

August 12, 2005

Reference:

Jurisdictional Wetland/Waters Delineation

Marlboro County Industrial Park - 236 Acres Bennettsville, Marlboro County, South Carolina

S&ME Job No. 1614-05-296

On behalf of Alliance Consulting Engineers, S&ME, Inc. (S&ME) has completed a Jurisdictional Wetland Delineation at the above-referenced site. The approximate 236-acre site is located east of S.C. Highway 38 and north of Beauty Spot Road East near Bennettsville. The site drains to Lilly Quick Creek east of the site and eventually to Lake Wallace and Crooked Creek within the Great Pee Dee River watershed.

Enclosed, please find the following information for your review: 1) site vicinity map; 2) USGS topographic map; 3) 1999 aerial photograph; 4) Marlboro County soil survey map; 5) site photographs; and 6) wetland/upland datasheets.

On July 29 and August 4, 2005, Chris Daves conducted the jurisdictional wetland delineation. Please refer to Figure 3 for the following jurisdictional locations:

• Wetland A (Photos 1-3) — Carolina bay wetland located on the southern portion of the site. A pipe underneath Ox Bodies Drive connects Wetland A to a ditch that is hydrologically connected to Lake Wallace.

S&ME Project No. 1614-05-296 August 12, 2005

Wetland B (Photo 4) – Linear, forested wetland located on the eastern portion of the site. Soils
were saturated throughout Wetland B. Wetland B drains eventually to Lilly Quick Creek east of
the site.

The upland portions of the site consist of industrial facilities, fallow fields (Photo 5), and mixed pine-hardwood woodland.

The on-site limits of the jurisdictional areas will likely be surveyed by a registered land surveyor and following your on-site concurrence with our findings, platted at an appropriate scale for your review.

Thank you for your time and attention to this matter. If you require a field visit to verify the location of the jurisdictional areas, we look forward to meeting you onsite. If we can provide any additional information, please do not hesitate to contact Chris Daves at 803-561-9024.

Sincerely,

S&ME, Inc.

Chris Daves Biologist Jim Palmer, P.E.

Geotechnical Department Manager

s:environ/1614-05jobs/1614-05-296/jdrequest

REQUEST FOR WETLAND DETERMINATION

Agent/Developer/Engineer

(name, address, phone)

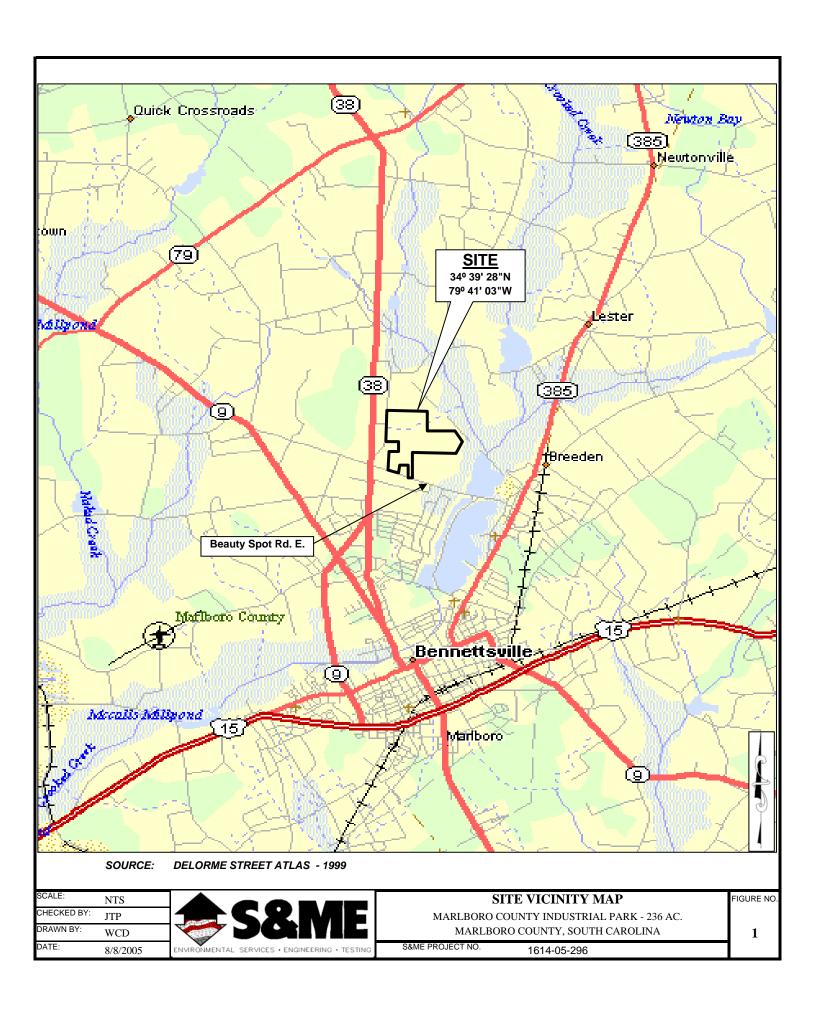
Date:8/8/05County:MARLBOROTotal Acreage of Tract:236 ACRES

