5		Vegetation
	= Total Cover	Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate s	heet.)	

Profile Description: (Describe to the dep	th needed to docum	ent the indicator	or confirm	the absence	of indicators.)
Depth Matrix	Redo>	Features			
(inches) Color (moist) %	Color (moist)	<u>% Type¹</u>	Loc ²	Texture	Remarks
0-3 10YR 4/2 70	54R 4/6	5 C	M	SL	
10485/6 25	·				
					
·					
		<u> </u>			
	3				
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS	=Masked Sand Gra	ins.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil Indicators:					tors for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface	(S7)		2	cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)		ow Surface (S8) (M	LRA 147.		past Prairie Redox (A16)
Black Histic (A3)		face (S9) (MLRA 1			(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed				edmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Mat				(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark S				ery Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark	Surface (F7)			her (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depres				
Sandy Mucky Mineral (S1) (LRR N,	Iron-Mangane	se Masses (F12) (L	.RR N,		
MLRA 147, 148)	MLRA 136)			
Sandy Gleyed Matrix (S4)	Umbric Surfac	ce (F13) (MLRA 13	6, 122)	³ Indi	cators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floor	odplain Soils (F19)	(MLRA 14	8) wet	land hydrology must be present,
Stripped Matrix (S6)	Red Parent M	aterial (F21) (MLR/	a 127, 147) unle	ess disturbed or problematic.
Restrictive Layer (if observed):					
Type: Gravel layer					
Depth (inches): <u>3</u>				Hydric Soil I	Present? Yes
Remarks:	-			1	
Remarks.					

WETLAND DETERMINATION DATA FO	RM – Eastern Mountains	and Piedmont Region
Project/Site: Martin County Solar	City/County: Martin Cou	Aty Sampling Date: 11/3 20
Applicant/Owner: Soution		State: KY Sampling Point: (1)AS-43
Investigator(s): S. Kelley, C. Knabel	Section, Township, Range: N	
Landform (hillslope, terrace, etc.): Long		
Subregion (LRR or MLRA): Lat: Lat:		-412606 Datum: NAD83(KYHPS)
Soil Map Unit Name: FiF: Fileblack, Fairpoint, Kaymine soil		
Are climatic / hydrologic conditions on the site typical for this time of ye		
Are Vegetation, Soil, or Hydrology significantly		ircumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If needed, exp	plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point location	s, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Ves No	Is the Sampled Area within a Wetland?	Yes No
Upland point associ	ated w/ Wethan	id w
HYDROLOGY		
Wetland Hydrology Indicators:	<u>S</u>	econdary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		_ Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Pl		_ Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfic Saturation (A3) Oxidized Rhizes	pheres on Living Roots (C3)	_ Drainage Patterns (B10) _ Moss Trim Lines (B16)
Water Marks (B1) Presence of Re		_ Dry-Season Water Table (C2)
	luction in Tilled Soils (C6)	_ Crayfish Burrows (C8)
Drift Deposits (B3)		_ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain i	n Remarks)	_ Stunted or Stressed Plants (D1)
Iron Deposits (B5)	-	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	_	_ Shallow Aquitard (D3)
Water-Stained Leaves (B9)	_	_ Microtopographic Relief (D4)
Aquatic Fauna (B13)		_ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches)		
Surface Water Present? Yes No Depth (inches) Water Table Present? Yes No Depth (inches)		
Saturation Present? Yes No Depth (inches)		Irology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo		· · · · · · · · · · · · · · · · · · ·
	, previous inspections), il availa	
Remarks:		
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Sampling Point: (JAS-43

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30M)	and the low sector with a feature of the low sector with the low s	Species?		Number of Dominant Species
1. Acer rubrum	5		FAC	That Are OBL, FACW, or FAC: (A)
2.	1.1			
3	-			Total Number of Dominant Species Across All Strata: 4 (B)
3.				Species Across All Strata: (B)
4 <u>NIR</u>				Percent of Dominant Species
5			1	That Are OBL, FACW, or FAC:(A/B)
6				
7				Prevalence Index worksheet:
2 4	5	= Total Cov		Total % Cover of:Multiply by:
50% of total cover: 🔔 🦽				OBL species x 1 =
	20 % 01	IUIAI COVEL.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 M	00	/		FAC species x 3 =
1. Eleagnus umbellatu	45		UPL	
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7,				1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
	95	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 47.5		total cover	19	4 - Morphological Adaptations ¹ (Provide supporting
the second se	20% 01	total cover.	-11-	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: <u>5m</u>)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Phytolacca americana		2.	FALU	
2. Rosa Multi Flora	10		FALU	1
	15	/	UPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	-			Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7	_			height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
10				
11	0.0	-		Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 15	20% of	total cover:	6	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1.				
2. 1				
		·		
3. <u>N//</u>				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	heet)			
Sementer (molece prote numbers here of on a separate s				
<i>a</i> .				

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Profile Description: (Describe to the dept	h needed to document the indicator or confirm	n the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
0-3 10yB 4/2 100		
		· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·	
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148)	MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147	
Restrictive Layer (if observed):		
Type: Grave Lever		
Depth (inches): 3		Hydric Soil Present? Yes No
	_	
Remarks:		
		.8
1		
4		

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/Co	bunty: Martin County Sampling Date: 11/3/20
Applicant/Owner: Savion	State: KY Sampling Point: WAS-44
Investigator(s): S.Kelley, C. Knabel Section	
Landform (hillslope, terrace, etc.): Ditch Local relie	
Subregion (LRR or MLRA): LRRN Lat: 37.760914	
Soil Map Unit Name: _ F: B: Fiveblock, Fair point, Kay nine soils, 6-3	
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	
Are Vegetation, Soil, or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology significantly distance	
SUMMARY OF FINDINGS – Attach site map showing sam	
	;; ,,,,,,
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
	within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
Remarks.	
Wetland	
Drainage ditde @ end of Stream 7, hydrology likely s	goes subsurface PEM
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) True Aquatic Plants (B	14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor	r (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced I	
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C7	
Algal Mat or Crust (B4) Other (Explain in Remain Control of C	arks) Stunted or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): O	
Water Table Present? Yes Ves No Depth (inches):	_ / /
Saturation Present? Yes Ves Depth (inches): ()	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ous inspections), if available:
Remarks:	
54	

Sampling Point: w₩-44

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1)	<u>% Cover Species?</u> Status	Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2 3		Total Number of Dominant Species Across All Strata:3(B)
4. N Ps 5		Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6		
7		Prevalence Index worksheet:
	= Total Cover	Total % Cover of:Multiply by:
50% of total cover:	20% of total cover:	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: /SM)		FACW species x 2 =
1. Acer negundo	10 FAL	FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
4	·	Column Totals: (A) (B)
5	······	Prevalence Index = B/A =
7		Hydrophytic Vegetation Indicators:
8		1 - Rapid Test for Hydrophytic Vegetation
9		∠2 - Dominance Test is >50%
	10 = Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	20% of total cover:	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:)		data in Remarks or on a separate sheet)
	25 _/ OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Symphiotrichum Jumosum	10 FAC	
3. Eleo charis compressor		¹ Indicators of hydric soil and wetland hydrology must
4. Persecaria pennsylvanica		be present, unless disturbed or problematic.
5		Definitions of Four Vegetation Strata:
6		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7 8		height.
9		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
	TO = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>35</u>	20% of total cover:14	Weedwaine All weedwaines greater than 2.28 ft in
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
2	·	
3. NA		
3N/K	a	
4		Hydrophytic
5		Vegetation Present? Yes No No
50% of total cover:	= Total Cover 20% of total cover:	
Remarks: (Include photo numbers here or on a separate s	heet.)	

Profile Desc	ription: (Describe	to the dept	n needed to docum	ent the i	ndicator c	or confirm	the absence of	indicator	s.)		
Depth	Matrix			K Features			_		20.11		
(inches)	Color (moist)		Color (moist)	%	Type	Loc ²	Texture		Remark	S	
0-8	104R 3/1	80	7.5184/4	20	<u> </u>	M	SICL				
		1							-		
						<u> </u>					
					-						
	-						2				
	(<u></u>)										
1Tuno: C=C	oncentration, D=Dep	lotion DM-E	Poducod Matrix MS	-Mackad	Sand Gra	ine	² Location: PL=P	oro Lining	A M-Matri	le	
Hydric Soil			reduced matrix, mo	-Maskeu	Sand Gra	1115.	Indicator				ioils ³ :
Histosol			Dark Surface	(97)					0) (MLRA	-	
	bipedon (A2)		Polyvalue Bel	· ·	e (S8) (M	RA 147				-	
Black Hi			Thin Dark Sur					LRA 147	-	•)	
	n Sulfide (A4)		Loamy Gleye			,,	647 V		dplain Soi	ls (F19)	
17 The second	Layers (A5)		Depleted Mat	-				LRA 136,	5	. ,	
	ick (A10) (LRR N)		Kedox Dark S	Surface (F	6)				Dark Surfa	ce (TF12	2)
Depleted	Below Dark Surface	e (A11)	Depleted Darl	k Surface	(F7)		Other	r (Explain	in Remar	ks)	
Thick Da	ark Surface (A12)		Redox Depres	ssions (F8	3)						
Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masse	es (F12) (L	RR N,					
	A 147, 148)		MLRA 136	1.5							
	leyed Matrix (S4)		Umbric Surfac					-	rophytic v	-	
	edox (S5)		Piedmont Floo						gy must b		t,
	Matrix (S6)		Red Parent M	aterial (F2	21) (MLRA	127, 147)) unless	disturbed	d or proble	matic.	
	_ayer (if observed):										
Type:											
Depth (ind	ches): <u>රි</u>		-				Hydric Soil Pre	sent?	Yes	No	
Remarks:											

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/C	ounty: Martin Counter	4 S	ampling Date: 11 3 20
Applicant/Owner: Savion			Sampling Point: WAS-45
Investigator(s): 5. Kelley, C. Knobel Section			
Landform (hillslope, terrace, etc.): Hillslope Local reli		Alexal	Slape (9()):
Subregion (LRR or MLRA): LARN Lat: Lat:			Datum: <u>NAD83(KH</u> FIPS)
Soil Map Unit Name: FiB: Fivedolock, Frigpoint, Kaymine soils, 6			
Are climatic / hydrologic conditions on the site typical for this time of year? Y			
Are Vegetation, Soil, or Hydrology significantly distur	ed? Are "Normal Circu	umstances" pre	sent? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	tic? (If needed, explain	n any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations,	transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	Is the Sampled Area	ę	
Wetland Hydrology Present? Yes No	within a Wetland?	Yes	No
Remarks:			
Upland point associated w/ (Jetland X		
Upland point associated of			
HYDROLOGY			
Wetland Hydrology Indicators:	Seco	ondary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	2	Surface Soil Cr	
Surface Water (A1) True Aquatic Plants (I	14)	Sparsely Veget	ated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odd		Drainage Patter	
Saturation (A3) Oxidized Rhizosphere	s on Living Roots (C3)	Moss Trim Line	s (B16)
Water Marks (B1) Presence of Reduced	iron (C4)	Dry-Season Wa	iter Table (C2)
Sediment Deposits (B2) Recent Iron Reduction	in Tilled Soils (C6)	Crayfish Burrov	vs (C8)
Drift Deposits (B3) Thin Muck Surface (C		Saturation Visit	le on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Rem			ssed Plants (D1)
Iron Deposits (B5)		Geomorphic Po	
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitar	
Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopograph FAC-Neutral Te	
Field Observations:		AC-Neutral Te	51 (D3)
Surface Water Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches):			
Saturation Present? Yes No Depth (inches):	Wetland Hydrol	loav Present?	Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	ous inspections), if available:	:	
Remarks:			ä
	-		

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	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:) 1	% Cover	Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 0	(A)
2				Total Number of Dominant	(7
3				/ /	(B)
				Percent of Dominant Species	
5					(A/B)
6				Prevalence Index worksheet:	-
7					
		= Total Cov		Total % Cover of: Multiply by:	
50% of total cover:	20% of	total cover:		OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 5-)		-1		FACW species x 2 =	
1. Eleogras univelleta	15_	V	UPL	FAC species x 3 =	
2				FACU species x 4 =	
3				UPL species x 5 =	
4				Column Totals: (A)	_ (B)
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	s
7					
8.				1 - Rapid Test for Hydrophytic Vegetation	
9.			2	2 - Dominance Test is >50%	
	15 =	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹	
50% of total cover:5				4 - Morphological Adaptations ¹ (Provide supp	orting
Herb Stratum (Plot size: <u>570</u>)				data in Remarks or on a separate sheet)	
1. Lonicera japonica	20		FACU	Problematic Hydrophytic Vegetation ¹ (Explain	1)
	30	1	FACU		
			UPL	¹ Indicators of hydric soil and wetland hydrology m	ust
4. Phytolacch americana	10		FALU	be present, unless disturbed or problematic.	
5. Setaria ormila	-10-		FAK	Definitions of Four Vegetation Strata:	
	5		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 c	m) or
6. Plantayo major			PACO	more in diameter at breast height (DBH), regardle	ss of
7				height.	
8				Sapling/Shrub - Woody plants, excluding vines,	less
9				than 3 in. DBH and greater than or equal to 3.28 f m) tall.	ft (1
10					
11	9			Herb - All herbaceous (non-woody) plants, regard	dless
		Total Cove	er	of size, and woody plants less than 3.28 ft tall.	
50% of total cover:	20% of	total cover:		Woody vine - All woody vines greater than 3.281	ft in
Woody Vine Stratum (Plot size:)				height.	_
1	-		(
3. NA					
3. N PF					
4				Hydrophytic	
5				Vegetation	
		Total Cove		Present? Yes No V	
50% of total cover:		total cover:_			
Remarks: (Include photo numbers here or on a separate s	heet.)				
					-
1					

	ription: (Describe	to the deptr	needed to docur	nent the i	indicator v	or commit	the absence	or maroute	513.)	
Depth	Matrix			x Features	<u> </u>					
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4	101B 4/2	95		<u> </u>			SCL			
	10 YR 5/8	5						Distur	ned soil in	nelision
4-6	104R 5/6	100					SL			
		100					0-			
k 2								-		
		<u> </u>								
								-		
17		-	New York Strategies Add		Cand Or		21	-Dees List	an Manhala	
Hydric Soil	oncentration, D=Dep	letion, RM=F	Reduced Matrix, Ma	S=Masked	Sand Gra	ins.			ng, M=Matrix. oblematic Hyd	ria Saila ³
-				(07)					-	
Histosol			Dark Surface		- (00) (14	0.0447			A10) (MLRA 14	-7)
Histic Ep	bipedon (A2)		Polyvalue Be				148)		Redox (A16)	
	n Sulfide (A4)		Thin Dark Su Loamy Gleye			47, 140)	D	(MLRA 14	odplain Soils (l	=10)
	Layers (A5)		Depleted Ma		2)		F	(MLRA 13		(3)
	ck (A10) (LRR N)		Redox Dark		6)		V		Dark Surface	(TE12)
	Below Dark Surface	∋ (A11)	Depleted Dat	•					in in Remarks)	
	ark Surface (A12)	,	Redox Depre							
	lucky Mineral (S1) (L	.RR N,	Iron-Mangan		-	.RR N,				
	147, 148)		MLRA 13							
	leyed Matrix (S4)		Umbric Surfa	ce (F13) (I	MLRA 13	6, 122)	³ Indi	icators of hy	ydrophytic vege	tation and
	edox (S5)		Piedmont Flo	odplain So	oils (F19)	MLRA 14	B) we	tland hydro	logy must be pr	esent,
Stripped	Matrix (S6)		Red Parent M	Aaterial (F2	21) (MLR/	A 127, 147) unl	ess disturb	ed or problema	tic.
	ayer (if observed):									
Type:	provel layer		-							
Depth (inc	ches):						Hydric Soil	Present?	Yes	No
Remarks:										
										Ŷ
										*
										Υ.
										X
										×
										÷

	- Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 11/3 20
Applicant/Owner: Savian	State: KY Sampling Point: WAS-46
Investigator(s): 5, Kelley C. Kinabel Section	
Landform (hillslope, terrace, etc.): Local rel	ief (concave, convex, none): Cowcoll, Slope (%): O
Subregion (LRR or MLRA):RRN Lat: 37.762991	Long: -82,473785 Datum: NAD83 (KYFIPS)
Soil Map Unit Name: _ FiB: Fireblock Fairpoint, Kaymine soil, 6-3	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	(os No (If no ovnlain in Domarks)
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes <u>No</u>
Remarks:	
Closed Depression	
Wetland Y	
	PEM
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) True Aquatic Plants ((B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Od	
Saturation (A3) Oxidized Rhizosphere	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	d Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reductio	n in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C	C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Rer	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): O	_ / /
Saturation Present? Yes Ves Depth (inches): O	Wetland Hydrology Present? Yes No No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
Nonarka.	
2	
(#)	
*35X	
	ä

1020

Sampling Point: (JPS-26

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	1	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:
1 2				
3				Total Number of Dominant Species Across All Strata: (0 (B)
4. N A			00	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				That Are OBL, FACW, OF FAC (AB)
				Prevalence Index worksheet:
7		= Total Cov		Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15M)		total bover.		FACW species x 2 =
1. Fraxinus pennsylvanica	5	/	FACUS	FAC species x 3 =
2. ALER Negundo	16		FAC	FACU species x 4 =
			ring.	UPL species x 5 =
3V			·	Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7	<u> </u>			1 - Rapid Test for Hydrophytic Vegetation
8		·	(<u></u>	2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 7.5	20% of	total cover:	3	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 57)	_	/		,
1. Carex Frank:	25		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Scippus cuperinus	20		FACIN	1
3. Symphio Frichum Jumasum	35	1	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Persecaria pennsylvanica	15		FACW	
5. Lonicera imponica	10		FACU	Definitions of Four Vegetation Strata:
6. Bidens Frondosa	20	1	FACUS	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9		<u> </u>		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11	105			Herb – All herbaceous (non-woody) plants, regardless
50% state 1 2 6	125 =	Total Cove	15	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>62.5</u>	20% of	total cover:_		Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30M)	1		FACU	height.
1. Lonicera japonica			FFLU	
2				
3				
4				Hydrophytic
5				Vegetation
		Total Cove		Present? Yes Ves No
50% of total cover: <u>6,5</u>	20% of 1	total cover:	0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth Matrix	R	edox Features	3	
nches) Color (moist)	% Color (moist)			Remarks
0-10 104R4/1	85 75 YR 3/4	15 <u>C</u> M	5:6	
	· · · · · · · · · · · · · · · · · · ·			
ype: C=Concentration, D=Depl	etion, RM=Reduced Matrix	MS=Masked Sand Grains.		re Lining, M=Matrix.
dric Soil Indicators:				for Problematic Hydric Soils ³ :
_ Histosol (A1)	Dark Surf			Muck (A10) (MLRA 147)
_ Histic Epipedon (A2)		Below Surface (S8) (MLRA		Prairie Redox (A16)
Black Histic (A3)		Surface (S9) (MLRA 147, 14	-	RA 147, 148)
Hydrogen Sulfide (A4)		eyed Matrix (F2)		ont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted		2. Bubbbb	RA 136, 147)
2 cm Muck (A10) (LRR N)		ark Surface (F6)		hallow Dark Surface (TF12)
Depleted Below Dark Surface		Dark Surface (F7)	Other	(Explain in Remarks)
Thick Dark Surface (A12)		pressions (F8)		
Sandy Mucky Mineral (S1) (L	RR N, Iron-Mang	ganese Masses (F12) (LRR M	l,	
MLRA 147, 148)	MLRA	136)		
Sandy Gleyed Matrix (S4)	Umbric Se	urface (F13) (MLRA 136, 122		rs of hydrophytic vegetation and
_ Sandy Redox (S5)	Piedmont	Floodplain Soils (F19) (MLR	A 148) wetland	hydrology must be present,
Stripped Matrix (S6)	Red Pare	nt Material (F21) (MLRA 127	, 147) unless d	disturbed or problematic.
A				
strictive Layer (if observed):				
Type: Gravel layer			Hydric Soil Pres	ent? Yes No
Type: Gravel layer Depth (inches): 10			Hydric Soil Pres	ent? Yes 🗸 No
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	ent? Yes 🛴 No
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	eent? Yes <u></u> No
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	eent? Yes <u>, No</u> No
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	eent? Yes <u>, No</u>
Type: Gravel layer Depth (inches): 10			Hydric Soil Pres	eent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	eent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	ent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u> <u>No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u> <u>No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No </u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u> <u>No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u> <u>No</u>
Type: <u>Gravel layer</u> Depth (inches): <u>10</u>			Hydric Soil Pres	nent? Yes <u>, No</u>
Type: Gravel layer Depth (inches): 10			Hydric Soil Pres	nent? Yes <u>, No </u>
Type: Gravel layer Depth (inches): 10			Hydric Soil Pres	nent? Yes <u>, No </u>
Type: Gravel layer			Hydric Soil Pres	rent? Yes <u>, No</u>
Type: Gravel layer Depth (inches): 10			Hydric Soil Pres	eent? Yes <u>, No</u>
Type: Gravel layer Depth (inches): 10			Hydric Soil Pres	ent? Yes <u>, No</u> <u>No</u>

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin Coun	tysolar	City/County: Markin C	Sampling Date: U/2/20	
Applicant/Owner: Saujon	1.		State: KY Sampling Point: WAS-47	í.
Investigator(s): S.Kelley, C.	. Krabel	Section, Township, Range:		
Landform (hillslope, terrace, etc.)		_ Local relief (concave, convex,		
Subregion (LRR or MLRA):	1	3/	02,473658 Datum: NAD83(KVE	ipss
0		0115, 6-30% slages, Ston-		
		1 1 1		P
	1	of year? Yes No		
	_, or Hydrology signific		nal Circumstances" present? Yes No	
Are Vegetation, Soil			d, explain any answers in Remarks.)	
SUMMARY OF FINDING	S – Attach site map show	wing sampling point loca	tions, transects, important features, etc.	
Hydrophytic Vegetation Presen Hydric Soil Present? Wetland Hydrology Present?	nt? Yes No Yes No Yes No	Is the Sampled Are. within a Wetland?	a Yes No	
Remarks:				
	Upland point ass	ociated w/ Wetle	und Y	
HYDROLOGY		(a.		
Wetland Hydrology Indicators			Secondary Indicators (minimum of two required)	
	f one is required; check all that a		Surface Soil Cracks (B6)	
Surface Water (A1)		atic Plants (B14)	Sparsely Vegetated Concave Surface (B8)	
High Water Table (A2)		Sulfide Odor (C1)	_ Drainage Patterns (B10)	
Saturation (A3) Water Marks (B1)		Rhizospheres on Living Roots (C3 of Reduced Iron (C4)	 Moss Trim Lines (B16) Dry-Season Water Table (C2) 	
Sediment Deposits (B2)		on Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)	
Drift Deposits (B3)		(Surface (C7)	Saturation Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		plain in Remarks)	Stunted or Stressed Plants (D1)	
Iron Deposits (B5)			Geomorphic Position (D2)	
Inundation Visible on Aeria	I Imagery (B7)		Shallow Aquitard (D3)	
Water-Stained Leaves (B9))		Microtopographic Relief (D4)	
Aquatic Fauna (B13)			FAC-Neutral Test (D5)	
Field Observations:				
The second of an and second	Yes No Depth (in			
	Yes No Depth (in			
(includes capillary fringe)	Yes <u>No</u> <u>No</u> <u>Depth</u> (ir	photos, previous inspections), if a	d Hydrology Present? Yes No	
	in gauge, nomening weil, dena	prioros, previous inspections), il u		
Remarks:				

Sampling Point: 1175-47

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				
				Total Number of Dominant
3 4N k				Species Across All Strata: > (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove	er	Total % Cover of:Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: ドル)				FACW species x 2 =
	70	/	1101	FAC species x 3 =
1. Eleagnus umbellata	10		DPL	
2	<u> </u>			FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				8
				Prevalence Index = B/A =
б				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
		= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:5				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: _54)	2070 01		/1	data in Remarks or on a separate sheet)
	20	1	F. 1	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Golidago canadensis	20	-++	FALL	
2. Viola soraria	25	\checkmark	FACU	
3. Bateveds Vinigians	5		FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	15	/	FAU	
5. Asplenium electrinicition			FACO	Definitions of Four Vegetation Strata:
			FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
	15_	\rightarrow		more in diameter at breast height (DBH), regardless of
7. Eleagnus umbellata	8		UPL	height.
8. Tox: codeniron radicans	2		FAC	Carling/Charles Mandu slanta avaluding visage lage
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.	-			
11. <u></u>	90		·	Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 46	10 =	Total Cove		of size, and woody plants less than 3.28 ft tall.
	20% of	total cover:_	18.7	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30,)		1		height.
1. Lonicera japonica	10	1	FACU	
2.				
3	8			
4				Hydrophytic
5				Vegetation
5	=	Total Cove	er	Present? Yes No
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			•

 \boldsymbol{F}_{i}^{i}

Sampling Point: 64-47

2045). ·····		D I I I		irm the absence of	
pth <u>Matrix</u> ches) <u>Color (moist)</u> -5 <u>IONR4/3</u>	100	Redox Feature (moist) %	s Type ¹ _Loc ²	Texture	Remarks
<u>10/18,5/2</u>					
	,				
pe: C=Concentration, D=Depl	etion, RM=Reduce	d Matrix, MS=Masked	d Sand Grains.		Pore Lining, M=Matrix.
dric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (L MLRA 147, 148) Sandy Redox (S5) Stripped Matrix (S6) strictive Layer (if observed): Type: Crock Depth (inches): Sandys:		Park Surface (S7) olyvalue Below Surfa hin Dark Surface (S9 oamy Gleyed Matrix (pepleted Matrix (F3) ledox Dark Surface (F pepleted Dark Surface (edox Depressions (F on-Manganese Mass MLRA 136) mbric Surface (F13) (iedmont Floodplain S led Parent Material (F) (MLRA 147, 148 (F2) 66) 9 (F7) 8) es (F12) (LRR N, (MLRA 136, 122) oils (F19) (MLRA	2 cm 47, 148) Coas) Pied (N Very Othe ³ Indicat 148) wetlar 147) unless	rs for Problematic Hydric Soils ³ : a Muck (A10) (MLRA 147) st Prairie Redox (A16) 1LRA 147, 148) mont Floodplain Soils (F19) 1LRA 136, 147) shallow Dark Surface (TF12) er (Explain in Remarks) tors of hydrophytic vegetation and ad hydrology must be present, s disturbed or problematic.

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WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar	City/County: Mortin County	Sampling Date: 11 4 20
Applicant/Owner: Scolon	State:	LI Sampling Point: WAS-48
Investigator(s): S.Kelley, C.Knabel	Section, Township, Range:NA	
Landform (hillslope, terrace, etc.):		Slope (%): 2
Subregion (LRR or MLRA): Lat: Lat:	Long: -82, 4702+7	Datum: NAD 83 (KYFIP3)
Soil Map Unit Name: FiB: Fireblack, Fairpoint, Kaymine		
Are climatic / hydrologic conditions on the site typical for this time		
Are Vegetation, Soil, or Hydrology signifi		ices" present? Yes No
Are Vegetation, Soil, or Hydrology natura SUMMARY OF FINDINGS – Attach site map sho		
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area	
Hydric Soil Present? Yes No	within a Wetland? Yes	No
Wetland Hydrology Present? Yes No		
Remarks: Classed dancessian in cleared pour	rline coer:dor	
Closed depression in cleared pow Wetland	_	
Wettana	2_	
		PEM
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	ply) Surface	e Soil Cracks (B6)
Surface Water (A1) True Aqu	tic Plants (B14) Sparse	ly Vegetated Concave Surface (B8)
		ge Patterns (B10)
Saturation (A3) Oxidized	Rhizospheres on Living Roots (C3) Moss T	Frim Lines (B16)
Water Marks (B1) Presence	of Reduced Iron (C4) Dry-Se	ason Water Table (C2)
		h Burrows (C8)
		tion Visible on Aerial Imagery (C9)
		d or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		prphic Position (D2) w Aquitard (D3)
Water-Stained Leaves (B9)		pographic Relief (D4)
Aquatic Fauna (B13)		eutral Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (ii	ches): Ø	
	ches):	
	ches): 0 Wetland Hydrology P	Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial	photos, provious inspections) if susilable:	
Describe Recorded Data (stream gauge, monitoring weil, aena	notos, previous inspections), il available.	
Remarks:		

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover Species? Status</u>	Number of Dominant Species
1	· · · · · · · · · · · · · · · · · · ·	That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4. N A		
5		Percent of Dominant Species
		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
500/ 51.1.1	= Total Cover	OBL species x 1 =
the second	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		
1	· · · · · · · · · · · · · · · · · · ·	FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
4. NA		Column Totals: (A) (B)
5		
6		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9		3 - Prevalence Index is ≤3.0 ¹
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5m)		
1. Phalanis annoinacea	9.5 FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persecaria pennsulvanica	5 FACW	
3		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		
		Definitions of Four Vegetation Strata:
5		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6		more in diameter at breast height (DBH), regardless of
7		height.
8		Sapling/Shrub - Woody plants, excluding vines, less
9		than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
	= Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover:		
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
1		neight.
2. 1		
2. NA	······································	
S		
4	······································	Hydrophytic
5	<u> </u>	Vegetation
	= Total Cover	Present? Yes No No
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate s	heet.)	

