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Feature ID: NWA015

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



Project/Site:	WETI		RMINAT		A FORM - I	Midwes	t Region	10/10/2022
Applicant/Owner	Lake OI	ake Charlotte S	olar LLC	County.	State:	MN	Sampling Date.	NWA017A
Investigator(s):	۵			Sect	on Townshin	Range:	Sec	17 T103N R30W
Landform (hillslope terr	ace etc.).	Denres	sion		relief (concav		none):	Concave
Slope (%): 2	Lat [.]	43 72954	31011		-94 4638	2, CONVEX,	Datum:	WGS84
	Clarion-Sto	rden complex, 6	to 10 perc	ent slopes,	-04.4000	0		
Soil Map Unit Name:	moderately	eroded	•	• •	NWI	Classifica		NA
Are climatic/hydrologic c	conditions of th	ne site typical for	this time of	of the year?	Yes (If	f no, expla	iin in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	/ disturbed?	Are "r	normal circumsta	inces present? No
Are vegetation	, soil	, or hydrology		naturally pr	oblematic?	(If nee	eded, explain a	ny answers in remarks.)
SUMMARY OF FIN	IDINGS							
Hydrophytic Vegeta	ation Present?	P No						
Hydric Soil Presen	t?	No		Is the s	ampled area	within a v	wetland?	No
Wetland Hydrology	Present?	No		lf yes, c	ptional wetlar	nd site ID:		
Remarks:								
Recently harvested a	agricultural fiel	d.						
VEGETATION U	se scientific	c names of pla	ants.					
Tasa Olash		,	Absolute	Dominant	Indicator	Domin	ance Test Worl	ksheet
1.	(Plot size:)	% Cover	Species	Status	Number that are	r of Dominant Spe OBL, FACW, or	ecies FAC: 0 (A)
2 3						Total N Species	umber of Domina Across All Strata	nt a: 0 (B)
4 5						Percent that are	t of Dominant Spe OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
		-		=Total Cov	ər			
Sapling/Shrub Stratum	(Plot size:)				Preval	lence Index Wo	rksheet
1						Total %	6 Cover of:	Multiply by:
2								_ x 1 =
3								_ X Z =
4 5						FACI		_ x 3 =
J				=Total Cov	er	UPL st	pecies	_ ^ + =
Herb Stratum	(Plot size:)				Colum	n totals	(A) (B)
1.	-	,				Preval	ence Index = B/	_ () () () ()
2.								
3.						Hydro	phytic Vegetati	on Indicators:
4.						F	Rapid test for hy	drophytic vegetation
5						[Dominance test	is >50%
6						F	Prevalence index	< is ≤3.0*
7						1	Morphological ac	laptations* (provide
8						-	supporting data	n Remarks or on a
9 10							Problematic byd	rophytic vogotation*
10				-Total Cov	or			ophylic vegetation
Woody Vine Stratum	(Plot size:)			51	*Indicator	rs of hydric soil an unless disturbed o	d wetland hydrology must be r problematic
۰ ۲								· · ·
<u> </u>		-		=Total Cov	ər	Hyd Veg Pres	rophytic etation sent?	No
Remarks: (Include photo Harvested agricultural fin	o numbers hei eld. Brome an	e or on a separa d velvet leaf on f	te sheet) ield edge	Bare ground	I: 100%			
				- <u>5</u>				

NWA017A

Profile Descr	ription: (Describe	e to the	depth needed	to docun	nent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix			Redox Fea	tures			
(Inches)	Color (moist)	%	Color (moist	:) %	Type*	Loc**	Texture	Remarks
0-12	2.5Y 3/3	100					Sandy Loam	
*Type: C =	Concentration, D	= Deple	tion, RM = Re	duced Mat	rix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)			Sandy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2))		Sandy Red	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ack Histic (A3)			Stripped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	l	_oamy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5)	l	oamy Gle	ed Matrix	: (F2)	Other (explain in	remarks)
2 0	m Muck (A10)		[Depleted M	atrix (F3)			
De	pleted Below Darl	k Surfac	e (A11) I	Redox Dark	<pre>Surface</pre>	(F6)		
Th	ick Dark Surface ((A12)	[Depleted D	ark Surfac	ce (F7)	*Indicators of hydropl	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	I	Redox Dep	ressions (F8)	hydrology must be pr	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive L	ayer (if observed	l):						
Туре:		-					Hydric Soil Presen	t? No
Depth (inches	s):				-			
Soil is extrem	nely compacted							
	CV							
	G I							
Primony India	rology indicators	s: Iono io r	equired: check	k all that ar			Secondary India	store (minimum of two required)
			equired, criec		<u>, Found (B</u>	10)	<u>Secondary Indica</u>	
Sunac			_		Fauna (B	(13)		
High W	vater Table (A2)			I rue Ac	quatic Plar	nts (B14)	1) Drainage	e Patterns (B10)
Satura	tion (A3)			Hyarog	en Suitide	Odor (C	1) Dry-Sea	Son Water Table (C2)
Water	Marks (B1)			Dxidize	a Knizosp Cai	oneres on	Living Crayfish	Burrows (C8)
Drift D	enosits (B3)			Present	ce of Redu	iced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal N	Aat or Crust (B4)		_	Recent	Iron Redu	action in T	Filled Soils X Geomor	phic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	 Thin Mu	uck Surfac	e (C7)		
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (I	Explain in	Remarks	3)	
Field Observ	ations:							
Surface Wate	r Present?	Yes	No	х	Depth (ii	nches):		
Water Table F	Present?	Yes	No	X	Depth (ii	nches):	We	tland Hydrology Present2
Saturation Pre	esent?	Yes	No	X	Depth (ii	nches):		No
(includes capi	illary fringe)							
Describe Rec	orded Data (strea	m gauge	e, monitoring v	vell, aerial	photos, pr	evious in	spections), if available:	
1								
Remarks:								







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Feature ID: NWA017

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate



Aerial Photograph Review



	WETLAN			A FORM - I	Midwest R	egion	40/40/2022
Applicant/Owner:	Lake Charlot	Charlotte Solar II		State:	MN San	npling Date:	N\\/A021A
	Lake		.U Soci			Soc 17	
		Hillslopp		roliof (concov		no):	
	l at:	13 72802			67 Da	tum:	WGS84
	Clarion-Storden	complex, 6 to 10 p	ercent slopes,	-34.4040			W0304
Soil Map Unit Name:	moderately eroc	ed	· ·	NWI	Classification): 	NA
Are climatic/hydrologic	conditions of the sit	e typical for this tim	ne of the year?	Yes (I	f no, explain ir	n remarks)	
Are vegetation	K, soil, o	r hydrology	Significant	y disturbed?	Are "norn	nal circumstance	es present? No
Are vegetation	, soil, o	r hydrology	naturally p	roblematic?	(If neede	d, explain any a	answers in remarks.)
SUMMARY OF FI	NDINGS						
Hydrophytic Vege	tation Present?	No					
Hydric Soil Prese	nt?	No	Is the s	sampled area	within a wet	land?	No
Wetland Hydrolog	y Present?	No	If yes, o	optional wetlar	nd site ID:		
Remarks:							
Recently harvested ag	ricultural field						
Recently narvested agi							
VEGETATION L	Jse scientific na	mes of plants.					
		Absolu	te Dominant	Indicator	Dominanc	e Test Worksh	eet
Tree Stratum	(Plot size:) % Cov	ver Species	Status	Number of	Dominant Specie	S
1					that are OB	L, FACW, or FAC	<u> 0 (A)</u>
3.					Total Numb	er of Dominant	0 (B)
4.					Demonstrati		()
5.					that are OB	L, FACW, or FA	s <u>C: %</u> (A/B)
			=Total Cov	rer			
Sapling/Shrub Stratun	n (Plot size:)			Prevalence	e Index Works	heet
1					Total % C	over of:	Multiply by:
2						ies x	1 =
4					EAC speci	ies x	3=
5.					FACU spe	cies x	4 =
-			=Total Cov	ver	UPL speci	es x	5 =
Herb Stratum	(Plot size:)			Column to	tals	(A) (B)
1.					Prevalenc	e Index = B/A =	
2.							
3					Hydrophy	tic Vegetation	Indicators:
4					Rap	id test for hydro	phytic vegetation
5					Dom	ninance test is >	50%
0 7						nalence index is	≥3.0 tations* (provide
8.					supr	porting data in R	emarks or on a
9.					sepa	arate sheet)	
10.					Prot	plematic hydropl	nytic vegetation*
			=Total Cov	rer	(exp	lain)	
Woody Vine Stratum 1.	(Plot size:)			*Indicators of present, unle	hydric soil and we ss disturbed or pro	etland hydrology must be oblematic
2			=Total Cov	/er	Hydrop Vegetat Present	hytic tion t? <u>No</u>	
Remarks: (Include pho Harvested agricultural	to numbers here or field. Bare ground: 1	on a separate shee	:t)				

NWA021A

Type: C = C Hydric Soil In Histi Blac Hydr Strat 2 cm	Color (moist) Color (moist) Co	%	Color (mois	t) %	Type	Loc**	Texture	Remarks Image: Constraint of the second s
*Type: C = C Hydric Soil In Histi Blac Hydr Strat 2 cm	oncentration, D = dicators: psol (A1) c Epipedon (A2) k Histic (A3) rogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **Locati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Histo Blac Hydr Strat 2 cm	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **Locati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Histo Blac Hydr Strat 2 cm Deal	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **! ocati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histi Blac Hydr Strat 2 cm	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **I coat	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histi Blac Hydr Strat 2 cm	oncentration, D = dicators: psol (A1) c Epipedon (A2) k Histic (A3) rogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **I cost	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Histo Blac Hydr Strat 2 cm Deol	oncentration, D = dicators: psol (A1) c Epipedon (A2) k Histic (A3) rogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **I cost	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Blac Hydr Strat 2 cm Den	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **I coati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histic Histic Blac Hydr Strat 2 cm Deal	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) rogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **I coati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Histo Blac Hydr Strat 2 cm Dend	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **Locati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Histo Blac Hydr Strat 2 cm	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) rogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **Locati	on: PL = Pore Lining M = Matri
*Type: C = C Hydric Soil In Histo Histo Blac Hydr Strat 2 cm Deal	oncentration, D = dicators: osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)	= Depleti	on, RM = Re	educed Ma	trix, MS =	Masked S	Sand Grains **Locati	on: PL = Pore Lining M = Matri
Hydric Soil In Histo Histo Blac Hydr Strat 2 cm	dicators: bool (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)		<u> </u>	Sandy Gle		maonou e		
Histi Histi Blac Hydr Strat 2 cm	osol (A1) c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)		_	Sandy Gle			Indicators for Probl	ematic Hydric Soils*
Histi Histi Blac Hydr Strat 2 cm	c Epipedon (A2) k Histic (A3) ogen Sulfide (A4 ified Layers (A5)		_	Sundy Old	ved Matrix	(S4)	Coast Prairie Re	enale Hydric Solis .
Blac Blac Hydr Strat 2 cm	k Histic (A3) ogen Sulfide (A4 ified Layers (A5)			Sandy Red	lov (95)	(04)	Dark Surface (S	7) (I PP K 1)
Hydr Strat 2 cm	rogen Sulfide (A4 ified Layers (A5)			Sanuy Reu	OX(33)			(LRRR, L)
Hydr Strat 2 cm	ified Layers (A5)			Stripped ivi	atrix (56)			Masses (F12) (LRR K, L, R)
Strai	ified Layers (A5)	•)		Loamy IVIU	cky Minera	al (F1)		ark Sufface (TF12)
2 cm				Loamy Gle	yea iviatřix	(FZ)	Other (explain in	i remarks)
1)001	MUCK (A10)	. <i>.</i>		Depleted IV	atrix (F3)	(==)		
	eted Below Dark	Surface	(A11)	Redox Dar	k Surface	(F6)		
Thic	k Dark Surface (A	412)		Depleted D	ark Surfac	ce (F7)	*Indicators of hydrop	hytic vegetation and wetland
Sand	dy Mucky Mineral	l (S1)		Redox Dep	oressions (F8)	hydrology must be p	resent, unless disturbed or
5 cm	Mucky Peat or F	Peat (S3)					problemate	
estrictive Lay	ver (if observed)):						
уре:					_		Hydric Soil Prese	nt? No
Depth (inches):								
		i siope.						
	I Indicators							
rimary Indicate	ors (minimum of (- one is re	quired: chec	k all that a	oply)		Secondary Indic	ators (minimum of two required
Surface	Motor (A1)		quireu, criec		<u>ppiy)</u> Equina (B	12)	<u>Secondary Indic</u>	
Surface					; Fauna (B	(544)		Soli Clacks (Bo)
High Wa	ter Table (A2)		_	Irue A	quatic Plar	nts (B14)		e Patterns (B10)
Saturatio	on (A3)			Hydrog	en Sulfide	Odor (C	1) Dry-Sea	ason Water Table (C2)
Water M	arks (B1)			Oxidize	ed Rhizosp	neres on	Living Crayfish	1 Burrows (C8)
Seaimen	it Deposits (B2)			Roots ((C3)	used Iron	(C4) Saturati	on Visible on Aerial Imagery (C
	t or Cruct (B4)			Presen	ce of Real	ucea iron uction in T	(C4) Stunted	or Stressed Plants (D1)
Aigai ivia	osite (B5)			(CG)	II UII Keut		FAC-Ne	putral Test (D5)
Inundativ	osits (DS) on Visible on Aeri	ial Image	my (B7)		uck Surfac	$\sim (C7)$		
Inditidatio	Vegetated Conc		ace (B8)	Gauge		$\mathcal{D}(\mathcal{D}(\mathcal{D}))$		
Opensory 	ained Leaves (B	.ave oun .a)	acc (B0)	Other (Evolain in	Romarks)	
		3)	-			Remarks)	
ield Observat	ions:	Voo	N -	. v	Donth /:-	nchoo).		
Vater Table Pr	-iesent?			× <u>×</u>	Depth (II	nches):		etland Hydrology
Saturation Proc	ent?	100	NC	,	Depth (ii	nchee).		Present?
includes canille	arv fringe)	103						
)escribe Recor	ded Data (stream	n daude	monitoring	vell parial	nhotos pr	evious in	spections) if available.	
	aca Data (Sireali	n yauye,	morntoring (aciidi	priotos, pi			
emarke:								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

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Feature ID: NWA021

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- 🥏 Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



W	ETLAND DETER	RMINATION DAT	A FORM - N	lidwest Region	
Project/Site: Lak	e Charlotte	City/County:	Martin	Sampling Date:	10/19/2022
Applicant/Owner:	Lake Charlotte S	olar, LLC	State: N	MN Sampling Point:	NWA022A
Investigator(s):	Apryl Jennrich	Sec	tion, Township,	Range: Sec.	17 T103N R30W
Landform (hillslope, terrace, etc.)): Hillslo	pe Local	relief (concave	e, convex, none):	Concave
Slope (%): 20 Lat:	43.72812	Long:	-94.4673	1 Datum:	WGS84
Soil Map Unit Name: Water			NWI	Classification:	NA
Are climatic/hydrologic conditions	s of the site typical for	this time of the year?	Yes (If	no, explain in remarks)	
Are vegetation, soil	, or hydrology	Significant	ly disturbed?	Are "normal circumsta	inces present? Yes
Are vegetation , soil	, or hydrology	naturally p	roblematic?	(If needed, explain a	ny answers in remarks.)
SUMMARY OF FINDINGS	5				
Hydrophytic Vegetation Pre	sent? Yes				
Hydric Soil Present?	No	Is the	sampled area	within a wetland?	No
Wetland Hydrology Present	? <u>No</u>	If yes,	optional wetland	d site ID:	
VEGETATION Use scie	ntific names of pl	ants.	Indiantor	Dominance Test Worl	(choot
Tree Stratum (Plot size	30)	% Cover Species	Status	Dominance rest won	Sheet
1. Fraxinus pennsylvanica		40 Y	FACW	Number of Dominant Spe	ecies
2. Acer negundo		20 Y	FAC		
3.				Species Across All Strata	nt a: <u>4</u> (B)
4				Percent of Dominant Spe	ecies
5				that are OBL, FACW, or	FAC: 100% (A/B)
O and it and O hands O hand have a (Diate		60 =Total Cov	/er	Duranda and a dara Wa	
<u>Sapling/Snrub Stratum</u> (Plot s	size: <u>15</u>)	30 V	FAC	Total % Cover of:	rksneet Multiply by:
2. Rhamnus cathartica		10 Y	FAC	OBI species 0	x = 0
3.				FACW species 40	$x^{2} = \frac{1}{80}$
4.				FAC species 60	x 3 = 180
5.				FACU species 0	x 4 = 0
		40 =Total Cov	/er	UPL species 0	x 5 =0
Herb Stratum (Plot s	size: <u>5</u>)			Column totals 100	(A) <u>260</u> (B)
1				Prevalence Index = B//	A = 2.6
2					
3				Hydrophytic Vegetati	on Indicators:
4 5				X Dominance test	
6.				Prevalence index	k is ≤3.0*
7.				Morphological ac	aptations* (provide
8.				supporting data i	n Remarks or on a
9.				separate sheet)	
10				Problematic hydr	ophytic vegetation*
		=Total Cov	ver	(explain)	
Woody Vine Stratum (Plot s	size: 15)			*Indicators of hydric soil and present, unless disturbed of	d wetland hydrology must be r problematic
2		=Total Cov	ver	Hydrophytic Vegetation Present?	es_
Remarks: (Include photo number Bare ground: 50%	s here or on a separa	te sheet)			

NWA022A

Depth	Matrix		Re	dox Fea	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Tex	ture	Remarks
			. ,						
*Type: C =	Concentration, D	= Deplet	ion, RM = Redu	iced Mat	rix, MS =	Masked S	Sand Grains.	**Locatio	on: PL = Pore Lining, M = Matri
Hydric Soil	Indicators:						Indicator	rs for Proble	matic Hydric Soils*:
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coa	st Prairie Red	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)	Sa	ndy Red	ox (S5)		Dark	surface (S7	') (LRR K, L)
Bla	ack Histic (A3)		Str	ipped Ma	atrix (S6)		Iron	-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	ul (F1)	Very	/ Shallow Dai	rk Surface (TF12)
Str	atified Layers (A	5)	Loa	amy Gley	ed Matrix	: (F2)	Othe	er (explain in	remarks)
2 0	m Muck (A10)		De	pleted M	atrix (F3)				
De	pleted Below Da	k Surface	e (A11) Re	dox Dark	Surface	(F6)			
Th	ick Dark Surface	(A12)	De	pleted D	ark Surfac	ce (F7)	*Indicato	rs of hydroph	ovtic vegetation and wetland
Sa	ndy Mucky Mine	al (S1)	Re	dox Dep	ressions (F8)	hydrolog	y must be pre	esent, unless disturbed or
5 0	m Mucky Peat or	Peat (S3			·		problema	atic	
Postrictivo I	aver (if observe	4).							
							Hydric	Soil Presen	t2 No
Type: Depth (inches					-		Hydric	Soil Presen	t? <u>No</u>
Type: Depth (inches Remarks:): 				-		Hydric	Soil Presen	t? <u>No</u>
Type: Depth (inches Remarks: Obvious not a):	on slope.			-		Hydric	Soil Presen	t? <u>No</u>
Type: Depth (inches Remarks: Obvious not a): wetland based of GY	n slope.			-		Hydric	Soil Presen	t? <u>No</u>
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd	wetland based of GY	on slope.			-		Hydric	Soil Presen	t? <u>No</u>
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica	wetland based of GY rology Indicator	on slope. s: f one is re	equired; check a	II that ap	- - 		Hydric	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface	wetland based of GY rology Indicator ators (minimum of e Water (A1)	n slope. s: f one is re	equired; check a	Ill that ap Aquatic	- - - P <u>ply)</u> Fauna (B	.13)	Hydric Seco	Soil Presen	t? tors (minimum of two required) Soil Cracks (B6)
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W	i): GY rology Indicator ators (minimum o e Water (A1) /ater Table (A2)	on slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac	pply) Fauna (B		Hydric Secc	Soil Presen	t? <u>No</u> tors (minimum of two required) Soil Cracks (B6) Patterns (B10)
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura	wetland based of GY rology Indicator ators (minimum o e Water (A1) /ater Table (A2) tion (A3)	on slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac Hydroge	- - Fauna (B juatic Plar en Sulfide	.13) nts (B14) Odor (C ⁻	Hydric Seco	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)	on slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac Hydrogo Oxidize	- - Fauna (B juatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C ² oheres on	Hydric Secc 1) Living	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime	a wetland based of a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	on slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac Hydrogo Oxidize Roots (i	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C ² oheres on	Hydric Secc 1) Living	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	n slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots (Presence	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) hts (B14) Odor (C [.] oheres on uced Iron	Hydric Secc 1) Living (C4)	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLOO Wetland Hyd Primary Indica Surface High W Saturai Saturai Sedime Drift De Algal M	GY rology Indicator ators (minimum o e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)	n slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots (0 Presenc Recent	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C ² oheres on uced Iron uction in T	Hydric Seco 1) Living (C4) illed Soils	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Algal M Iron De	wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	on slope. s: f one is re	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots (0 Presenc Recent (C6)	p <u>ply)</u> Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C [.] oheres on uced Iron uction in T	Hydric Secc 1) Living (C4) illed Soils	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Satura Sedime Drift De Algal M Iron De Inunda	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ad	erial Imag	equired; check a	Il that ap Aquatic True Ac Hydrogo Oxidize Roots ((Presenc Recent (C6) Thin Mu	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C ⁷ oheres on uced Iron uction in T se (C7)	Hydric Secc 1) Living (C4) illed Soils	Soil Presen	tr? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ac	erial Imag	equired; check a	Il that ap Aquatic True Ac Hydrogo Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge (pply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Ick Surfac or Well Da	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9)	Hydric Secc 1) Living (C4) illed Soils	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLOG Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (erial Imag ncave Sur B9)	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots (f Presenc Recent (C6) Thin Mu Gauge Other (f	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Hydric Secc 1) Living (C4) illed Soils	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLOO Wetland Hyd Primary Indica Surface Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (ations:	erial Imag ncave Sur B9)	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots (f Presend Recent (C6) Thin Mu Gauge Other (E	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in	13) hts (B14) Odor (C ² oheres on ucced Iron uction in T ata (D9) Remarks	Hydric Seco 1) Living (C4) illed Soils	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLOO Wetland Hyd Primary Indica Surface High W Saturai Saturai Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (ations: r Present?	erial Imag ncave Sur B9)	equired; check a	Il that ap Aquatic True Ac Hydrogo Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge Other (E X	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu uck Surfac or Well Da Explain in	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks hches):	Hydric Secc 1) Living (C4) illed Soils)	Soil Presen	tr? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Drift De Inunda Sparse Water- Field Observ Surface Wate Water Table F	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ac ely Vegetated Con Stained Leaves (ations: r Present?	erial Imag ncave Sur B9) Yes	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots ((Present (C6) Thin Mu Gauge (Other (E X	pply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in Depth (ii	13) hts (B14) Odor (C ² oheres on uced Iron uced Iron iction in T se (C7) ata (D9) Remarks hches):	Hydric Seco 1) Living (C4) illed Soils)	Soil Presen	trest (minimum of two required) tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C4) or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?
Type: Depth (inches Remarks: Obvious not a HYDROLOG Wetland Hyd Primary Indica Surface High W Satura Sedima Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (ations: r Present? Present? Esent?	erial Imag ncave Sur B9) Yes Yes	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots ((Present (C6) Thin Mu Gauge Other (E X	pply) Fauna (B Fauna (B Fauna (B ran Sulfide d Rhizosp C3) ce of Redu lron Redu ick Surfac or Well Da Explain in Depth (in Depth (in	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Hydric Secc 1) Living (C4) "illed Soils)	Soil Presen	tr? No
Type: Depth (inches Remarks: Obvious not a HYDROLOG Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (ations: r Present? Present? Ellary fringe)	erial Imag ncave Sur B9) Yes Yes	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots (f Presend Recent (C6) Thin Mu Gauge Other (f X	pply) Fauna (B Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches):	Hydric Secc 1) Living (C4) illed Soils)	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLOO Wetland Hyd Primary Indica Surface High W Saturai Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Vater Table F Saturation Pre (includes capi Describe Rec	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (ations: r Present? Present? esent? Ilary fringe) orded Data (streat	erial Imag acave Sur B9) Yes Yes Yes am gauge	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C ² oheres on uced Iron uced Iron uced Iron ata (D9) Remarks hches): hches): evious in:	Hydric Seco 1) Living (C4) illed Soils) spections), if	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ac ely Vegetated Con Stained Leaves (ations: r Present? Present? Esent? llary fringe) orded Data (streat	erial Imag ncave Sur B9) Yes Yes Yes	ery (B7) face (B8) monitoring wel	Il that ap Aquatic True Ac Hydroge Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu ick Surfac or Well Da Explain in Depth (in Depth (in	13) hts (B14) Odor (C ² oheres on uced Iron uced Iron uction in T ee (C7) ata (D9) Remarks nches): nches): evious in:	Hydric Secc 1) Living (C4) illed Soils) spections), if	Soil Presen	t? No
Type: Depth (inches Remarks: Obvious not a HYDROLOG Wetland Hyd Primary Indica Surface High W Satura Water Sedima Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Field Observ Surface Wate Table F Saturation Pre (includes capi Describe Reco	a wetland based of GY rology Indicator ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (ations: r Present? esent? esent? llary fringe) orded Data (streat	erial Imag fone is re fone is re	equired; check a	Il that ap Aquatic True Ac Hydroge Oxidize Roots ((Present (C6) Thin Mu Gauge Other (E X	pply) Fauna (B Fauna (B Fauna (B ran Sulfide d Rhizosp C3) ce of Redu lron Redu ick Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ata (D9) Remarks nches): nches): evious in:	Hydric Secc 1) Living (C4) "illed Soils) spections), if	Soil Presen	t? No