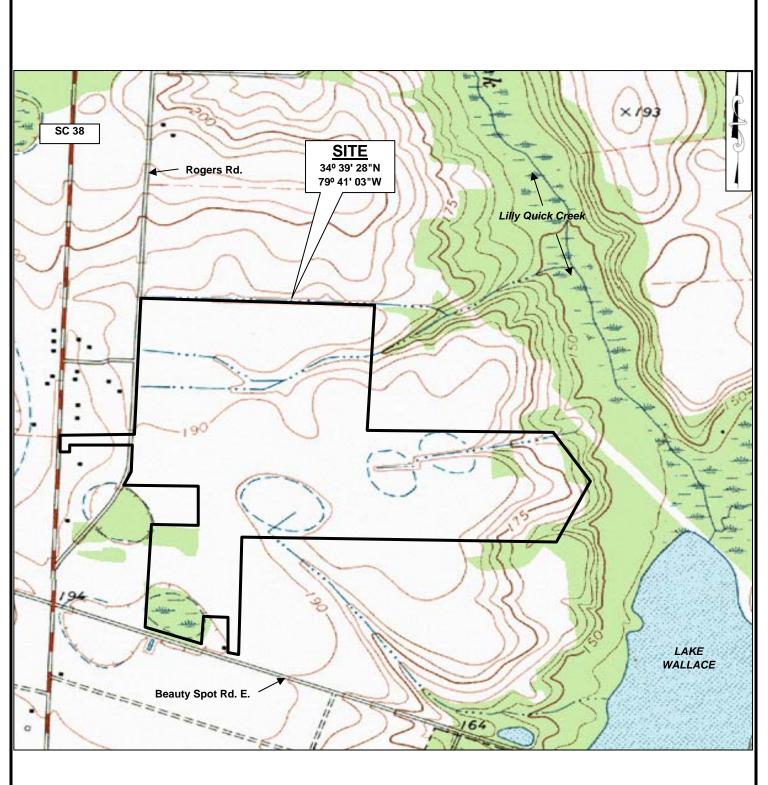
Project Name (if applicable): MARLBORO COUNTY INDUSTRIAL PARK

Property Owner

(name, address, phone)

Marlboro County	S&ME, Inc. (c/o Chris Daves)
Post Office Box 419	134 Suber Road
Bennettsville, SC 29512	Columbia, SC 29210
(843) 479-5626	(803) 561-9024
Status of Project (check one): ☐ Ongoing site work for development purposes ☐ Development in planning stages ☐ No specific development plans at this time	
Project Type – Indicate the proposed use of the land present, indicate the current zoning or land use at the ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Silviculture ☐ Aquaculture	
Information Required to Accompany Request – Chinformation as is available. At a minimum, the first to Accurate Location Map) from County Map, USG Survey Plat of Tax Map of Property in Question Soil Survey Sheet (USDA-NRCS or Aerial Photo Property boundaries should be shown on the soil survey Topographic Survey Conceptual Site Plan for the Overall Development	wo items must be forwarded: S Quad Sheet, etc.) (from County Assessor's Office or other source). ey/aerial photo.
Endangered Species Evaluation: Has the site been evaluated for the presence of federal species and/or any proposed or designated critical hab	
If YES, has the evaluation been coordinated with the	US Fish & Wildlife Service (FWS)? ☐ YES ☒ NO
If coordination has occurred, please provide the FWS FWS Log Number: Copy of Report Enclosed: YES NO	Log number and enclose a copy of the report:
If evaluation has not been coordinated with the US FV	WS, enclose a copy of your report findings.
the present property owner or have specific authority	nature required. The person signing this form must be of the property owner to authorize Corps of Engineers for on-site investigation if such is deemed necessary. We the specific authority of the property owner.
PRINTED NAME of person signing this form, belo	ow: Chris Daves
Signature of the property Owner or Authorized Ag	gent: Chro Daris