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the i	indicator of	or confirm	n the absence o	f indicato	rs.)	
Depth	Matrix			Feature			_			
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²			Remarks	
0-6	104B 4/1	47	54R 4/6	3	<u> </u>	<u>M</u>	SiL			
								_		
						·				
							New York Control of the Second			
-	-									
	ncentration D=Den	letion RM=	Reduced Matrix, MS	=Masked	Sand Gra	line	² Location: PL=	Pore Linin	ng M=Matrix	
Hydric Soil		iedon, raw-	Reduced Matrix, MO	-Maskeu	oand ore	1113.			oblematic Hydri	c Soils ³ :
Histosol			Dark Surface	(S7)					10) (MLRA 147)	
	vipedon (A2)		Polyvalue Bel		ce (S8) (M	LRA 147,			Redox (A16)	
Black Hi			Thin Dark Sur				(1	MLRA 147		
	n Sulfide (A4)		Loamy Gleyed		F2)				odplain Soils (F1	9)
	Layers (A5)		Depleted Matr					MLRA 136		-10)
	ck (A10) (LRR N) I Below Dark Surfac	0 (011)	Redox Dark S Depleted Dark						Dark Surface (Tl n in Remarks)	-12)
	rk Surface (A12)	e (A/I)	Redox Depres				0	iei (Explai	rin Kenarks)	
	lucky Mineral (S1) (I	RR N,	Iron-Mangane	The second se		.RR N,				
	147, 148)				. ,.					
	leyed Matrix (S4)		Umbric Surfac						drophytic vegeta	
	edox (S5)		Piedmont Floor						ogy must be pres	
	Matrix (S6)		Red Parent M	aterial (F	21) (MLR/	A 127, 147	7) unles	ss disturbe	d or problematic	
	ayer (if observed):									
	ravel layer								. /	
	ches):(Hydric Soil P	resent?	Yes /	lo
Remarks:										
3										

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City	County: Martin County Sampling Date: 11 4 20
Applicant/Owner: Sourion	State: K) Sampling Point: WAS-49
Investigator(s): S.Kelley, C. Knobel Sec	
	elief (concave, convex, none): Convex Slope (%): 5
	Long: -82.476 346 Datum: NAV
Soil Map Unit Name: FiB: Fiveblock, Fairpoint, Kaymine soils, 6-	
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 dista	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally probler	
	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
	cided w/ Wetland Z
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) True Aquatic Plants	
High Water Table (A2) Hydrogen Sulfide O	
Saturation (A3) Oxidized Rhizosphe Water Marks (B1) Presence of Reduce	eres on Living Roots (C3) Moss Trim Lines (B16)
	ed Iron (C4) Dry-Season Water Table (C2) ion in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface	
Algal Mat or Crust (B4) Other (Explain in Re	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	

20		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30m)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:
1. Aver negundo	_0_		FAC	That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0</u> (A/B)
6				Prevalence Index worksheet:
7	10.87			
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: <u>5</u>	20% of	total cover:	2	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
1. Eleaynus umbellata	100		UPL	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
	-			2 - Dominance Test is >50%
9	100	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 50				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:)	20 /8 01	lutai cuvei.		data in Remarks or on a separate sheet)
1. Persecatia virginiana			FARNU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Achyranthes inparica		-7		
			FICU	¹ Indicators of hydric soil and wetland hydrology must
3. Eleágnus umbellata			1977	be present, unless disturbed or problematic.
4. Displenium platyncuron			FALL	Definitions of Four Vegetation Strata:
5. Viola Goraria			FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. hosa multiflora			FACU	more in diameter at breast height (DBH), regardless of
7. Polistichum aristichoidics			FACU	height.
8. Loniciral japonica			FACU	Sapling/Shrub - Woody plants, excluding vines, less
9. Microster with virminewal	10		FAC	than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	75	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>31.5</u>	20% of	total cover:	15	We device Allowed wines reacted them 0.00 ft in
Woody Vine Stratum (Plot size: 36 M.)				Woody vine – All woody vines greater than 3.28 ft in height.
1. Lonicera joponica			FACU	
2.				
3.				
4				
5.			1	Hydrophytic Vegetation
··.		= Total Cov	ar	Present? Yes No
50% of total cover: 0.5		total cover:		
Remarks: (Include photo numbers here or on a separate s				
Tremarka, (include proto numbera note or on a separate a	1000.)			

Q -4 IDNR-4/2 IDD	Depth inches)	Color (moist)	%	Color (moist)	K Features	Type ¹	Loc ²	Texture Remarks
ydric Soil Indicators: Indicators for Problematic Hydric Soils								
ydric Soil Indicators: Indicators for Problematic Hydric Soils _ Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147)					· ·			
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Import Piedmont Floodplain Soils (F19) (MLRA 127, 147) Unless disturbed or problematic. Barby Hudris (S6) Red Parent Material (F21) (MLRA 127, 147) Unless disturbed or problematic.			letion, RM=	Reduced Matrix, MS		Sand Gra	ains.	
 Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Mless disturbed or problematic. 	Histosol Histic Ep Black His Hydrogen Stratified 2 cm Mue Depleted	(A1) stic (A3) n Sulfide (A4) I Layers (A5) ck (A10) (LRR N) I Below Dark Surface	e (A11)	Polyvalue Bel Thin Dark Sur Loamy Gleyer Depleted Mat Redox Dark S Depleted Darl	ow Surface face (S9) (d Matrix (F3) fix (F3) Surface (F6 k Surface ((MLRA 1 2)) F7)		2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12)
Type: Gravel layer Depth (inches): Hydric Soil Present? Yes No	Sandy M MLRA Sandy G Sandy Ro Stripped	ucky Mineral (S1) (L 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6)		Iron-Mangane MLRA 136 Umbric Surfac Piedmont Floo	ese Masses 5) ce (F13) (M codplain Soi	s (F12) (l I LRA 13 ils (F19)	6, 122) (MLRA 14	48) wetland hydrology must be present,
emarks:	Type: <u>6</u>	cavel layer						Hydric Soil Present? Yes No
	emarks:							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/County: Martin Coulary Sampling Date: 11/4/20
Applicant/Owner: State: Ky Sampling Point: WAS - 50
Investigator(s): 5, Kelley, C, Knabel Section, Township, Range: NA
Landform (hillslope, terrace, etc.): H: 1400 Local relief (concave, convex, none): Concave Slope (%): O
Soil Map Unit Name: FIF & Fiveblock, Fa: spoint, Kaymine 30:15, 30-8090-slope, Stony NWI classification: NA
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 No Is the Sampled Area within a Wetland? Yes No Hydric Soil Present? Yes No Is the Sampled Area within a Wetland? Yes No
Remarks: Closed depression in open Field Wetland AR PEM
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) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2)Recent Iron Reduction in Tilled Soils (C6)Grayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
August Mat of Oldst (D4) Statistical of
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches): D
Water Table Present? Yes No Depth (inches): 0
Saturation Present? Yes Vo Depth (inches): O Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

1.1

A DESTRUCTION OF

the second second second

	Absolute	Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC:	(A)
2		-		Total Number of Dominant	
3.				Species Across All Strata:	(B)
4NA					
5		10-11-11-11-11-11-11-11-11-11-11-11-11-1		Percent of Dominant Species That Are OBL, FACW, or FAC:	(4.15)
				That Are OBL, FACW, or FAC:	_ (A/B)
				Prevalence Index worksheet:	
7				Total % Cover of:Multiply by:	1
		= Total Cov		OBL species x1 =	
50% of total cover:	20% of	total cover:			
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =	
1				FAC species x 3 =	- 1
2				FACU species x 4 =	- 1
3				UPL species x 5 =	_
4				Column Totals: (A)	(B)
NIN.					- • •
				Prevalence Index = B/A =	_
6			ita	Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	1
8				2 - Dominance Test is >50%	
9					
	-	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹	
50% of total cover:				4 - Morphological Adaptations ¹ (Provide sup	
Herb Stratum (Plot size: 5M)				data in Remarks or on a separate sheet	
1. Typha angustifolia	45	1	ABI	Problematic Hydrophytic Vegetation ¹ (Expla	ain)
1. Tupna angusprons	15				
2. Bidens Frondosa			FACU	¹ Indicators of hydric soil and wetland hydrology	must
3. Sciepus cyperinus	20		FACW	be present, unless disturbed or problematic.	
4. Solidago gigantea	5		FACW	Definitions of Four Vegetation Strata:	
5. Symphis + richum dumpsum	25	1	FAL		
6				Tree - Woody plants, excluding vines, 3 in. (7.6	cm) or
7			-	more in diameter at breast height (DBH), regard height.	less of
				neight.	
8				Sapling/Shrub - Woody plants, excluding vines	
9				than 3 in, DBH and greater than or equal to 3.24	3 ft (1
10			-	m) tall.	
11		<u> </u>		Herb - All herbaceous (non-woody) plants, rega	ardless
	105 =	Total Cov	er	of size, and woody plants less than 3.28 ft tall.	
50% of total cover: 52.	20% of	total cover:	21	Mandu vine All wood wines creates then 2.2	0.4 in
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.20 height.	5 IL IN
1.				hoight	
2 1					
a NA					
o/ [*					
4				Hydrophytic	
5		-		Vegetation	
	=	Total Cov	er	Present? Yes No	
50% of total cover:	20% of	total cover:			
Remarks: (Include photo numbers here or on a separate s	heet.)				
and a second					
		11.0			

16

Sampling Point: 645-50

epth	Matrix			ox Features				
nches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
)-7	10484/2	80	5 ya 5/8	3	C	M	SILL	
	104R5/8	17	- 10					
								-
					-			
	-				-			
	-							
	· · · · · · · · · · · · · · · · · · ·	-						
					-			
		-				;		
				-	-			
pe: C=C	Concentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: Pl	L=Pore Lining, M=Matrix.
	Indicators:							ators for Problematic Hydric Soils ³ :
Histoso	I (A1)		Dark Surface	e (S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		e (S8) (N	ILRA 147.		oast Prairie Redox (A16)
	listic (A3)		Thin Dark Si					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gley				P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		6)		V	ery Shallow Dark Surface (TF12)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Da	rk Surface	(F7)		0	ther (Explain in Remarks)
_ Thick D	ark Surface (A12)		Redox Depre	essions (F8	3)			
Sandy I	Mucky Mineral (S1) (LRR N,	Iron-Mangar	ese Masse	s (F12) (LRR N,		
MLR	A 147, 148) 🍈 🎽		MLRA 13	6)				
_ Sandy (Gleyed Matrix (S4)		Umbric Surfa	ace (F13) (MLRA 13	6, 122)	³ Indi	cators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo	oodplain So	oils (F19)	(MLRA 14	8) we	tland hydrology must be present,
•••			D 1 D 1 1	Matarial /E	11 /AAL D	A 407 447		
	d Matrix (S6)		Red Parent I	viaterial (F		A 12/, 14/	') uni	ess disturbed or problematic.
strictive	Layer (if observed)		Red Parent I	viateriai (F		A 12/, 14/	') uni	ess disturbed or problematic.
strictive		•				A 12/, 14/	') uni	ess disturbed or problematic.
estrictive	Layer (if observed) Stavel layer	•0 •1	Reg Parent I	viateriai (F		A 12/, 14/		1
Type: _(Depth (in	Layer (if observed)	:	Reg Parent I			A 127, 147	r) unl Hydric Soil	1
Type: _(Depth (in	Layer (if observed) Stavel layer	•	Reg Parent I			A 127, 147		1
strictive Type: _(Depth (in	Layer (if observed) Stavel layer	:	Keg Parent 		2) (MLR	A 127, 147		1
strictive Type:(Depth (ir	Layer (if observed) Stavel layer		Keg Parent I	viatenai (r.	2) (MLR	A 12/, 14/		/
strictive Type:(Depth (ir	Layer (if observed) Stavel layer	•	Keg Parent I		2) (MLR	A 12/, 14/		1
strictive Type:(Depth (ir	Layer (if observed) Stavel layer	•	Keg Parent I		2) (MLR	A 12/, 14/		1
strictive Type:(Depth (ir	Layer (if observed) Stavel layer	•	Keg Parent 		2 T) (MLR	A 12/, 14/		/
strictive Type:(Depth (ir	Layer (if observed) Stavel layer	•	Keg Parent 		2 () (MLK	A 12/, 14/		1
Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent 		2 () (MILK	A 12/, 14/		/
Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent 		2 () (MLK	A 12/, 14/		/
Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent 		2 () (MLK	A 12/, 14/		/
estrictive	Layer (if observed) Stavel layer	•	Keg Parent 		2 () (MLK	A 12/, 14/		/
Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent		2 () (MLK	A 12/, 14/		1
strictive Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent		2 () (MLK	A 12/, 14/		/
strictive Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent		2 () (MLK	A 12/, 14/		/
Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent		2 () (MLK	A 12/, 14/		1
strictive Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keg Parent			A 12/, 14/		/
strictive Type: _(Depth (in	Layer (if observed) Stavel layer	•	Keġ Parent I		2 () (MLK	A 12/, 14/		/
strictive Type: _(Depth (in	Layer (if observed) Stavel layer		Keġ Parent I		2 () (MLK	A 12/, 14/		1
strictive Type:(Depth (ir	Layer (if observed) Stavel layer				2 () (MLK	A 12/, 14/		1
strictive Type:(Depth (ir	Layer (if observed) Stavel layer					A 12/, 14/		1
strictive Type:(Depth (ir	Layer (if observed) Stavel layer					A 12/, 14/		1
strictive Type: _(Depth (ir	Layer (if observed) Stavel layer					A 12/, 14/		1

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: <u>Martin County Solar</u> Applicant/Owner: <u>Sovian</u> Investigator(s): <u>S.Kelley</u> , <u>C.Knabel</u> Landform (hillslope, terrace, etc.): <u>Hilltop</u> Local relief (concave, convex, no Subregion (LRR or MLRA): <u>LRRN</u> Lat: <u>37.766874</u> Long: <u>-B</u> Soil Map Unit Name: <u>FiF: Fivedock, Fairpoint</u> ; Kaymine soil, <u>30-8090 slope</u> , <u>ston</u> . Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u>	
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Norma	al Circumstances" present? Yes No
	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locati	
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Hydric Soil Present? Yes No Is the Sampled Area within a Wetland? Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Remarks: Yes No No	Yes No
Upland point associated with W	etland - AA
HYDROLOGY	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	Hydrology Present? Yes No
Remarks:	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 M)	% Cover	Species?		Number of Dominant Species
1. Juniperus virginiana	20	/	EALN	That Are OBL, FACW, or FAC: (A)
			1100	
			-	Total Number of Dominant
3				Species Across All Strata: (B)
4				Demonst of Demissrat Crossing
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)
6			-	
				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
		= Total Cove		
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
1. Pyrus callergiana	5		UPL	FAC species x 3 =
2				FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:_		
Herb Stratum (Plot size: 5m)		1		data in Remarks or on a separate sheet)
1. Lespedeza cuneata	70	/	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Rosa multiflora			FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Plantago lanceolata	2		UPL	be present, unless disturbed or problematic.
4. Juncus tenuis	10		FAC.	Definitions of Four Vegetation Strata:
5				Seminario of Four Vegenation on and
6				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
		-		more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
	100	Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50				of size, and woody plants less than 5.20 it tall.
Next the factor that he was a second of the second se	20% 01	total cover:_	10_	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3. NA				
· · · · · · · · · · · · · · · · · · ·				
4				Hydrophytic
5				Vegetation
	=	Total Cove	r	Present? Yes No 🖌
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate sh	neet.)			
transmission in the second sec	120201			