	WE	LAND DETER	RMINATION	DATA	FORM -	Midwes	st Region	
Project/Site:	Lake C	harlotte	City/Cou	nty:	Marti	n	Sampling Date:	10/19/2022
Applicant/Owner:		Lake Charlotte S	olar, LLC		State:	MN	Sampling Point:	NWA022B
Investigator(s):		Apryl Jennrich		Sectio	n, Townshi	p, Range:	Sec.	18 T103N R30W
Landform (hillslope, ter	race, etc.):	Hillslo	pe	Local re	elief (concav	ve, convex	k, none):	Convex
Slope (%): 20	Lat:	43.72941	Lc	ong:	-94.467	752	Datum:	WGS84
Soil Map Unit Name:	Water				NW	I Classific	ation:	NA
Are climatic/hydrologic	conditions of	the site typical for	this time of the	e year?	Yes (If no, expla	ain in remarks)	
Are vegetation	, soil	, or hydrology	Sigr	nificantly	disturbed?	Are "	normal circumsta	nces present? Yes
Are vegetation SUMMARY OF FI	, soil	, or hydrology	natu	arally prob	olematic?	(If ne	eded, explain ar	iy answers in remarks.)
Hydrophytic Vege	tation Presen	t? No						
Hydric Soil Preser	nt?	No	1	Is the sa	mpled area	a within a	wetland?	Νο
Wetland Hydrolog	y Present?	No	I	lf yes, op	tional wetla	nd site ID:	:	
Remarks:								
VEGETATION L	Jse scientil	ic names of pla	ants.			<u> </u>		
Tree Christian		20	Absolute Dom	ninant	Indicator	Domir	nance Test Work	sheet
<u>1 Oueroue allea</u>	(Plot size:	30)	% Cover Sp	v	Status	Numbe	er of Dominant Spe	cies (A)
Quercus alba Tilia americana			10	r N	FACU	that are	e OBL, FACW, or F	AC: <u>0</u> (A)
3 Celtis occidentalis	3		10	N	FAC	Total N	Number of Dominar	nt · 1 (B)
4.	·					Opecie		(=)
5.						 Percer that are 	nt of Dominant Spe e OBL. FACW. or F	cies FAC: 0% (A/B)
			100 =To	tal Cover				
Sapling/Shrub Stratun 1. 2. 3. 4. 5. Herb Stratum 1. 2. 3.	n (Plot size	: <u>15</u>) : <u>5</u>)	=To	tal Cover		Preva Total OBL s FACW FAC s FACU UPL s Colum Preva	alence Index Wor % Cover of: species 0 V species 0 species 10 J species 90 species 0 nn totals 100 alence Index = B/A	ksheet Multiply by: $x 1 = 0$ $x 2 = 0$ $x 2 = 0$ $x 3 = 30$ $x 4 = 360$ $x 5 = 0$ $(A) 390$ (B) $x = 3.9$ $x = 3.9$
4. 5. 6. 7. 8. 9. 10.							Rapid test for hyc Dominance test is Prevalence index Morphological ad supporting data ir separate sheet) Problematic hydr	Irophytic vegetation s >50% is ≤3.0* aptations* (provide n Remarks or on a
			-To	ital Cover		-	(explain)	
Woody Vine Stratum	(Plot size	. 15)	_10			*Indicato present,	ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2			=To	tal Cover		Hyo Veç Pre	drophytic getation esent? <u>N</u>	0
Remarks: (Include pho Bare ground: 25%	to numbers h	ere or on a separa	te sheet)					

NWA022B

				uooum			or commune abser	
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
*Tupo: C =	Concontration D	- Doplo	tion DM - Podu	cod Mat	iv MS -	Maskad 9	Sand Crains **Loc	ntion: PL - Poro Liping M - Matrix
		- Depie	alon, Rivi – Redu	ceu mau	IX, IVIS –	waskeu (Janu Granns. Loc	Alion. FL - Fore Linnig, M - Maurix
Hydric Soli	indicators:		6		a al Mantuliu	(0.4)	Indicators for Pro	
HIS			Sar	ndy Gley	ed Matrix	(54)		Redox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface	(S7) (LRR K, L)
Bla	ick Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Mangane	se Masses (F12) (LRR K, L, R)
Hyd	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very Shallow	Dark Surface (TF12)
Stra	atified Layers (A5)	Loa	amy Gley	ed Matrix	: (F2)	Other (explain	in remarks)
2 c	m Muck (A10)		De	oleted Ma	atrix (F3)			
De	pleted Below Darl	s Surfac	e (A11) Ree	dox Dark	Surface	(F6)		
Thi	ck Dark Surface (A12)	De	oleted Da	ark Surfac	ce (F7)	*Indicators of hvdr	ophytic vegetation and wetland
Sar	ndy Mucky Minera	al (S1)	Ree	dox Depr	essions (F8)	hydrology must be	present, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Bootrictivo L		· ·						
Tupo:	ayer (if observed):					Hudria Sail Brad	ont? No
Type.	\.				-		Hydric Soli Pres	
Depth (inches).							
Remarks:					-			
Remarks: Obvious not a	wetland based or	n vegeta	tion and slope.		-			
Remarks: Obvious not a HYDROLOO	wetland based or	n vegeta	ition and slope.		-			
Remarks: Obvious not a HYDROLOO Wetland Hydr	wetland based or GY rology Indicators	n vegeta	tion and slope.		-			
Remarks: Obvious not a HYDROLO(Wetland Hydr Primary Indica	wetland based or GY rology Indicators ators (minimum of	n vegeta :: one is r	ition and slope. equired; check a	ll that ap			Secondary Inc	icators (minimum of two required)
Remarks: Obvious not a HYDROLOG Wetland Hydr Primary Indica Surface	wetland based or GY rology Indicators ators (minimum of e Water (A1)	n vegeta	tion and slope.	<u>II that ap</u> Aquatic	<u>ply)</u> Fauna (B	113)	Secondary Inc	icators (minimum of two required) ce Soil Cracks (B6)
Remarks: Obvious not a HYDROLOG Wetland Hydr Primary Indica Surface High W	wetland based or GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)	n vegeta	ition and slope.	ll that ap Aquatic True Aq	<u>ply)</u> Fauna (B uatic Plar	113) hts (B14)	<u>Secondary Inc</u> Surfa Drain	icators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10)
Remarks: Obvious not a HYDROLOO Wetland Hydr Primary Indica Surface High W Saturat	wetland based or GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3)	n vegeta	ition and slope.	II that ap Aquatic True Aq Hydroge	<u>plv)</u> Fauna (B uatic Plar en Sulfide	13) hts (B14)	Secondary Inc Surfa Drain 1) Dry-S	icators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Remarks: Obvious not a HYDROLOO Wetland Hydr Primary Indica Surface High W Saturat Water N	wetland based or GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3) Warks (B1)	n vegeta	tion and slope.	ll that ap Aquatic True Aq Hydroge Oxidized	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) nts (B14) Odor (C oheres on	Secondary Inc Surfa Drain 1)Dry-S Living Crayf	icators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8)
Remarks: Obvious not a HYDROLOO Wetland Hydr Primary Indica Surface High W Saturat Water N Sedime	wetland based or GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	n vegeta	ition and slope.	ll that ap Aquatic True Aq Hydroge Oxidized Roots ((<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3)	113) hts (B14) Odor (C oheres on	Secondary Inc Surfa Drain 1) Dry-S Living Crayf	icators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9)
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Project/Site:	Lake Charlo		City/County:	Martir		Date:	10/20/2022
Applicant/Owner:	Lakı	e Charlotte Solar,		State:	MN Sampling	, Point:	NWA023A
vestigator(s):	Apry	I Jennrich	Sec	tion, Township	, Range:	Sec.7 T10	3N R30W
andform (hillslope, terra	ace, etc.):	Depression	Local	relief (concav	e, convex, none):	(Concave
Slope (%): 1	Lat:	43.7375	Long:	-94.468	82 Datum:		WGS84
oil Man Llnit Name:	Clarion-Storde	n complex, 6 to 10	percent slopes,	NI\\//	Classification:		ΝΔ
	moderately ero	ided					
re climatic/hydrologic c	onditions of the s	ite typical for this f	ime of the year?		i no, explain in rem	arks)	
re vegetation X	, soil, e	or hydrology	Significantl	y disturbed?	Are "normal cir	cumstances p	present? No
re vegetation	, soil, ,	or hydrology	naturally pr	roblematic?	(If needed, exp	plain any ans	wers in remarks.
	DINGS						
Hydrophytic Vegeta	ation Present?	No					
Hydric Soil Present	t?	No	Is the s	ampled area	within a wetland?	•	No
Wetland Hydrology	Present?	No	If yes, o	optional wetlar	nd site ID:		
Remarks:							
Recently tilled agricult	ural field. Recer	itly harvested agri	cultural field.				
/EGETATION U	se scientific na	ames of plants					
		Absr	olute Dominant	Indicator	Dominance Tes	st Worksheet	1
Tree Stratum	(Plot size:) % C	over Species	Status			
1.					Number of Domin that are OBL, FA	ant Species	0 (A)
2.					Total Number of	Dominant	
3.					Species Across A	All Strata:	(B)
4.					Percent of Domir	ant Species	
5					that are OBL, FA	CW, or FAC:	<u>%</u> (A/B)
			=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:)			Prevalence Ind	lex Workshe	et
1						of: ı∨	lultiply by:
2.						X1 =	:
3						X∠=	<u>ــــــ</u>
4						x ɔ =	:
5			-Total Cov			X 4 =	:
I Ctratum		\		er	OPL Species	X U =	:(P)
	(Plot size.)				(A)	(D)
1					Prevalence inde	$\partial X = B/A = $	
2					Hydrophytic V	exectation Inc	lastara
3 ^					Rapid tes	+ for hydrophy	tic vegetation
4						$c = t e e t is >50^{\circ}$	lic vegetation
6					Prevalence	re index is ≤3	′º በ*
7					Morpholo	nical adaptati	ons* (provide
8.					supportin	a data in Rem	arks or on a
9.					separate	sheet)	
10.					Problema	tic hydrophyti	c vegetation*
			=Total Cov	/er	(explain)		0
Woodv Vine Stratum	(Plot size:)		-	*Indicators of hydric	s soil and wetla	ad bydrology must b
1.		,			present, unless dist	urbed or proble	matic
2.					Hydrophytic		
			=Total Cov	rer	Vegetation		
					Present?	No	
emarks: (Include photo	numbers here or	r on a separate sh	eet)				

NWA023A

Depth	Matrix	Matrix		Redox Features							
(Inches)	Color (moist)	%	Color (mo	ist)	%	Type*	Loc**	Tex	ture	Remarks	
0-22	10YR 2/1	100		,				С	lay		
22.20	2 EV E/2	100						Sand			
22-29	2.51 5/2	100						Sanu	y Clay		
*Type: C =	Concentration, D	= Deple	tion, RM =	Redu	ced Mat	rix, MS =	Masked S	Sand Grains	**Locati	on: PL = Pore Lining, M = Ma	
Hvdric Soil	Indicators:					,		Indicato	rs for Probl	ematic Hydric Soils*:	
His	stosol (A1)			San	ndv Glev	ed Matrix	(S4)	Coa	st Prairie Re	edox (A16) (LRR K. L. R)	
Hi	stic Eninedon (A2	`		- San	dv Redu	ou (S5)	(0.)	Dar	surface (S	7) (I RR K I)	
	ack Histic (A2))		- Ctrin		$r_{\rm otriv}$ (CC)			Mangapose	$M_{\text{Decode}} (E12) (I \text{ PP } K I \text{ P})$	
Dia	dek Flistic (AS)	4)	_			ku Minoro		11011		r = r = r = r = r = r = r = r = r = r =	
⊓y	ratified Levers (AF	4) '\				ky winera	41 (F1) (F2)	very	/ Shallow Da	ark Surface (TFTZ)	
))		- Loa	iny Gley		(FZ)	0	er (explain ir	r remarks)	
2(- (0.4.4)	_ Dep							
De	epieted Below Dar	K Sunac	e (A11)	- Rec	iox Dark	Surface	(F6)				
Ih	ick Dark Surface	(A12)		Dep	pleted Da	ark Surfac	ce (F7)	*Indicato	ors of hydrop	hytic vegetation and wetland	
Sa	andy Mucky Miner	al (S1)		Rec	lox Depi	ressions (F8)	hydrolog	y must be p	resent, unless disturbed or	
5 0	cm Mucky Peat or	Peat (S	3)					problem	allo		
ostrictivo I							1				
	ayer (if observed	:(k									
ype:	ayer (if observed	d):						Hydric	Soil Prese	nt? No	
Pepth (inches	s):	i): 				-		Hydric	Soil Prese	nt? <u>No</u>	
ype: Depth (inches	ayer (it observed	i): 				-		Hydric	Soil Prese	nt? <u>No</u>	
ype: epth (inches emarks:	GY	i): 				-		Hydric	Soil Prese	nt? <u>No</u>	
ype: epth (inches emarks: IYDROLO Vetland Hyd	GY	i):				-		Hydric	Soil Prese	nt? <u>No</u>	
ype: epth (inches emarks: IYDROLO /etland Hyd rimary Indica	GY Irology Indicator ators (minimum of	i): s: i one is i	equired; ch	eck al	I that ap	- - 		Hydric 	Soil Presei	nt? <u>No</u>	
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac	GY GY Irology Indicator: ators (minimum of e Water (A1)	1): s: i one is r	equired; ch	eck al	I that ap	- - pply) Fauna (B	113)	Hydric 	Soil Presei	nt? <u>No</u> ators (minimum of two require Soil Cracks (B6)	
ype: Pepth (inches Remarks: IYDROLO Vetland Hyd Primary Indica Surfac High W	GY GY Irology Indicator: ators (minimum of e Water (A1) Vater Table (A2)	i): s: ¢ one is i	equired; ch	eck al	I that ap Aquatic True Aq	- - - - - - - - - - - - - - - - - - -	113) hts (B14)	Hydric 	Soil Preser	nt? <u>No</u> ators (minimum of two require Soil Cracks (B6) e Patterns (B10)	
epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac High W Satura	GY Irology Indicator ators (minimum of e Water (A1) Vater Table (A2) tion (A3)	i): s: i one is i	equired; ch	eck al	I that ap Aquatic True Aq Hydroge	- - - Fauna (B juatic Plar en Sulfide	113) hts (B14) c Odor (C ²	Hydric Seco	Soil Preser	nt? No ators (minimum of two require Soil Cracks (B6) e Patterns (B10) ason Water Table (C2)	
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Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





A1

Feature ID: NWA023

____ Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WETI	AND DE	TERM	INAT	ION DATA	FORM -	Midwes	t Region		
Project/Site:	Lake Ch	arlotte		City/	County:	Marti	n	Sampling Dat	e: 10/20/2022	2
Applicant/Owner:		Lake Charlo	tte Sola	ar, LLC		State:	MN	Sampling Poir	nt: NWA024A	٩
Investigator(s):	A	pryl Jennric	h		Secti	on, Townshi	p, Range:	S	ec.7 T103N R30W	
Landform (hillslope, terra	ice, etc.):		Hillslope	9	Local	elief (conca	ve, convex	, none):	Convex	
Slope (%): 15	Lat:	43.73	3707		Long:	-94.469	967	Datum:	WGS84	
Soil Map Unit Name:	Clarion-Sto moderately	rden comple eroded	ex, 6 to	10 perc	ent slopes,	NW	I Classifica	ation:	NA	
Are climatic/hydrologic c	onditions of th	ne site typic:	al for th	is time o	of the year?	Yes (lf no, expla	ain in remarks))	
Are vegetation	, soil	, or hydro	logy		Significantly	disturbed?	Are "	normal circum	stances present?	Yes
Are vegetation	, soil	, or hydro	logy		naturally pro	oblematic?	(If ne	eded, explain	any answers in ren	narks.)
SUMMARY OF FIN	DINGS	_								
Hydrophytic Vegeta	tion Present?	1 {	No							
Hydric Soil Present	?	1	No		Is the s	ampled area	a within a	wetland?	No	
Wetland Hydrology	Present?	1	No		lf yes, o	ptional wetla	nd site ID:			
Remarks:										
	sa scientifi		of plar	ote						
			л ріаї А	hsolute	Dominant	Indicator	Domir	nance Test W	orksheet	
Tree Stratum (I	Plot size:	30)	9	6 Cover	Species	Status				
1. Fraxinus pennsvlva	nica	,		50	Y	FACW	Number	of Dominant S	Species or FAC: 3 (A)
2. Acer negundo				15	Y	FAC	T ()		· .	,
3.							Specie	s Across All Str	nant ata: 4 (1	B)
4.							Percen	t of Dominant S	Species	
5							that are	e OBL, FACW,	or FAC: 75% (A	/B)
				65	=Total Cove	er				
Sapling/Shrub Stratum	(Plot size:	15)				Preva	lence Index V	Vorksheet	
1. Ribes cynosbati				20	Ŷ	FAC		% Cover of:	Multiply by:	
2								l species 5	$x_1 = 0$	-
4							FAC s	necies 3	$5 \times 3 = 105$	-
5.							FACU	species 4	$x = \frac{160}{2}$	-
				20	=Total Cove	er	UPL s	pecies 0	x 5 = 0	-
Herb Stratum	(Plot size:	5)				Colum	n totals 12	25 (A) 365	(B)
1. Bromus inermis	-		_	40	Y	FACU	Preva	lence Index =	B/A = 2.9	-
2.										-
3							Hydro	ophytic Veget	ation Indicators:	
4								Rapid test for	hydrophytic vegetatic	วท
5							<u> </u>	Dominance te	st is >50%	
6								Prevalence ind	$3ex IS \leq 3.0^{\circ}$	•
8								supporting dat	ta in Remarks or on a	с 9
9.							_	separate shee	et)	•
10.								Problematic h	ydrophytic vegetatior	۱*
				40	=Total Cove	er		(explain)		
Woody Vine Stratum	(Plot size:	15)				*Indicato	ors of hydric soil unless disturbed	and wetland hydrology r d or problematic	must be
2.							ц	Ironhutic		
					=Total Cove	er	Veq	jetation		
							Pre	sent?	No	
Remarks: (Include photo	numbers her	e or on a se	eparate	sheet)						
Bare ground: 10%										

NWA024A

Profile Descr	ription: (Describe	to the	depth neede	d to	docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix			Redox Features					
(Inches)	Color (moist)	%	Color (mois	st)	%	Type*	Loc**	Texture	Remarks
				ŕ					
*Type: C =	Concentration, D	= Deple	tion, RM = R	edu	ced Matr	ix, MS =	Masked \$	Sand Grains **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:							Indicators for Proble	ematic Hydric Soils*:
- His	stosol (A1)			Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)			Sar	ndy Redo	ox (S5)	. ,	Dark Surface (S	7) (LRR K, L)
Bla	ack Histic (A3)			Stri	pped Ma	trix (S6)		Iron-Manganese	Masses (F12) (LRR K. L. R)
Hv	drogen Sulfide (A	4)		Loa	mv Muc	kv Minera	l (F1)	Verv Shallow Da	rk Surface (TE12)
Str	ratified Lavers (A5)		Loa	imv Glev	ed Matrix	(F2)	Other (explain in	remarks)
2	cm Muck (A10)	/		Der	bleted M	atrix (E3)	()		
	pleted Below Darl	k Surfac	e (A11)	Rec	lox Dark	Surface	(F6)		
D0	ick Dark Surface (Δ12)		Dor		ark Surfac	(F7)		
	nck Dark Sunace ((C12)		Der				*Indicators of hydrop	nytic vegetation and wetland
3a	muy Mucky Miller	Poot(ST)	2)	Net		65510115 (F0)	problematic	esent, unless disturbed of
	chi wucky Feat Of	real (S	3)					•	
Restrictive L	ayer (if observed	l):							
Туре:								Hydric Soil Preser	11? <u>No</u>
Depth (inches	s):								
Remarks:									
Obvious not a	a wetland based or	n slope.							
HYDROLO	GY								
Wetland Hyd	rology Indicators	s:							
Primary Indica	ators (minimum of	one is r	equired; cheo	ck a	ll that ap	ply)		Secondary Indica	ators (minimum of two required)
Surfac	e Water (A1)				Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)
High W	Vater Table (A2)		-		True Aq	uatic Plar	nts (B14)	Drainag	e Patterns (B10)
Satura	tion (A3)		_		Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)		-		Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)				Roots (C	23)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)				Presenc	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal N	/lat or Crust (B4)				Recent	Iron Redu	iction in T	Tilled Soils Geomor	phic Position (D2)
Iron De	eposits (B5)		_		(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)		Thin Mu	ck Surfac	e (C7)		
Sparse	ely Vegetated Con	cave Su	rface (B8)		Gauge o	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)	_		Other (E	xplain in	Remarks	6)	
Field Observ	ations:	-					-		
Surface Wate	r Present?	Yes	N	0_	Х	Depth (ir	nches):		tland Hydrology
Water Table F	Present?	Yes	N	o _		Depth (ir	nches):		Present?
Saturation Pre	esent?	Yes	N	o _		Depth (ir	nches):		No
(includes capi	illary fringe)								
Describe Rec	orded Data (stream	m gauge	e, monitoring	well	, aerial p	onotos, pr	evious in	spections), if available:	
Pomorke									
Remarks:									



	WET	LAND DET	ERMINAT	ION DAT	A FORM -	 Midwest Region 	
Project/Site:	Lake C	harlotte	City	/County:	Marti	in Sampling Date: 10/20/2022	
Applicant/Owner:		Lake Charlotte	e Solar, LLC		State:	MN Sampling Point: NWA025A	
Investigator(s):		Apryl Jennrich		Sec	tion, Townshi	ip, Range: Sec.7 T103N R30W	
Landform (hillslope, ter	race, etc.):	Hill	slope	Local	relief (conca	ave, convex, none): Convex	
Slope (%): 10	Lat:	43.736	73	Long:	-94.470	003 Datum: WGS84	
Soil Map Unit Name:	Webster c	lay loam, 0 to 2	2 percent slop	bes	NW	VI Classification: NA	
Are climatic/hydrologic	conditions of	the site typical	for this time of	of the year?	Yes	(If no, explain in remarks)	
Are vegetation	, soil	, or hydrolog	ду	Significant	ly disturbed?	Are "normal circumstances present? Ye	S
Are vegetation	, soil	, or hydrolog	ду	naturally p	roblematic?	(If needed, explain any answers in remar	ks.)
SUMMARY OF FI	NDINGS						
Hydrophytic Vege	tation Present	t? No					
Hydric Soil Preser	nt?	No		Is the s	sampled area	a within a wetland? No	
Wetland Hydrolog	y Present?	No		If yes, o	optional wetla	and site ID:	
Remarks:							
VEGETATION U	Jse scientif	ic names of	plants.	Densiseert	L. Pastan	Dening and TrackWorkshop	
Troo Stratum	(Plot size:	30)		Species	Status	Dominance lest worksneet	
1 Ouercus alba)	70 COVER	v	FACIL	Number of Dominant Species	
2. Acer negundo			25	Y	FAC		
3.				•		Total Number of Dominant Species Across All Strata: 3 (B)	
4.						Percent of Dominant Species	
5			05	Tatal Car		that are OBL, FACW, or FAC: <u>33%</u> (A/B)	
Sanling/Shruh Stratun	n (Plot size:	15		=10tal Cov	/er	Provalence Index Worksheet	
1	<u>ii</u> (Flot Size.	15)			Total % Cover of Multiply by:	
2.						$OBL \text{ species} \qquad 0 \qquad \text{x1} = 0$	
3.						FACW species $0 \times 2 = 0$	
4.						FAC species 30 x 3 = 90	
5.						FACU species 90 x 4 = 360	
				=Total Cov	ver	UPL species 0 x 5 = 0	
Herb Stratum	(Plot size:	5)			Column totals 120 (A) 450 (B	5)
1. Bromus inermis			40	Y	FACU	Prevalence Index = B/A = 3.75	
2. Asclepias syriaca			10	N	FACU		
3. Setaria pumila			5	N	FAC	Hydrophytic Vegetation Indicators:	
4 5						Rapid test for hydrophytic vegetation	
9 6						Prevalence index is <3.0*	
7.						Morphological adaptations* (provide	
8.						supporting data in Remarks or on a	
9.						separate sheet)	
10.						Problematic hydrophytic vegetation*	
			55	=Total Cov	/er	(explain)	
Woody Vine Stratum 1.	(Plot size:	15)			*Indicators of hydric soil and wetland hydrology mus present, unless disturbed or problematic	t be
2				=Total Cov	/er	Hydrophytic Vegetation Present? <u>No</u>	
Remarks: (Include pho Bare ground: 0%	to numbers he	re or on a sepa	arate sheet)				