SOURCE: USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE MAP
BENNETTSVILLE NORTH, SC - 1972

 SCALE:
 1" = 900'

 CHECKED BY:
 JTP

 DRAWN BY:
 WCD

 DATE:
 8/8/2005



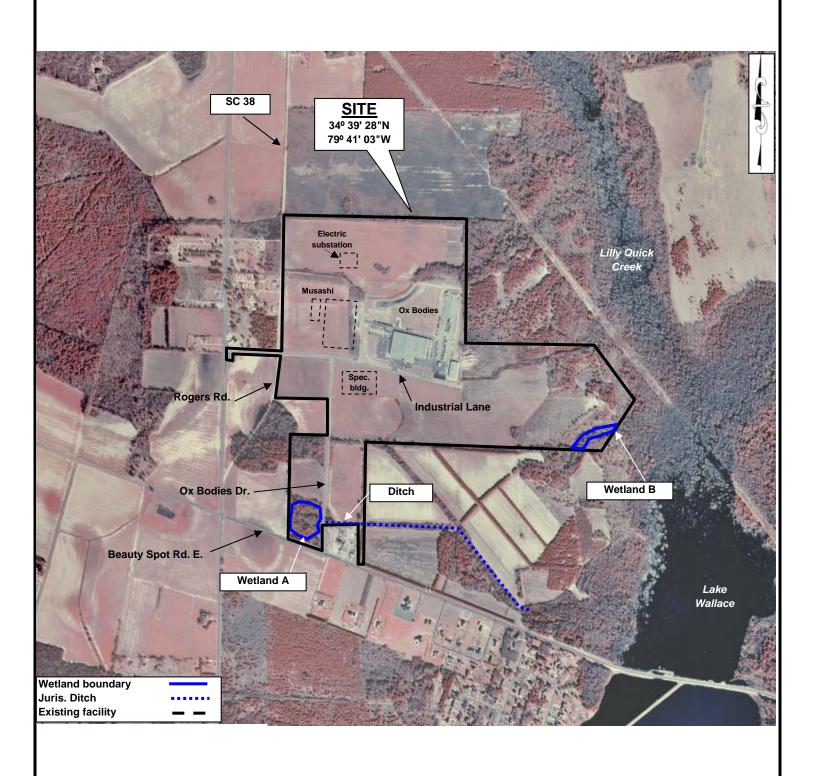
SITE TOPOGRAPHIC MAP

MARLBORO COUNTY INDUSTRIAL PARK - 236 AC. MARLBORO COUNTY, SOUTH CAROLINA

S&ME PROJECT NO. 1614-05-296

FIGURE NO.