Sampling Point: (1)PS-5)

Matrix		Redo	x Features			n the absence of				
Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Rem	arks	
104B 4/2	98	10 YR 5/8	2	<u> </u>	<u>M</u>	<u>CL</u>				
ncentration D=Der		=Reduced Matrix M		Sand Gr			ore Linir	ng M=N	Aatrix	
and the second data	neadin, rain	-Neduced WathA, Wi	- Waskeu	Sand Gi	air 15.					ric Soils ³ :
stic (A3) n Sulfide (A4) Layers (A5) ck (A10) (LRR N) Below Dark Surfac Irk Surface (A12) ucky Mineral (S1) (I a 147, 148) eyed Matrix (S4) edox (S5)		 Thin Dark Su Loamy Gleye Depleted Ma Redox Dark 3 Depleted Dail Redox Depresimation Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo 	rface (S9) d Matrix (F trix (F3) Surface (F6 k Surface (essions (F8 ese Masse 6) cce (F13) (N podplain So	(MLRA 1 (2) (F7)) s (F12) (/ILRA 13 ils (F19)	47, 148) LRR N, 6, 122) (MLRA 14	(M Piedr (M Very Othe ³ Indicat 18) wetlan	LRA 147 mont Flo LRA 130 Shallow r (Explain ors of hy d hydrol	7, 148) odplain 6, 147) Dark S n in Rer drophyl	Soils (I urface (marks) ic vege st be pr	TF12) tation and esent,
ayer (if observed)	:				A 127, 14					
:hes): <u>5</u>						Hydric Soil Pre	esent?	Yes _	\checkmark	No
					×					e.
	ndicators: (A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) ck (A10) (LRR N) Below Dark Surface rk Surface (A12) ucky Mineral (S1) (I 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed)	ndicators: (A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) ck (A10) (LRR N) Below Dark Surface (A11) rk Surface (A12) ucky Mineral (S1) (LRR N, 147, 148) leyed Matrix (S4) edox (S5) Matrix (S6) ayer (if observed): Table (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A12) (A13) (A13) (A14) (A14) (A15) (A17) (A18) (A17)	ndicators: (A1) Dark Surface ipedon (A2) Polyvalue Be stic (A3) Thin Dark Surface n Sulfide (A4) Loamy Gleyee Layers (A5) Depleted Ma ck (A10) (LRR N) Redox Dark Surface (A11) Below Dark Surface (A11) Depleted Dark Surface (A12) ucky Mineral (S1) (LRR N, Iron-Mangani 147, 148) MLRA 133 leyed Matrix (S4) Umbric Surface edox (S5) Piedmont Floc Matrix (S6) Red Parent N ayer (if observed):	ndicators:	ndicators:	(A1) Dark Surface (S7) ipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) stic (A3) Thin Dark Surface (S9) (MLRA 147, 148) n Sulfide (A4) Loamy Gleyed Matrix (F2) Layers (A5) Depleted Matrix (F3) ck (A10) (LRR N) Redox Dark Surface (F6) Below Dark Surface (A11) Depleted Dark Surface (F7) rk Surface (A12) Redox Depressions (F8) ucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, 147, 148) Umbric Surface (F13) (MLRA 136, 122) edox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 143) Matrix (S6) Red Parent Material (F21) (MLRA 127, 143) ayer (if observed):	Indicators: Indicator (A1)	Indicators: Indicators for Pre- (A1)	Indicators: Indicators for Problema (A1)	Indicators: Indicators for Problematic Hyd (A1)

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region Project/Site: Martin County Solar City/County: Martin County Sampling Date: State: KY Applicant/Owner: Sourion Sampling Point: WAS-Investigator(s): S. Keller Co Knabel _____ Section, Township, Range: NIA Landform (hillslope, terrace, etc.): Terrace Slope (%): Subregion (LRR or MLRA): LRR Lat: 37.164713 Long: -82.460265 Datum: NAD81 Soil Map Unit Name: FiF: Fiveldock, Fourpoint, Kay mine soils, 30.800050115, Stony NWI classification: NA 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 ___, Soil _____, or Hydrology _____ naturally problematic? Are Vegetation (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Is the Sampled Area Yes No Yes No_____ Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes No Remarks: Closed depression adjacent to pond berm Werland - AB **JFM** 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) ____ True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) ____ Hydrogen Sulfide Odor (C1) ___ Drainage Patterns (B10) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Moss Trim Lines (B16) _ Saturation (A3) Water Marks (B1) Presence of Reduced Iron (C4) ____ Dry-Season Water Table (C2) ___ Recent Iron Reduction in Tilled Soils (C6) Sediment Deposits (B2) Crayfish Burrows (C8) Drift Deposits (B3) ____ Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) ___ Other (Explain in Remarks) ____ Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) _ Shallow Aquitard (D3) ___ Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Yes ____ No ____ Depth (inches): 0 Surface Water Present? Water Table Present? Yes _____ No ____ Depth (inches):____ Wetland Hydrology Present? Yes Saturation Present? Yes _____ No ____ Depth (inches):____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Sampling Point: (A) AS-52

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover Species? Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4N/k		Percent of Dominant Species
5		That Are OBL, FACW, or FAC:OO (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of:Multiply by:
	= Total Cover	OBL species
1 S 44 1	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x3 =
1		FACU species x4 =
2		
3		UPL species x 5 = (A)
4		Column Totals: (A) (B)
5NA		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		$\int 2$ - Dominance Test is >50%
9		3 - Prevalence Index is $\leq 3.0^{1}$
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Phelaris arundinaccu	20 FACW	
2. Bidens Frondosa		¹ Indicators of hydric soil and wetland hydrology must
3. JUNOUS EFFUSUS		be present, unless disturbed or problematic.
4. Plantayo major		Definitions of Four Vegetation Strata:
5. Symphistrichum demosum	13 FAC	
6	·	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		height.
8		Configure/Charaka Wanda alanta availading vinan lang
9		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11		Herb – All herbaceous (non-woody) plants, regardless
	55 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 27,5	20% of total cover: <u>II</u>	Mandausing All used using greater than 2.28 ft in
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in height.
1		
2		
3		
4		Understander
5		Hydrophytic Vegetation
	= Total Cover	Present? Yes No
50% of total cover:		+
Remarks: (Include photo numbers here or on a separate s	sheet.)	
Contraction and Contraction		

Depth	Matrix			x Features	S I		_		_	
(inches)	Color (moist)	%	Color (moist)	_%	_Type ¹	_Loc ²	Texture		Remarks	
0-5	104R 4/1	90	104R 5/8	5	_C_	M	Sil	_		
	•		54R 4/8	5	C.	DL				
0			<u> </u>					-		
					-			-		
				_						
	-	-	· · · · ·		-			-		
					-					
							-			
		- () 			-		9	-		
		-								
¹ Type: C=Co	oncentration, D=Dep	pletion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lini	ng, M=Matrix.	
Hydric Soil									roblematic Hyd	lric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (/	A10) (MLRA 14	7)
	pipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (N	ILRA 147			Redox (A16)	
	stic (A3)		Thin Dark Su					(MLRA 14		
	n Sulfide (A4)		Loamy Gleye	d Matrix (I	F2)		_	Piedmont Flo	odplain Soils (F	-19)
Stratified	Layers (A5)		Depleted Mat	trix (F3)				(MLRA 13	6, 147)	
2 cm Mu	ick (A10) (LRR N)		Redox Dark S	Surface (F	6)			Very Shallow	/ Dark Surface ((TF12)
Depleted	Below Dark Surfac	e (A11)	Depleted Dar	k Surface	(F7)			Other (Expla	in in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	3)					
Sandy M	lucky Mineral (S1) (I	LRR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,				
MLRA	147, 148)		MLRA 13	6)						
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	³ In	dicators of h	ydrophytic vege	tation and
Sandy R	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	48) vi	etland hydro/	logy must be pr	esent,
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 14	7) u	nless disturb	ed or problemat	tic.
Restrictive	ayer (if observed):									
Type: Gr	ovel lader									
Depth (inc	and a second sec		3				Hvdric So	il Present?	Yes	No
Remarks:										
Remarks.										
			20							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin Crownly Solar City	//County: Martin County Sampling Date: 11/4/20					
Applicant/Owner: Savion	State: KT Sampling Point: LIA5-53					
Investigator(s): S.Kelley, C. Knabel See						
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5						
Subregion (LRR or MLRA): LARA Lat: 37.764662						
Soil Map Unit Name: F:F: Fireblock Fairpoint, Kaymine Soils,						
Are climatic / hydrologic conditions on the site typical for this time of year?						
Are Vegetation, Soil, or Hydrology significantly dist						
Are Vegetation, Soil, or Hydrology naturally proble						
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No						
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No					
Wetland Hydrology Present? Yes No						
Remarks:						
Lipland Only resar	isted with Weltland AB					
Upland point assoc	WE CON WITH WE PLOPER OU					
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) True Aquatic Plants						
High Water Table (A2) Hydrogen Sulfide C						
	eres on Living Roots (C3) Moss Trim Lines (B16)					
Water Marks (B1) Presence of Reduction Presence of Reduction Presence of Reduction Reduction Presence	ed Iron (C4) Dry-Season Water Table (C2) tion in Tilled Soils (C6) Crayfish Burrows (C8)					
Drift Deposits (B3) Thin Muck Surface						
Algal Mat or Crust (B4) Other (Explain in R						
Iron Deposits (B5)	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	Microtopographic Relief (D4)					
Aquatic Fauna (B13)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No Depth (inches):	<u> </u>					
Water Table Present? Yes No Depth (inches):						
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:					
Remarks:						
	2					

Sampling Point: WAS-53

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 M)		Species?		
1. Robinia previoaccacia	Construction of the second sec		FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
The prevention	10		EAL.	
2. Juniperus Virginiana	12		1-40	Total Number of Dominant
3				Species Across All Strata: (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6	-			Prevalence Index worksheet:
7,				
	28	= Total Cove	er.	Total % Cover of:Multiply by:
50% of total cover:12.5				OBL species x 1 =
	20 /0 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15M)				
1. Acer rubrum	10	\checkmark	FAC	FAC species x 3 =
2. Robinia pseudoaccacio-	5	/	FALU	FACU species x 4 =
3. Pyrus calleryana	2		1101	UPL species x 5 =
			UT	and the second se
4				Column Totals: (A) (B)
5				
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
	17			3 - Prevalence Index is ≤3.0 ¹
2.00		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:8.5	20% of	total cover:_	2.T	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)				
1. Lonicera japonica	20		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Lespedeza cuneata	20		FALU	
2. Despeorers contenans				¹ Indicators of hydric soil and wetland hydrology must
3. Junlus tenuis			FAC	be present, unless disturbed or problematic.
4. Plantago major	10		FACU	Definitions of Four Vegetation Strata:
5. Polistichum aristichnoidics	5		FAW	Deminions of Four vegetation Strata.
			-time	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	85	= Total Cove	ar.	of size, and woody plants less than 3.28 ft tall.
50% of total cover: _42.5				
	_ 20 % 01	total cover		Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)			1	height.
1				
2				
3				
4		·		Hydrophytic
5				Vegetation
		Total Cau		Present? Yes No
		= Total Cove		·····
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate sh	neet.)			
	1.57			

Profile Description:	(Describe to the d	epth needed to docun	nent the in	dicator	or confirm	the absence of in	ndicators.)	
Depth	Matrix		x Features					
attendeterterterterterterterterterterterterter	(moist) %	Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>	Remarks	
0-6 104R	11 97	104R 5/8	3	C	M	Sice		
3.0 1								
		-						
					-			
	· · · ·	-						
		-						
¹ Type: C=Concentration	on D=Depletion R	M=Reduced Matrix, MS	=Masked	Sand Gra	ins	² Location: PL=Pc	ore Lining, M=Matrix.	
Hydric Soil Indicators		M-Reduced Matrix, Mc	-waskeu	Sand Gra			for Problematic Hydric S	oils ³ :
Histosol (A1)		Dark Surface	(\$7)				Muck (A10) (MLRA 147)	54470 IN
Histic Epipedon (A	(2)	Polyvalue Bel	201	e (S8) (M	LRA 147.		Prairie Redox (A16)	
Black Histic (A3)	/	Thin Dark Su					.RA 147, 148)	
Hydrogen Sulfide	(A4)	Loamy Gleye					ont Floodplain Soils (F19)	
Stratified Layers (/		Depleted Mat					.RA 136, 147)	
2 cm Muck (A10)	(LRR N)	Redox Dark S	Surface (F6	5)		Very S	Shallow Dark Surface (TF12)
Depleted Below D	ark Surface (A11)	Depleted Dar	k Surface (F7)		Other	(Explain in Remarks)	
Thick Dark Surface	e (A12)	Redox Depre	ssions (F8))				
Sandy Mucky Mine	eral (S1) (LRR N,	Iron-Mangane	ese Masses	s (F12) (L	.RR N,			
MLRA 147, 148		MLRA 136	-					
Sandy Gleyed Mat		Umbric Surface					rs of hydrophytic vegetation	
Sandy Redox (S5)		Piedmont Flo					hydrology must be present	
Stripped Matrix (S		Red Parent M	laterial (F2	1) (MLRA	A 127, 147) unless o	disturbed or problematic.	
Restrictive Layer (if o								
Type: Gravel	9					1	/	
Depth (inches):						Hydric Soil Pres	sent? Yes <u> </u>	
Remarks:								