NWA025A

			•			indiodicol	or commune absence				
Depth <u>Matrix</u>			Re	dox Feat	tures						
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks			
					51						
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mati	rix, MS =	Masked S	Sand Grains. **Locat	on: PL = Pore Lining, M = Matrix			
Hydric Soil	Indicators:						Indicators for Prob	ematic Hydric Soils*:			
His	tosol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	edox (A16) (LRR K, L, R)			
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)			
Bla	ick Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Manganese	n-Manganese Masses (E12) (I PP K I P)			
Bia	drogen Sulfide (A	4)		my Muc	ky Miners	al (F1)	Very Shallow D	$r_{\rm L}$ (Errer, 2, 17)			
11yo	atified Lovers (A5	+) \	Los		od Matrix	(E2)	Other (explain in	y Snallow Dark Surface (1F12)			
OII	m Muck (A40))				(ГZ)		i i ciliains)			
2c		~ /			atrix (F3)						
De	pleted Below Dark	c Surfac	e (A11) Ree	dox Dark	Surface	(F6)					
Thi	ck Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydrop	tors of hydrophytic vegetation and wetland gy must be present, unless disturbed or			
Sa	ndy Mucky Minera	al (S1)	Ree	dox Depr	essions (F8)	hydrology must be p				
5 c	m Mucky Peat or	Peat (S	3)				problematic				
Restrictive L	aver (if observed).									
Type:		,.					Hydric Soil Prese	nt? No			
Denth (inches)).			ype: Hydric Soil Present? No							
	/•										
Remarks:	<u> </u>										
Remarks: Obvious not a	wetland based or	n slope a	and vegetation.		-						
Remarks: Obvious not a	wetland based or	n slope a	and vegetation.		<u>.</u>						
Remarks: Obvious not a HYDROLOO Wetland Hydr	wetland based or GY rology Indicators	n slope a	and vegetation.		<u>.</u>						
Remarks: Obvious not a HYDROLO(Wetland Hydr Primary Indica	wetland based or GY rology Indicators ators (minimum of	n slope a	and vegetation. equired; check a	II that ap			Secondary Indic	ators (minimum of two required)			
Remarks: Obvious not a HYDROLOO Wetland Hydr Primary Indica Surface	wetland based or GY rology Indicators ators (minimum of e Water (A1)	n slope a	and vegetation. equired; check a	<u>Il that ap</u> Aquatic	<u>plv)</u> Fauna (B	;13)	Secondary Indic	ators (minimum of two required) Soil Cracks (B6)			
Remarks: Obvious not a HYDROLO(Wetland Hydi Primary Indica Surface High W	wetland based or GY rology Indicators ators (minimum of Water (A1) Vater Table (A2)	n slope a	and vegetation. equired; check a	ll that ap Aquatic True Aq	<u>ply)</u> Fauna (B uatic Plar	113) hts (B14)	Secondary Indic	<u>ators (minimum of two required)</u> Soil Cracks (B6) e Patterns (B10)			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat	wetland based or GY rology Indicators ators (minimum of Water (A1) /ater Table (A2) ion (A3)	n slope a	and vegetation. equired; check a	II that ap Aquatic True Aq Hydroge	<u>ply)</u> Fauna (B uatic Plar en Sulfide	113) hts (B14)	Secondary Indic Surface Drainac 1) Dry-Sea	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2)			
Remarks: Obvious not a HYDROLOO Wetland Hydu Primary Indica Surface High W Saturat Water I	wetland based or GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1)	n slope a	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C oheres on	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8)			
Remarks: Obvious not a HYDROLOO Wetland Hydu Primary Indica Surface High W Saturat Water I Sedime	wetland based or GY rology Indicators ators (minimum of e Water (A1) dater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	n slope : :: one is r	and vegetation. equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (0	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C oheres on	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9)			
Remarks: Obvious not a HYDROLO(Wetland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De	wetland based or GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3)	n slope a	and vegetation. equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (0 Presenc	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) nts (B14) Odor (C oheres on uced Iron	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)			
Remarks: Obvious not a HYDROLOO Wetland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M	wetland based or GY rology Indicators ators (minimum of Water (A1) dater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)	n slope a	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots (0 Presenc Recent	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) nts (B14) Odor (C oheres on uced Iron uction in T	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2)			
Remarks: Obvious not a HYDROLOO Wetland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De	wetland based or GY rology Indicators ators (minimum of Water (A1) dater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5)	n slope a	and vegetation. equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6)	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) nts (B14) Odor (C oheres on uced Iron uction in T	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) te Patterns (B10) ason Water Table (C2) th Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)			
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Remarks: Obvious not a HYDROLOO Wetland Hydu Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-1	wetland based or GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Com Stained Leaves (E	rial Imag cave Su 39)	and vegetation. equired; check a gery (B7) urface (B8)	II that ap Aquatic True Aq Hydroge Oxidized Roots ((Present (C6) Thin Mu Gauge C Other (E	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ck Surfac or Well Da Explain in	a13) hts (B14) Odor (C oheres on uced Iron uced Iron ice (C7) ata (D9) Remarks	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundai Sparse Water-3	wetland based or GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E ations:	rial Imag cave Su 39)	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in	a13) ants (B14) a Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Inunda Sparse Water-3 Field Observa Surface Water	wetland based or GY rology Indicators ators (minimum of e Water (A1) dater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) posits (B5) tion Visible on Ael ly Vegetated Com- Stained Leaves (E ations: r Present?	rial Imag cave Su 99) Yes	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	ply) Fauna (B Fauna (B autic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in	a13) ants (B14) a Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl (C4) Stuntec Filled Soils Geomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Water-S Field Observa Surface Water	wetland based or GY rology Indicators <u>ators (minimum of</u> e Water (A1) dater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Ael ly Vegetated Con- Stained Leaves (E ations: r Present? present?	rial Imag cave Su 39) Yes Yes	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu iron Redu iron Redu iron Redu cr Well Da explain in Depth (ii Depth (ii	a13) ants (B14) odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches):	Secondary Indic Surface Drainag 1)Dry-Sea LivingCrayfisl Saturat (C4)Stuntec Filled SoilsGeomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)			
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Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water-3 Field Observa Surface Water Water Table P Saturation Pre (includes capi	wetland based or GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) posits (B5) tion Visible on Ael ly Vegetated Con- Stained Leaves (E ations: r Present? Present? lary fringe)	rial Imag cave Su 39) Yes Yes	and vegetation. equired; check a gery (B7) frface (B8) No No No	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	13) 13) 13) 14) 15) 16) 16) 16) 16) 16) 16) 16) 16	Secondary Indic Surface Drainag Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) te Patterns (B10) ason Water Table (C2) th Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) sutral Test (D5)			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Water Table P Saturation Pre (includes capil Describe Reco	wetland based or GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3) Marks (B1) Marks (B1) Marks (B1) Marks (B2) posits (B3) lat or Crust (B4) posits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E ations: r Present? Present? Present? Marks (Stream Present) Present? Present (Stream Present) Present (Stream	rial Imag cave Su 39) Yes Yes Yes	and vegetation. equired; check a gery (B7) rface (B8) No o, monitoring wel	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in	113) 113)	Secondary Indic Surface Drainag Dry-Sea Living Crayfisl Saturat (C4) Stunted Filled Soils Geomo FAC-Ne Spections), if available:	ators (minimum of two required) Soil Cracks (B6) te Patterns (B10) ason Water Table (C2) in Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Water Table P Saturation Pre (includes capil Describe Reco	wetland based or GY rology Indicators ators (minimum of a Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) aposits (B3) lat or Crust (B4) aposits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? llary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ze of Redu Iron Redu iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in	a13) hts (B14) Odor (C oheres on uced Iron uced Iron uced Iron ata (D9) Remarks nches): nches): revious in	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) etland Hydrology Present?No			
Remarks: Obvious not a HYDROLOO Wetland Hydu Primary Indica Surface High W Saturat Water I Sedime Orift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Water Table P Saturation Pre (includes capil Describe Reco	wetland based or GY rology Indicators ators (minimum of a Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? llary fringe) prded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) te of Redu Iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in	a13) hts (B14) Odor (C oheres on uced Iron uced Iron uced Iron ata (D9) Remarks nches): nches): revious in	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne) w spections), if available:	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) etland Hydrology Present?No			
Remarks: Obvious not a HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-3 Field Observa Surface Water Water Table P Saturation Pre (includes capil Describe Reco	wetland based or GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? llary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes Yes	and vegetation.	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X	plv) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in botos, pr	a13) hts (B14) Odor (C oheres on uced Iron uction in 7 ata (D9) Remarks nches): nches): nches): revious in	Secondary Indic Surface Drainag 1) Dry-Sea Living Crayfisl Saturat (C4) Stuntec Filled Soils Geomo FAC-Ne) w spections), if available:	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) etland Hydrology Present? No			







80 120 160 200 40











Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

Feature ID: NWA025

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WET Lake Ch	LAND DETER	MINAT	ION DAT County:	A FORM Mar	 Midwes 	st Region Sampling Date:	10/20/2022
Applicant/Owner:	2010 01	Lake Charlotte So	lar, LLC	<u> </u>	State:	MN	Sampling Point:	NWA026A
Investigator(s):	/	Aprvl Jennrich	,	Sec	tion. Townsh	nip. Range:	Sec	.8 T103N R30W
Landform (hillslope, terra	ace. etc.):	Depress	sion	Loca	relief (conc	ave. convex	(, none):	Concave
Slope (%): 1	Lat:	43.74081	-	Long:	-94.46	6326	Datum:	WGS84
Soil Map Unit Name:	Webster cl	av loam. 0 to 2 pe	rcent slop	bes	N	VI Classifica	ation:	NA
Are climatic/hydrologic c	onditions of t	he site typical for $\frac{1}{2}$	this time of	of the year?	Yes	(If no. expl	ain in remarks)	
Are vegetation X	soil	or hydrology		Significant	lv disturbed?	Are "	normal circumsta	inces present? No
Are vegetation	, soil	, or hydrology		naturally n	roblematic?	(If ne	eded explain a	ny answers in remarks)
		, or hydrology						
Hydrophytic Vegeta	ation Present	? <u>No</u>						
Hydric Soil Present	?	No		Is the	sampled are	ea within a	wetland?	Νο
Wetland Hydrology	Present?	No		If yes,	optional wetl	and site ID:		
Remarks:								
Recently harvested a	gricultural fie	ld.						
VEGETATION US	se scientin	c names of pla	Absoluto	Dominant	Indicator	Domir	anco Tost Worl	rshoot
Tree Stratum (Plot size:)	% Cover	Species	Status	Number that are	er of Dominant Spo e OBL, FACW, or	ecies FAC: 0 (A)
2. 3.						Total N Specie	lumber of Domina s Across All Strata	nt a: <u>0</u> (B)
4 5				Total Car		Percent that are	at of Dominant Spe e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
Sonling/Shrub Stratum	(Plot size:	、 -			/er	Brove	longo Indox Wo	rkahaat
sapling/Shrub Stratum	(Plot size:)				Total	% Cover of:	rksneet Multiply by:
2								x 1 –
3.						FACW	/ species	x 2 =
4.						FAC s	species	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	/er	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1						Preva	lence Index = B/A	A =
3						Hydro	ophytic Vegetati	on Indicators:
4.							Rapid test for hv	drophytic vegetation
5.							Dominance test	is >50%
6.							Prevalence index	k is ≤3.0*
7.							Morphological ad	aptations* (provide
8							supporting data i	n Remarks or on a
9							separate sheet)	
10							Problematic hydi	ophytic vegetation*
				=Total Cov	/er		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil an unless disturbed o	d wetland hydrology must be r problematic
2				=Total Cov	/er	— Hyc Veg Pre	drophytic jetation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie	numbers he	re or on a separat und: 100%	e sheet)			ł	-	

NWA026A

Profile Desci	ription: (Describe	to the	depth needed	o docum	ent the i	ndicator	or confirm the absence	e of indicators.)		
Depth	Depth <u>Matrix</u>		<u>R</u>	edox Feat	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-37	10YR 2/1	100					Clay			
37-39	2.5Y 3/2	100					Sandy Clay			
*Type: C =	Concentration, D	= Deple	tion, RM = Red	uced Mat	rix, MS =	Masked	Sand Grains. **Locati	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Probl	ematic Hydric Soils*:		
His	stosol (A1)		Sa	andy Gley	ed Matrix	(S4)	Coast Prairie Re	edox (A16) (LRR K, L, R)		
His	stic Epipedon (A2)		Sa	andy Redo	ox (S5)		Dark Surface (S	Dark Surface (S7) (LRR K, L)		
Bla	ack Histic (A3)		St	ripped Ma	atrix (S6)		Iron-Manganese	Iron-Manganese Masses (F12) (LRR K. L. R)		
Hy	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallow Da	Very Shallow Dark Surface (TF12)		
Sti	ratified Layers (A5)	Lo	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)		
2 0	m Muck (A10)	,	 De	epleted M	atrix (F3)	· · ·	、 .			
De	pleted Below Darl	k Surfac	e (A11) Re	dox Dark	Surface	(F6)				
Th	ick Dark Surface ('A12)	De	epleted D	ark Surfac	(F7)	*ludiaatana af buduan	ndicators of hydrophytic vegetation and wetland		
 Sa	indy Mucky Miner	al (S1)		dox Deni	ressions ((F8)	hydrology must be p			
5	may Mucky Peat or	Peat (S	3)			10)	problematic			
00			0)			1				
Restrictive L	ayer (if observed	l):								
Туре:					_		Hydric Soil Prese	nt? <u>No</u>		
Depth (inches	s):				-					
Remarks:										
HYDROLO	GY									
Wetland Hyd	rology Indicators	s:								
Primary Indica	ators (minimum of	one is r	equired; check	all that ap	ply)		Secondary Indic	ators (minimum of two required)		
Surfac	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)		
 High W	Vater Table (A2)			 True Aa	uatic Plar	, nts (B14)	Drainag	e Patterns (B10)		
Fight Water Table (A2) Saturation (A3)				Hvdroge	en Sulfide	Odor (C	Dry-Season Water Table (C2)			
Saturation (A3)				Oxidized	d Rhizosr	heres on	Living Cravfish	Burrows (C8)		
Sediment Deposits (B2)				Roots (23)		Saturati	on Visible on Aerial Imagery (C9)		
Drift Deposits (B3)				Presence	ce of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)		
Algal Mat or Crust (B4)				Recent	Iron Redu	uction in	Tilled Soils X Geomor	phic Position (D2)		
Iron Deposits (B5)				(C6)			FAC-Ne	utral Test (D5)		
Inunda	tion Visible on Ae	gery (B7)	Thin Muck Surface (C7)							
Sparse	elv Vegetated Con	Irface (B8)	Gauge or Well Data (D9)							
Water-		Other (E	Explain in	Remarks	5)					
Field Observ	ations:	- /					,			
Field UDSerV	allons:	Vec	No	Y	Denth (in	nches).				
Water Table	Present?	Yee	No	<u> </u>	Depth (ii	nches).	We	etland Hydrology		
Saturation Pr	esent?	Yes	No	<u>x</u>	Depth (ii	nches).		Present?		
(includes can	illary fringe)	103	NO					110		
Describe Rec	orded Data (stream	m ຕອບຕ	e monitoring we	ll aerial r	photos pr	evious in	spections) if available.			
		in gauge	, montoning we	n, aonar p	2.1000, pl					
Remarks:										






0 40 80 120 160 200













Feature ID: NWA026

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- —— Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WET Lake Ch	LAND DETER	MINAT	ION DAT /Countv:	A FORM Mar	 Midwes 	st Region Sampling Date:	10/20/2022
Applicant/Owner:	24.10 01	Lake Charlotte Sc	lar, LLC	e e a lingt	State:	MN	Sampling Point:	NWA027A
Investigator(s):		Aprvl Jennrich	,	Sec	tion. Townsh	nip. Range:	Sec.	8 T103N R30W
Landform (hillslope, terra	ace. etc.):	Depress	sion	Loca	l relief (conc	ave. convex	a none):	Concave
Slope (%): 1	Lat:	43.74075	-	Long:	-94.46	6258	Datum:	WGS84
Soil Map Unit Name:	Webster cl	av loam. 0 to 2 pe	rcent slop	bes	N	NI Classifica	ation:	NA
Are climatic/hydrologic c	onditions of t	he site typical for	this time of	of the year?	Yes	(If no. expl	ain in remarks)	
Are vegetation X	soil	or hydrology		Significant	lv disturbed?	2 Are "	normal circumstar	ces present? No
Are vegetation	, coii	, or hydrology		naturally n	roblematic?	(If ne	eded explain an	v answers in remarks)
SUMMARY OF FIN		, or hydrology				(1110		y anowers in remaine.)
Hydrophytic Vegeta	ation Present	? <u>No</u>						
Hydric Soil Present	?	No		Is the	sampled are	ea within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes,	optional wet	land site ID:		
Remarks:								
Recently harvested a	gricultural fie	ld.						
VEGETATION US	se scientifi	c names of pla	ints.	Deminant	la dia atau	Domin		- h t
<u>Tree Stratum</u> (Plot size:)	% Cover	Species	Status	Numbe that are	er of Dominant Spe e OBL, FACW, or F	cies AC: 0 (A)
2 3						Total N Specie	lumber of Dominar s Across All Strata	t (B)
4 5				Total Ca		Percent that are	t of Dominant Spe e OBL, FACW, or F	cies AC: <u>%</u> (A/B)
Sanling/Shruh Stratum	(Plot size:	\			/ei	Brova	lonco Indox Wor	kshoot
<u>Sapiing/Siriub Stratum</u>	(FIOL SIZE.)				Total	% Cover of:	Multiply by:
2.						OBL	pecies	x 1 =
3.						FACW	/ species	x 2 =
4.						FAC s	pecies	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	/er	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	n totals	(A) (B)
1						Preva	lence Index = B/A	.=
3						Hydro	onhytic Vegetatio	on Indicators:
4.							Rapid test for hvd	rophytic vegetation
5.							Dominance test is	s >50%
6.							Prevalence index	is ≤3.0*
7.							Morphological ad	aptations* (provide
8.							supporting data ir	Remarks or on a
9.							separate sheet)	
10							Problematic hydro	ophytic vegetation*
				=Total Cov	/er		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2				=Total Cov	ver	— Hyc Veg Pre	Irophytic jetation sent? <u>N</u>	0
Remarks: (Include photo Harvested agricultural fie	o numbers he eld. Bare grou	re or on a separat und: 100%	e sheet)					

NWA027A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the li	nuicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-16	10YR 2/1	100					Clay	
16-19	2.57 3/2	89	2.57.5/2	10	D	м	Sandy Clay	
10-13	2.31 3/2	03	2.51 5/2	10	0	101	Calley Clay	
			2.5Y 5/6	1	C	PL		Distinct or Prominent
19-20	2.5Y 5/2	99	2.5Y 5/6	1	С	PL	Sandy Clay	Distinct or Prominent
20-23	2.5Y 6/3	99	2.5Y 5/6	1	С	PL	Sandy Clay Trace Gravel	Distinct or Prominent
*Tvpe: C =	Concentration. D	= Deple	tion. RM = Redu	ced Mati	ix. MS =	Masked S	Sand Grains. **Locatio	n: PL = Pore Lining. M = Matrix
Hvdric Soil	Indicators:		,		,		Indicators for Proble	matic Hydric Soils*:
His	itosol (A1)		Sar	ndv Glev	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K. L. R)
His	tic Epipedon (A2)		Sar	ndv Redo	ox (S5)	(-)	Dark Surface (S7	() (I BB K. I.)
Bla	uck Histic (A3)		Stri	nned Ma	rix (S6)		Iron-Manganese	$M_{2} = (E12) (IRR K R)$
Dia	drogon Sulfido (A.	4)			ky Minora			(TE12)
1 iyo	atified Lovers (AF	+) \	Loa		ny Motrix	(F2)		romarka)
	m Muck (A10))	L0a			. (FZ)		Temarks)
20		o ((50)		
	pleted Below Dari	< Surfac	e (A11) Red	dox Dark	Surface	(F6)		
Thi	ck Dark Surface (A12)	Dep	pleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	ytic vegetation and wetland
Sai	ndy Mucky Minera	al (S1)	Red	dox Depr	essions (F8)	hydrology must be pro	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed):						
Restrictive La Type:	ayer (if observed):					Hydric Soil Presen	t? No
Restrictive La Type: Depth (inches)):):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches)	ayer (if observed):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches) Remarks:):):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks:	ayer (if observed):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks:	ayer (if observed):					Hydric Soil Presen	t? <u>No</u>
Restrictive L; Type: Depth (inches Remarks:):):):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks: HYDROLOO	ayer (if observed):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr	ayer (if observed): GY rology Indicators):					Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr Primary Indica	ayer (if observed): GY rology Indicators ators (minimum of): s: one is r	equired; check a	ll that ap	<u>.</u> <u>.</u> <u>.</u> <u>.</u>		Hydric Soil Presen	t? No
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr Primary Indica Surface	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1)): s: one is r	equired; check a	II that ap Aquatic	<u>ply)</u> Fauna (B	13)	Hydric Soil Presen	t? No
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr Primary Indica Surface High W	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2)): s: one is r	equired; check a	II that ap Aquatic True Aq	<u>ply)</u> Fauna (B uatic Plar	13) nts (B14)	Hydric Soil Presen	t? No
Restrictive La Type: Depth (inches Remarks: HYDROLOC Wetland Hydr Primary Indica Surface High W Saturat	ayer (if observed): GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3)): :: one is r	equired; check a	ll that ap Aquatic True Aq Hydroge	<u>plv)</u> Fauna (B uatic Plar en Sulfide	13) nts (B14) Odor (C	Hydric Soil Presen	t? No
Restrictive La Type: Depth (inches Remarks: HYDROLOO Wetland Hydr Primary Indica Surface High W Saturat Water N	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) dater Table (A2) ion (A3) Marks (B1)): s: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) nts (B14) Odor (C oheres on	Hydric Soil Presen	t? No tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr Primary Indica Surface High W Saturat Water N Sedime	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)): s: one is r	equired; check a	ll that ap Aquatic True Aq Hydroge Oxidized Roots (0	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C hheres or	Hydric Soil Presen	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9)
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr Primary Indica Surface High W Saturat Water N Sedime Drift De	GY rology Indicators ators (minimum of Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3)): S: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presence	<u>plv)</u> Fauna (B uatic Plar n Sulfide d Rhizosp C3) æ of Redu	13) hts (B14) Odor (C heres or uced Iron	Hydric Soil Presen	tors (minimum of two required) tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Restrictive La Type: Depth (inchess Remarks: HYDROLO(Wetland Hydr Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M	ayer (if observed): (): (): (): (): (): (): ():): :: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) æ of Redu Iron Redu	13) hts (B14) Odor (C heres or uced Iron uction in	Hydric Soil Presen	tr? No
Restrictive La Type: Depth (inchess Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De	ayer (if observed): (): (): (): (): (): (): ():): .: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6)	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu	13) hts (B14) Odor (C heres or uced Iron uction in [–]	Hydric Soil Presen	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inchess Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aeu): one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac	13) hts (B14) Odor (C bheres on ucted Iron uction in ⁻ te (C7)	Hydric Soil Presen	t? No tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) in Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inchess Remarks: Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Com-): one is r rial Imag cave Su	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ck Surfac or Well Da	13) hts (B14) Odor (C pheres or ucted Iron iction in ⁻ se (C7) ata (D9)	Hydric Soil Presen	tr? No
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Water-S	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E): one is r rial Imag cave Su 39)	equired; check a 	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge o Other (E	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) se of Redu Iron Redu ck Surfac or Well Da Explain in	13) hts (B14) Odor (C heres or uced Iron uction in ce (C7) ata (D9) Remarks	Hydric Soil Presen	tr? No tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
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Restrictive La Type: Depth (inchess Remarks: Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aei ly Vegetated Con- Stained Leaves (E ations: r Present?): one is r one is r one is r one is r Yes	equired; check a 	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in	13) hts (B14) Odor (C heres or uced Iron uction in ⁻ ee (C7) ata (D9) Remarks nches):	Hydric Soil Presen	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inchess Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Water Table P	ayer (if observed): (): (): (): (): (): (): ():): one is r one is r rial Imag cave Su 39) Yes Yes	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X X	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	13) hts (B14) Odor (C heres on uction in ⁻ ce (C7) ata (D9) Remarks nches):	Hydric Soil Presen Secondary Indica Surface	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) Itral Test (D5) tland Hydrology Present?
Restrictive La Type: Depth (inchess Remarks: Remarks: HYDROLO(Wetland Hydu Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Vater Table P Saturation Pre	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Com Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (ir Depth (ir	13) hts (B14) Odor (C heres or uction in ⁻ te (C7) ata (D9) Remarks nches): _ nches): _ nches): _	Hydric Soil Presen Secondary Indica Surface	tread Hydrology resent?
Restrictive La Type: Depth (inches Remarks: Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Vater Table P Saturation Pre (includes capil	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B3) lat or Crust (B4) posits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present? Present? llary fringe)	rial Imag cave Su 39) Yes Yes Yes Yes	equired; check a gery (B7) gery (B7) NoNoNoNo	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge C Other (E X X X X	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ck Surfac or Well Da cxplain in Depth (in Depth (in	13) hts (B14) Odor (C heres or uced Iron uction in ⁻ e (C7) ata (D9) Remarks hches): hches):	Hydric Soil Presen Secondary Indica Surface	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?
Restrictive La Type: Depth (inches Remarks: Remarks: HYDROLOG Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Water Table P Saturation Pre (includes capil Describe Reco	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aei ly Vegetated Con- Stained Leaves (E ations: r Present? Present? Present? e): rial Imag cave Su 39) Yes Yes Yes Magauge	equired: check a gery (B7) gery (B7) NoNoNoNoNoNoNoNo	II that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C heres or uced Iron uction in ⁻ ee (C7) Remarks nches): _ nches): _ evious in	Hydric Soil Presen Secondary Indica Surface	t? No
Restrictive La Type: Depth (inchess Remarks: Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundal Sparse Water-S Field Observa Surface Water Vater Table P Saturation Pre (includes capil Describe Reco	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) dater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) ator Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E ations: r Present? esent? esent? llary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; check a gery (B7) urface (B8) NoNoNoNoNoNoNoNoNoNoNo	II that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge o Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C beres on uced Iron uced Iron uction in ce (C7) ata (D9) Remarks nches): nches): evious in	Hydric Soil Presen Secondary Indica Surface	t? No
Restrictive La Type: Depth (inchess Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Water Table P Saturation Pre (includes capil Describe Reco	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) posits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present? Secont? llary fringe) orded Data (stream): one is r one is r one is r Yes Yes Yes Yes m gauge	equired; check a gery (B7) urface (B8) No	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C heres on uced Iron uced Iron uction in ⁻ ata (D9) Remarks nches): _ nches): _ nches): _ revious in	Hydric Soil Presen Surface	t? No
Restrictive La Type: Depth (inchess Remarks: Remarks: HYDROLO(Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Vater Table P Saturation Pre (includes capil Describe Reco	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? lary fringe) orded Data (stream): one is r one is r ves Yes Yes Yes Mes Yes	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X I, aerial p	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in photos, pr	113) hts (B14) Odor (C heres on uction in ⁻ exe (C7) ata (D9) Remarks nches): evious in	Hydric Soil Presen Secondary Indica Surface	tress (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) In Visible on Aerial Imagery (C9) or Stressed Plants (D1) obic Position (D2) utral Test (D5) tland Hydrology Present?No