2



SOURCE: NAPP AERIAL PHOTOGRAPH - 1999

SCALE: NTS
CHECKED BY: JTP
DRAWN BY: WCD
DATE: 8/8/2005
ENVIRONMENTA

S&NE
ENVIRONMENTAL SERVICES ENGINEERING TESTING

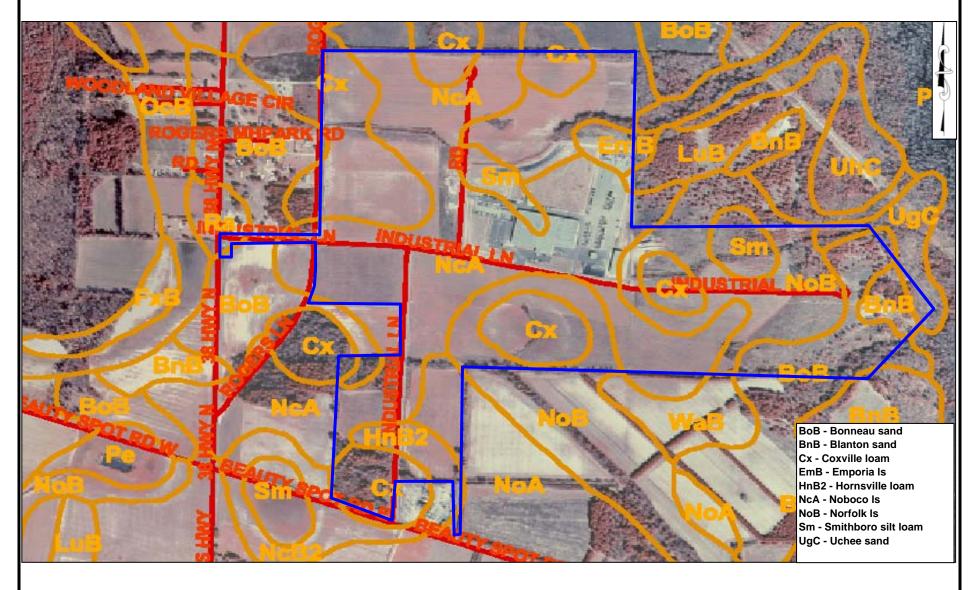
SITE AERIAL MAP

FIGURE NO.

MARLBORO COUNTY INDUSTRIAL PARK - 236 AC. MARLBORO COUNTY, SOUTH CAROLINA

S&ME PROJECT NO. 1614-05-296

3



SOURCE: SOIL SURVEY OF MARLBORO COUNTY - 2000 CD VERSION

SCALE: NTS
CHECKED BY: JTP
DRAWN BY: WCD
DATE: 8/1/2005



SITE SOILS MAP
MARLBORO COUNTY INDUSTRIAL PARK
MARLBORO COUNTY, SOUTH CAROLINA

FIGURE NO.

4

S&ME PROJECT NO. 1614-05-296



SITE PHOTOGRAPHS



Photo #1: Wetland A on southern portion of site.



Photo #2: Pipe below Ox Bodies Drive connecting Wetland A to a ditch.



Photo #3: Typical soil sample of Wetland A.



Photo #4: Wetland B on the eastern portion of site.



Photo #5: Typical upland on the site.

S&ME Project No.: 1614-05-296 Marlboro County Industrial Park – 236 Acres

DATA FORM ROUTINE WETLAND DELINEATION (1987 COE WETLANDS DELINEATION MANUAL)

Project/Site:	Mariboro County Industrial Park – 236 Acres			Date:		8/3/	05
Applicant/Owner:	Marlboro County + clo Alliance Consulting Engin	eers		County:		Marib	OFO
Investigator:	Chris Daves – S&ME, Inc.			State:		SC	;
Do Normal Circum	stances exist on the Site?	YES	NO	Community ID	:	Wetlar PF0	
Is the site significa	ntly disturbed (Atypical Situation)?	YES	NO	Transect ID:	1	Plot ID:	1
Is the area a poten	itial Problem Area? (If needed, explain on reverse)	YES	NO	F9I: 3438,58,	N	Lon: 79 4	1, 03, AA

VEGETATION

Dominant Plant Species		inant Plant Species Stratum Indicator Domina				Stratum	Indicator
1.	Liquidambar styraciflua	Tree	FAC+	-			
2.	Pinus taeda	Tree	FAC	0.			
3,	Quercus nigra	Tree	FAC	1.	and the second s		
4.	. Quercus phellos	Tree	FACW -	2.			
5	Acer vubrum	Tree	FAC	3.			
6.	Toxicodendron radicans	Vine	FAC	4.			
7.	Swilax rotundifolia	Vine	FAC	5.	***************************************		
8	Campsis radicans	Vine	FAC	6.			
Pe	rcent of Dominant Species	that are OB	L, FACW o	FAC (excludi	ng FAC-):	100% (12	.5%)
Re	marks: Carolina bay wetlar	nd. Mostly FA	C vegetation	Vegetation cri	teria met.		