Project/Site Martin County Solar City/Cou	inty: Martia County Sampling Date: 11 4/20
Applicant/Owner: Savion	State: _KY Sampling Point: (UAS - 54
	Township, Range:
Landform (hillslope, terrace, etc.): Pont Fringe Local relief	
Subregion (LRR or MLRA):LRRNLat:Aat:Lat:Aat:Aat:Aat:Aat:	
Soil Map Unit Name: FiF: Fiveblock Far point Kay mine Soils, 30-807	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbe	
Are Vegetation, Soil, or Hydrology naturally problematic	
SUMMARY OF FINDINGS – Attach site map showing samp	
Hudrig Coil Dresent?	s the Sampled Area vithin a Wetland? Yes No
Remarks	
Wetland Fringe around OW-01	PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Operth (inches): Operth (inches): Operth (inches): Operth (inches):	(C1) Drainage Patterns (B10) on Living Roots (C3) Moss Trim Lines (B16) on (C4) Dry-Season Water Table (C2) n Tilled Soils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) ¥ FAC-Neutral Test (D5)
Remarks:	

Sampling Point: UNS-54

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1)	<u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2 3		Total Number of Dominant Species Across All Strata: (B)
3 4A 5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet;
7		Total % Cover of: Multiply by:
EQ0/ of total payor:	= Total Cover	OBL species x 1 =
	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
1		FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
3N	· · · · · · · · · · · · · · · · · · ·	
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9		3 - Prevalence Index is ≤3.0 ¹
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 ^)	A	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Typha angustifolia	90 OBL	
2		¹ Indicators of hydric soil and wetland hydrology must
3		be present, unless disturbed or problematic.
4		Definitions of Four Vegetation Strata:
5		
6		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		height.
8		
9		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		m) tall.
11.		Herb – All herbaceous (non-woody) plants, regardless
	90 = Total Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45		
Woody Vine Stratum (Plot size:)		Woody vine – All woody vines greater than 3.28 ft in
1		height.
2.		
3. NA		
5		Hydrophytic
J	= Total Cover	Vegetation Present? Yes No
50% of total cover:		
Remarks: (Include photo numbers here or on a separate s	nicet)	

190

Sampling Point: WAS-54

4

Depth	Matrix		Red	ox Features				e of indicators.)
(inches)	Color (moist)		Color (moist)	%	_Type'	Loc ²	Texture	Remarks
10-8	JDYP: 4/1	<u>90</u>	10 4R 5/8		_C		<u>5:C</u>	
Hydric Soil Histosol Histic E	pipedon (A2)	letion, RM=F	Dark Surface	e (S7) elow Surfac	e (S8) (M i	LRA 147,		PL=Pore Lining. M=Matrix. ators for Problematic Hydric Soils ³ : 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)
Hydroge Stratifie 2 cm Mu Deplete Thick Da Sandy M MLR/	istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) (LRR N) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) (L A 147, 148) Gleyed Matrix (S4)		Thin Dark Su Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Iron-Mangan MLRA 13 Umbric Surfa	ed Matrix (F trix (F3) Surface (Fork Surface essions (F8 esse Masse 6)	5) (F7)) s (F12) (L	RR N,		(MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Stripped			Piedmont Flo					etland hydrology must be present, nless disturbed or problematic.
emana.								

Project/Site: Martin County Solar City/County: Martin County Sampling Date: 11/4/20
Applicant/Owner: Savion State: Ky Sampling Point: WAS - 55
Investigator(s): S.Kelley, C.Knabel Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
Soil Map Unit Name: FIF: Fixeblock, Fairpoint, Kuyming Soils, 30-8090 slope, stony NWI classification: NA
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 No Is the Sampled Area within a Wetland? Hydric Soil Present? Yes No Is the Sampled Area within a Wetland? Wetland Hydrology Present? Yes No No
Remarks:
Upland point associated w/ Wetland AC
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)True Aquatic Plants (B14)Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Vater Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Vide Maris (B7) Presence of Reduced Norr (C4) Dry Section Water Paper (C2)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

 \overline{a}

VEGETATION (Four Strata) – Use scientific names of plants	VEGETATION (Four Strata) – Use	e scientific names of plants
---	--------------------------------	------------------------------

Sampling Point: WK- 95

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 M)		Species?	Status	Number of Dominant Species
1. Platonis accidentalis	5	1	FALW	That Are OBL, FACW, or FAC: 2 (A)
2. Ulmus americana	20		FAC	
3				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 12.5				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15m)	_ 2070 01			FACW species x 2 =
	0.0	/		
1. Eleagnus umbeilata	20		UPL	FAC species x 3 =
2				FACU species x 4 =
3		V		UPL species x 5 =
4				Column Totals: (A) (B)
		1		
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7		·		1 - Rapid Test for Hydrophytic Vegetation
8				
9				2 - Dominance Test is >50%
	20	= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: L D				4 - Morphological Adaptations ¹ (Provide supporting
	20% 0	total cover:_	-1	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 57))	-	1	-	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Lespedeza cuncata	50		FALU	
2. Solidayo canoderis s	30		FACU	
3. Trifdlum repease			FACU	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Mondy plants evaluding vince 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9		10		Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
	90 =	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45	20% of	total cover:_	18	
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1/				neight.
2				
3		. <u> </u>		
4				Hydrophytic
5				Vegetation
		Total Cove	r	Present? Yes No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate sh	neet.)			

Sampling Point: WAS-55

Depth	Matrix		th needed to docu Rec	lox Features					
	olor (moist)		Color (moist)	%	Type'	Loc ²	Texture		emarks
0-8 10.	182/	- 70		-			SICU	Disturbed	Soil/Fill
/12	IR 3/2	30		,	1			1. e	.l
					7			-	
				-					
								-	
							•)		
			•						
			10	-	. <u> </u>				
				- 0 <u></u>				-	
				<u></u>	<u> </u>			-	
	3								
ype: C=Concent	ration, D=Dep	letion, RM=	Reduced Matrix, N	/IS=Masked	Sand Gra	ins.	² Location: P	L=Pore Lining, M	=Matrix.
ydric Soil Indica									natic Hydric Soils ³
Histosol (A1)			Dark Surfac	ce (S7)			2	cm Muck (A10) (MLRA 147)
Histic Epipedo	n (A2)			Below Surfac	ce (S8) (M I	LRA 147,		Coast Prairie Redo	
Black Histic (A			Thin Dark S	Surface (S9)	(MLRA 14	47, 148)		(MLRA 147, 14	3)
_ Hydrogen Sulfi				yed Matrix (I	F2)		F	Piedmont Floodpla	
_ Stratified Layer			Depleted M					(MLRA 136, 14)	
2 cm Muck (A1		- (844)		CSurface (F				ery Shallow Dark	•
_ Depleted Below		e (A11)		ark Surface ressions (F8			— ()ther (Explain in F	kemarks)
_ Thick Dark Sur _ Sandy Mucky !		RR N	Iron-Manga	-		RRN			
MLRA 147,			MLRA 1		5 (1 12) (ann n,			
1307	•		Umbric Sur	•	MI DA 136	: 122)	3100	licators of hydrop	nytic vegetation and
Sandy Gleved									
 Sandy Gleyed Sandy Redox (
Sandy Gleyed Sandy Redox (Stripped Matrix	(S5)		Piedmont F	loodplain So Material (F2	oils (F19) (MLRA 14	8) we	etland hydrology r less disturbed or	nust be present,
Sandy Redox (Stripped Matrix	(S5) ((S6)		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we	etland hydrology n	nust be present,
Sandy Redox (Stripped Matrix	(S5) c (S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we	etland hydrology n	nust be present,
_ Sandy Redox (_ Stripped Matrix estrictive Layer ((S5) ((S6) (if observed):	×.	Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we	etland hydrology r less disturbed or	nust be present,
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix Restrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creace Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creace Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creace Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Create Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creace Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Create Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creace Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix Restrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix Restrictive Layer Type:	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix Restrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix Restrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix Restrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creac Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.
Sandy Redox (Stripped Matrix estrictive Layer Type: Creace Depth (inches):	(S5) ((S6) (if observed):		Piedmont F	loodplain So	oils (F19) (MLRA 14	8) we) un	etland hydrology r less disturbed or	nust be present, problematic.

Project/Site: Martin County Solar	City/Co	ounty: Martin (County	Sampling Date: 11/4/20
Project/Site: Martin County Solar Applicant/Owner: Saujon		7	State: KY	Sampling Point: WAS-56
Investigator(s): S.Kelley, C.Knalael	Section	n, Township, Range:	NIA	
Landform (hillslope, terrace, etc.): Flood plain				
Subregion (LRR or MLRA): Lat:	37.767257	Long: =	82,458739	Datum: NAUA3(KYERS)
Soil Map Unit Name: FiF Fiveblock, Fuirpoint,				
Are climatic / hydrologic conditions on the site typical for			,	
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology	÷			
SUMMARY OF FINDINGS – Attach site m	ap showing sam	pling point loca	tions, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes	No	Is the Sampled Are	a	/
	No	within a Wetland?	Yes 🗸	No
Wetland Hydrology Present? Yes	No			
Remarks:			Potentially	y Jurissi ctional
L. L.	Jettand AD			
Recieves Flow from OW-02 and				PEM
HYDROLOGY	FLOUSIS THID JETER	m		
Wetland Hydrology Indicators:			Secondary India	ators (minimum of two required)
Primary Indicators (minimum of one is required; check	c all that apply)			I Cracks (B6)
2	True Aquatic Plants (B	14)		egetated Concave Surface (B8)
×	Hydrogen Sulfide Odor			atterns (B10)
	Oxidized Rhizospheres			
	Presence of Reduced		1	Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction	in Tilled Soils (C6)	Crayfish Bu	rrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7	7)	Saturation \	/isible on Aerial Imagery (C9)
	Other (Explain in Rema	arks)		Stressed Plants (D1)
Iron Deposits (B5)				c Position (D2)
Inundation Visible on Aerial Imagery (B7)			Shallow Aqu	
Water-Stained Leaves (B9) Aquatic Fauna (B13)			FAC-Neutra	raphic Relief (D4)
Field Observations:			FAC-Neutra	
Surface Water Present? Yes No	Depth (inches):			
Water Table Present? Yes No				
Saturation Present? Yes No		Wetland	d Hydrology Prese	nt? Yes No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previ	ious inspections), if a	vallable:	
Remarks:				

Sampling Point: (WAS-56

· · ·	Abcolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				That Ale OBL, FACW, OF FAC. (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4NA				
5,				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	<u> </u>			
		= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
1. Eleagnus umbelluta	5	/	110-	FAC species x 3 =
N .				FACU species x 4 =
2				
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
	5	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: _ 2.<				4 - Morphological Adaptations ¹ (Provide supporting
-	20% 01	total cover.	<u> </u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)			<i>a</i> b 1	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arthraxon hispidis	<u> </u>		FAL	
2. Bidenš Franciasa	30	/	FACUS	
3. Carex Frankii			OBL	¹ Indicators of hydric soil and wetland hydrology must
4. JUNCUS CAUSUS			1.00000	be present, unless disturbed or problematic,
				Definitions of Four Vegetation Strata:
5				Tree Meedy plants evaluating vines 2 in (7.6 and at
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				5
				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in, DBH and greater than or equal to 3,28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	90 :	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 45		total cover:		The property of the second sec
				Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1,				
2				
3. NA				
4.				
				Hydrophytic
5				Vegetation Present? Yes No No
		= Total Cove		
50% of total cover:	_ 20% of	total cover:		
Remarks: (Include photo numbers here or on a separate sh	neet.)			

Depth	Matrix		Redo	ox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture _	Remarks
0-4	101B4/	93	104R 5/10	7	_C	M	Sill	
		-						
का स्वतन्त्री				·				
		oletion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	Location: PL=	Pore Lining, M=Matrix.
lydric Soil I								ors for Problematic Hydric Soils ³ :
Histosol	(A1) bipedon (A2)		Dark Surface Polyvalue Be		CO) (1			m Muck (A10) (MLRA 147) ast Prairie Redox (A16)
Black His			Thin Dark Su					MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			47, 110,		dmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma		,			MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (Fe	6)			y Shallow Dark Surface (TF12)
	Below Dark Surfac	ce (A11)	Depleted Da				Oth	er (Explain in Remarks)
	rk Surface (A12)		Redox Depre					
	lucky Mineral (S1) (LRR N,	Iron-Mangan		s (F12) (l	RR N,		
	147, 148) leyed Matrix (S4)		MLRA 13 Umbric Surfa			6 122)	³ Indica	ators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					ind hydrology must be present.
	Matrix (S6)		Red Parent I				27	s disturbed or problematic.
	ayer (if observed)	:					1	
Type: G	ravel layer							
Depth (inc	ches): 4						Hydric Soil P	resent? Yes No
Remarks:							ļ.	

WETLAND DETERMINATIO			-
Project/Site: Martin County Solar	City/County: Mac	KA County	Sampling Date: 11 4 20
Applicant/Owner: 56-1-an	*	State: KY	Sampling Point: WAS-57
Applicant/Owner: <u>Skilley</u> C. Kiele	Section, Township,	Range: NA	
Landform (hillslope, terrace, etc.): Hillslope			
Subregion (LRR or MLRA): LARN Lat:			
Soil Map Unit Name: FiF: Five black, Fairpaint,			
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology		feneeded, explain any answe	
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling poin	it locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: Yes	No within a We		_ No
Upland point	t associated w/ W	lettand AD { Al	5
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check		Surface Soil	
	Frue Aquatic Plants (B14)		etated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1) Dxidized Rhizospheres on Living R	oots (C3) Drainage Pat	
	Presence of Reduced Iron (C4)		Nater Table (C2)
	Recent Iron Reduction in Tilled Soil		7.778
	Thin Muck Surface (C7)		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or St	ressed Plants (D1)
Iron Deposits (B5)		Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	
Water-Stained Leaves (B9)			phic Relief (D4)
Aquatic Fauna (B13) Field Observations:		FAC-Neutral	Test (D5)
	Depth (inches):		
	Depth (inches):		
		Wetland Hydrology Presen	t? YesNo
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring we	ali, aeriai photos, previous inspectio	ons), if available:	
Remarks			

Sampling Point: WAK-51

0.4	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Platanus occidentalis	20	/	FACW	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
50% of total cover:D	20% of	total cover:	4	2
Sapling/Shrub Stratum (Plot size: 5M.)		1		FACW species x 2 =
1. Eleagnus umbellata	90		UPL	FAC species x 3 =
2	· <u>· · · · · · · · · · · · · · · · · · </u>			FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	90	= Total Cove	er .	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:5	20% of	total cover:	18	
Herb Stratum (Plot size: 5M)		12		data in Remarks or on a separate sheet)
1. Rosa multi Flora	25		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Lonicisa japanica		./		
3. Dicanthelium clandestinum	5		FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Microsterion vinineur			FAL	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
5. Eleagnus umbellata				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Herb – All herbaceous (non-woody) plants. regardless
	75	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.5	20% of	total cover:	15	
Woody Vine Stratum (Plot size: 30 M)	1			Woody vine – All woody vines greater than 3.28 ft in
1. Lonicera japonica	5	/	FACU	height.
0 1			11100	
2				
3				
4				Hydrophytic
5			<u></u>	Vegetation
		= Total Cove		Present? Yes No
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			