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWA027

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



Project/Site:	WET Lake Ch	LAND DETER	MINAT	ION DAT /Countv:	A FORM Mar	 Midwes 	st Region Sampling Date:	10/20/2022
Applicant/Owner:		Lake Charlotte Sc	olar, LLC		State:	MN	Sampling Point:	NWA028A
Investigator(s):	ļ	Apryl Jennrich		Sec	tion, Townsh	nip, Range:	Sec	2.8 T103N R30W
Landform (hillslope, terr	race, etc.):	Depress	sion	Local	relief (conca	ave, convex	(, none):	Concave
Slope (%): 1	Lat:	43.74149		Long:	-94.46	6104	Datum:	WGS84
Soil Map Unit Name:	Webster cl	ay loam, 0 to 2 pe	rcent slop	bes	N۱	VI Classific	ation:	NA
Are climatic/hydrologic	conditions of t	he site typical for	this time of	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	(, soil	, or hydrology		Significant	ly disturbed?	? Are "	normal circumsta	ances present? No
Are vegetation	, soil	, or hydrology		naturally p	roblematic?	(If ne	eded, explain a	ny answers in remarks.)
SUMMARY OF FI	NDINGS	_						
Hydrophytic Veget	tation Present	? <u>No</u>						
Hydric Soil Preser	nt?	No		Is the s	sampled are	ea within a	wetland?	No
Wetland Hydrolog	y Present?	No		lf yes, o	optional wetl	and site ID:	·	
Remarks:								
Recently harvested	agricultural fie	ld.						
VEGETATION U	Jse scientifi	c names of pla	ints.					
			Absolute	Dominant	Indicator	Domir	nance Test Wor	ksheet
<u>Tree Stratum</u> 1.	(Plot size:)	% Cover	Species	Status	Numbe that are	er of Dominant Sp e OBL, FACW, or	ecies FAC: 0 (A)
2 3.						Total N Specie	Number of Dominations S Across All Strat	ant 0 (B)
4 5						Percer	nt of Dominant Sp e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
		_		=Total Cov	/er			
Sapling/Shrub Stratum	<u>ı</u> (Plot size:)				Preva	lence Index Wo	orksheet
1						Total	% Cover of:	Multiply by:
2						OBLS	species	_ x 1 =
3						FACV		_ x 2 =
4 5						FAC S		_ x 3 =
5				=Total Cov	/er			_ × 5 =
Herb Stratum	(Plot size:) —				Colum	nn totals	(A) (B)
1.		/				Preva	lence Index = $B/$	(-)
2.								
3.						Hydro	ophytic Vegetat	ion Indicators:
4.							Rapid test for hy	drophytic vegetation
5							Dominance test	is >50%
6							Prevalence inde	x is ≤3.0*
7							Morphological a	daptations* (provide
8							supporting data	in Remarks or on a
9							Separate sneet)	ranhutia vagatatian*
10				-Total Cay	uor.			
Woody Vine Stratum	(Plot size:)				*Indicate present,	ors of hydric soil an unless disturbed c	d wetland hydrology must be r problematic
2.				=Total Cov	/er	— Hyc Veç Pre	drophytic getation sent?	No
2 Remarks: (Include phot Harvested agricultural f	o numbers he ield. Bare grou	re or on a separat	e sheet)	=Total Cov	ver	Hyo Veç Pre	drophytic getation sent?	<u>No</u>

NWA028A

Profile Descr	iption: (Describe	to the	depth neede	ed to	o docum	ent the i	ndicator	or confirm the abs	sence of i	indicators.)
Depth	Matrix			Re	dox Feat	ures				
(Inches)	Color (moist)	%	Color (mois	st)	%	Type*	Loc**	Texture		Remarks
0-19	10YR 2/1	100						Clay Loam		
10.22	10VP 2/2	80	2 EV 4/2		10	D	M	Sandy Clay Loan		
19-23	101R 3/2	09	2.51 4/3		10	D	IVI	Sandy Ciay Loan	ii	
			7.5YR 4/4		1	С	PL			Distinct or Prominent
23-24	10YR 5/4	100						Sand		
*Type: C =	Concentration, D	= Deple	tion, RM = R	edu	ced Matr	rix, MS =	Masked	Sand Grains. **L	ocation: F	PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:							Indicators for F	Problema	tic Hydric Soils*:
His	stosol (A1)			Sar	ndy Gley	ed Matrix	(S4)	Coast Prair	ie Redox	(A16) (LRR K, L, R)
His	stic Epipedon (A2)	1		Sar	ndy Redo	ox (S5)		Dark Surfac	ce (S7) (L	.RR K, L)
Bla	ack Histic (A3)			Stri	pped Ma	trix (S6)		Iron-Manga	anese Ma	sses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)		Loa	amy Muc	ky Minera	al (F1)	Very Shallo	w Dark S	Surface (TF12)
Str	atified Layers (A5)		Loa	amy Gley	ed Matrix	(F2)	Other (expl	ain in rem	narks)
2 c	m Muck (A10)	,		De	pleted Ma	atrix (F3)	. ,			
De	pleted Below Darl	k Surfac	e (A11)	Re	dox Dark	Surface	(F6)			
Th	ick Dark Surface (A12)	· · ·	Dei	oleted Da	ark Surfac	ce (F7)	*Indiantara of h	drophytic	vogetation and watland
Sa	ndv Mucky Minera	, al (S1)		Red	dox Depr	essions ((F8)	hvdrology must	be prese	nt. unless disturbed or
<u> </u>	m Mucky Peat or	Peat (S	3)		aon Dopi		,	problematic		,
			-)							
	ayer (if observed	l):								N
Type:	<u>۱</u>							Hydric Soli P	resent?	<u>NO</u>
Depth (inches										
Remarks:										
HYDROLO	GY									
Wetland Hyd	rology Indicators	8:								
Primary Indica	ators (minimum of	one is r	equired; cheo	ck a	ll that ap	<u>ply)</u>		Secondary	Indicators	s (minimum of two required)
Surface	e Water (A1)				Aquatic	Fauna (B	313)	Su	rface Soil	Cracks (B6)
High W	/ater Table (A2)		-		True Aq	uatic Plai	nts (B14)	Dra	ainage Pa	atterns (B10)
Satura	tion (A3)		-		Hydroge	en Sulfide	Odor (C	1) Dry	y-Season	Water Table (C2)
Water	Marks (B1)		-		Oxidized	d Rhizosp	heres or	Living Cra	ayfish Bur	rrows (C8)
Sedime	ent Deposits (B2)				Roots (C	C3)		Sa	turation V	isible on Aerial Imagery (C9)
Drift De	eposits (B3)		_		Presenc	e of Red	uced Iron	n (C4) Stu	unted or S	Stressed Plants (D1)
Algal M	lat or Crust (B4)				Recent	Iron Redu	uction in	Tilled Soils X Ge	omorphic	Position (D2)
Iron De	eposits (B5)		_		(C6)			FA	C-Neutra	l Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)		Thin Mu	ck Surfac	ce (C7)			
Sparse	ly Vegetated Con	cave Su	Irface (B8)		Gauge of	or Well Da	ata (D9)			
Water-	Stained Leaves (E	39)	_		Other (E	xplain in	Remarks	6)		
Field Observ	ations:									
Surface Wate	r Present?	Yes	N	0	Х	Depth (i	nches):		Motion	
Water Table F	Present?	Yes	N	ο	Х	Depth (i	nches):		P	resent?
Saturation Pre	esent?	Yes	N	ο.	Х	Depth (i	nches):			No
(includes capi	llary fringe)									
Describe Rec	orded Data (strea	m gauge	e, monitoring	wel	i, aerial p	onotos, pr	evious in	spections), if availal	ble:	
Domortics										
Remarks:										











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-1143-

-1150-

1952-

A1

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Feature ID: NWA028

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

Proiect/Site:	WETL Lake Ch	AND DETER	MINATI //Citv	ION DAT	• A FORM Mart	• Midwes	st Region Sampling Date:	10/20/2022
Applicant/Owner:	L	ake Charlotte So	lar, LLC		State:	MN	Sampling Point:	NWA030A
Investigator(s):	A	pryl Jennrich		Sect	ion, Townsh	ip, Range:	Sec	.8 T103N R30W
Landform (hillslope, terra	ace, etc.):	Depress	ion	Local	relief (conca	ave, convex	, none):	Concave
Slope (%): 1	Lat:	43.74232		Long:	-94.45	756	Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	encoe complex, () to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic c	onditions of th	e site typical for t	his time c	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantl	v disturbed?	Are "	normal circumsta	nces present? No
Are vegetation	soil	_ or hydrology		naturally pr	oblematic?	(If ne	eded. explain a	nv answers in remarks.)
SUMMARY OF FIN	DINGS			, , , , , , , , , , , , , , , , , , , ,		(,,
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present	?	No		Is the s	ampled are	a within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, o	ptional wetla	and site ID:		
Remarks:								
Recently harvested a	gricultural field	t.	nto					
VEGETATION 08			hsolute	Dominant	Indicator	Domir	nance Test Work	rshoot
Tree Stratum (I	Plot size:)	% Cover	Species	Status	Number that are	er of Dominant Spe e OBL. FACW. or	ecies FAC: 0 (A)
2. 3.						Total N Specie	lumber of Dominal s Across All Strata	nt a: <u>0</u> (B)
4 5				Tatal Oas		Percent that are	nt of Dominant Spe e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
Sopling/Shrub Stratum	(Plot size:	、 _		= I otal Cov	er	Brove	longo Index We	rkahaat
saping/shrub stratum)				Total	% Cover of:	Multiply by:
2.							species	x 1 =
3.						FACW	V species	x 2 =
4.						FAC s	species	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	er	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1						Preva	lence Index = B//	A =
2						Hydro	nhytic Voqotati	on Indicators:
3 4						пушт	Rapid test for by	drophytic vegetation
5.							Dominance test i	s >50%
6.							Prevalence index	c is ≤3.0*
7.							Morphological ad	laptations* (provide
8.							supporting data i	n Remarks or on a
9.							separate sheet)	
10							Problematic hydr	ophytic vegetation*
				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil and unless disturbed or	d wetland hydrology must be problematic
2				=Total Cov	er	— Hyd Veg Pre	drophytic getation sent?	<u>lo</u>
Remarks: (Include photo Harvested agricultural fie	numbers here	e or on a separate	e sheet)			I	<u> </u>	<u> </u>

NWA030A

Profile Descr	iption: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Redox Features					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-21	10YR 2/1	100					Clay	
21-23	10VP 2/1	90	10VR 4/2	10	П	м	Sandy Clay	
21-23	1011 2/1	90	10111 4/2	10		IVI	Sandy Clay	
23-30	2.5Y 4/1	90	2.5Y 3/1	10	D	М	Sandy Clay	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	uced Mat	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ack Histic (A3)		St	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5)	Lo	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)
2 0	m Muck (A10)		De	pleted M	atrix (F3)			
De	pleted Below Darl	< Surfac	e (A11) Re	dox Dark	Surface	(F6)		
Th	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	wic vegetation and wetland
Sa	ndv Muckv Minera	, al (S1)	 Re	dox Depi	ressions (F8)	hydrology must be pr	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)		()	problematic	
	, 	\ <u>`</u>	,					
Restrictive L	ayer (if observed):					Hydria Sail Brasan	*2 No
Type.	٨.				-		nyunc son Fresen	
Deptil (menes	·/·				-			
Remarks:								
HYDROLO	GY							
Wetland Hyd	rology Indicators	5:						
Primary Indica	ators (minimum of	one is r	equired; check a	all that ap	ply)		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	513)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidize	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	ce of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils X Geomor	phic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparse	ely Vegetated Con	cave Su	Irface (B8)	Gauge	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	S)	
Field Observ	ations:				_			
Surface Wate	r Present?	Yes	No	X	Depth (ii	nches): _	We	tland Hydrology
Water Table F	resent?	Yes	No	<u> </u>	Depth (ii	nches):		Present?
Saturation Pre	esent?	Yes	No	X	Depth (ii	nches):		No
(includes capi	nary minge)		- monitoria - cor		hotes		opportions) if sucht-	
Describe Rec	orded Data (stream	m gauge	e, monitoring we	n, aerial p	motos, pr	evious in	ispections), if available:	
Remarks								
ntomainð.								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWA030

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Proiect/Site:	WETI Lake Ch	AND DETER	MINATI //Citv	ON DAT	- A FORM Mart	Midwes	st Region Sampling Date:	10/20/2022
Applicant/Owner:		_ake Charlotte So	lar, LLC		State:	MN	Sampling Point:	NWA031A
Investigator(s):	Δ	pryl Jennrich		Sect	ion, Townsh	ip, Range:	Sec.	8 T103N R30W
Landform (hillslope, terrad	ce, etc.):	Depress	on	Local	relief (conca	ive, convex	, none):	Concave
Slope (%): 2	Lat:	43.73744		Long:	-94.45	776	Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	lencoe complex, () to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic co	onditions of th	ne site typical for t	his time c	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantl	y disturbed?	Are "	normal circumsta	nces present? No
Are vegetation	, soil	, or hydrology		naturally pr	oblematic?	(If ne	eded, explain ar	y answers in remarks.)
SUMMARY OF FINI	DINGS							
Hydrophytic Vegetat	ion Present?	No No						
Hydric Soil Present?	j	No		Is the s	ampled are	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, c	ptional wetla	and site ID:		
Remarks:								
Recently harvested ag	ricultural fiel	d.						
VEGETATION Us	e scientific	c names of pla	nts.	Deminent	la di seten	Damin		ah aat
Tree Stratum (F	lot size:)	% Cover	Species	Status	Number that are	er of Dominant Spe	cies
2 3						Total N Specie	lumber of Dominar s Across All Strata	nt (B)
4 5						Percent that are	nt of Dominant Spe e OBL, FACW, or F	cies FAC: <u>%</u> (A/B)
		. –		=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:)				Preva	Ilence Index Wor	ksheet
1							% Cover of:	
3						FACW	/ species	x2=
4.						FACs	pecies	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	er	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1						Preva	lence Index = B/A	.=
2								
3						Hydro	Popid toot for by:	on Indicators:
4 5							Dominance test is	
6							Prevalence index	is ≤3.0*
7.							Morphological ad	aptations* (provide
8.							supporting data ir	Remarks or on a
9.							separate sheet)	
10							Problematic hydro	ophytic vegetation*
				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2				=Total Cov	er	— Hyd Veg Pre	drophytic jetation sent?	<u>o</u>
Remarks: (Include photo Harvested agricultural fiel	numbers her	e or on a separate nd: 100%	e sheet)					

NWA031A

Depth (Inches) Mattix Bedox Features (Loc* Toxiure Remarks 0-80 10/R 21 0.9 10/R 50 1 C. PL Study Clay Law Delincit or Prominent 28-25 10/R 21 9.9 10/R 50 1 C. PL Study Clay Law Delincit or Prominent 28-25 10/R 21 9.9 10/R 50 1 C. PL Study Clay Law Delincit or Prominent 28-25 10/R 20 9.9 10/R 50 1 C. PL Study Clay Law Delincit or Prominent 28-25 10/R 50 10/R 50 1 C. PL Study Clay Law Delincit or Prominent 28-25 10/R 50 10/R 50 1 C. PL Study Clay Law Delincit or Prominent 28-25 10/R 50 10/R 50 Delincit or Problematic Hydric Solls*: Cold Relin Micros 1 Cold Relin Micros 1<	Profile Descr	ription: (Describe	e to the	depth needed	to docum	ent the i	ndicator	or confirm the absence	of indicators.)
(Inches) Color (monit) % Color (monit) % Type* Loc* Texture Remarks 0-46 10YR 21 100 1 0 M Sard Trace Ciay Loam District of Provinent 20-26 10YR 32 80 10YR 42 10 D M Sard Trace Gravel District of Provinent 20-26 10YR 32 80 10YR 42 10 D M Sard Trace Gravel District of Provinent 20-26 10YR 32 80 10YR 42 10 D M Sard Trace Gravel District of Provinent 20 10YR 21 10 1 1 1 District of Provinent District of Provinent 20 10YR 21 30 Sard Graver (S) District of Provinent District of Provinent (S) Districator of Provinent (S) District of Provinent (S	Depth	Matrix		<u>R</u>	edox Feat	tures			
0-6 107R 21 100	(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
16-20 10YR 2/1 9 10YR 2.6 1 C PL Sandy Cay Loam Datatest or Prominent 20-25 10YR 3.2 85 10YR 4.2 10 D M Sandy Take Direct 20-25 10YR 3.2 85 10YR 4.2 10 D M Sandy Take Direct Datatest or Prominent 20-25 10YR 5.6 1 C PL Datatest or Prominent Datatest or Prominent 20-26 Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location, PL = Pore Lining, M = Matrix Hydro S01 (Micros:	0-16	10YR 2/1	100					Clay Loam	
20-26 10YR 32 88 10YR 42 10 D M Stand Trace Grawt Image: Stand	16-20	10YR 2/1	99	10YR 5/6	1	С	PL	Sandy Clay Loam	Distinct or Prominent
Image: Secondary Indicators Indicators Indicators Indicators Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: Problematic Hydris Solis": Coast Praine Redox Chi (LR K, L, R) Depletion Dark Surface (F12) (LR K, L, R) Structure (A1) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Trick Dark Surface (A11) Depleted Matrix (F2) "Indicators (maintum of two required hydrology musite present, unless disturbed or problematic Restrictive Layer (f observed):	20-25	10YR 3/2	89	10YR 4/2	10	D	м	Sand Trace Gravel	
Image: constraint of the second sec	20 20			10VR 5/6	1				Distinct or Prominant
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grain: "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grain: "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grain: "Location: PL = Pore Lining, M = Matrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, (S1) Coast Parlie Redox (A10) (LRPK K, L, R) Black Histic (A3) Stripped Matrix (S2) Coast Parlies (CS7) (LRR K, L, R) C = Stripped Matrix (S2) Depleted Matrix (S2) Coast Parlies (CS7) (LRR K, L, R) C = Stripped Matrix (S4) Depleted Matrix (S2) Other (explain in remarks) C = C = Mack (A10) Depleted Matrix (S2) Other (explain in remarks) C = Sandy Mucky Mineral (S1) Redox Depressions (F8) Indicators of hydrophytic vegetation and wetland hydrology must be present; unless disturbed or problematic Papel, (mokeys): Redox Depressions (F8) Hydric Soil Present? No				101K 5/6	1	C	FL		Distinct of Fromment
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Natrix Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Locators for Problematic Hydric Solis". Histic Epipedon (A2) Sandy Gleyed Matrix (Si) Coast Praine Redox (A16) (LRR K, L, R) Black Histic (A3) Coarry Mudcy Mineral (F1) One-Manganese Masses (F12) (LRR K, L, R) Black Histic (A3) Coarry Mudcy Mineral (F1) Very Shalow Dark Surface (TF12) Depleted Balow Dark Surface (A1) Depleted Ank Surface (F1) Other (explain in remarks) There is Surface (A1) Redox Dark Surface (F1) 'indicators of hydrophytic vegelation and wetland hydrology must be present, unless disturbed or problematic Type:									
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Typic: S = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. "Location: PL = Pore Lining, M = Matrix Typic: S = Concentration, D = Depletion, RM = Reduced Matrix, (S6) Indicators for Problematic Hydric Solls": Histosofi (A2) Sandy Gleyed Matrix (S6) Coast Prairie Redox (A16) (LRR K, L, R) Histosofi (A1) Loamy Mucky Mineral (F1) Other (explain in remarks) High open Sulfide (A4) Loamy Mucky Mineral (F1) Other (explain in remarks) Depleted Balow Dark Surface (A12) Depleted Matrix (F3) Indicators of hydrophylic vegetation and wetland hydrology musk be present, unless disturbed or problematic Thick Dark Surface (A12) Depleted Dark Surface (F7) Indicators of hydrophylic vegetation and wetland hydrology musk be present, unless disturbed or problematic Type: Depleted Balow Dark Surface (F1) Indicators of hydrophylic vegetation and wetland hydrology functiones (F8) Type: Depleted Balow Dark Surface (F1) Indicators (Intiminum of two required for the Apuatic Fauna (F13) Surface Vater (A1) Surface Vater (A1) Aquatic Fauna (F13) Dirk Depleted Balow Dark Surface (F1) Dirk Depleted Balow Dark Surface (F1) Surface Vater (A1) Aquatic Fauna (F13) <									
"Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains" "Location: PL = Pore Lining, M = Matrix "Hydric Soil Indicators: Indicators for Problematic Hydric Soils": Histool (A1) Sandy Gleyed Matrix (S4) Dark Surface (S7) (LRR K, L, R) Back Histic (A3) Sintpeed Matrix (S5) Dark Surface (S7) (LRR K, L, R) Histool (A1) Loamy Gleyed Matrix (S6) Dark Surface (S7) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Depleted Matrix (F3) Depleted Bork Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present; unless disturbed or problematic Restrictive Layer (if observed):									
*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. *Location; PL = Pore Lining, M = Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils*: Histic Epipedon (A2) Sandy Redox (S5) Black Histic (A3) Gripped Matrix (S4) Hydrogen Sutfide (A4) Loarny Mucky Mineral (F1) Very Statiled Layers (A5) Loarny Gleyed Matrix (S4) Depleted Matrix (S4) Depleted Matrix (S4) Depleted Bark Surface (A12) Depleted Matrix (S4) Strattified Layers (A5) Loarny Gleyed Matrix (S7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Free Problematic Restrictive Layer (if Observed); Type: Propi (inches): Hydric Soil Present? Remarks: Hydric Soil Present? Hydrology Indicators: Presence of Reduced Iron (C4) Saturation (A3) Hydrology Solfide Cdor (C1) Saturation (A3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (G7) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (G7) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (G7) Thin Muck Surface (C7)									
Hydric Soli Indicators: Indicators (A1) Sandy Gleyed Matrix (S4) Histosol (A1) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6) Hydrogen Suffide (A4) Loarny Mucky Mineral (F1) Very Stratified Layers (A5) Loarny Gleyed Matrix (S7) Der Stratified Layers (A5) Loarny Gleyed Matrix (F2) Other (septed Below Dark Surface (A11) Depleted Matrix (F3) Depleted Below Dark Surface (A12) Depleted Dark Surface (F7) 'Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Type:	*Type: C =	Concentration, D	= Deple	tion, RM = Red	uced Mat	rix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Histosol (A1) Sandy Gleyed Matrix (S4) Coast Praint Recko (A16) (LRR K, L, R) Histo Epideo (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L, R) Histo Epideo (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L, R) Histo Epideo (A2) Sandy Medox (S6) Torn-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulface (A1) Depleted Matrix (F2) Other (explain in remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (If observed): Type: Hydric Soil Present? No Pine Indicators (minimum of one is required: check all that apply) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Dry-Resence (B10) Saturation (A3) Hydrogen Sulfide Codo (C1) Dry-Sesson Water Table (C2) Surface Water (A1) Crayfish Burrows (C8) Saturation (A3) Hydrogen Sulfide Codo (C1) Dry-Sesson Water Table (C2) Sutrate Oracle Sulface Plants (C3) Sutrate C2) Mater Karks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C3)	Hydric Soil	Indicators:	•					Indicators for Proble	ematic Hydric Soils*:
Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S1) (LRR K, L) Histic (A3) Stripped Matrix (S6) Inton-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulfide (IA) Loarny Mucky Mineral (F1) Versy Shallow Dark Surface (R17) Stratified Layers (A5) Loarny Mucky Mineral (F1) Other (explain in remarks) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Depressions (F8) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: No No Depth (incles): Remarks: Remarks: Sturface (A11) Aquatic Fauna (B13) Surface Water (A1) Aquatic Pans (B13) Surface Sol Cracks (B6) Drainage Patterns (B10) Surface Water (A1) Aquatic Pans (B13) Drainage Patterns (B10) Drainage Patterns (B10) Surface Water (A1) Oxidized Rhizospheres on Living Carafish Burrows (C8) Surface (C2) Surface (B2) Roots (C2) Root (C3) Surface (C3) Surface (C3) Surface (B5) C(C3) Surface (C3) Surface (C3) Surface (C3) Drin Depos	His	stosol (A1)		Sa	andy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallowark Surface (TF12) Other (explain in remarks) Depleted Below Dark Surface (A12) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric Soil Present? No Type: Hydrology Indicators: No Surface (A12) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Flauna (B13) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water (A1) Oxidiaed Rhizospheres on Living Surface Soil Cracks (B6) Surface Soil Cracks (B6) Sedment Deposits (B2) Roots (C3) Reoter (C1) Dry Season Water Table (C2) True Aquatic Flauna (B13) Crayfish Burrows (C3) Sedment Deposits (B3) Presence of Reduced Iron (C4) Staturation Visible on Aerial Imagery (C9) Staturation Visible on Aerial Imagery (C9) Mith Deposits (B3) Oxidiaed Rhizospheres on Living Secondary Indicators (D5) True Aquatic C1) Secondary Indicators (D5) No	His	stic Epipedon (A2)		Sa	andy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)
Hydrogen Sulfae (A4) Loamy Mucky Mineral (F1)	Bla	ack Histic (A3)		St	ripped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks) 2 cm Muck (A10) Depleted Matrix (F3) Thick Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): True A park (S3) Present? No Type: Depleted Matrix (F2) Mydric Soil Present? No Primary Indicators: Primary Indicators: No No Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (B6) Drakage Patterns (B10) Surface Water (A1) Aquatic Fauna (B13) Durace Soil Cracks (B6) Dry Season Water Table (C2) Sufface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Dry Season Water Table (C2) Saturation (A3) Hydroposits (B1) Oxidized Rhizospheres on Living Saturation Visible on Aerial Imagery (C9) Prime Poposits (B2) Resent Iron Reduction In Tilled Soils X Geomorphic Positin (D1) Sufface (C7) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Yesenn? No Field Observations: No	Hy	drogen Sulfide (A	4)	Lc	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
2 cm Muck (A10) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Festicitive Layer (if observed): Type: Type: Hydric Soil Present? Depleted Below Dark Surface (F6) No Phyten COCY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Hylph Vater Table (A2) True Aquastic Plants (B14) Drainage Patterns (B10) Surface Soil Cracks (B6) Oxid:zed Rhizospheres on Living Carylish Burrows (C8) Sediment Deposits (B2) Roots (C3) Presence of Reduced Iron (C4) Sturtation Visible on Aerial Imagery (C9) Orift Deposits (B3) Presence of Reduced Iron (C4) Sturted or Stressed Plants (D1) Sturtation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Gauge or Well Data (D9) Sturted or Stressed Plants (D1) Mater Natined Leaves (B9) Other (Explain in Remarks) Table Present? No </td <td>Str</td> <td>atified Layers (A5</td> <td>)</td> <td>Lc</td> <td>amy Gley</td> <td>ed Matrix</td> <td>(F2)</td> <td>Other (explain in</td> <td>remarks)</td>	Str	atified Layers (A5)	Lc	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Stardy Mucky Mearal (S1) Depleted Dark Surface (F7) Stardy Mucky Mearal (S1) Redox Depressions (F8) Problematic hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed):	2 c	m Muck (A10)		De	epleted M	atrix (F3)			
Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic S cm Mucky Peat or Peat (S3) Redox Depressions (F8) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Type:	De	pleted Below Darl	k Surfac	e (A11) Re	edox Dark	Surface	(F6)		
Sandy Mucky Mineral (S1)	Th	ick Dark Surface ((A12)	De	epleted Da	ark Surfac	ce (F7)	*Indicators of hydrop	nytic vegetation and wetland
	Sa	ndy Mucky Minera	al (S1)	Re	edox Depi	ressions ((F8)	hydrology must be pr	esent, unless disturbed or
Restrictive Layer (if observed): Type:	5 c	m Mucky Peat or	Peat (S	3)				problematic	
Type:	Restrictive L	aver (if observed	i):						
Depth (inches):	Type:		,					Hydric Soil Preser	nt? No
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Dift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water Table Present? Yes No Surface Water Present? Yes No X Depth (inches): Metland Hydrology Water Table Present? Yes No X Depth (inches):	Depth (inches	s):				-		-	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1)									
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: No X Depth (inches): Metland Hydrology Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No	HYDROLO	GY							
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sectiment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Face-Neutral Test (D5) Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No Saturation Present?	Wetland Hyd	rology Indicators	S:						
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High Water Table (A2) True Aquatic Plants (B14) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Sufface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): No (includes capillary fringe) No X Depth (inches): No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No	Surface	e Water (A1)			Aquatic	Fauna (B	813)	Surface	Soil Cracks (B6)
Saturation (A3) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils K Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Water-Stained Leaves (B9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Mo Saturation Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No <td>High W</td> <td>/ater Table (A2)</td> <td></td> <td></td> <td>True Aq</td> <td>uatic Plai</td> <td>nts (B14)</td> <td>Drainage</td> <td>e Patterns (B10)</td>	High W	/ater Table (A2)			True Aq	uatic Plai	nts (B14)	Drainage	e Patterns (B10)
Water Marks (B1) Oxidized Rhizospheres on Living Crayfish Burrows (C8) Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water Table Present? Yes No X Depth (inches): Wetland Hydrology Saturation Present? Yes No X Depth (inches): No	Satura	tion (A3)			_ Hydroge	en Sulfide	odor (C	1) Dry-Sea	son Water Table (C2)
Sediment Deposits (B2) Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks) Other (Explain in Remarks) Field Observations: Saturation Present? Yes Saturation Present? Yes No X Saturation Present? Yes No X Mater Table Present? Yes No X Saturation Present? Yes No X Saturation Present? Yes No X Depth (inches):	Water	Marks (B1)			Oxidize	d Rhizosp	pheres on	Living Crayfish	Burrows (C8)
Drift Deposits (B3) Presence of Reduced iron (C4) Stunde of Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Other (Explain in Remarks) Wetland Hydrology Field Observations: No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): No Saturation Present? Yes No X Depth (inches): No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No Remarks: Remarks: Remarks: Remarks: Remarks:	Sedime	ent Deposits (B2)			_ Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Adgar Mar Or Crust (B4) Recent non Reduction in Thied Solis X Geomorphic Position (D2) Iron Deposits (B5) (C6) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes Surface Water Present? Yes No X Water Table Present? Yes No X Saturation Present? Yes No X (includes capillary fringe) Depth (inches): No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		eposits (B3)			Presence Booont	ce of Red	uced Iron	Filled Seile X Coomer	or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): (includes capillary fringe) No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Aigai iv	hat of Crust (D4)			(CG)	Iron Real			utral Tast (D5)
Indication Visible on Actial imagery (br)	Inunda	tion Visible on Ae	rial Ima	nery (B7)	_ (CO) _ Thin Mu	ick Surfac	na (C7)		
Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? No Water Table Present? Yes No X Depth (inches): Present? No Saturation Present? Yes No X Depth (inches): No No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Sparse	Normalized Con	rave Si	urface (B8)	- Gauge (De(OT)		
Field Observations: No X Depth (inches): Wetland Hydrology Present? Water Table Present? Yes No X Depth (inches): Present? Saturation Present? Yes No X Depth (inches): Present? No Saturation Present? Yes No X Depth (inches):	Water-	Stained Leaves (F	39)		Other (F	-xolain in	Remarks	;)	
Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Water Table Present? Yes No X Depth (inches): Present? Present? No Saturation Present? Yes No X Depth (inches): Present? No Saturation Present? Yes No X Depth (inches): Present? No (includes capillary fringe) No X Depth (onches): Image: No No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Field Observ		50)				Remarke	,,	
Water Table Present? Yes No X Depth (incles): Wetland Hydrology Present? Present? No Saturation Present? Yes No X Depth (incles):	Surface Wate	r Present?	Ves	No	x	Denth (i	nches).		
Saturation Present? Yes No X Depth (inches): Present? No (includes capillary fringe) Depth (inches):	Water Table F	Present?	Yes	No	X	Depth (i	nches):	We	tland Hydrology
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Saturation Pre	esent?	Yes	No	X	Depth (i	nches):		Present? No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	(includes capi	illary fringe)			·				
Remarks:	Describe Rec	orded Data (strea	m gauge	e, monitoring we	ell, aerial p	photos, pr	evious in	spections), if available:	
Remarks:			-	-					
Remarks:									
	Remarks:								