HYDROLOGY

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SOUS

Map Unit Name	(Series and Pha	Drainage Class:	Poor			
Taxonomy (Sub	group): Typic (Field Observations (Type? Yes 🖾 No				
PROFILE DES	CRIPTION			Community ID:	Wetland A/ PF01	
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc	
0-6	Ap	10YR 2/1			Loam	
6-12	В	10YR 6/1	10YR 6/6	Abundant	Loamy clay	
		HYDRIC S	 OIL INDICATOR	 :S	L	
Histosol			Concreti	ons		
☐ Histic Epipe ☐ Sulfidic Odd			☐ High Org Sandy Soils	ganic Content in Surf	ace Layer in	
☐ Samaic Oat ☐ Aquic Moist			,	Streaking in Sandy :	Ralle	
Reducing C	**			1 Local Hydric Soils		
		dora		*	F101	
Gleyed or L Remarks: Hydric		903		xplain in Remarks)		
indistrict it your	come brossite					
					Marina r na a tipo a ponsa roccom - 10-10-0-4 - 4 r	
WETLAND DE	TERMINATIO	¥				
Hydrophytic Ve	egetation Prese	nt? ⊠YES [ON			
Wetland Hydro	logy Present?	⊠ YES [] NO Is this	is Sampling Point Within a Wetland		
Hydric Soils Pr	esent?	⊠YES [JNO			
Romarke All H	hroa pritario mot	Jurisdictional Wetl	and (A)	,,		

DATA FORM ROUTINE WETLAND DELINEATION (1987 COE WETLANDS DELINEATION MANUAL)

Project/Site:	Mariboro County Industrial Park - 236 Acres			Date:		8/3/	35
Applicant/Owner:	Mariboro County - c/o Alliance Consulting Engin	eers		County:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Marib	oro
Investigator:	Chris Daves - S&ME, Inc.			State:		SC	:
Do Normal Circum	stances exist on the Site?	YES	NO	Community ID	1	Wetlar PF0	
Is the site significa	ntly disturbed (Atypical Situation)?	YES	NO	Transect ID:	1	Plot ID:	1
Is the area a poten	tial Problem Area? (If needed, explain on reverse)	YES	NO	Lat: 34 39' 28"	N	Lon: 794	1' 03"W

VEGETATION

	Dominant Plant Species	Stratum	Indicator	Do	minant Plant Species	Stratum	Indicator
1.	Liquidambar styraciflua	Tree	FAC +	9.	Toxicodendron radicans	Vine	FAC
2.	Liriodendron tulipifera	Tree	FAC	10.	Woodwardia arcolata	Herb	OBL
3.	Quercus nigra	Tree	FAC	11.	Athyrium filix-femina	Herb	FAC
4.	Alnus servulata	Tree/Shrub	FACW+	12.			
5	Acer rubrum	Tree	FAC	13.			
6.	Clethra phifolia	Shrub	FACW	14.	}		
7.	Smilax rotundifolia	Vine	FAC:	15.			
8	Campsis radicans	Vine	FAC	16.			
Pe	rcent of Dominant Species	that are OB	L, FACW c	r FA	C (excluding FAC-):	100% (27	'%)
	marks: Forested wetland.						

HYDROLOGY

Recorded Data (Describe in Remarks)	WETLAND HYDROLOGY INDICATORS
Stream, Lake or Tide Gauge	Primary Indicators:
Aerial Photographs	☑ Inundated
Other	Saturated in Upper 12 Inches
	☐ Water Marks
FIELD OBSERVATIONS	☐ Drift Lines
Depth of Surface Water (in.)	Sediment Deposits
Depth to Free Water in Pit (in.) 2-3 inches	□ Drainage Pattern in Wetlands
Depth to Saturated Soil (in.)	Secondary Indicators (2 or more required):
Remarks: Linear, forested wetland on the eastern portion of site. Standing water was observed in certain portions of Wetland B, Saturated soils observed throughout.	

SOUS

Map Unit Name (Series and Pha	Drainage Class: Well			
Taxonomy (Subg	гоцр): Arenia	Field Observations (
PROFILE DES	CRIPTION			Community ID:	Wetland B/ PF01
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Confrast	Texture, Concretions, Structure, etc
0-8	A	10YR 2/1			Loam
8-12	В	10YR 4/2			Loamy clay
	1	HYDRIC S	L OIL INDICATOR	<u> </u>	<u>i</u>
Histosol			Concreti		
☐ Histic Epiped			☐ High Org Sandy Soils	ganic Content in Surf	face Layer in
☐ Aquic Moist			,	Streaking in Sandy :	Salle
				n Local Hydric Soils	
Reducing Co				· ·	LIDE
Gleyed or Lo		olors	U Other (E	xplain in Remarks)	
nemana. nyane	auna present.				
WETLAND DE	rerminatio		- The Revenue of the Section S	- COMPANY TO COMPANY T	71777
Hydrophytic Ve	getation Pres	ent? 🛛 YES [] NO		\$\$\$\$\$\$\$\$\$ &#\$</td></tr><tr><td></td><td></td><td>⊠ YES 「</td><td colspan=3>ES ☐ NO Is this Sampling Point Within a ⊠ YES ☐ NO</td></tr><tr><td>Wetland Hydrol</td><td>ogy Present?</td><td>₩ 1E9 F</td><td>140</td><td>⊠ YES ∐</td><td>NO</td></tr></tbody></table>