1

Sampling Point: WH-57

(inches) 0-8	Matrix		Redox Features		
0-8	Color (moist)	%	Color (moist) Type ¹ Loc ²	and the second sec	Remarks
	104R 6/1	30	<u></u>	SICL	Disturbed Fill Soils
	104R513	60		-	
	7.54B58	10			
8-12	104R6/2	70-		_ <u>5L</u>	
	104R 5/3	30			
	· · · · · · · · · · · · · · · · · · ·				
				-	
Type C=Cor	ncentration D=Depl	etion RM=I	Reduced Matrix, MS=Masked Sand Grains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil In					ators for Problematic Hydric Soils ³ :
Histosol (/	A1)		Dark Surface (S7)	2	cm Muck (A10) (MLRA 147)
	pedon (A2)		Polyvalue Below Surface (S8) (MLRA 14		oast Prairie Redox (A16)
Black Hist			Thin Dark Surface (S9) (MLRA 147, 148		(MLRA 147, 148)
	Sulfide (A4) Layers (A5)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	H	iedmont Floodplain Soils (F19) (MLRA 136, 147)
	k (A10) (LRR N)		Redox Dark Surface (F6)		ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dark Surface (F7)		other (Explain in Remarks)
	k Surface (A12)		Redox Depressions (F8)		
	ucky Mineral (S1) (L	RR N,	Iron-Manganese Masses (F12) (LRR N,		
	147, 148) eyed Matríx (S4)		MLRA 136) Umbric Surface (F13) (MLRA 136, 122)	³ Ind	icators of hydrophytic vegetation and
Sandy Gle			Piedmont Floodplain Soils (F19) (MLRA		Itland hydrology must be present,
	Matrix (S6)		Red Parent Material (F21) (MLRA 127, 1		less disturbed or problematic.
	ayer (if observed):				
Type: Gra					
Depth (inch	nes): 12			Hydric Soil	Present? Yes No
Remarks:	Fill layer	COM	taining Coal Spoil		

and the second	
WETLAND DETERMINATION DATA FORM – Eastern Mounta	
Project/Site: Martin County Solar City/County: Martin C	
Applicant/Owner: Suin	State: KY Sampling Point: WAS-58
Investigator(s): 5. Kelley, C. Kuabel Section, Township, Range:	NA
Landform (hillslope, terrace, etc.): Seep Local relief (concave, convex, net concerned)	one): <u>Concave</u> Slope (%): 2
Subregion (LRR or MLRA): LARN Lat: 37.767413 Long: -8	32,458686 Datum: NAD83(K1975)
Soil Map Unit Name: FIF: Fireblack, Fairpoint, Haymine soils, 30-8090 slupe, Stor	NWI classification: NA
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 "Norma	al Circumstances" present? Yes 📶 No
	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locati	ions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area	
Hydric Soil Present? Yes No within a Wetland?	Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
What I AF	
Wettand AE	
Originates from seep out of hillside and flows into a	N-02 PEM
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) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3)	
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2) Crayfish Burrows (C8)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes Ves Depth (inches): 0	
Water Table Present? Yes No Depth (inches):	
	Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	alladie:
Remarks:	

Sampling Point:_____AS - 58

Tree Stratum (Plot size:		Absolute	Dominant	Indicator	Dominance Test worksheet:
2		% Cover			
3. Species Across All Strata: ? (B) 4. N Percent of Dominant Species 100 (A/B) 7. = Total Cover 50% of total cover: 20% of total cover: 20% of total cover: 20% of total cover: 20% of total cover: 21 1 22 1 1 23 24 1 <td></td> <td></td> <td></td> <td></td> <td></td>					
4					Species Across All Strata:
5	N LI Pr				
6.	4	1.		-	
7. = Total Cover = Total Cover The value of lack worksheet: Sapino(Shub Stratum (Plot size: 15 A) 5 2% of total cover: FACU species $x 2 =$ 3. 5 4 2% of total cover: FACU species $x 4 =$ 3. 5 4 4 4 4 4 3. 6 7	5			<u> </u>	That Are OBL, FACW, or FAC: (A/B)
Total Cover Total Cover 50% of total cover: 20% of total cover: 2 2 3 5 4 6 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 8 7 9 50% of total cover: 50% of total cover: 20% of total cover: 4 6 7 7 8 7 9 50% of total cover: 20% of total cover: 20% of total cover: 10 10 11 10 12 10 12 10 13 10 14 10 15 10 16 10 17 10 18 10 19 10	6				Prevalence index worksheet:
Solv of total cover: 20% of total cover: OBL species x 1 = Sapling/Shub Stratum (Plot size: 15 A FACU species x 2 = A	7		-	·	
Sapting/Shrub Stratum (Plot size: 15.4) 1. ACC ^ Acy > 1.0 FAC species	17.00				
Source Areysen Source FAC species x3 = 2		20% of	total cover:		1 M M
2	Sapling/Shrub Stratum (Plot size: 10 M)				
2	1. ALER Acyundo	5		FAL	FAC species x 3 =
3.	2				FACU species x 4 =
4					UPL species x 5 =
5					Column Totals: (A) (B)
6.	5		-		
7.	6				
8					
9					
50% of total cover: - 50% of total cover: - 1. 50% of total cover: - 2. 10 - 2. 10 - 2. 10 - 2. - - 3. - - 4. - - 5. - - 6. - - 7. - - 8. - - 9. - - 10. - - 11. - - 12. - - 13. - - 9. - - 10. - - 11. - - 12. - - 50% of total cover: - - 14. - - -					✓ 2 - Dominance Test is >50%
50% of total cover: 2.6 20% of total cover: 1 Herb Stratum (Plot size: 5 10 FACU Problematic Hydrophytic Vegetation ¹ (Explain) 1. Juncuty effectsuy 10 FACU Problematic Hydrophytic Vegetation ¹ (Explain) 2. Arthuson hice bits 40 FACU Problematic Hydrophytic Vegetation ¹ (Explain) 3. 40 FACU Problematic Hydrophytic Vegetation ¹ (Explain) 1 4. 5. 6 FACU Problematic Hydrophytic Vegetation Strata: 7. FRACU FRACU Problematic Hydrophytic Vegetation Strata: 8. Septent at breast height (DBH), regardless of height. 50% of total cover: 50% of total cover: 50% of total cover: 50% of total cover: 20% of total cover: 10 1. 50% of total cover: 20% of total cover: 10 1. 50% of total cover: 20% of total cover: 10 2. Septimized for total cover: 10 10 3. Septimized for total cover: 20% of total cover: 10 1. Septimized for total cover: 20% of total cover:	9	-			3 - Prevalence Index is ≤3.0 ¹
Sub% of total cover 20% of total cover Herb Stratum (Plot size:) 1. Juncuty effectsuy 10 2. Arthewon, hice diss 40 3. 40 4.					4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:) 10		20% of	total cover:		data in Remarks or on a separate sheet)
1			1	-A- 1	Problematic Hydrophytic Vegetation ¹ (Explain)
3		10			
3	2. Arthorom hispidis	40	\checkmark	FAL	¹ Indicators of hydric soil and wotland hydrology must
4.	3				
5.	4				
6. Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 8.					Seminent er fear fegetation ettean
7	6.				
8					
9.	8		-		
$\frac{10.}{11.}$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $11.$ $10.$ 10	9				
11					, , , , , , , , , , , , , , , , , , ,
50% of total cover: 20% of total cover: 10 Woody Vine Stratum (Plot size:) 1		-			
50% of total cover: 20% of total cover: 10 Woody Vine Stratum (Plot size:) 1		<0			
Woody Vine Stratum (Plot size:) Woody vine - All woody vines greater than 3.28 ft in height. 1			transferration in the presence		of size, and woody plants less than 3.28 ft tall.
1		20% of	total cover:	10	Woody vine - All woody vines greater than 3.28 ft in
2					height.
3.					
4	2				
5	3		. <u> </u>		
5	4				Hydrophytic
50% of total cover: 20% of total cover:	5				
			= Total Cove	er	Present? Yes No
Remarks: (Include photo numbers here or on a separate sheet.)	50% of total cover:	20% of	total cover:		
	Remarks: (Include photo numbers here or on a separate s	heet.)			

×

Sampling Point: 108-58

100000000000000000000000000000000000000	ription: (Describe	to the depth r				or confirm	n the absence	of indicators.)
Depth	Matrix			x Features		1 2	T	B
(inches)	Color (moist)		Color (moist)	_%	Type ¹		Texture	Remarks
0-6	10YR 4/1	95	01R5/6	-5	_ <u>C</u>	<u>M</u>	Sic	
						· · · · · · · · · · · · · · · · · · ·	A	
	\ <u></u>	·						*
d								
				· · · · · ·				
							-	-
								•
	*							
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indica	ators for Problematic Hydric Soils ³ :
Histosol	(A1)	-	Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)	-	Polyvalue Be				148) C	coast Prairie Redox (A16)
Black Hi		-	_ Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)	-	Loamy Gleye		-2)		P	iedmont Floodplain Soils (F19)
	Layers (A5)	-	Depleted Mai		-			(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S					ery Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11) _	Depleted Dar				C	other (Explain in Remarks)
	rk Surface (A12)		Redox Depre			DD 4		
	lucky Mineral (S1) (I	_RK N, _	Iron-Mangan		s (F12) (L	_KR N,		
	147, 148)		MLRA 13			4001	31	instant of hudson hudio up and the and
	leyed Matrix (S4) edox (S5)	-	Umbric Surfa Piedmont Flo					icators of hydrophytic vegetation and tland hydrology must be present,
	Matrix (S6)	-	Red Parent N					less disturbed or problematic.
	ayer (if observed):					127, 147		less distance of problematic.
Type:(
	, , , , , , , , , , , , , , , , , , , ,							
Depth (inc	cnes): <u>u</u>		·				Hydric Soil	Present? Yes / No
Remarks:								
0								
					4-V-			
					- 19	13	- A.	
					a lite a) and algel			
				. 3	<u>6</u>			
				-54	3 .	1. a.	1.1	

Project/Site: Martin County Solar City/Cou	unty: Martin County Sampling Date: 11/4/20
Applicant/Owner: Gavida	State: K1 Sampling Point: WAS-59
	, Township, Range: N/A
Landform (hillslope, terrace, etc.): Floriplain Local relief	
Subregion (LRR or MLRA): LA%N Lat: Lat:	
Soil Map Unit Name: F:F: Fiveblock, Fairpoint, Kaymine soils, 30	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbe	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Libudeia Cail Dessant Q Van / Alla	s the Sampled Area within a Wetland? Yes No
Wellard AF	
WEIGHER	PEM
Fed From hillside scep & Stream 10	PER
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) True Aquatic Plants (B1	4) Sparsely Vegetated Concave Surface (B8)
Ligh Water Table (A2) Hydrogen Sulfide Odor	
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced Ir Sediment Deposits (P2) Presence of Reduced Ir	
Sediment Deposits (B2) Recent Iron Reduction i Drift Deposits (B3) Thin Muck Surface (C7)	
Algal Mat or Crust (B4) Other (Explain in Remai	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes <u>No</u> Depth (inches): <u>0</u>	- / /
Saturation Present? Yes Ver No Depth (inches): U	Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	bus inspections), if available:
Remarks:	
iteriality.	

1

Sampling Point: WAS-59

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: 2 (A)
2.				
3				Total Number of Dominant Species Across All Strata: \mathcal{L} (B)
4. N A				Species Across All Strata: (B)
4N/N				Percent of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: 100 (A/B)
6				Developes la devenadada este
7				Prevalence Index worksheet:
		= Total Cove	r	Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
				FACU species x 4 =
2				
3				UPL species x 5 =
4				Column Totals: (A) (B)
5NA				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)				
1. Symphiotrichum dumosum	_10	\checkmark	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Carlet Frankii	2		OBL	
3. Microstedium vimineum	15		FAC	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5	·			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height,
8				
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 13.		= Total Cove		of size, and woody plants less than 3.28 ft tall.
	20% 01	total cover:	241	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				*
2				
3NR				
4				
5.				Hydrophytic Vegetation
·		- Total Cause		Present? Yes No
EQD/ aftetel acuer		= Total Cove total cover:	r i	
50% of total cover:		total cover:		· · · · · · · · · · · · · · · · · · ·
Remarks: (Include photo numbers here or on a separate s	sheet.)			
				3

8

Sampling Point: WAS-59

epth	Matrix		oth needed to docur Redo	x Feature			and the set of the set	· · · · · · · · · · · · · · · · · · ·	
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remar	ks
<u>)-4</u>	104R 4/1	93	104R 5/6	7	_C	<u>M</u>	<u> </u>		
						_			
								6	
			s	_	_	· <u> </u>			
	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.		Pore Lining, M=Mat	
Histoso Histic E Black H Hydrogo Stratifie 2 cm Mo Deplete Thick D Sandy N	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) (LRR N) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) (I		 Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma Redox Dark S Depleted Dai Redox Depres Iron-Mangan 	low Surfac rface (S9) d Matrix (f trix (F3) Surface (F k Surface essions (F8 esse Masse	6) (MLRA 1 (F2) (F7) (F7) (F7)	47, 148)	2 cm 148) Coa: (N Pied (N Very	rs for Problematic Muck (A10) (MLR st Prairie Redox (A ILRA 147, 148) mont Floodplain Sc ILRA 136, 147) Shallow Dark Surf er (Explain in Rema	A 147) 16) bils (F19) ace (TF12)
Sandy (Sandy F	A 147, 148) Gleyed Matrix (S4) Redox (S5) I Matrix (S6)		MLRA 13 Umbric Surfa Piedmont Flo Red Parent M	ce (F13) (odplain S	oils (F19)	(MLRA 14	8) wetlar	tors of hydrophytic nd hydrology must b s disturbed or probl	present,
	Layer (if observed):								
Type: _(ches): 4						Hydric Soil Pr		No
emarks:	ciles). <u> </u>			-			Hydric Soli Ph	esent? Yes 🗸	
								×	
	÷								

Eastern Mountains and Piedmont - Version 2.0

Project/Site: Martin County Solar City/Co	unty: Martin County Sampling Date: 11/4/20
Applicant/Owner: Soution	State: K Sampling Point: WAS-60
Investigator(s): 5. Kelley, C. Knabel Section	n, Township, Range: NR
	f (concave, convex, none): Convex Slope (%): 5
Subregion (LRR or MLRA): LREN Lat: 37,767/87	Long: -82,451678 Datum: NAD83(K1FIP5)
Soil Map Unit Name: FiFiFiveblock, Falspornt, Kaymine Soils, 30-1	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed	
Are Vegetation, Soil, or Hydrology naturally problemati	
SUMMARY OF FINDINGS – Attach site map showing same	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	is the Sampled Area
Undrig Coil Dropant? Voc No	within a Wetland? Yes <u>No</u>
Wetland Hydrology Present? Yes No	
Remarks:	
	at structure are
Upland point associat	wetland AF
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) True Aquatic Plants (B7	14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor	-
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced II	
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C7 Algal Mat or Crust (B4) Other (Explain in Rema	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	_ /
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	ous inspections), if available:
Demerke	
Remarks:	