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Feature ID: NWA031

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



Proiect/Site:	WETL Lake Ch	-AND DETERN arlotte	VINATI //Citv	ON DAT	• FORM - Mart	Midwes	st Region Sampling Date:	10/20/2022
Applicant/Owner:		Lake Charlotte Sol	ar, LLC		State:	MN	Sampling Point	: NWA032A
Investigator(s):	Α	pryl Jennrich		Sect	on, Townsh	ip, Range:	Se	c.8 T103N R30W
Landform (hillslope, terra	ace, etc.):	Depressi	on	Local	relief (conca	ive, convex	, none):	Concave
Slope (%): 1	Lat:	43.73685		Long:	-94.45	587	Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	lencoe complex, 0	to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic c	onditions of th	ne site typical for th	nis time c	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantl	/ disturbed?	Are "	normal circumst	ances present? No
Are vegetation	, soil	_ , or hydrology		naturally pr	oblematic?	(If ne	eded, explain a	any answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	ation Present?	No						
Hydric Soil Present	?	No		Is the s	ampled are	a within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, c	ptional wetla	and site ID:		
Remarks:								
Recently harvested a	gricultural fiel	d.						
VEGETATION Us	se scientific	names of plar	nts.					
_		A	bsolute	Dominant	Indicator	Domir	nance Test Wor	rksheet
<u>Tree Stratum</u> (Plot size:) %	% Cover	Species	Status	Numbe that are	er of Dominant Sp e OBL, FACW, or	pecies FAC: 0 (A)
2 3						Total N Specie	lumber of Domina s Across All Strat	ant ta: 0 (B)
4 5						Percen	t of Dominant Sp e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
		_		=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index Wo	orksheet
1						Total	% Cover of:	Multiply by:
2								x1 =
3								X Z =
4 5						FAC S		
J				=Total Cov	er	UPLs	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	n totals	(A) (B)
1.	· -	,				Preva	lence Index = B	/A =
2.								
3.						Hydro	phytic Vegetat	tion Indicators:
4.							Rapid test for hy	vdrophytic vegetation
5							Dominance test	is >50%
6							Prevalence inde	ex is ≤3.0*
7							Morphological a	daptations* (provide
8							supporting data	In Remarks or on a
9 10							Problematic byd	Ironhytic vegetation*
10				-Total Cov	ar		(evolain)	
Woody Vine Stratum	(Plot size: _)				*Indicato present,	ors of hydric soil ar unless disturbed o	nd wetland hydrology must be or problematic
2.				=Total Cov	er	— Hyc Veg Pre	Irophytic jetation sent?	<u>No</u>
Remarks: (Include photo Harvested agricultural fie	numbers her eld. Bare grou	e or on a separate	e sheet)	=1 otal Cov	ər	Pre	letation sent?	<u>No</u>

NWA032A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	Redox Features				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-36	10YR 2/1	100					Clay Loam	
36-39	2 5Y 3/2	100					Sandy Clay	
30-39	2.01 3/2	100					Candy Clay	
			<u> </u>					
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mati	rix, MS =	Masked \$	Sand Grains. **Locatio	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:		0			(0.4)	Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)		Sai	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S7	() (LRR K, L)
Bla	ack Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	arogen Sulfide (A	4)	Loa	amy Muc	ky Minera	а (F1) . (F2)	Very Shallow Da	rk Surface (TF12)
Str	autied Layers (A5)	Loa	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)
20	m MUCK (A10)	6 C			atrix (F3)	(FC)		
De	pietea Below Darl	K Surfac	e (A11)Re	uox Dark		(רט) אם (ר <u>ס</u>)		
In	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1) Dest (O		dox Depr	essions (F8)	problematic	esent, unless disturbed or
50	m Mucky Peat or	Peat (S	3)			n	F	
Restrictive L	ayer (if observed	l):						
Туре:					-		Hydric Soil Presen	t? <u>No</u>
Depth (inches	s):				-			
HYDROLO	GY							
Wetland Hyd	rology Indicators	3:						
Primary Indica	ators (minimum of	one is r	equired; check a	II that ap	<u>ply)</u>		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	iction in T	Filled Soils X Geomor	phic Position (D2)
Iron De	eposits (B5)		·	(C6)		()	FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	e (C7)		
Sparse	ely Vegetated Con	cave Su	irface (B8)	Gauge	or Well Da	ata (D9)	`	
Water-	Stained Leaves (E	39)		Other (E	xplain in	Remarks	s) 	
Field Observ	ations:	Var	N1-	V	Dorth (
Surface Wate	r Present?	Yes	No	X 	Depth (II	nches):	We	tland Hydrology
Saturation Pr	sent?	Yee		л У	Depth (ii	nches).		Present?
(includes cani	llarv fringe)	162	INU	Λ				
Describe Reo	orded Data (strea	m ຕອບດ	e. monitoring wel	l, aerial r	photos pr	evious in	spections), if available	
		. <u>ə</u> ~uy	,	, p			-, <i>, , , , , , , , , , , , , , , , , , </i>	
Remarks:								











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TETRA TECH

Feature ID: NWA032

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Region		
Project/Site:	Lake C	harlotte	City/	County:	Mart	in	Sampling D	ate:	10/20/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling P	oint:	NWA033A
Investigator(s):		Apryl Jennrich		Secti	on, Townsh	ip, Range:		Sec.8 T1)3N R30W
Landform (hillslope, terra	ce, etc.):	Depress	sion	Local r	elief (conca	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.737		Long:	-94.45	97	Datum:		WGS84
Soil Map Unit Name:	Canisteo-	Glencoe complex,	0 to 2 per	cent slopes	NW	/I Classific	ation:		NA
Are climatic/hydrologic co	onditions of	the site typical for	this time o	of the year?	Yes	(If no, expl	ain in remarl	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	mstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expla	ain any an	swers in remarks.)
SUMMARY OF FIN	DINGS								
Hydrophytic Vegeta	tion Present	t? <u>No</u>							
Hydric Soil Present	?	Yes		Is the sa	ampled are	a within a	wetland?		No
Wetland Hydrology	Present?	No		lf yes, o	otional wetla	and site ID:	:		
Remarks:									
Recently harvested ac	gricultural fie	eld.							
VEGETATION Us	e scientif	ic names of pla	ants.						
		,	Absolute	Dominant	Indicator	Domii	nance Test	Workshee	t
1 (F	Plot size:)	% Cover	Species	Status	Numbe that are	er of Dominar e OBL, FACV	nt Species V, or FAC:	0 (A)
2. 3.						Total N Specie	Number of Do es Across All	minant Strata:	0 (B)
4 5						Percer	nt of Dominar e OBL, FACV	it Species V, or FAC:	<u>%</u> (A/B)
		-		=Total Cove	r				
Sapling/Shrub Stratum	(Plot size:)				Preva	alence Index	Workshe	et
1						Total	% Cover of:	N A	/ultiply by:
2							species	X1:	=
З Л							v species	X 2 1	-
5.						FACL	J species	x 0	=
				=Total Cove	r	UPLs	species	x 5	=
Herb Stratum	(Plot size:)				Colun	nn totals	(A)	(B)
1.						Preva	lence Index	= B/A =	
2.								_	
3						Hydro	ophytic Veg	etation In	dicators:
4							Rapid test for	or hydroph	ytic vegetation
5							Dominance	test is >50	%
6							Prevalence	index is ≤3	.0*
7 8								ai adaptat	ons" (provide
8 9							separate sh		Idiks of off a
10.							Problematic	hvdrophvt	ic vegetation*
				=Total Cove	r		(explain)	, , ,	5
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric so , unless disturb	oil and wetla	nd hydrology must be ematic
2				=Total Cove	r	— Hyo Veç Pre	drophytic getation esent?	No	
Remarks: (Include photo Harvested agricultural fie	numbers he ld. Corn doe	ere or on a separat	te sheet) sed. Bare	ground: 100	%				

NWA033A

Profile Descr	ription: (Describe	to the	depth needed	to docum	nent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		R	edox Fea	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-20	10YR 2/1	100					Loam	
20-39	2.5 ¥ 3/1	100					Loam	
20-39	2.51 5/1	100					Loan	
*Type: C =	Concentration, D	= Deple	etion, RM = Red	uced Mat	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)		S	andy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2)	1	S	andy Red	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ack Histic (A3)		S	ripped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	 Lo	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5)	 Lo	amy Gley	ed Matrix	(F2)	X Other (explain in	remarks)
2 c	m Muck (A10)		D	epleted M	atrix (F3)	. ,		
De	pleted Below Darl	k Surfac	e (A11) R	edox Dark	Surface	(F6)		
Th	ick Dark Surface (A12)) <u> </u>	epleted D	ark Surfac	ce (F7)	*Indiantara of hydroph	with vegetation and watland
Sa	ndv Mucky Minera	al (S1)	=	edox Dep	ressions (F8)	hvdrology must be pr	esent, unless disturbed or
5.0	m Mucky Peat or	Peat (S	3)			. 0)	problematic	
			.,					
Restrictive L	ayer (if observed):						
Type:	、 、				-		Hydric Soil Presen	t? <u>Yes</u>
Depth (Inches	<i></i>				-			
Remarks:								
A12 Assume	d							
HYDROLO	GY							
Wetland Hyd	rology Indicators	8:						
Primary Indica	ators (minimum of	one is r	equired; check	all that ap	oply)		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Ac	juatic Plai	nts (B14)	Drainage	e Patterns (B10)
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidize	d Rhizosp	heres or	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presend	ce of Red	uced Iron	n (C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	iction in ⁻	Tilled Soils X Geomor	ohic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	e (C7)		
Sparse	ely Vegetated Con	cave Su	Irface (B8)	Gauge	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		_Other (E	Explain in	Remarks	S)	
Field Observ	ations:							
Surface Wate	r Present?	Yes	No	Х	Depth (i	nches):		tland Hydrology
Water Table F	Present?	Yes	No	<u>X</u>	Depth (i	nches): _		Present?
Saturation Pre	esent?	Yes	No	X	Depth (i	nches):		No
(Includes capi	illary tringe)							
Describe Rec	orded Data (strea	m gauge	e, monitoring we	en, aerial p	onotos, pr	evious in	ispections), if available:	
Remarks								
Komarka.								







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Feature ID: NWA033

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WETLAND DETERMII			NATION DATA FORM - I Citv/Countv: Martin		 Midwes 	st Region Sampling Date:	10/20/2022
Applicant/Owner:		Lake Charlotte Sc	lar, LLC	· -	State:	MN	Sampling Point:	NWA034A
Investigator(s):	,	Apryl Jennrich		Sect	tion, Townsh	nip, Range:	Sec	.8 T103N R30W
Landform (hillslope, terra	ce, etc.):	Hillslop	e	Local	relief (conca	ave, convex	, none):	Concave
Slope (%): 5	Lat:	43.73769		Long:	-94.45	5944	Datum:	WGS84
Soil Map Unit Name:	Clarion-Sv	vanlake complex, 2	2 to 6 per	cent slopes	N۱	VI Classifica	ation:	NA
Are climatic/hydrologic cc	onditions of f	the site typical for t	his time o	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significant	y disturbed?	? Are "	normal circumsta	nces present? No
Are vegetation	, soil	, or hydrology		naturally p	roblematic?	(If ne	eded, explain a	ny answers in remarks.)
SUMMARY OF FINI	DINGS							
Hydrophytic Vegetat	tion Present	? <u>No</u>						
Hydric Soil Present?)	No		Is the s	sampled are	ea within a	wetland?	No
Wetland Hydrology	Present?	No	lf yes, o	optional wetl	and site ID:			
Remarks:								
Recently harvested ag	pricultural fie	eld.	nto					
VEGETATION US	e scientin	c names of pla	Absoluto	Dominant	Indicator	Domir	anco Tost Work	rehaat
Tree Stratum (F	Plot size:)	% Cover	Species	Status	Numbe that are	er of Dominant Spe e OBL, FACW, or	ecies FAC: 0 (A)
2 3						Total N Specie	lumber of Dominal s Across All Strata	nt a: 0 (B)
4 5				Tatal Car		Percent that are	at of Dominant Spe e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
Sonling/Shrub Stratum	(Plot size:	\		= I otal Cov	er	Brove	longo Index We	rkahaat
sapiing/snrub stratum	(PIOL SIZE.)				Total	% Cover of:	Multiply by:
2.						OBL	species	x 1 =
3.						FACW	V species	x 2 =
4.						FAC s	species	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	ver	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1						Preva	lence Index = B/A	=
2 3						Hydro	nhytic Vegetati	on Indicators:
4.						Tiyare	Rapid test for hvo	drophytic vegetation
5.							Dominance test i	s >50%
6.							Prevalence index	(is ≤3.0*
7.							Morphological ad	laptations* (provide
8.							supporting data i	n Remarks or on a
9							separate sheet)	
10							Problematic hydr	ophytic vegetation*
				=Total Cov	rer		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil and unless disturbed or	d wetland hydrology must be problematic
2				=Total Cov	rer	— Hyc Veg Pre	drophytic getation sent?	<u>lo</u>
Remarks: (Include photo Harvested agricultural fiel	numbers he ld. Bare gro	re or on a separat und: 100%	e sheet)					

NWA034A

Profile Desci	ription: (Describe	e to the	depth needed	to docur	nent the i	ndicator	or confirm the absence	of indicators.)		
Depth <u>Matrix</u>			Redox Features							
(Inches)	Color (moist)	%	Color (moist)	%	% Type*		Texture	Remarks		
0-11	10YR 2/1	100					Loam			
11-20	2.5Y 5/4	96	2.5Y 3/1	3	D	М	Loam Trace Gravel			
			2.5Y 5/6	1	С	PL		Distinct or Prominent		
					-					
*Type: C =	Concentration, D	= Deple	etion, RM = Red	duced Ma	trix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:		
His	stosol (A1)		S	andy Gle	yed Matrix	: (S4)	Coast Prairie Redox (A16) (LRR K, L, R)			
His	stic Epipedon (A2))	s	andy Red	lox (S5)		Dark Surface (S7) (LRR K, L)			
Bla	ack Histic (A3)		s	tripped M	atrix (S6)		Iron-Manganese Masses (F12) (LRR K, L, R)			
Hy	drogen Sulfide (A	4)	L	oamy Mu	cky Minera	al (F1)	Very Shallow Dark Surface (TF12)			
Sti	ratified Layers (A5	i)	L	oamy Gle	yed Matrix	(F2)	Other (explain in	Other (explain in remarks)		
2 0	cm Muck (A10)		C	epleted M	Aatrix (F3)					
De	pleted Below Dar	k Surfac	e (A11) R	edox Dar	k Surface	(F6)				
Th	ick Dark Surface ((A12)	c	epleted D	ark Surfa	ce (F7)	*Indicators of hydrop	nytic vegetation and wetland		
Sa	ndy Mucky Miner	al (S1)		edox Dep	oressions ((F8)	hydrology must be present, unless disturbed or			
5 0	m Mucky Peat or	Peat (S	3)				problematic			
Restrictive L	aver (if observed	D:								
Type:		.,-					Hydric Soil Preser	it? No		
Depth (inches	s):				_		·			
	GV									
Primary Indic:	ators (minimum of	s: One is i	equired: check	all that a	nnly)		Secondary Indica	ators (minimum of two required)		
Surfac	e Water (Δ1)		equired, check		<u>ppiy)</u> Eauna (B	813)	<u>Surface</u>	Soil Cracks (B6)		
High Water Table (A2)					quatic Pla	nte (B14)	Drainage Patterns (B10)			
High Water Table (A2)				Hydron	ien Sulfide	$\Delta Odor (C)$	Dry-Season Water Table (C2)			
Water Marks (B1)				Oxidize	ed Rhizosr	beres on	Living Cravfish	Burrows (C8)		
Sediment Deposits (B2)				Roots ((C3)		Saturatio	on Visible on Aerial Imagery (C9)		
Drift Deposits (B3)				Presen	ce of Red	uced Iron	(C4) Stunted	or Stressed Plants (D1)		
Algal Mat or Crust (B4)				Recent	Iron Redu	uction in T	Filled Soils Geomor	phic Position (D2)		
Iron De	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)		
Inunda	tion Visible on Ae	rial Ima	gery (B7)	Thin M	uck Surfac	ce (C7)				
Sparsely Vegetated Concave Surface (B8)				Gauge or Well Data (D9)						
Water-	Stained Leaves (B	39)		Other (Explain in	Remarks	;)			
Field Observ	ations:									
Surface Wate	r Present?	Yes	No	Х	_ Depth (i	nches):	We	tland Hydrology		
Water Table I	Present?	Yes	No	<u>X</u>	_ Depth (i	nches):		Present?		
Saturation Pro	esent?	Yes	No	X	_ Depth (i	nches):		No		
Uncludes cap	mary minge)	maoura	monitoring	oll acric!	nhoton		sportions) if availables			
Describe Kec	orded Data (Strea	m gaug	e, monitoring w	en, aerial	μποιος, βι	evious in	spections), il avallable:			
Remarks:										