DATA FORM ROUTINE WETLAND DELINEATION (1987 COE WETLANDS DELINEATION MANUAL)

Project/Site:	roject/Site: Marlboro County Industrial Park - 236 Acres			Date:		8/3/05		
Applicant/Owner:	er: Marlboro County - c/o Alliance Consulting Engineers County:		M	Mariboro				
Investigator: Chris Daves - S&ME, Inc.				State:		SC		
Do Normal Circum	stances exist on the Site?	YES	NO	Community ID:		Jplan	d	
Is the site significa	ntly disturbed (Atypical Situation)?	YES	NO	Transect ID: 1	Plot I	D:	1	
is the area a poter	ntial Problem Area? (If needed, explain on reverse)	YEŞ	NO	Lat: 3439'28"N	Lon:	79 41	. 03AA	

VEGETATION

	Dominant Plant Species	Stratum Indicator			minant Plant Species	Stratum	Indicator
1.	Liquidambar styraciflua	Tree	FAC+	9.	Toxicodendron radicans	Vine	FAC
2.	Quereus nigra	Tree	FAC	10.	Vitis rotundifolia	Vine	FAC
3.	Carya cordiformis	Tree	FAC	11.	Parthenocissus quinquefolia	Vine	FAC
4.	Carya tomentosa	Tree		12.	Smilax rotundifolia	Vine	FAC
5	Cornus florida	Tree	FAC	13.	Asplenium platyneuron	Herb	FACU
6.	Pinus taeda	Tree	FAC	14.			
7.	Primus serotina	Shrub	FACU	15.			
8	Ostrya virginica	Shrub/Tree	FACU-	16.	3 MONTH AND THE AND TH		
Pe	rcent of Dominant Species	that are OE	L, FACW o	r FA	C (excluding FAC-):	75% (0%)	
Re	marks: Mixed pine-hardwood	i upland adjace	nt to Wetland	s A & i	3. Mostly FAC vegetation. \	egetation crit	eria met.

HYDROLOGY

Recorded Data (Describe in Remarks)	WETLAND HYDROLOGY INDICATORS		
Stream, Lake or Tide Gauge	e or Tide Gauge Primary Indicators:		
Aerial Photographs	raphs		
Other	Saturated in Upper 12 Inches		
No Recorded Data Available	Water Marks		
FIELD OBSERVATIONS	☐ Drift Lines		
Depth of Surface Water (in.)	Sediment Deposits		
Depth to Free Water in Pit (in.)	☐ Drainage Pattern in Wetlands		
Depth to Saturated Soil (in.)	Secondary Indicators (2 or more required):		
Remarks; No hydrologic indicators noted.	☐ Oxidized Root Channels in Upper 12 Inches ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (Explain in Remarks)		

SOILS

Map Unit Name	(Series and Pha	ise): Hornsvil	le sci (HnB2)	Drainage Class:	Mod. Well
Taxonomy (Subgroup): Aquic hapludults			Field Observations Confirm Mapped Type? Yes ⊠ No □		
PROFILE DES	CRIPTION			Community ID:	Upland
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Техture, Concretions, Structure, etc.
0-6	Ap	10YR 4/3			Loamy sand
6-12	6	10YR 6/6	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Sandy loam
		HYDRIC S	OIL INDICATOR	RS	
Histosol			Concreti	ons	
☐ Histic Epipedon ☐ High Org ☐ Sulfidic Odor Sandy Soils			ganic Content in Surface Layer in		
— □ Aquic Moist	ure Regime		Organic	Streaking in Sandy	Soils
Reducing C	onditions		Listed o	n Local Hydric Soils	List
			Explain in Remarks)		
Remarks: Hydric				,	
WETLAND DE	TERMINATIO	N	***************************************		
Hydrophytic Ve	getation Pres	ent? 🛮 YES [JNO		***************************************
Wetland Hydro	logy Present?	☐ YES [☑ NO Is this	Is this Sampling Point Within a Wetland? ☐ YES NO	