1. C. C.

Sampling Point: UAS-60

20.		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30A)	Charles and a second second second	Species?		Number of Dominant Species
1. Platanus occidentalis	40		FACW	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Total Number of Dominant Species Across All Strata: (B)
4NA				
11				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7			<u> </u>	Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover:	20% of	total cover:_	8	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M)				FACW species x 2 =
1. Eleganos umbellata	90		UPL	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4				
	<u> </u>			Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	90 =	= Total Cove	er	
50% of total cover: 45	20% of	total cover:_	18	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)				data in Remarks or on a separate sheet)
1. Eleagnus umbellata	15	1	UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. White snakeroot				
		_ V	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Rosa multiflora				be present, unless disturbed or problematic.
4. Lonicera japonica	12		FACU	Definitions of Four Vegetation Strata:
5. Polistichum aristichroidices			FACU	Tool Mandu danta analytica view 2 in (7.0 am) as
	10	\checkmark	FAL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Viola Soraria	5		FALD	height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	0	10		
111 <u>5</u>	10			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 30		= Total Cove total cover:		of size, and woody plants less than 5.26 it tail.
	20% 0	total cover:_	1~	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1		-		
2				
3				
4				Hydrophytic
5				Vegetation
	=	= Total Cove	er	Present? Yes No
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate sl				
	,			
2				

Sampling Point: UAS-60

- 1

Depth Matrix Corr (moist) Corr (moist) Corr (moist) Corr (moist) Texture Remarks Corr (Dist) Matrix Fig. Texture Texture Remarks Corr (Dist) Matrix Fig. Texture Remarks Corr (Dist) Matrix Fig. Texture Remarks Corr (Dist) Matrix Fig. Fig. Fig. Corr (Dist) Matrix Fig. Fig. Fig. Fig. Corr (Dist) Matrix Matrix Matrix Fig. Fig. Corr (Dist) Matrix Matrix Matrix Matrix Fig. Matrix Matrix Matrix Matrix Matrix Fig. Fig. <t< th=""><th></th><th>indicators.)</th><th>the absence of indica</th><th>or commin the a</th><th></th><th></th><th></th><th>to the depth</th><th>Matrix</th><th>Depth</th></t<>		indicators.)	the absence of indica	or commin the a				to the depth	Matrix	Depth
Support 15 Prote: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. Vigtic Soil Indicators: Indicators for Problematic Hyg Histoc Epipedon (A2) Polyvalue Below Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histoc Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prains Redox (A14) Hydrogen Suffed (A4) Loamy Gleyed Matrix (F2) Piedemont Ficodplain Soils (I Stratified Layers (A5) Depleted Batrix (F3) (MLRA 147, 148) Stratified Layers (A5) Depleted Natrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) Stratified Layers (A5) Depleted Dark Surface (F13) Other (Explain in Remarks) Stratified Layers (A5) Depleted Capital Soils (F13) (MLRA 136, 122) ³ Indicators of hydrophylic vege wetland hydrology must be pipedmont Floodplain Soils (F19) (MLRA 147, 148) Sandy Redox (S5) Piedmont Floodplain Soils (F12) (MLRA 142, 147) unless disturbed or problema Stripped Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophylic vege wetland hydrology must be pipedmont Floodplain Soils (F19) (MLRA 142, 147) unless disturbed or problema <t< th=""><th></th><th>Remarks</th><th>Texture</th><th>Loc² Te</th><th></th><th></th><th></th><th>%</th><th></th><th></th></t<>		Remarks	Texture	Loc ² Te				%		
SUR 5/2 15 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix, indicators for Problematic Hyp Histoc Dipedon (A2) — Polyvalue Below Surface (S8) (MLRA 147, 148) — Cast Parine Redux (A10) (MLRA 147, 148) Histoc Dipedon (A2) — Polyvalue Below Surface (S8) (MLRA 147, 148) — Cast Parine Redux (A10) (MLRA 147, 148) Histoc Dipedon (A2) — Dolyvalue Below Surface (S8) (MLRA 147, 148) — (MLRA 147, 148) Hydrogen Surface (A1) — Depleted Matrix (F3) — (MLRA 147, 148) Yorking Surface (A12) — Redox Dark Surface (F13) — Very Shallow Dark Surface (F13) Sandy Redox Dark Surface (A12) — Redox Depressions (F12) — Indicators of hydrophytic vege wetland hydrology must be ploted Dark Surface (S5) Sandy Redox (S5) — Piedmont Floodpian Soils (F12) (MLRA 143, 142) — unless disturbed or problema strictive Layer (if observed): Type:			5:0	MS	С.		NOR SHE	85	104B4/2	2-10
ypa: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix, fridicators for Problematic Hyd yrain Dark Surface (S7)									5UR 5/4	-0
dric Soil Indicators: Indicators for Problematic Hyc Histic Epipedon (A2) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (1 Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (1 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6)									3 78 18	
dric Soil Indicators: Indicators for Problematic Hyc Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (I (MLRA 147, 148) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (A11) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Dark Surface (F12) (LRR N, WLRA 136, 142) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) Other (Explain in Remarks) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ^a Indicators of hydrophytic vege Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pr Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema Depth (inches): Matrix Si Yes										
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Histosol (A1)		Pore Lining, M=Matrix.	² Location: PL=Pore Li	ins. ² Loca	Sand Gra	S=Masked	duced Matrix, MS	pletion, RM=Re	ncentration, D=Dep	pe: C=Co
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (1 Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (A17) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (F12) (LRR N, MLRA 147, 148) MLRA 136, 122) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) ³ Indicators of hydrophytic vege Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pr Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema strictive Layer (if observed): Hydric Soil Present? Yes	dric Soils ³ :	rs for Problematic Hydric	Indicators for						ndicators:	dric Soil I
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Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136, Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Eddox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pristrictive Layer (if observed): Red Parent Material (F21) (MLRA 127, 147) Type: Grave Depth (inches): Hydric Soil Present? Yes marks: Hydric Soil Present? Yes								·e (Δ11)		
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MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vege wetland hydrology must be private of problema Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema strictive Layer (If observed): Hydric Soil Present? Yes Type: Hydric Soil Present? Yes marks: Hydric Soil Present? Yes				.RR N,				LRR N,		
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pr Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problema strictive Layer (if observed): Type: Grand Layer (if observed): Depth (inches): Hydric Soil Present? Yes marks:				NGUNA ESISIANSI. N	. ,.					
Stripped Matrix (S6)	station and	tors of hydrophytic vegetation	³ Indicators of	6, 122)	MLRA 13	ce (F13) (I	Umbric Surfa			
strictive Layer (if observed): Type: Grand Caye Hydric Soil Present? Yes marks:										
Type: Gravil Layer Depth (inches): 6 marks:	tic.	s disturbed or problematic.	unless distu	127, 147)	21) (MLR	laterial (F2	Red Parent M			
Depth (inches): Yes marks:		-								
marks:	· /	and the second se								
	No 🖌	esent? Yes <u> </u>	Hydric Soil Present	Hyd			-		hes): <u>-(p</u>	Depth (inc
										marks:
					2					

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region Project/Site: Martin County Solar City/County: Martin County Sampling Date: 11/5 Applicant/Owner: Savion Sampling Point: 1245 State: KY Section, Township, Range: MA Investigator(s): S.Kelley, M. Johnson Landform (hillslope, terrace, etc.): Hilldope Seep Local relief (concave, convex, none): Concase. Slope (%): 3 Subregion (LRR or MLRA): LRRN Lat: 37,766763 Datum: NAD83 KIA Long: -82,459161 Soil Map Unit Name: FFF Fairpoint, Fivedolock, Kaymine Soils, 30-8090 slopes, Stony NWI classification: N/A 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 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 Is the Sampled Area Hydric Soil Present? No Yes within a Wetland? Wetland Hydrology Present? Yes No Remarks: We Hand A5 Hillade seep Feeding hydrology into S-10 (Acid mine drainage) PEM 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) X Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) ス High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Yes ____ No ____ Depth (inches):_0 Surface Water Present? No ____ Depth (inches): 0 Water Table Present? Wetland Hydrology Present? Yes No __ Depth (inches):__O Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Sampling Point: (1)AS-61

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Acer negurida	_10_	$ \rightarrow $	FPL.	That Are OBL, FACW, or FAC: (A)
20				Total Number of Dominant
3				Species Across All Strata:3(B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: [60] (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
50% of total cover:5	20% of	= Total Cov	er 1	OBL species x 1 =
	20% 0	total cover.	<u> </u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				
1				FAC species x 3 =
2			<u></u>	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5N A				
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8,				∠ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5n)				
1. Microstegium vimineum	70		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Eleagurus unsbellata	10		UPL	
3. Viola Gorania	5			¹ Indicators of hydric soil and wetland hydrology must
			FACU	be present, unless disturbed or problematic.
4. Lovicena japonicu				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				
	87 -	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3,28 ft tall.
50% of total cover: 43.5		total cover:		
Woody Vine Stratum (Plot size: 30A)				Woody vine – All woody vines greater than 3.28 ft in
1. Vitis rivarius	5	1	FACW	height.
			inco	
2				
3				
4				Hydrophytic
5				Vegetation
	5 =	Total Cove	er	Present? Yes No
50% of total cover: 2.5	20% of	total cover:_	1	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Dese	cription: (Describe t	o the depth n				or confirm	n the absence o	f indicators.)
Depth	Matrix	%		x Features		12	Tautura	Demerler
(inches)	Color (moist)		Color (moist)	%	Type'		Texture	Remarks
0-10	104R 4/1	93 7	, SYR 4/4		_C	M	SICL	
							<u> </u>	
1								
			1.					
	1							
¹ Type: C=C	oncentration, D=Deple	etion, RM=Red	Juced Matrix, MS	=Masked	Sand Gra	líns.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicate	ors for Problematic Hydric Soils ³ :
Histosol	(A1)	Ļ	Dark Surface	(S7)				m Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be	ow Surfac	ce (S8) (M	LRA 147,		ast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	face (S9)	(MLRA 1	47, 148)		MLRA 147, 148)
Hydroge	n Sulfide (A4)	Г	Loamy Gleye	d Matrix (F	=2)		Pie Pie	dmont Floodplain Soils (F19)
	l Layers (A5)		Depleted Mat					MLRA 136, 147)
	ick (A10) (LRR N)	F	Redox Dark S					y Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dar				Oth Oth	ier (Explain in Remarks)
	ark Surface (A12)		Redox Depres			55 N		
	lucky Mineral (S1) (LI		Iron-Mangane		es (F12) (L	.RR N,		
	147, 148) Bleyed Matríx (S4)		MLRA 136 Umbric Surfa			6 1221	³ India	ators of hydrophytic vegetation and
	edox (S5)	Г	Piedmont Flo					and hydrology must be present,
	Matrix (S6)		Red Parent M					ss disturbed or problematic.
	ayer (if observed):							
	avel layer							
	ches): 10						Hydric Soil P	resent? Yes 📈 No
· · · · · · · · · · · · · · · · · · ·							Hydric Soli P	
Remarks:			*					
								8-

Project/Site: Martin County Solar City/C	ounty Maria County Sampling Date: 11/5/00
Applicant/Owner: Source	State: KY Sampling Point: UAS-62
Investigator(s): S. Keller, M. Junsan Section	Township Bange: V/A
Landform (hillslope, terrace, etc.): Hillslope Local reli	ef (concave, convex, pone): Convex Slope (%): 5
	Long: -82,459223 Datum: AIADB3(14-(FIPS)
Soil Map Unit Name: FiF: Fireblock, Fairpoint, Kingmine soils, 30	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Ves No	Is the Sampled Area within a Wetland? Yes No
Upland point assoc	ciated w/ Wetland AG
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)	
High Water Table (A2)	
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Sediment Deposits (B2) Recent Iron Reduction	
Sediment Deposits (B2) Drift Deposits (B3) China Muck Surface (C	
Algal Mat or Crust (B4)	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	ious inspections), if available:
Remarks:	

Sampling Point: WAS-62

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1)		Species?	<u>Status</u>	Number of Dominant Species 1 That Are OBL, FACW, or FAC: (A)
2 3				Total Number of Dominant Species Across All Strata:(B)
3NA				Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7 (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by: OBL species x 1 =
50% of total cover:	20% of	total cover:_		
Sapling/Shrub Stratum (Plot size: 15M)	0.5	/		FACW species x 2 =
1. Eleaguis umbellator			UPL	FAC species x 3 =
2,		. <u> </u>		FACU species x 4 =
3				UPL species x 5 = (A)
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6			<u> </u>	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	-00			3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 47.5		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
	20% 01	total cover:_	<u> </u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M) 1. Microstegium VimineyM	20	/	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Eleannis umbellata				
2. Eleagnus umbellata 3. Polistichum aristichroidics	10		FACU	¹ Indicators of hydric soil and wetland hydrology must
		\checkmark	FACU	be present, unless disturbed or problematic.
4. Lonicera japonica 5. Viola soraria				Definitions of Four Vegetation Strata:
S. VIDIA SOTARA	10		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Pripoteris intermedia		<u> </u>	FACU	more in diameter at breast height (DBH), regardless of
7. Asplenium platyineuron		· · · · · · · · · · · · · · · · · · ·		height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9	•			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11	75-	Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.5	20% of 1	total cover:		
Woody Vine Stratum (Plot size:)	_	-		Woody vine – All woody vines greater than 3.28 ft in height.
1				
2				
3. N A				
4				Hydrophytic
5				Vegetation
	=	Total Cove	r	Present? Yes No
50% of total cover:	20% of t	total cover:_		
Remarks: (Include photo numbers here or on a separate sh	neet.)			