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Feature ID: NWA034

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review
Proiect/Site:	WET Lake Ch	LAND DETER	MINAT //Citv	ION DAT	A FORM · Mari	 Midwes 	st Region Sampling Date:	10/20/2022
Applicant/Owner:		Lake Charlotte So	lar, LLC		State:	MN	Sampling Point	: NWA035A
Investigator(s):	/	Apryl Jennrich		Sect	ion, Townsh	nip, Range:	Se	c.8 T103N R30W
Landform (hillslope, terr	ace, etc.):	Swale	•	Local	relief (conca	ave, convex	(, none):	Concave
Slope (%): 5	Lat:	43.73503		Long:	-94.4	62	Datum:	WGS84
Soil Map Unit Name:	Clarion-Sw	anlake complex, 2	to 6 perc	cent slopes	NV	VI Classific	ation:	NA
Are climatic/hydrologic c	conditions of t	he site typical for t	his time o	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantl	y disturbed?	Are "	normal circumst	ances present? No
Are vegetation	, soil	, or hydrology		naturally pr	oblematic?	(If ne	eded, explain a	any answers in remarks.)
	DINGS						•	
Hydrophytic Vegeta	ation Present	? <u>No</u>						
Hydric Soil Presen	t?	No		Is the s	ampled are	ea within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, o	optional wetl	and site ID:	·	
Remarks:								
Recently harvested a	agricultural fie	ld.						
VEGETATION U	se scientifi	c names of pla	nts.					
Trop Stratum		A		Dominant	Indicator	Domir	nance Test Wor	ksheet
1)	% Cover	Species	Status	Numbe that are	er of Dominant Sp e OBL, FACW, or	ecies FAC: 0 (A)
2 3						Total N Specie	Number of Domina s Across All Strat	ant ta: <u> </u>
4 5.						Percer	nt of Dominant Sp e OBL, FACW, or	ecies · FAC: % (A/B)
				=Total Cov	er			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index Wo	orksheet
1						Total	% Cover of:	Multiply by:
2						OBLs	species	x 1 =
3						FACV	V species	x 2 =
4						FACS		X 3 =
J				-Total Cov	or			X 4 =
Herb Stratum	(Plot size:) —				Colum	n totals	(A) (B)
1.	(/				Preva	lence Index = B_i	(X)(Z)
2.								,
3.						Hydro	ophytic Vegetat	ion Indicators:
4.							Rapid test for hy	drophytic vegetation
5.							Dominance test	is >50%
6.							Prevalence inde	ex is ≤3.0*
7							Morphological a	daptations* (provide
8							supporting data	in Remarks or on a
9							separate sheet)	
10				Tatal Cau			Problematic nyc	rophytic vegetation"
Woody Vine Stratum	(Plot size:)			er	*Indicate	(explain) ors of hydric soil ar unless disturbed o	nd wetland hydrology must be or problematic
2				=Total Cov	er	Hyc Veç	drophytic getation	
						Pre	sent?	<u>No</u>
Remarks: (Include photo	o numbers he eld. Bare grou	re or on a separate	e sheet)					

NWA035A

Depth	Matrix		<u>R</u>	edox Fea	tures						
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Tex	ture	Remarks		
0-1	10YR 2/1	100					Sa	and			
1 10	10VP 2/1	100					Clay	Loom			
1-10	101R 2/1	100					Cidy	LUain			
18-30	10YR 2/2	100					Clay	Loam			
*Type: C =	Concentration, D	= Deple	etion, RM = Red	uced Mat	rix, MS =	Masked \$	Sand Grains.	**Locatio	on: PL = Pore Lining, M = Mat		
lydric Soil	Indicators:						Indicato	rs for Proble	ematic Hydric Soils*:		
His	stosol (A1)		Sa	indy Gley	ed Matrix	(S4)	Coa	st Prairie Re	dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2)		Sa	indy Red	ox (S5)		Darl	< Surface (S7	') (LRR K, L)		
Bla	ack Histic (A3)		St	ripped Ma	atrix (S6)		Iron	-Manganese	Masses (F12) (LRR K, L, R)		
Hy	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very	/ Shallow Da	rk Surface (TF12)		
Sti	ratified Layers (A5)	Lo	amy Gley	ed Matrix	: (F2)	Othe	er (explain in	remarks)		
2 c	cm Muck (A10)		De	pleted M	atrix (F3)						
De	pleted Below Darl	k Surfac	e (A11)Re	dox Dark	Surface	(F6)					
Th	ick Dark Surface ((A12)	De	pleted D	ark Surfac	ce (F7)	*Indicato	ors of hydroph	nytic vegetation and wetland		
Sa	indy Mucky Minera	al (S1)	Re	edox Dep	ressions (F8)	hydrolog	y must be pro	esent, unless disturbed or		
5 c	cm Mucky Peat or	Peat (S	3)				problema	atic			
estrictive L	ayer (if observed	l):									
ype:							Hydric	Soil Presen	t? No		
ype: Depth (inches Remarks:	s):	- 			-		Hydric	Soil Presen	t? <u>No</u>		
ype: epth (inches emarks:	s):				-		Hydric	Soil Presen	t? <u>No</u>		
ype: epth (inches emarks: YDROLO	GY				-		Hydric	Soil Presen	t? <u>No</u>		
ype: epth (inches emarks: IYDROLO /etland Hyd	s): GY Irology Indicators	3:			- - 		Hydric	Soil Presen	t? <u>No</u>		
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica	GY GY Irology Indicators ators (minimum of	s: one is r	equired; check	all that ap	- - - - -		Hydric 	Soil Presen	t? No		
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1)	s: one is r	equired; check	all that ap	- - - - - - - - - - - - - - - - - - -	:13)	Hydric	Soil Presen	t? <u>No</u>		
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indic: Surfac High W	GY GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)	s: one is r	equired; check	all that ap Aquatic	- - - - - - - - - - - - - - - - - - -	113) hts (B14)	Hydric Seco	Soil Presen	t? <u>No</u> tors (minimum of two require Soil Cracks (B6) Patterns (B10)		
ype: epth (inches emarks: YDROLO /etland Hyd /etland Hyd /imary Indica Surfac High W Satura	GY GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Made (P1)	s: one is r	equired; check	all that ap Aquatic True Ac Hydrog	- 	13) hts (B14)	Hydric Seco 1)	Soil Presen	t? No		
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surfac High W Satura Water Satura	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ort Densaite (B2)	s: one is r	equired; check	all that ap Aquatic True Ac Hydrog Oxidize	- - Fauna (B guatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C oheres on	Hydric Seco 1) Living	Soil Presen	t? No		
/pe: epth (inches emarks: YDROLO fetland Hyd rimary Indica Surfac Surfac High W Satura Water Sedimu Drift D	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s: one is r	equired; check	all that ap Aquatic True Ac Hydrog Oxidize Roots (i	- Fauna (B guatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C oheres on	Hydric Seco 1) Living	Soil Presen	t? No		
/pe: epth (inches emarks: YDROLO fetland Hyd imary Indica Surfac High W Satura Water Sedimu Drift Du Algal N	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	s: one is r	equired; check	all that ap Aquatic True Ac Hydrog Oxidize Roots (Present	pply) Fauna (B guatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) nts (B14) Odor (C oheres on uced Iron	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	t? No		
ype: epth (inches emarks: YDROLO Yetland Hyd rimary Indica Surfac Surfac High W Satura Water Satura Orift Du Algal M	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5)	s: one is r	equired; check	all that ap Aquatic True Ac Hydrog Oxidize Roots (i Presend Recent (C6)	- Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	113) hts (B14) Odor (C oheres on uced Iron uction in T	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	t? No		
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ype: epth (inches emarks: /YDROLO /etland Hyd rimary Indica Surfac 	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con	s: one is r rial Imag	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (Present Recent (C6) Thin Mu Gauge	- 	a13) ants (B14) a Odor (C bheres on uced Iron uction in T ce (C7) ata (D9)	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	tr? No		
/pe: epth (inches emarks: YDROLO etland Hyd rimary Indica Surfac High W Satura Water Drift D Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E	rial Imag cave Su 39)	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge Other (I	- 	a13) ants (B14) a Odor (C bheres on uced Iron uced Iron uced (C7) ata (D9) Remarks	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	t? No		
/pe: epth (inches emarks: YDROLO YDROLO Yetland Hyd fimary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations:	rial Imag cave Su 39)	equired; check	all that ag Aquatic True Ac Hydrog Oxidize Roots (Presend Recent (C6) Thin Mu Gauge Other (I	- Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in	113) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	t? No		
ype: emarks: YDROLO /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd //etland Satura //etland Satura //etland Satura //etland Hyd //etland Hyd //	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae- ely Vegetated Con Stained Leaves (E- rations: or Present?	rial Imag cave Su 39)	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (Presend Recent (C6) Thin Mu Gauge Other (I	- 	113) to (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	tr? No		
ype: epth (inches emarks: YDROLO /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd Satura Surfac High W Satura Sedim Drift D Sedim Drift D Sedim Nater Sedim Sedim Satura (unda Sparse Water- ield Observ urface Wate /ater Table F	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E vations: r Present? Present?	rial Imag cave Su 39) Yes Yes	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge Other (I X	- 	a13) hts (B14) Odor (C oheres on uced Iron uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	ttand Hydrology		
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surfac High W Satura Water Sedime Drift D Algal N Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pro	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (i Present (C6) Thin Mu Gauge Other (i X X X	- 	a13) ats (B14) be Odor (C be odor (C be (C7) ata (D9) Remarks nches): _ nches): _ nches): _	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	tress (minimum of two require soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present? No		
ype: epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surfac High W Satura Water Sedima Orift Da Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pro	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (r Present (C6) Thin Mu Gauge Other (f X X X	- Fauna (B Fauna (B guatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches):	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	tress (minimum of two requires soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1) obic Position (D2) utral Test (D5) tland Hydrology Present?No		
ype: Pepth (inches Remarks: HYDROLO Vetland Hyd Yrimary Indica Surfac High W Satura Water Sedime Drift D Algal M Iron De Inunda Sparse Water- Surface Water Surface Water Gurface Water Surface Water	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: or Present? Present? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes Yes	equired; check	all that ar Aquatic True Ac Hydrog Oxidize Roots (Present (C6) Thin Mu Gauge Other (I X X X	- 	a13) ats (B14) odor (C oheres on uced Iron uction in 7 ata (D9) Remarks nches): nches): nches): ata (D9) revious in	Hydric Seco 1) Living (C4) Filled Soils	Soil Presen	tress (minimum of two requires Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1) obic Position (D2) utral Test (D5) tland Hydrology Present?No		
ype: epth (inches emarks: //YDROLO /etland Hyd rimary Indica Surfac 	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E vations: r Present? Present? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; check	all that ag Aquatic True Ac Hydrog Oxidize Roots (Presend (C6) Thin Mu Gauge Other (I X X X II, aerial	- 	a13) hts (B14) Odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks nches): nches): nches): revious in	Hydric Seco 1) Living (C4) Filled Soils 5) spections), if	Soil Presen	t? No		
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surfac High W Satura Satura Water Sedim Drift D Satura Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pro ncludes capi escribe Rec	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: ar Present? Present? esent? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	gery (B7)	all that ar Aquatic True Ac Hydrog Oxidize Roots (Presend Recent (C6) Thin Mu Gauge Other (I X X X	- 	a13) hts (B14) Odor (C oheres on uced Iron uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches): - revious in	Hydric Seco 1) Living (C4) Filled Soils ;) spections), if	Soil Presen	trest (minimum of two requires Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (or Stressed Plants (D1) ohic Position (D2) utral Test (D5)		





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





A1

Feature ID: NWA035

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Lake Charlotte Solar Martin County, Minnesota

	WE	FLAND DE	TERMIN	AT	ION DATA	FORM	- Midwes	t Region			
Project/Site:	Lake C	harlotte		City	/County:	Mai	rtin	Sampling D	ate:	10/20/202	22
Applicant/Owner:		Lake Charlo	otte Solar, L	LC		State:	MN	Sampling P	oint:	NWA036	A
Investigator(s):		Apryl Jennric	ch		Sectio	on, Towns	hip, Range:		Sec.8 T10	03N R30W	
Landform (hillslope, ter	rrace, etc.):		Swale		Local r	elief (conc	ave, convex	, none):		Concave	
Slope (%): 10	Lat:	43.73	3691		Long:	-94.46	6312	Datum:		WGS84	
Soil Map Unit Name:	Clarion-S	wanlake com	plex, 2 to 6	per	cent slopes	N	WI Classific	ation:		NA	
Are climatic/hydrologic	conditions of	the site typic	al for this ti	me	of the year?	Yes	(If no, expla	ain in remarl	ks)		
Are vegetation	, soil	, or hydro	logy		Significantly	disturbed	? Are "	normal circu	mstances	present?	Yes
Are vegetation	, soil	, or hydro	logy		naturally pro	blematic?	(If ne	eded, expla	ain any an	swers in re	marks.)
SUMMARY OF FI	NDINGS										
Hydrophytic Vege	etation Preser	ıt?	No								
Hydric Soil Prese	nt?	1	No		Is the sa	mpled ar	ea within a	wetland?		No	
Wetland Hydrolog	gy Present?	1	No		lf yes, op	tional wet	land site ID:				
Remarks:											
VEGETATION U	Jse scienti	fic names o	of plants.								1
			Absol	ute	Dominant	Indicator	r Domir	nance Test	Workshee	t	
Tree Stratum 1.	(Plot size:	30)	% Co	over	Species	Status	Numbe that are	er of Dominar e OBL, FACV	nt Species V, or FAC:	0	(A)
2 3							Total N Specie	lumber of Do s Across All	minant Strata:	1	(B)
4 5							Percer	nt of Dominar e OBL, FACV	it Species V, or FAC:	0% (A/B)
					=Total Cove	r					
Sapling/Shrub Stratur	n (Plot size	: 15)				Preva	lence Index	Workshe	et	
1							Total	% Cover of:	Ν	Aultiply by:	
2							OBL	species	0 x1:	=	_
3								v species	0 X2:	= 0	_
4 5							FAC S			= <u> </u>	_
ə					=Total Cove	r	UPLS	pecies	$\frac{35}{0}$ x 5 :	= <u> </u>	_
Herb Stratum	(Plot size	: 5)		-	-	Colum	nn totals	99 (A)	396	(B)
1. Bromus inermis	,		_ ´ 99		Y	FACU	Preva	lence Index	= B/A =	4	_``
2.									_		—
3.							Hydro	ophytic Veg	etation In	dicators:	
4.								Rapid test fo	or hydroph	ytic vegetat	ion
5								Dominance	test is >50	%	
6								Prevalence	index is ≤3	.0*	
7								Morphologic	al adaptati	ions* (provi	de
8									ata in Ren	narks or on	а
9								Problematic	bydrophyt	ic vegetatio	n*
10			90		-Total Cove	r			nyaropnyi	ic vegetatio	11
Woody Vine Stratum	(Plot size	: 15	_)			I	*Indicato present,	ors of hydric so unless disturb	oil and wetla	nd hydrology ematic	[,] must be
2					=Total Cove	r	Hyo Vec	drophytic tation			
Demonstra (t. 1. 1. 1.							Pre	sent?	<u>No</u>		
Remarks: (Include pho	to numbers h	ere or on a se	eparate she	et)							
Bare ground: 0%											

NWA036A

Profile Descr	ription: (Describe	e to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth	Matrix		Re	dox Feat	ures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:		
, His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2))	Sa	ndy Redo	ox (S5)	· · ·	Dark Surface (S7	7) (LRR K, L)		
Bla	ack Histic (A3)		Str	pped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K. L. R)		
Hv	drogen Sulfide (A	4)	l o:	amy Muc	kv Minera	d (F1)	Verv Shallow Da	rk Surface (TF12)		
Str	ratified Lavers (A5)	Lo:	amy Glev	ed Matrix	(F2)	Other (explain in	remarks)		
2 0	cm Muck (A10)	,		pleted M	atrix (F3)	· -/		,		
 	epleted Below Darl	k Surfac	e (A11) Re	dox Dark	Surface	(F6)				
D0	ick Dark Surface ((A12)	De	oleted Da	ark Surfac	(F7)	*****			
\	andy Mucky Miner	al (S1)	Be	dox Denr	ant Ounde	F8)	^Indicators of hydroph	nytic vegetation and wetland		
0a	may Mucky Miller	Poat (S	3)		03310113 (10)	problematic			
		r cat (O	5)							
Restrictive L	ayer (if observed	l):								
Type:					-		Hydric Soil Presen	t? <u>No</u>		
Depth (inches	s):				-					
Obvious not a	a wetland based or	n vegeta	ation.							
	G I									
	ators (minimum of	ono is r	equired: check a	ll that an			Secondary Indica	ators (minimum of two required)		
		0110 15 1	equired, check a	<u>A quatia</u>	<u>piy)</u> Feune (P	10)	<u>Secondary Indica</u>			
Sunac				Aqualic	Fauna (D	(13)	Sunace			
High W	Vater Table (A2)			I rue Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)		
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)		
vvater	Marks (B1)			Oxidized	a Knizosp	neres on	Living Crayfish	Burrows (C8)		
Sedime	eni Deposits (B2)			Prosono	53) So of Rodu	uced Iron	(C4) Stunted	or Stressed Plants (D1)		
Algal M	Aat or Crust (B4)			Recent	Iron Redu	iction in T	Filled Soils X Geomori	ohic Position (D2)		
Iron De	eposits (B5)			(C6)			FAC-Nei	utral Test (D5)		
Inunda	ation Visible on Ae	rial Imag	nery (B7)	Thin Mu	ick Surfac	e (C7)				
Sparse	elv Vegetated Con	cave Su	urface (B8)	Gauge	or Well Da	ata (D9)				
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	;)			
	etions:	-~,				····	·,			
Surface Wate	rations:	Vec	No	Y	Denth (in	nchee).				
Water Table	Present?	Yes	No	Λ	Depth (ii	nches).	We	tland Hydrology		
Saturation Pre	esent?	Yes	No		Depth (ii	nches):		Present?		
(includes capi	illary fringe)									
Describe Rec	orded Data (strea	m daude	e, monitorina wel	I, aerial r	photos. pr	evious in	spections). if available:			
		3		P	· · · · · P ·		. ,,			
Remarks:										



	WE	TLAND DE	TER	MINAT	ON DAT	FORM -	- Midwes	t Region			
Project/Site:	Lake C	Charlotte		City/	County:	Mart	tin	Sampling Da	ate:	10/20/2022	
Applicant/Owner:		Lake Charlo	otte So	lar, LLC		State:	MN	Sampling Po	pint:	NWA037A	
Investigator(s):		Apryl Jennrig	ch		Sect	on, Townsh	ip, Range:		Sec.8 T103	N R30W	
Landform (hillslope, terr	ace, etc.):		Ditch		Local	relief (conca	ave, convex	, none):	Co	ncave	
Slope (%): 5	Lat:	43.73	3868		Long:	-94.46	492	Datum:	W	GS84	
Soil Map Unit Name:	Clarion-S	wanlake com	plex, 2	to 6 perc	cent slopes	NV	VI Classifica	ation:	N	A	
Are climatic/hydrologic	conditions of	the site typic	al for t	his time c	of the year?	Yes	(If no, expla	ain in remark	s)		
Are vegetation	, soil	, or hydro	ology		Significantly	v disturbed?	Are "	normal circur	nstances pr	esent? Y	/es
Are vegetation	, soil	, or hydro	ology		naturally pr	oblematic?	(If ne	eded, explai	n any answ	ers in rema	arks.)
SUMMARY OF FIN	DINGS										
Hydrophytic Veget	ation Preser	nt?	No								
Hydric Soil Presen	t?	I	No		Is the s	ampled are	a within a	wetland?	N	0	
Wetland Hydrology	/ Present?		No		lf yes, o	ptional wetla	and site ID:				
Remarks:											
VEGETATION U	se scienti	fic names o	of pla	nts.							
			A	Absolute	Dominant	Indicator	Domir	nance Test V	Vorksheet		
Tree Stratum 1.	(Plot size:	30)		% Cover	Species	Status	Numbe that are	er of Dominant e OBL, FACW	Species , or FAC:	0 (A))
2. 3.							Total N Specie	lumber of Dor s Across All S	ninant trata:	0 (B))
4 5							Percen that are	it of Dominant e OBL, FACW	Species , or FAC:	<u>0%</u> (A/E	3)
					=Total Cove	er					
Sapling/Shrub Stratum	(Plot size	: 15)				Preva	lence Index	Worksheet		
1								% Cover of:	Mu	Itiply by:	
2									$\frac{0}{2}$ x 2 =		
3 4							FAC	necies	$\frac{2}{0} \times 3 =$		
5.							FACU	species	$\frac{1}{90}$ x 4 =	360	
					=Total Cove	er	UPL s	pecies	0 x 5 =	0	
Herb Stratum	(Plot size	: 5)				Colum	nn totals	92 (A)	364 ((B)
1. Bromus inermis			_	90	Y	FACU	Preva	lence Index =	= B/A =	3.96	
2. Phalaris arundinad	cea			2	Ν						
3							Hydro	phytic Vege	tation India	ators:	
4								Rapid test fo	r hydrophyti	c vegetation	۱
5								Dominance t	est is >50%		
6							_	Prevalence II	ndex is ≤3.0	` a* (provide	
7 8								supporting d	ata in Roma		
9.							_	separate she	et)		
10.								Problematic	nydrophytic	vegetation*	
				92	=Total Cove	er		(explain)		-	
Woody Vine Stratum 1.	(Plot size	: 15)				*Indicato present,	ors of hydric so unless disturb	il and wetland ed or problem	hydrology mu atic	ust be
2					=Total Cove	er	— Hyc Veg Pre	Irophytic jetation sent?	<u>No</u>		
Remarks: (Include phot	o numbers h	ere or on a se	eparate	e sheet)							

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	iption: (Describe	e to the d	eptn needed to	o aocum	ient the li	nuicator	or confirm the	ausence	of Indicators.)
Depth	Matrix		Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	re	Remarks
*Type: C =	Concentration D	= Deple	ion RM = Redu	iced Mati	rix MS =	Masked S	Sand Grains	**Locatio	n: PL = Pore Lining M = Matrix
Hydric Soil	Indicators:	Dopio			ix, we	Mashea	Indicators		matic Hydric Soils*:
	etocol (A1)		Sa	ndy Glev	od Matrix	(\$4)	Coast	Drairia Roc	h_{0x} (A16) (LRP K P)
	siusui (AT) stis Eningdon (AQ)	`	Sa			(34)	Coast		(LDD K L)
His	stic Epipedon (A2,)	Sa	nay Read	DX (55)			sunace (S7	
Bla	ack Histic (A3)		Str	ipped Ma	atrix (S6)		Iron-M	anganese	Masses (F12) (LRR K, L, R)
Hy	varogen Sulfide (A	4)	Loa	amy Muc	ky Minera	ai (F1)	Very S	nallow Dar	K Surface (TF12)
Str	ratified Layers (A5	5)	Loa	amy Gley	ed Matrix	: (F2)	Other	(explain in	remarks)
2 c	cm Muck (A10)		De	pleted M	atrix (F3)				
De	epleted Below Dar	k Surface	e (A11) Re	dox Dark	Surface	(F6)			
Th	ick Dark Surface	(A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators	of hydroph	ytic vegetation and wetland
Sa	andy Mucky Minera	al (S1)	Re	dox Depi	essions (F8)	hydrology r	nust be pre	esent, unless disturbed or
5 c	cm Mucky Peat or	Peat (S3	3)				problematio	C	
Restrictive I	aver (if observed	<i>1</i>).							
	ayer (il observed	<i></i>					Hydric S	oil Present	2 No
Denth (inches	z).				-		Tryanc of	on resen	
Boptin (monoc					-				
Potential unde	erground utility co	nflict.							
HYDROLO	GY								
Wetland Hyd	Irology Indicators	s:							
Primary Indica	ators (minimum of	f one is re	equired; check a	Ill that ap	<u>ply)</u>		Secon	dary Indica	tors (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	13)		Surface S	Soil Cracks (B6)
High W	Vater Table (A2)			True Aq	uatic Plar	nts (B14)		_ Drainage	Patterns (B10)
Satura	ition (A3)			Hydroge	en Sulfide	Odor (C	1)	Dry-Seas	son Water Table (C2)
Water	Marks (B1)			Oxidize	d Rhizosp	heres on	Living	Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		<u> </u>	 Saturatio	n Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presend	e of Redu	uced Iron	(C4)	Stunted of	or Stressed Plants (D1)
Algal M	Mat or Crust (B4)			Recent	Iron Redu	iction in T	Tilled Soils X	Geomorp	hic Position (D2)
Iron De	eposits (B5)			(C6)				FAC-Neu	itral Test (D5)
Inunda	ation Visible on Ae	rial Imag	ery (B7)	Thin Mu	ick Surfac	e (C7)		_	
Sparse	ely Vegetated Con	icave Su	face (B8)	Gauge	or Well Da	ata (D9)			
Water-	-Stained Leaves (I	B9)	· · · ·	Other (E	Explain in	Remarks	5)		
Field Observ	vations.						-		
	er Present?	Yes	No	х	Depth (ir	nches):		1	
Surface Wate	Present?	Yes	No		Depth (ir	nches):		Wet	tland Hydrology
Surface Wate Water Table F			No		Depth (ir	nches):		1	Present? No
Surface Wate Water Table F Saturation Pre	esent?	Yes	110		- · ·	· -			
Surface Wate Water Table F Saturation Pre (includes capi	esent? illary fringe)	Yes	110						
Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	esent? illary fringe) corded Data (strea	Yes	, monitoring wel	l, aerial p	photos, pr	evious in	spections), if a	vailable:	
Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	esent? illary fringe) corded Data (strea	Yes m gauge	, monitoring wel	l, aerial p	photos, pr	evious in	spections), if a	vailable:	
Surface Wate Water Table F Saturation Pre (includes capi Describe Reco Remarks:	esent? illary fringe) corded Data (strea	Yes m gauge	, monitoring wel	l, aerial p	photos, pr	evious in	spections), if a	vailable:	
Surface Wate Water Table F Saturation Pre (includes capi Describe Rec Remarks:	esent? illary fringe) corded Data (strea	Yes	, monitoring wel	I, aerial p	ohotos, pr	evious in	spections), if a	vailable:	