Sampling Point: WAS-62

Profile Desc Depth	ription: (Describe t Matrix	o the dept		ment the in ox Features		or confirm	n the absence	of indicators.)
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
<u> </u>	_10484/4	_90	5YA 5/4			_M	<u>SiL</u>	
¹ Type: C=Co Hydric Soil I	ncentration. D=Depl	etion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	 ins.		L=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
Histosol Histic Ep Black His Hydroge Stratified 2 cm Mu Depletec Thick Da Sandy M MLRA Sandy G Sandy R	(A1) ipedon (A2)		Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma Redox Dark 3 Depleted Dar Redox Depre Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo Red Parent M	elow Surface (Face (S9) (ed Matrix (F trix (F3) Surface (F6 rk Surface (essions (F8) ese Masses 6) Ince (F13) (N podplain So	(MLRA 14 2) (F7)) s (F12) (L /LRA 136 ils (F19) (47, 148) .RR N, 5, 122) MLRA 14	148) 2 P P V V 0 3 Ind 8) we	cm Muck (A10) (MLRA 147) coast Prairie Redox (A16) (MLRA 147, 148) fiedmont Floodplain Soils (F19) (MLRA 136, 147) fery Shallow Dark Surface (TF12) ther (Explain in Remarks) icators of hydrophytic vegetation and ttland hydrology must be present, less disturbed or problematic.
Type: Depth (inc	ayer (if observed): and lance hes): <u>4</u>						Hydric Soil	1
Remarks:								

WETLAND DETERMINATION DATA FORM	 Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar: City/C	County: Martin County Sampling Date: 11/5/20
Applicant/Owner: 500100	
Investigator(s): 5, Kelley, M. Johnson Section	
Landform (hillslope, terrace, etc.): Flond plan Local rel	
	Long:62,458415 Datum: NAD83 (KUF103)
Soil Map Unit Name: VCSKF : Clovedick-Shelocta-Kimper Company	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	2
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing san	
SolumArt of Thebitoo – Attach site map showing san	inping point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
Wetland AH	
DUCTION A MIT	R= M
Welland Fringe along 5-12, located in Fli	PEM
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)	(B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	or (C1) Drainage Patterns (B10)
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3) Algal Mat or Crust (B4)	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): D	
Water Table Present? Yes No Depth (inches): _O	
Saturation Present? Yes Ves Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge. monitoring well, aerial photos, pre-	vious inspections), if available:
Demode	
Remarks:	

Sampling Point: WAS-63

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
				Total Number of Dominant Species Across All Strata: 4 (B)
3NA	-			
				Percent of Dominant Species (1)
5				That Are OBL, FACW, or FAC: (A/B)
6				
7		· <u> </u>	A	Prevalence Index worksheet:
		= Total Cov	er	Total % Cover of:Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
	10	./	ARI	FAC species x 3 =
1. Salix nigra				
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7			÷	1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is $\leq 3.0^{1}$
		= Total Cove	er	
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: <u>5M</u>)		-		data in Remarks or on a separate sheet)
1_Salix nigra	2		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
- Salit nigra				
2. Percerania pennsylvanica 3. Carex Frankii	_12_	\checkmark	FACW	¹ Indicators of hydric soil and wetland hydrology must
3. Carek Frank'i	10		OBL	be present, unless disturbed or problematic.
4. Boehmenia cylindrica	17		FAGN	Definitions of Four Vegetation Strata:
5. Vernonica giaanteen			FAL	bennitions of Four Vegetation offata.
6. Typha AngustiFolia				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
- 11				more in diameter at breast height (DBH), regardless of
7. Corex vulpencidio				height.
8. Scippis cyperinus			FAW	Sapling/Shrub – Woody plants, excluding vines, less
9. Cyperus strigosus			FACW	than 3 in. DBH and greater than or equal to 3.28 ft (1
10. Arthrazon hispidis	20	~	FAC	m) tall.
11. Solidano giganteo	2		FACW	Herb – All herbaceous (non-woody) plants, regardless
0 0 0	100 =	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50		total cover:		······
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3				
4				Hydrophytic
5.				Vegetation
		= Total Cove	ar	Present? Yes No No
50% of total cover:				
			-	
Remarks: (Include photo numbers here or on a separate s	neet.)			

×

1	28									
SOIL								S	ampling Poil	nt:WAS-63
	cription: (Describe	to the dep				or confirr	n the absence	of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	<u>x Feature</u> %	Type ¹	Loc ²	Texture		Remarks	
0-4	10 1/R 5/1	95	7,5 1R 5/8	.5	С	M	Sic			
4-12	10-185/2	ΰÒ	104R 5/8	ID	C.	M	SICL		t)	
16 24	104B2/1	30	1.1.2				Comp.			
12-20	104R 5/2	100					SL			3
					(
	my m						3 	0		
	1) (1	- <u></u>	1			·				
			8) 		
'Type: C=C	concentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: Pl	_=Pore Lini	ng, M=Matrix.	
Hydric Soil			1 2						oblematic Hyd	ric Soils ³ :
Histosol			Dark Surface	. ,				÷.	10) (MLRA 14)	7)
	pipedon (A2) listic (A3)		Polyvalue Be					oast Prairie (MLRA 14	Redox (A16) 7. 148)	
	en Sulfide (A4)		Loamy Gleye			,,	Pi		odplain Soils (F	19)
	d Layers (A5)		X Depleted Ma					(MLRA 13		
	uck (A10) (LRR N) d Below Dark Surfac	e (A11)	Redox Dark Depleted Da						Dark Surface (n in Remarks)	(F12)
	ark Surface (A12)		Redox Depre						in in rice include)	
	Mucky Mineral (S1) (I	LRR N,	Iron-Mangan		es (F12) (LRR N,				
	A 147, 148) Gleyed Matrix (S4)		MLRA 13 Umbric Surfa		MIRA 13	6, 122)	³ Indi	cators of hy	drophytic veget	tation and
	Redox (S5)		Piedmont Flo					-	logy must be pre	
	d Matrix (S6)		Red Parent N	Material (F	21) (MLR	A 127, 147	7) unl	ess disturbe	ed or problemat	ic.
	Layer (if observed):								,	a ²¹
Type:	iches):						Hydric Soil	Present?	Yes	No
Remarks:							Injune com	i icoont.		
, tothighter										
1		10						10		
		à								
		34								
								2		
	120									
	1									

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WE TEAM DETERMINATION	DATATORM - Lastern Would	tains and Fleumont Reg	JION
Project/Site: Martin County Solar	City/County: Martin	County Sampling	Date: 11 5 20
Applicant/Owner: Savion		State:K Y Samp	ing Point: WAJ-64
Investigator(s): S. Kelley, C. Knabel	Section, Township, Range	:_N/A	
Landform (hillslope, terrace, etc.): Hillslop 2	Local relief (concave, convex,	none): Convex	Slope (%):
Subregion (LRR or MLRA): LRRN Lat:	1,762694 Long:	-82,458435	Datum: NADB3(14178)
Soil Map Unit Name: UCSKF + Clovedick - Shelcra-K	imperComplex, 20-8090 sloves, Ver	USYMM NWI classification: M	IA
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil, or Hydrologys		mal Circumstances" present?	Yes No
Are Vegetation, Soil, or Hydrology r		ed, explain any answers in Rem	
SUMMARY OF FINDINGS – Attach site map	snowing sampling point loca	ations, transects, impor	ant features, etc.
Hydric Soil Present? Yes N	No Is the Sampled Are within a Wetland?		\checkmark
Upland pai	int associated w/ We	tland Att	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minin	num of two required)
Primary Indicators (minimum of one is required; check all t	that apply)	Surface Soil Cracks (B	6)
Surface Water (A1)	e Aquatic Plants (B14)	Sparsely Vegetated Co	incave Surface (B8)
	Irogen Sulfide Odor (C1)	Drainage Patterns (B1)	
	dized Rhizospheres on Living Roots (C		
	sence of Reduced Iron (C4)	Dry-Season Water Tab	le (C2)
	cent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)	
	n Muck Surface (C7)	Saturation Visible on A	
Algal Mat or Crust (B4)	er (Explain in Remarks)	Geomorphic Position (I	, ,
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)	52)
Water-Stained Leaves (B9)		Microtopographic Relie	f (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes No Dep	pth (inches):	1	
Water Table Present? Yes No Dep	pth (inches):		/
	pth (inches): Wetlan	d Hydrology Present? Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous inspections), if	available:	
Remarks:			
		4	

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Sampling Point: WAS -64

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	STATUTE CONTRACTOR OF STATUTE	Species?	Status	Number of Dominant Species
1. Platanus occidentalis	20		FACW	That Are OBL, FACW, or FAC:(A)
2. Robinia pseudocaccacia		./	FACU	
				Total Number of Dominant
3. Pinuto rigida				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 42.9 (A/B)
6,				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of:Multiply by:
E0% of total power:				OBL species x 1 =
50% of total cover:	20% 01	total cover.		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		1		
1. Eleugnus umbellato.	50	\checkmark	UPL	FAC species x 3 =
2. Fraining pennsylvanica	5		FAL	FACU species x 4 =
3. Platans occidentalis	15		FACW	UPL species x 5 =
				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
100 Tax	70	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>35</u>	20% of	total cover:	14	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Solidago gigantea	10		FACUL	Problematic Hydrophytic Vegetation ¹ (Explain)
	15	-/	FAW	
2. Lonicera jabonica	15			¹ Indicators of hydric soil and wetland hydrology must
3. Tussilago Farfara		<u> </u>		be present, unless disturbed or problematic.
4. Polistichum aristichobidics	5		FACU	Definitions of Four Vegetation Strata:
5. Lespedeza cuneata	10		FAW	
6. Microstegium vinineum	25		FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			· · · · · · · · · · · · · · · · · · ·	more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.	-			
1 G				Herb – All herbaceous (non-woody) plants, regardless
705		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>38.5</u>	20% of	total cover:_	121-1	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s				
Remarks. (include photo numbers here of on a separate s	neet.)			
			_	

Depth	Matrix	to the dep	th needed to docun Redo	x Features		or comm	in the absence	or indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-6	10-18-4/2	98	104R 6/6	2	C	M	SICL	
6-8	2.51 5/2	90	7.54R5/6	10	C.	M	SL	
<u> </u>	0	-			<u> </u>			
	-	<u></u>)	·				
	<u></u>							
					4			
						-		
		-						
-14-1	-							<u>.</u>
		oletion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.		=Pore Lining, M=Matrix.
Hydric Soil I	Indicators:						Indica	tors for Problematic Hydric Soils ³ :
Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be					past Prairie Redox (A16)
Black His			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4) Layers (A5)		Loamy Gleye		-2)			edmont Floodplain Soils (F19)
	ick (A10) (LRR N)		K Depleted Mat		5)			(MLRA 136, 147) ry Shallow Dark Surface (TF12)
	Below Dark Surfac	e (A11)	Depleted Dar	the second second second				her (Explain in Remarks)
	ark Surface (A12)		Redox Depre					()
Sandy M	lucky Mineral (S1) (I	LRR N,	Iron-Mangane	ese Masse	s (F12) (L	RR N,		
	147, 148)		MLRA 136					
	ileyed Matrix (S4)		Umbric Surfa					cators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					land hydrology must be present,
	Matrix (S6) ayer (if observed)		Red Parent N	laterial (F2	21) (MLRA	127, 147) unle	ess disturbed or problematic.
Type: Gr								
Depth (inc							Undria Cail I	Present? Yes No
	cnes): <u>D</u>						Hydric Soll F	
Remarks:								
					1			

Project/Site: Martin County Solar City	County: Martin County Sampling Date: 11 5 20
Applicant/Owner: Source	County: <u>Martin County</u> Sampling Date: 11 5 20 State: <u>Ky</u> Sampling Point: <u>WAS - 65</u>
Investigator(s): 5. Keller M. Johnson Sec	tion. Township. Range: NA
	elief (concave, convex, none): <u>Concave</u> Slope (%): <u>1, 5</u>
Subregion (LRR or MLRA): LRRN Lat: 37.750/013	Long: -82,458477 Datum: NAD83 (M=(+2))
Soil Map Unit Name: F: F: Fiveblack, Fairpoint, Keymine soil, 30-	
Are climatic / hydrologic conditions on the site typical for this time of year?	
	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Welland AI	
	PEM
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)	
High Water Table (A2)	
Saturation (A3) Oxidized Rhizosphe	res on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1)	ed Iron (C4) Dry-Season Water Table (C2)
	on in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)	
Iron Deposits (B5)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🖊 No Depth (inches): 💋	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes Ves
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	

Sampling Point: WAS -65

		ominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1)	<u>% Cover</u> <u>S</u>	pecies? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant Species Across All Strata:(B)
4JP 5			Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6			Prevalence Index worksheet:
7			
		otal Cover	Total % Cover of: Multiply by: OBL species x 1 =
50% of total cover:	20% of tot	al cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 5M)	10	()AI	FAC species x 3 =
1. Salit niga			FACU species x 4 =
2			UPL species x 5 =
3			
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
6 7			Hydrophytic Vegetation Indicators:
		· · · · · · · · · · · · · · · · · · ·	1 - Rapid Test for Hydrophytic Vegetation
8			✓ 2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 5	= T	otal Cover	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5m)	20 % 01 1018		data in Remarks or on a separate sheet)
1. Arthraton hispidis	4-0	FAE	Problematic Hydrophytic Vegetation ¹ (Explain)
		FAC	
2. Symphiotrichum dumonum	-10		¹ Indicators of hydric soil and wetland hydrology must
3. Carex Frank:	2	OBL	be present, unless disturbed or problematic.
4 <u>Salix nigra</u> 5. <u>Bidens Frondosa</u>		OBL	Definitions of Four Vegetation Strata:
	12 -	FACUS	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Typha oungustifalia		OBI	more in diameter at breast height (DBH), regardless of
7. Eliocharis compressa		OBL	height.
8			Sapling/Shrub - Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
115	95 = T		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 47,5		otal Cover al cover: 9	of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)			Woody vine – All woody vines greater than 3.28 ft in height.
1			
2			
3NA			
4I			Usedna s hutia
5.			Hydrophytic Vegetation
	= To	otal Cover	Present? Yes No
50% of total cover:	20% of tota	al cover:	,
Remarks: (Include photo numbers here or on a separate s	heet.)		
	20		

Sampling Point: (JAS-65

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	- %	_Type ¹	Loc ²	Texture	Remarks
0-4	104B 3/	75	7.54R5/4	10	<u> </u>	PL		
	10YR 513	15						
							· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
				 .				
		·						(<u></u>
					21			·
					·			
								N/
								· · · · · · · · · · · · · · · · · · ·
17 0 0							21 11 17	
	oncentration. D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	coast Prairie Redox (A16)
Black Hi	10 10 10		Thin Dark Su			47, 148)	П.	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		-2)			Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma					(MLRA 136, 147)
	ck (A10) (LRR N)	- (11)	Redox Dark Depleted Da					/ery Shallow Dark Surface (TF12) 0ther (Explain in Remarks)
	l Below Dark Surfac Irk Surface (A12)	e (ATT)	Redox Depre					cher (Explain in Remarks)
	lucky Mineral (S1) (L	RRN	Iron-Mangan					
	147, 148)		MLRA 13		3 (1 1 Z) (1	Litter,		
	leyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Inc	licators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent I					less disturbed or problematic.
	ayer (if observed):				/ \		1	
	ravel layer							
Depth (inc							Hydric Soil	Present? Yes No
							Thyane bon	
Remarks:								
		8						