	WETL	AND DETER	MINATI	ON DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Martin	า	Sampling Date:	10/20/2022
Applicant/Owner:	L	ake Charlotte So	olar, LLC		State:	MN	Sampling Point:	NWA038A
Investigator(s):	Ap	oryl Jennrich		Sectio	n, Townshij	o, Range:	Sec.8	3 T103N R30W
Landform (hillslope, terrac	e, etc.):	Plair	ו	Local re	elief (concav	ve, convex	, none):	None
Slope (%): 0	Lat:	43.739		Long:	-94.454	38	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex,	0 to 2 per	cent slopes	NW	I Classifica	ation:	NA
Are climatic/hydrologic cor	nditions of the	e site typical for	this time o	of the year?	Yes (lf no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumstar	ices present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain an	y answers in remarks.)
Hvdrophytic Vegetati	on Present?	No						
Hydric Soil Present?		No		Is the sa	moled area	within a	wetland?	No
Wetland Hydrology P	Procont?	No			tional wotla		-	
Remarks:				ii yes, op		nu site iD.	·	
Recently tilled agricultur	al field. Red	cently harvested	l agricultur	al field.				
VEGETATION Use	SCIENTIFIC	names of pla	ants.	Dominant	Indiantar	Demin	anas Test Merk	
Tree Stratum (Pl	ot size:)	% Cover	Species	Status	Numbe that are	er of Dominant Spece e OBL, FACW, or F	cies AC: 0 (A)
23						Total N Specie	lumber of Dominan s Across All Strata:	t (B)
4 5				-Total Cove		Percent that are	t of Dominant Spece OBL, FACW, or F	cies AC: <u>%</u> (A/B)
Sanling/Shrub Stratum	(Plot size:	, -				Preva	lence Index Worl	kshoot
1	(1 101 3126.)				Total	% Cover of	Multiply by:
2.						OBLs	species	x 1 =
3.						FACV	/ species	x 2 =
4.						FAC s	species	x 3 =
5.						FACU	species	x 4 =
		_		=Total Cover	r	UPL s	pecies	x 5 =
Herb Stratum 1 2.	(Plot size:)				Colum Preva	nn totals lence Index = B/A	(A)(B) =
3.						Hydro	ophytic Vegetatio	n Indicators:
4.							Rapid test for hyd	rophytic vegetation
5							Dominance test is	>50%
6							Prevalence index	is ≤3.0*
7						_	Morphological ada	aptations* (provide
8						_	supporting data in	Remarks or on a
9 10							Problematic bydro	phytic vegetation*
10				-Total Cove		-	(evolain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil and unless disturbed or p	wetland hydrology must be problematic
2.				=Total Cover	ſ	– Hyc Veg Pre	drophytic getation sent? <u>No</u>	0
Remarks: (Include photo r Recently tilled agricultural	umbers here field. Bare gr	or on a separat	te sheet)					

SOIL

NWA038A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ient the i	iuicator	or confirm the absence	or indicators.
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-17	10YR 2/1	100					Clay	
17-21	10YR 2/1	99	10YR 3/3	1	С	PL	Clay	Distinct or Prominent
21-24	10YR 2/1	99	10YR 3/3	1	C	PI	Sandy Clay	Distinct or Prominent
21 21	10VD 2/1	07	10//0.2/2		0		Candy Clay	Distinct or Prominent
24-28	101R 2/1	97	10TK 3/3	3	C	PL	Sandy Clay	Distinct of Prominent
28-37	10YR 2/2	78	10YR 3/2	10	D	М	Sandy Clay	
			10YR 4/6	3	С	PL		Distinct or Prominent
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mat	rix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:	<u> </u>					Indicators for Proble	ematic Hydric Soils*:
His	tosol (A1)		Sar	ndy Glev	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sar	ndv Redo	ox (S5)	(-)	Dark Surface (S	7) (LRR K. L)
	uck Histic (A3)		Stri	inned Ma	riv (S6)		Iron-Manganese	Massas (F12) (IRR K R)
Dia 	drogen Sulfide (A)	4)	0	my Muc	ky Minera) (E1)	Very Shallow Da	rk Surface (TE12)
□y	atified Lovers (AF	+)	L0a			(F) (F)		romarka)
	atified Layers (A5))	Loa	amy Gley	ed Matrix	(FZ)	Other (explain in	remarks)
2c		~ /			atrix (F3)			
De	pleted Below Dark	Surfac	e (A11) Rec	dox Dark	Surface	(F6)		
Thi	ck Dark Surface (A12)	Dep	pleted Da	ark Surfac	ce (F7)	*Indicators of hydropl	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Rec	dox Depi	ressions (F8)	hydrology must be pr	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed):						
Restrictive La	ayer (if observed):			_		Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches	ayer (if observed):			-		Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches	ayer (if observed):			-		Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks:	ayer (if observed):):			-		Hydric Soil Presen	t? <u>No</u>
Restrictive La Fype: Depth (inches Remarks:	ayer (if observed):):			-		Hydric Soil Presen	nt? <u>No</u>
Restrictive La Type: Depth (inches Remarks:	ayer (if observed):):			-		Hydric Soil Presen	it? <u>No</u>
Restrictive La Type: Depth (inches Remarks:	ayer (if observed):):			-		Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches Remarks: HYDROLOG	ayer (if observed): GY):			-		Hydric Soil Presen	t? <u>No</u>
Restrictive La Type: Depth (inches) Remarks: HYDROLOG Wetland Hydi	ayer (if observed): GY rology Indicators	;:			- - 		Hydric Soil Presen	it? <u>No</u>
Restrictive La Type: Depth (inches Remarks: HYDROLOG Wetland Hydir Primary Indica	ayer (if observed): GY rology Indicators):	equired; check a	II that ap	- - - -		Hydric Soil Presen	nt? <u>No</u>
Restrictive La Type: Depth (inches Remarks: HYDROLOO Netland Hydi Primary Indica Surface	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1)):	equired; check a	Il that ap Aquatic	- - - - - - - - - - - - - - - - - - -	.13)	Hydric Soil Presen	tt? No ators (minimum of two required) Soil Cracks (B6)
Restrictive La Type: Depth (inches Remarks: HYDROLOO Netland Hydi Primary Indica Surface High W	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2)):	equired; check a	Il that ap Aquatic True Aq	- - - Fauna (B uatic Plar	13) nts (B14)	Hydric Soil Presen	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10)
Restrictive La Type: Depth (inches Remarks: HYDROLOO Netland Hydu Primary Indica Surface High W Saturat	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3)):		Il that ap Aquatic True Aq Hydroge	<u>ply)</u> Fauna (B uatic Plar en Sulfide	113) nts (B14) Odor (C	Hydric Soil Presen	tt? No
Restrictive La Type: Depth (inches Remarks: HYDROLO(Wetland Hydr Primary Indica Surface High W Saturat Water I	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) (ater Table (A2) ion (A3) Warks (B1)): :: one is r		Il that ap Aquatic True Aq Hydroge Oxidized	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C iheres on	Hydric Soil Presen	tt? No
Restrictive La Type: Depth (inches Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)):		Il that ap Aquatic True Aq Hydroge Oxidized Roots ((<u>ply)</u> Fauna (B juatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C heres on	Hydric Soil Presen	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) dater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)):	 equired; check a 	Il that ap Aquatic True Aq Hydroge Oxidizer Roots (0 Presence	<u>ply)</u> Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) nts (B14) Odor (C heres on uced Iron	Hydric Soil Presen	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)):	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) nts (B14) Odor (C heres on uced Iron uction in T	Hydric Soil Presen	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Netland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5)):	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidizee Roots ((Presenc Recent (C6)	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C heres on uced Iron uction in T	Hydric Soil Presen	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Netland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer): one is r	<u>equired; check a</u>	Il that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C heres on uced Iron uction in T ce (C7)	Hydric Soil Present	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inches Remarks: HYDROLOO Netland Hyde Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Cond	ial Imag cave Su	<u>equired; check a</u>	Il that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge o	- Fauna (B Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu	13) hts (B14) Odor (C bheres on uced Iron uction in T se (C7) ata (D9)	Hydric Soil Present	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inches Remarks: HYDROLOO Vetland Hyde Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S	ayer (if observed): GY rology Indicators ators (minimum of Water (A1) (ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E	ial Imag cave Su 39)	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge o Other (E	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu lick Surfac or Well Da Explain in	13) hts (B14) Odor (C heres on uced Iron uction in 7 ce (C7) ata (D9) Remarks	Hydric Soil Present	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-1	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) 'ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E ations:	;: one is r cave Su 39)	<u>equired; check a</u> 	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge o Other (E	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu ck Surfac or Well Da Explain in	13) hts (B14) Odor (C beres on uced Iron uced Iron iction in T ce (C7) ata (D9) Remarks	Hydric Soil Present	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse Water-S Surface Water	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) ent Deposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Cond Stained Leaves (E ations: r Present?	ial Imag cave Su 9) Yes	<u>equired; check a</u> gery (B7) 	Il that ap Aquatic True Aq Hydroge Oxidizee Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E	ply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu Iron Redu C3 (Surfac or Well Da Explain in	13) hts (B14) Odor (C heres on uced Iron uced Iron iction in T ee (C7) ata (D9) Remarks nches):	Hydric Soil Present	ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5)
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundal Sparse Water-S Surface Water Vater Table F	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aei ly Vegetated Cond Stained Leaves (E ations: r Present?	ial Imag cave Su 39) Yes Yes	gery (B7)	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X	ply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C wheres on uction in T ce (C7) ata (D9) Remarks nches):	Hydric Soil Present	tetland Hydrology Present?
Restrictive La Type: Depth (inches) Remarks: HYDROLOO Netland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S Sield Observa Surface Water Saturation Pre	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Warks (B1) ent Deposits (B2) aposits (B3) lat or Crust (B4) aposits (B5) tion Visible on Aer ly Vegetated Com- Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Il that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	ply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in	13) hts (B14) Odor (C heres on uction in 1 ce (C7) ata (D9) Remarks nches):nches):nches):	Hydric Soil Present Secondary Indica Secondary Indica Surface Drainage Drainage 1) Dry-Sea Drainage 1) Dry-Sea 1) Crayfish Saturation 10 Living Crayfish Saturation 11 (C4) Stunted FAC-Nee S) We	tt? No ators (minimum of two required) Soil Cracks (B6) e Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) utral Test (D5) ettand Hydrology Present? No
Restrictive La Type: Depth (inches Remarks: HYDROLOO Vetland Hyde Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundar Sparse Water-S Field Observa Surface Water Saturation Pre includes capil	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Cond Stained Leaves (E ations: r Present? Present? Present? llary fringe)	rial Imag cave Su 9) Yes Yes Yes	gery (B7)	Il that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	ply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu ick Surfac or Well Da Explain in Depth (ii Depth (ii	13) hts (B14) Odor (C bheres on uction in T be (C7) ata (D9) Remarks nches): nches):	Hydric Soil Present Secondary Indica Secondary Indica Surface Drainage Drainage Dry-Sea Dry-Sea Saturation Stunted Tilled Soils FAC-Nee S)	tt? No
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Restrictive La Type: Depth (inches Remarks: HYDROLOO Vetland Hydr Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Water-S Field Observa Surface Water Vater Table P Saturation Pre includes capil Describe Reco	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) posits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? llary fringe) proded Data (strear	i: one is r one is r i: one is r Yes Yes Yes Yes n gauge	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidizer Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X I, aerial p	ply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in D	13) hts (B14) Odor (C heres on uced Iron uction in 7 ee (C7) ata (D9) Remarks nches): nches): evious in	Hydric Soil Present Secondary Indica Surface	ttand Hydrology Present?
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Restrictive La Type: Depth (inches) Remarks: HYDROLOO Wetland Hydi Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundai Sparse Water-S Field Observa Surface Water Saturation Pre- includes capil Describe Reco	ayer (if observed): GY rology Indicators ators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) posits (B3) lat or Crust (B4) eposits (B5) tion Visible on Aer ly Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? llary fringe) orded Data (strear): rial Imag cave Su 39) Yes Yes Yes n gauge	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X X I, aerial p	ply) Fauna (B puatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C heres on uced Iron uction in 7 ee (C7) ata (D9) Remarks nches): evious in	Hydric Soil Present Secondary Indica Secondary Indica Surface Drainage 1) Dry-Sea 1) Dry-Sea 1) Dry-Sea 1) Saturation 1) Sturted 1)	ttand Hydrology Present?No





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TETRA TECH

Lake Charlotte Solar Martin County, Minnesota

	WETL	AND DETER	MINATI	ON DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Mart	in	Sampling Date:	10/20/2022
Applicant/Owner:	L	ake Charlotte So	lar, LLC		State:	MN	Sampling Point:	NWA039A
Investigator(s):	Ap	oryl Jennrich		Sectio	on, Townsh	ip, Range:	Sec	.8 T103N R30W
Landform (hillslope, terra	ce, etc.):	Plain		Local r	elief (conca	ve, convex	, none):	None
Slope (%): 1	Lat:	43.73958		Long:	-94.45	271	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gl	encoe complex, (to 2 per	cent slopes	NV	/I Classific	ation:	NA
Are climatic/hydrologic co	onditions of the	e site typical for t	his time o	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumsta	ances present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain a	ny answers in remarks.
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present?	?	No		Is the sa	mpled are	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, op	tional wetla	and site ID:		
Remarks:								
Recently tilled agricultu	Iral field. Re	cently harvested	agricultur	al field.				
VEGETATION Us	e scientific	names of pla	nts.	<u> </u>		<u> </u>		
Tree o Otreeture (1		, ,	Absolute	Dominant	Indicator	Domir	nance Test Work	ksheet
1 (F	Plot Size:)	% Cover	Species	Status	Numbe that are	er of Dominant Spe e OBL, FACW, or	ecies FAC: 0 (A)
2 3						Total N Specie	lumber of Domina s Across All Strata	nt a: 0 (B)
4 5						Percer	nt of Dominant Spe e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
		_		=Total Cove	r			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index Wo	rksheet
1						Total	% Cover of:	Multiply by:
2								_ x 1 =
3								_ X Z =
4 5						EACL		_ x 3 =
0				=Total Cove	r	UPLS	pecies	x5=
Herb Stratum	(Plot size:) —				Colum	n totals	(A) (B)
1.	· —	/				Preva	lence Index = B//	A =
2.								
3.						Hydro	phytic Vegetati	on Indicators:
4.							Rapid test for hy	drophytic vegetation
5							Dominance test i	s >50%
6							Prevalence index	k is ≤3.0*
7							Morphological ac	laptations* (provide
8							supporting data i	n Remarks or on a
9							separate sheet)	
10				Tatal Oass			Problematic nyor	opnytic vegetation"
Woody Vine Stratum	(Plot size:)		= I otal Cove	r	*Indicate	(explain) ors of hydric soil and unless disturbed of	d wetland hydrology must be
2				=Total Cove	r	Hyc Veg Pre	drophytic getation sent?	<u>\o_</u>
Remarks: (Include photo Recently tilled agricultura	numbers here al field. Bare g	or on a separate	e sheet)			Pre	sent?	<u>No</u>

NWA039A

Depth (Inches) Matrix Redox Features Color (moist) % Color (moist) % Type* Loc** Texture 0-23 10YR 2/1 100 Clay Clay 23-26 2.5Y 3/2 90 2.5Y 4/2 10 D M Sandy Clay 26-30 2.5Y 5/4 100 Sandy Clay Loam	Remarks
Color (moist) % Color (moist) % Type* Loc** Texture 0-23 10YR 2/1 100 Clay Clay 23-26 2.5Y 3/2 90 2.5Y 4/2 10 D M Sandy Clay 26-30 2.5Y 5/4 100 Sandy Clay Loam	Remarks
0-23 10YR 2/1 100 Clay Clay 23-26 2.5Y 3/2 90 2.5Y 4/2 10 D M Sandy Clay 26-30 2.5Y 5/4 100 Image: Sandy Clay Loam Image: Sandy Clay Loa	
23-26 2.5Y 3/2 90 2.5Y 4/2 10 D M Sandy Clay 26-30 2.5Y 5/4 100 Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay Loam Image: Sandy Clay L	
26-30 2.5Y 5/4 100 D IM Outroy only 26-30 2.5Y 5/4 100 Sandy Clay Loam	
26-30 2.5Y 5/4 100 Sandy Clay Loam Image: Second state sta	
*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL =	= Pore Lining, M = Matrix
Hydric Soil Indicators: Indicators for Problematic	Hydric Soils*:
Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A1	16) (LRR K, L, R)
Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR	. K, L)
Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masse	s (F12) (LRR K, L, R)
Hvdrogen Sulfide (A4) Loamv Mucky Mineral (F1) Very Shallow Dark Surfa	ace (TF12)
Stratified Layers (A5) Loamy Gleved Matrix (F2) Other (explain in remark	(S)
2 cm Muck (A10) Depleted Matrix (F3)	,
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)	
Thick Dark Surface (A12)	we to the second second second
Sandy Mucky Mineral (S1) Redox Depressions (F8) bydrology must be present u	getation and wetland
5 cm Mucky Reat or Peat (S3)	
Restrictive Layer (if observed):	
Type: Hydric Soil Present?	No
Depth (inches):	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (m	ninimum of two required)
Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cra	acks (B6)
High Water Table (A2) True Aquatic Plants (B14) Drainage Patter	rns (B10)
Saturation (A3) Hvdrogen Sulfide Odor (C1) Drv-Season Wa	ater Table (C2)
Water Marks (B1) Oxidized Rhizospheres on Living Cravfish Burrow	vs (C8)
	ble on Aerial Imagery (C9)
J Segiment Deposits (B2) Roots (C3) Saturation Visib	ssed Plants (D1)
Searment Deposits (B2) Roots (C3) Saturation Visib Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stress	sition (D2)
Searment Deposits (B2) Roots (C3) Saturation Visib Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stress Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Po	est (D5)
Sequment Deposits (B2) Roots (C3) Saturation Visib Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stress Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Po Iron Deposits (B5) (C6) FAC-Neutral Te	
Searment Deposits (B2) Roots (C3) Saturation Visib Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stress Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Po Iron Deposits (B5) (C6) FAC-Neutral Te Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Te	
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Sequment Deposits (B2) Roots (C3) Saturation Visib Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Strest Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Po Iron Deposits (B5) (C6) FAC-Neutral Te Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Te Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Saturation Present? Yes No X Depth (inches): Wetland H Saturation Present? Yes No X Depth (inches): Presence Presence of Reduced Iron (C4) Saturation Visib Depth (inches): No X Depth (inches): FAC-Neutral Te Water Table Present? Yes No X Depth (inches): Presence Presence Saturation Present? Yes No X Depth (inches): Presence Presence Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Saturation Presentions), if available: <td>Hydrology ent? <u>No</u></td>	Hydrology ent? <u>No</u>
Sequment Deposits (B2) Roots (C3) Saturation Visib Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Strest Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Geomorphic Po Iron Deposits (B5) (C6) FAC-Neutral Te Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) FAC-Neutral Te Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Vater-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Saturation Present? Yes No X Depth (inches): Wetland H Saturation Present? Yes No X Depth (inches): Pres Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Pres	Hydrology ent? <u>No</u>
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80 120 160 200 40 0











Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

Feature ID: NWA039

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot \bigcirc
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Lake Charlotte Solar Martin County, Minnesota

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	t Region	1	
Project/Site:	Lake C	harlotte	City/	County:	Marti	n	Sampling I	Date:	10/20/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling F	Point:	NWA040A
Investigator(s):		Apryl Jennrich		Sectio	on, Townshi	p, Range:		Sec.8 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Toeslo	pe	Local r	elief (conca	ve, convex	, none):		Concave
Slope (%): 2	Lat:	43.73552		Long:	-94.45	68	Datum:		WGS84
Soil Map Unit Name:	Canisteo-(Glencoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of	the site typical for	this time o	of the year?	Yes (lf no, expla	ain in remai	·ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expl	ain any ar	nswers in remarks.)
SUMMARY OF FIND	INGS								
Hydrophytic Vegetati	ion Present	t? No							
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?		No
Wetland Hydrology F	Present?	No		If yes, or	tional wetla	nd site ID:			
Remarks:				, , -1					
Recently tilled agricultur	al field.	ecently harvested	l agricultu	ral field.					
VEGETATION Use	e scientifi	c names of pla	ants.	Deminant	la dia ata a	Dami		We also has	- 1
Troo Stratum (P	lot cizo:)	Absolute	Species	Status	Domin	iance l'est	worksnee	et
<u>Thee Stratum</u> (P	IOL SIZE.)		Species	Status	Numbe	er of Domina	nt Species	0 (4)
2						that are	e OBL, FAC	W, or FAC:	<u> </u>
3.						Total N Specie	lumber of Do s Across All	ominant Strata:	(B)
4 5.						Percer	t of Domina OBL, FAC	nt Species W. or FAC:	% (A/B)
				=Total Cove	r		, -	,	
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Inde	x Worksh	eet
1						Total	% Cover of:		Multiply by:
2						OBL s	species	x 1	=
3						FACV	v species	x 2	=
4						FAC s	species	x 3	=
5				T () O		FACU	species	x 4	=
List Orestore		, -		= I otal Cove	r	UPL s	species	x 5	= (D)
Herb Stratum	(Plot size:)				Colum	n totais	(A) <u>(</u> B)
1						Preva	ience index	I = B/A = -	
2						Hydro	onhytic Ver	notation Ir	dicators
4							Rapid test f	or hydroph	vtic vegetation
5.							Dominance	test is >50)%
6.							Prevalence	index is ≤	3.0*
7.							Morphologi	cal adapta	tions* (provide
8.							supporting	data in Re	marks or on a
9							separate sł	neet)	
10							Problemation	c hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric s unless distur	oil and wetl bed or prob	and hydrology must be lematic
2				=Total Cove	r	— Hyo Veç Pre	drophytic jetation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural	iumbers he	re or on a separat	te sheet)						

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Profile Descr	ription: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-37	10YR 2/1	100					Clay	
37-40	10VR 2/2	100					Clay	
37-40	1011 2/2	100					Cidy	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	uced Mat	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	stic Epipedon (A2))	Sa	ndy Redo	ox (S5)		Dark Surface (S	7) (LRR K, L)
Bla	ack Histic (A3)		Str	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hv	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Str	ratified Layers (A5)	Lo	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)
2 c	cm Muck (A10)	,	De	pleted M	atrix (F3)	()	、 .	,
De	pleted Below Dar	k Surfac	e (A11) Re	dox Dark	Surface	(F6)		
= Th	ick Dark Surface ((A12)	De	pleted Da	ark Surfac	ce (F7)	*ludiostono of buduou	
 Sa	indy Mucky Miner	al (S1)	Be	dox Deni	ressions (F8)	hydrology must be pr	esent unless disturbed or
5	may Mucky Peat or	Peat (S	3)		00010110 (10)	problematic	
			0)					
Restrictive L	ayer (if observed	l):						
Туре:					-		Hydric Soil Preser	it? <u>No</u>
Depth (inches	s):				-			
Remarks:								
HYDROLO	GY							
Wetland Hyd	rology Indicators	S:						
Primary Indica	ators (minimum of	one is r	equired; check a	all that ap	<u>ply)</u>		Secondary Indica	ators (minimum of two required)
Surfac	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)
High W	Vater Table (A2)			True Aq	uatic Plai	nts (B14)	Drainage	e Patterns (B10)
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	e of Red	uced Iron	n (C4) Stunted	or Stressed Plants (D1)
Algal N	/lat or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils Geomor	phic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparse	ely Vegetated Con	cave Su	Irface (B8)	Gauge	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	S)	
Field Observ	ations:				_			
Surface Wate	r Present?	Yes	No	X	Depth (i	nches):	We	tland Hydrology
Water Table F	-resent?	Yes	No	<u>X</u>	Depth (i	nches):		Present?
Saturation Pre	esent?	Yes	No	X	Depth (i	nches):		No
(includes capi	mary tringe)				hata -			
Describe Rec	orded Data (Strea	m gauge	e, monitoring we	n, aeriai p	motos, pr	evious in	ispections), it available:	
Remarke								
ntomaina.								







0 40 80 120 160 200 Feet



ABBE









Feature ID: NWA040

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream

2-foot Elevation Contour

- _____ Index
- ----- Intermediate



Aerial Photograph Review

Lake Charlotte Solar Martin County, Minnesota



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	WETL	AND DETER	MINAT	ION DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	arlotte	City/	County:	Marti	n	Sampling Date	e: 10/20/2022
Applicant/Owner:	L	ake Charlotte So	olar, LLC		State:	MN	Sampling Poin	t: NWA041A
Investigator(s):	A	pryl Jennrich		Sectio	on, Townshi	p, Range:	Se	ec.8 T103N R30W
Landform (hillslope, terrad	ce, etc.):	Plair	า	Local r	elief (conca	ve, convey	, none):	None
Slope (%): 0	Lat:	43.73481		Long:	-94.45	73	Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic co	nditions of th	e site typical for	this time o	of the year?	Yes (lf no, expl	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circums	stances present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain	any answers in remarks.)
SUMMARY OF FIND	DINGS							
Hydrophytic Vegetat	ion Present?	No						
Hydric Soil Present?		No		Is the sa	mpled area	a within a	wetland?	No
Wetland Hydrology F	Present?	No		If yes, op	tional wetla	nd site ID:		
Remarks:								
Recently tilled agricultur	ral field. Re	cently harvested	agricultur	al field.				
VEGETATION US	e scientific	names of pla	ants.	Dominant	Indiactor	Domi	anaa Taat Wa	wheels and
Tree Stratum (P	lot size:)	% Cover	Species	Status	Domi	lance lest wo	rksneet
<u>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>	101 5120.)		Species	Status	Numbe	er of Dominant S	pecies
1 2						that ar	e OBL, FAGW, C	or FAC: 0 (A)
3.						Total N Specie	lumber of Domir s Across All Stra	nant ata: 0 (B)
4 5						Percer that ar	nt of Dominant S e OBL, FACW, c	pecies or FAC: <u>%</u> (A/B)
		_		=Total Cove	r			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index W	lorksheet
1						Total	% Cover of:	Multiply by:
2						OBL	species	x 1 =
3						FACV	v species	x2 =
4								X 3 =
ə				-Total Cove	r			X 4 =
Herb Stratum	(Plot size:	· –			1	Colum	n totals	$\underline{A} = \underline{A} $
1	(1 101 3126.)				Preva	lence Index – F	(D) (D)
2						11000		
3.						Hydro	ophytic Vegeta	tion Indicators:
4.							Rapid test for h	ydrophytic vegetation
5.							Dominance tes	t is >50%
6.							Prevalence ind	ex is ≤3.0*
7.							Morphological	adaptations* (provide
8							supporting data	a in Remarks or on a
9							separate sheet)
10							Problematic hy	drophytic vegetation*
				=Total Cove	r		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicate present,	ors of hydric soil a unless disturbed	and wetland hydrology must be or problematic
2				=Total Cove	r	— Hyo Veç Pre	drophytic jetation sent?	<u>No</u>
Remarks: (Include photo Recently tilled agricultural	numbers her I field. Bare g	∍ or on a separa ∣round: 100%	te sheet)					

NWA041A

Depth	Matrix			Redox Features							
(Inches)	Color (moist)	%	Color (mo	ist)	%	Type*	Loc**	Text	ure	Remarks	
0-25	10YR 2/1	100						Clay L	.oam		
25.27	10VP 2/1	100									
23-37	101R 2/1	100						Cic	ay		
37-40	10YR 2/2	100						Cla	ау		
*Type: C =	Concentration, D	= Deple	etion, $RM = F$	Redu	ced Matr	ix, MS =	Masked \$	Sand Grains.	**Locatio	on: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:							Indicator	s for Proble	ematic Hydric Soils*:	
His	stosol (A1)			Sar	ndy Gleye	ed Matrix	(S4)	Coas	t Prairie Re	dox (A16) (LRR K, L, R)	
His	stic Epipedon (A2)			Sar	ndy Redo	ox (S5)		Dark Surface (S7) (LRR K, L)			
Bla	ack Histic (A3)			Stri	pped Ma	trix (S6)		Iron-	Manganese	Masses (F12) (LRR K, L, R)	
Hy	drogen Sulfide (A	4)		Loa	my Mucl	ky Minera	al (F1)	Very	Shallow Da	rk Surface (TF12)	
Sti	atified Layers (A5)		Loa	my Gley	ed Matrix	(F2)	Othe	r (explain in	remarks)	
2 c	m Muck (A10)			Dep	pleted Ma	atrix (F3)					
De	pleted Below Darl	k Surfac	e (A11)	Rec	lox Dark	Surface	(F6)				
Th	ick Dark Surface ((A12)		Dep	pleted Da	ark Surfac	ce (F7)	*Indicator	s of hydroph	nytic vegetation and wetland	
Sa	ndy Mucky Minera	al (S1)		Rec	lox Depr	essions (F8)	hydrology	must be pro	esent, unless disturbed or	
5 c	m Mucky Peat or	Peat (S	3)					problema	tic		
Restrictive L	ayer (if observed	l):									
ype:										40 N.a	
								Hydric	Soil Presen	t? NO	
Depth (inches Remarks:	s): 							Hydric	Soil Presen	t? <u>NO</u>	
Depth (inches	s):							Hydric :	Soil Presen	t? <u>NO</u>	
Depth (inches Remarks:	GY							Hydric :	Soil Presen	t? <u>NO</u>	
Depth (inches Remarks: HYDROLO Wetland Hyd	GY	s:			ll that an				Soil Presen	tere (minimum of two required)	
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica	GY rology Indicators	s: one is r	equired; che	eck a	I that ap		42)	Hydric : Seco	ndary Indica	tters (minimum of two required)	
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1)	s: one is r	equired; che	eck a	I that ap	<u>ply)</u> Fauna (B	:13)	Hydric : Seco	ndary Indica Surface	tters (minimum of two required) Soil Cracks (B6)	
Pepth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2)	s: one is r	equired; che	eck a	l that ap Aquatic True Aq	<u>ply)</u> Fauna (B uatic Plar	113) hts (B14)	Hydric : Seco	ndary Indica Surface	tors (minimum of two required) Soil Cracks (B6) Patterns (B10)	
Depth (inches Remarks: IYDROLO Vetland Hyd Primary Indica Surfac High W Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)	s: one is r	equired; che	eck a	l that ap Aquatic True Aq Hydroge	<u>ply)</u> Fauna (B uatic Plar en Sulfide	13) nts (B14) Odor (C	Hydric : Seco - 1)	ndary Indica Surface Drainage Dry-Sea	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2)	
Depth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High W Satura Satura Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) opt Dapagita (B2)	s: one is r	equired; che	eck a	ll that ap Aquatic True Aq Hydroge Oxidized	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	113) hts (B14) Odor (C oheres on	Hydric : <u>Seco</u> - 1) - Living _	ndary Indica Surface Drainage Dry-Sea Crayfish	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8)	
Pepth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High W Satura Satura Vater Sedime Driff D	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s: one is r	equired; che	eck a	l that ap Aquatic True Aq Hydroge Oxidized Roots (C	<u>ply)</u> Fauna (B uatic Plar on Sulfide d Rhizosp C3)	113) hts (B14) Odor (C oheres on	Hydric : <u>Seco</u> - 1) - Living - (C4) -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1)	
Pepth (inches Remarks: Remarks: Remarks: Remarks: Primary Indica Surfac Surfac High W Satura Water Sedime Drift Dr Algal M	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)	s: one is r	equired; che	eck a	l that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent I	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu ron Redu	13) hts (B14) Odor (C oheres on uced Iron	Hydric : Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface Drainage Crayfish Saturatic Stunted Geomore	tters (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) phic Position (D2)	
Depth (inches Remarks: Remarks: Primary Indica Surfac High W Satura Water Satura Drift D Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	s: one is r	equired; che	eck a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6)	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu Iron Redu	13) nts (B14) Odor (C oheres on uced Iron uction in T	Hydric : Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomorp FAC-Net	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Alternational Primary Indica Primary Indica Surfac Unifac Satura Satura Satura Drift Di Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	s: one is r	equired; che	eck a	l that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu iron Redu ck Surfac	113) Ints (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Hydric : Seco - - - Living - - (C4) - - Filled Soils - -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomory FAC-Net	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High W Satura Water Satura Drift D Algal M Iron De Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con	s: one is r rial Imag	equired; che gery (B7) Irface (B8)	eck a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu lron Redu ck Surfac or Well Da	113) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Hydric : Seco - 1) - Living - (C4) - Filled Soils - -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomorp FAC-Net	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: AYDROLO Vetland Hyd Primary Indica Surfac Surfac High W Satura Water Sedimo Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E	rial Imag cave Su 39)	equired; che gery (B7) Irface (B8)	eck a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E	ply) Fauna (B uatic Plar n Sulfide d Rhizosp C3) ie of Redu lron Redu ck Surfac or Well Da ixplain in	a13) hts (B14) odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks	Hydric : Seco - 1) - Living - (C4) - Filled Soils -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomorg FAC-Net	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Attand Hyd Primary Indica Surfac High W Satura Water Sedim Drift Du Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations:	s: one is r rial Ima cave Su 39)	equired; che gery (B7) Irface (B8)	eck a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E	ply) Fauna (B autic Plar en Sulfide d Rhizosp 3) e of Redu iron Redu ck Surfac or Well Da ixplain in	13) 13) 13) 13) 14) 14) 14) 15) 14) 14) 15) 15) 16) 16) 16) 16) 16) 16) 16) 16	Hydric : Seco - - - - - - - - - - - - - - - - - - -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomory FAC-Neu	tters (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac High W Satura Water Sedime Drift Do Algal M Iron De Inunda Sparse Water- Field Observ	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present?	s: one is r rial Imag cave Su 39) Yes	equired; che gery (B7) Irface (B8)		I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp 23) e of Redu iron Redu ck Surfac or Well Da cxplain in	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Hydric : Seco - 1) - Living - (C4) - Filled Soils - -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomorp FAC-Net	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Remarks: Remarks: Primary Indica Primary Indica Surfac High W Satura Water Sedimo Drift Do Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes	gery (B7) Inface (B8)	eck a 	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 23) e of Redu iron Redu iron Redu ck Surfac or Well Da ixplain in Depth (ii	113) 113)	Hydric : Seco - - - - - - - - - - - - - - - - - - -	ndary Indica 	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Remarks: Remarks: Primary Indica Surfac High W Satura Water Sedimu Algal M Iron De Inunda Sparse Water- Sield Observ Surface Wate Vater Table F Saturation Pro	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes Yes	gery (B7) Irface (B8)	eck a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 23) ee of Redu iron Redu ck Surfac or Well Da explain in Depth (ii Depth (ii	a13) hts (B14) Odor (C oheres on uced Iron uced Iron uced Iron ata (D9) Remarks nches):n nches):n	Hydric Seco - 1) - Living - (C4) - Filled Soils - s) -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted FAC-Net	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (CS or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Remarks: Remarks: Primary Indica Surfac High W Satura Water Sedime Drift D Satura Drift D Satura Iron De Inunda Sparse Water- Field Observ Surface Wate Nater Table F Saturation Pre includes cap	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) //at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	equired; che gery (B7) Irface (B8)	lock a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 3) e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (in Depth (in	a13) hts (B14) Odor (C oheres on uced Iron uction in 7 ata (D9) Remarks nches):	Second 1) - Living - (C4) - Filled Soils - :) -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomory FAC-Nea	tiors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surfac Surfac Water Sedim Satura Water Sedim Drift Du Satura Nater Sedim Sedim Satura Sedim Satura Sedim Satura Sedim Satura Sedim Satura Sedim Sedim Satura Sedim Satura Sedim Sedim Satura Sedim Sedi	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; che gery (B7) Irface (B8)	eck a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X X	ply) Fauna (B autic Plar en Sulfide d Rhizosp 3) ee of Redu iron Redu ck Surfac or Well Da ck Surfac or Well Da ck Surfac ixplain in Depth (ii Depth (ii Depth (ii	a13) ants (B14) a Odor (C oheres on uced Iron uction in 7 ata (D9) Remarks nches): nches): nches): revious in	Hydric : Seco - - - - - - - - - - - - - - - - - - -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomory FAC-Neu We available:	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	
Depth (inches Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Remarks: Surface High W Satura Water Sedime Drift Do Algal M Iron De Inunda Sparse Water Sield Observ Surface Wate Vater Table F Saturation Pre Saturation Pre Saturation Pre Saturation Pre	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? essent? essent? ellary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; che gery (B7) Irface (B8)		I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 23) e of Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in Depth (in	a13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches): nches): nches): nches): revious in	Hydric : Seco - - - - - - - - - - - - - - - - - - -	ndary Indica Surface Drainage Dry-Sea Crayfish Saturatic Stunted Geomorp FAC-Net	tters (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9 or Stressed Plants (D1) ohic Position (D2) utral Test (D5) tland Hydrology Present?No	
Depth (inches Remarks: Remarks: Remarks: Remarks: Primary Indica Surfac High W Satura Water Sedim Orift Du Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Vater Table F Saturation Pro includes cap Describe Rec	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: r Present? Present? esent? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; che gery (B7) Irface (B8)	lock a	I that ap Aquatic True Aq Hydroge Oxidizec Roots (C Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 23) e of Redu ron Redu ron Redu ck Surfac or Well Da ixplain in Depth (in Depth (in Depth (in	113) hts (B14) Odor (C oheres on uced Iron uction in 7 ce (C7) ata (D9) Remarks nches): nches): nches): revious in	Hydric : Seco	ndary Indica ndary Indica Surface Drainage Dry-Sea: Crayfish Saturatic Stunted Geomory FAC-Net We available:	ttors (minimum of two required) Soil Cracks (B6) Patterns (B10) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (CS or Stressed Plants (D1) ohic Position (D2) utral Test (D5)	











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Feature ID: NWA041

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

Lake Charlotte Solar Martin County, Minnesota



Proiect/Site:	WEII Lake Ch	LAND DETER	MINATI //Citv	ION DAT	A FORM · Mart	• Midwes	St Region Sampling Date:	10/20/2022
Applicant/Owner:		Lake Charlotte So	lar, LLC		State:	MN	Sampling Point:	NWA042A
Investigator(s):	ļ.	Apryl Jennrich		Sect	ion, Townsh	ip, Range:	Sec	.8 T103N R30W
Landform (hillslope, terra	ce, etc.):	Depress	ion	Local	relief (conca	ave, convex	, none):	Concave
Slope (%): 1	Lat:	43.73179		Long:	-94.45	781	Datum:	WGS84
Soil Map Unit Name:	Canisteo-G	Glencoe complex, () to 2 per	cent slopes	NV	VI Classifica	ation:	NA
Are climatic/hydrologic co	onditions of t	he site typical for t	his time c	of the year?	Yes	(If no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significant	y disturbed?	Are "	normal circumsta	nces present? No
Are vegetation	, soil	, or hydrology		naturally p	oblematic?	(If ne	eded, explain a	ny answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	tion Present	? <u>No</u>						
Hydric Soil Present?	?	No		Is the s	ampled are	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		lf yes, o	optional wetl	and site ID:		
Remarks:								
Recently harvested ag	pricultural fiel	ld.						
VEGETATION US	e scientino	c names of pla	hts.	Dominant	Indicator	Domir	ance Test Worl	rshoot
Tree Stratum (F	Plot size:)	% Cover	Species	Status	Numbe that are	er of Dominant Spe e OBL, FACW, or	ecies FAC: 0 (A)
2 3						Total N Specie	lumber of Domina s Across All Strata	nt a: <u> 0 (</u> B)
4 5				-Total Cau	or	Percent that are	nt of Dominant Spe e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:) —		=101a1 000	ei	Prova	lence Index Wo	rkshoot
<u>- 3201119/511105 51121011</u>	(1 101 3126.)				Total	% Cover of:	Multiply by:
2.						OBLs	species	x 1 =
3.						FACV	v species	x 2 =
4.						FAC s	species	x 3 =
5.						FACU	species	x 4 =
				=Total Cov	er	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:)				Colum	nn totals	(A) (B)
1						Preva	lence Index = B//	<i></i>
2								
3						Hydro	phytic Vegetati	on Indicators:
4 5							Dominance test i	
6.							Prevalence index	(is ≤3.0*
7.							Morphological ac	laptations* (provide
8.							supporting data i	n Remarks or on a
9.							separate sheet)	
10							Problematic hydr	ophytic vegetation*
				=Total Cov	er		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicato present,	ors of hydric soil and unless disturbed of	d wetland hydrology must be problematic
2				=Total Cov	er	— Hyd Veg Pre	drophytic getation sent?	<u>lo</u>
Remarks: (Include photo Harvested agricultural fie	numbers her Id. Bare grou	re or on a separate und: 100%	e sheet)					

NWA042A

Profile Descr	ription: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth <u>Matrix</u>		Re	dox Fea	tures						
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-20	10YR 2/1	100					Clay Loam			
20-23	2.5Y 3/2	100					Sandy Clav			
20 20	2101 0/2									
					-					
*Type: C =	Concentration, D	= Deple	etion, RM = Redu	iced Mat	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:		
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)		
His	stic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S7) (LRR K, L)			
Bla	ack Histic (A3)		Str	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)		
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)		
Str	atified Layers (A5)	Loa	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)		
2 0	m Muck (A10)		De	pleted M	atrix (F3)					
De	pleted Below Darl	< Surfac	e (A11) Re	dox Dark	Surface	(F6)				
Th	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydron	avtic vegetation and wetland		
Sa	ndy Mucky Minera	al (S1)	Re	dox Depi	ressions (F8)	hydrology must be pr	vdrology must be present. unless disturbed or		
5 0	m Mucky Peat or	Peat (S	3)			- /	problematic			
Destrictive I	, 	\	,							
Restrictive L	ayer (if observed):					Undria Cail Drease	40 No		
Type: Roci	K 02				-		Hydric Soll Preser			
Depth (inches	5). 23				-					
	<u></u>									
HYDROLO	GY									
Wetland Hyd	rology Indicators	S:	and the standard standards							
Primary Indica	ators (minimum of	one is i	equired; check a	ill that ap			Secondary Indica	ators (minimum of two required)		
Surfac	e Water (A1)			Aquatic	Fauna (B	513)	Surface	Soil Cracks (B6)		
High W	/ater Table (A2)			True Aq	juatic Plar	nts (B14)	Drainage	e Patterns (B10)		
Saturation (A3)				Hydroge	en Sulfide	Odor (C	1)Dry-Sea	son Water Table (C2)		
Water	Marks (B1)			Oxidize	d Rhizosp	heres or	Living Crayfish	Burrows (C8)		
Sediment Deposits (B2)				Roots (C3)		Saturatio	on Visible on Aerial Imagery (C9)		
Drift Deposits (B3)				Presence	ce of Redi	uced Iron	Tilled Caile	or Stressed Plants (D1)		
Algal N	hat or Crust (B4)		Recent	Iron Real	action in		utral Test (DE)			
	tion Visible on As	rial Ima			ok Surfor			utrai Test (DS)		
Inunua	Noncontraction of Ae									
Opaise	Stained Leaves (F	cave 30		Other (F	Evolain in	ala (D9) Romarka	2)			
	Stallieu Leaves (L	59)				Remarks	»)			
Field Observ	ations:	Vac	N1-	v	Denth /	nohoo).				
Surface wate	r Present?	Yes	No	X 	Depth (II	ncnes):	We	tland Hydrology		
Saturation Pr	sont?	Vec		^ 	Depth (II			Present?		
(includes capi	illary fringe)	162		^	_ Depth (II					
	orded Data (stream	m aaua		L aprial r	abotos pr	evious in	spections) if available:			
		n yauyi		i, acrial p	510103, pl	CVICUS III				
Remarks:										








Feature ID: NWA042

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

Project/Site:	WET Lake Ch	LAND DETER	City/	County:	• FORM - Marti	Midwes	st Region Sampling Date:	10/20/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling Point:	NWA043A
Investigator(s):		Apryl Jennrich		Sect	ion, Townshi	p, Range:	Sec.8	T103N R30W
Landform (hillslope, te	errace, etc.):	Hillto	р	Local	relief (conca	ve, convex	, none):	Convex
Slope (%): 1	Lat:	43.73309		Long:	-94.459	937	Datum:	WGS84
Soil Map Unit Name:	Nicollet-Cr	ppin complex			NW	I Classifica	ation:	NA
Are climatic/hydrologi	c conditions of t	he site typical for	this time c	of the year?	Yes (lf no, expla	ain in remarks)	
Are vegetation	X , soil	, or hydrology		Significantl	v disturbed?	Are "	normal circumstand	ces present? No
Are vegetation	, soil	, or hydrology		naturally pr	, oblematic?	(If ne	eded. explain anv	answers in remarks.)
SUMMARY OF F	INDINGS					X -	,	,
Hydrophytic Veg	etation Present	? <u>No</u>						
Hydric Soil Prese	ent?	No		Is the s	ampled area	a within a	wetland?	No
Wetland Hydrolo	gy Present?	No		lf yes, o	ptional wetla	nd site ID:		
Remarks:								
Recently harvested	d agricultural fie	ld.						
VEGETATION	Use scientifi	c names of pla	ants.					
Tana Olastan		,	Absolute	Dominant	Indicator	Domir	nance Test Works	heet
1	(Plot size:)	% Cover	Species	Status	Numbe that are	er of Dominant Speci e OBL, FACW, or FA	es AC: 0 (A)
2 3						Total N Specie	lumber of Dominant s Across All Strata:	(B)
4 5.						Percen	t of Dominant Speci OBL, FACW, or FA	es \C: % (A/B)
				=Total Cov	er	_	- , - ,-	· · ·
Sapling/Shrub Stratu	IM (Plot size:)				Preva	lence Index Work	sheet
1.						Total ^o	% Cover of:	Multiply by:
2						OBL s	pecies	x 1 =
3						FACW	/ species :	x 2 =
4						FAC s	species	x 3 =
5						FACU	species	x 4 =
		、 -		=Total Cov	er	UPLs	pecies	x 5 = (D)
Herb Stratum	(Plot size:)				Colum	in totals	(A) (B)
1						Preva	lence Index = B/A =	=
2						Hydro	nhytia Vagatatian	Indiactora
۵ ۵							Rapid test for hydro	onhytic vegetation
5.							Dominance test is:	>50%
6.							Prevalence index is	s ≤3.0*
7.							Morphological ada	otations* (provide
8.						:	supporting data in	Remarks or on a
9.							separate sheet)	
10.							Problematic hydrop	ohytic vegetation*
				=Total Cov	er		(explain)	
Woody Vine Stratum	(Plot size:)				*Indicato present,	ors of hydric soil and w unless disturbed or p	vetland hydrology must be roblematic
2				=Total Cov	er	– Hyc Veg Pre	Irophytic jetation sent? <u>No</u>	_
2 Remarks: (Include phe Harvested agricultural	oto numbers he I field. Bare grou	re or on a separat und: 100%	te sheet)	=Total Cov	er	– Hyc Veg Pre	trophytic letation sent? <u>No</u>	

NWA043A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)	
Depth	Matrix		Re	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
. ,		70		,,,	. , po	200	i ontaro		
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Matr	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:	
His	stosol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)	
His	stic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)	
Bla	ack Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Manganese	Masses (F12) (LRR K. L. R)	
Hv	drogen Sulfide (A	4)		my Muc	kv Minera	l (F1)	Verv Shallow Da	rk Surface (TF12)	
	atified Lavers (A5)		amy Glev	red Matrix	(F2)	Other (explain in	remarks)	
	m Muck (A10)	/	Eet	nig Cicy	atrix (F3)	(12)		Temano)	
20		. Curtoo			Curfooo				
De		(Sunac			Sunace	(FO)			
In	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	nytic vegetation and wetland	
Sa	ndy Mucky Minera	al (S1)	Ree	dox Depr	essions (F8)	hydrology must be pro	esent, unless disturbed or	
5 c	m Mucky Peat or	Peat (S	3)				problematic		
Restrictive L	ayer (if observed):							
Type:							Hydric Soil Presen	t? No	
Depth (inches	5):				•		-		
Remarks:									
Obvious not a	wetland.								
HYDROLO	GY								
Wetland Hyd	rology Indicators	5:							
Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	ply)		Secondary Indica	tors (minimum of two required)	
Surface	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)	
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)	
Satura	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Seas	son Water Table (C2)	
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Cravfish	Burrows (C8)	
Sedime	ent Deposits (B2)			Roots (C	23)		Saturatio	on Visible on Aerial Imagery (C9)	
Drift De	eposits (B3)			Presenc	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)	
Algal M	lat or Crust (B4)			Recent	Iron Redu	iction in T	Filled Soils Geomor	phic Position (D2)	
Iron De	eposits (B5)			(C6)			FAC-Neu	utral Test (D5)	
Inunda	tion Visible on Ae	rial Imad	uerv (B7)	Thin Mu	ck Surfac	e (C7)	_		
Sparse	lv Vegetated Con	cave Su	urface (B8)	Gauge	or Well Da	ata (D9)			
Water-	Stained Leaves (F	89)		Other (F	volain in	Remarks	:)		
						Remarke	,,		
Field Observ	ations:	Var	NI	v	Dorth (
Surface wate	r Present?	Yes		X	Depth (II	nches):	We	tland Hydrology	
Soturotion De	resent?	Vec				iches):		Present?	
Jaturation Fresent: Tes Depth (IIChes)									
Departies Dec	Includes capillary tringe)								
Describe Rec	Jescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Pomorko:									
Remarks.									





	WETI	_AND DETER		ION DAT	FORM -	Midwes	t Regio	า	
Project/Site:	Lake Ch	arlotte	City/	County:	Marti	n	Sampling	Date:	10/20/2022
Applicant/Owner:	l	_ake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	NWA044A
Investigator(s):	A	pryl Jennrich		Secti	on, Townshi	p, Range:		Sec.17 T	103N R30W
Landform (hillslope, terrae	ce, etc.):	Plair	۱	Local	relief (conca	ve, convex	, none):		Concave
Slope (%): 1	Lat:	43.72823		Long:	-94.456	609	Datum:		WGS84
Soil Map Unit Name:	Crippin loar	m, 1 to 3 percent	slopes		NW	I Classific	ation:		NA
Are climatic/hydrologic cc	onditions of th	ne site typical for	this time c	of the year?	Yes (lf no, expla	ain in rema	rks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	oblematic?	(If ne	eded, exp	lain any ai	nswers in remarks.)
SUMMARY OF FINI	DINGS			-					
Hydrophytic Vegetat	tion Present?	Y No							
Hydric Soil Present?)	No		Is the s	ampled area	a within a	wetland?		No
Wetland Hydrology I	Present?	No		lf yes, o	ptional wetla	nd site ID:			
Remarks [.]					•				
Recently tilled agricultu	ral field. Re	ecently harvested	l agricultur	ral field.					
VEGETATION US	e scientino	; names or pla	Ahaoluto	Dominant	Indicator	Domi	anaa Taa	Worksho	o.t
Tree Stratum (E	Plot sizo:)	% Cover	Species	Status	Domin	lance res	t worksne	et
<u>1</u> (1	101 3126.)		Opecies	Olalus	Numbe	er of Domina	ant Species	0 (A)
2.						that an	e OBL, FAC	W, OF FAC:	<u> </u>
3.						Total N Specie	lumber of D s Across Al	ominant I Strata:	(B)
4 5						Percer that are	it of Domina e OBL, FAC	ant Species W, or FAC:	<u>%</u> (A/B)
		_		=Total Cove	er				
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Inde	ex Worksh	eet
1						Total	% Cover of	f:	Multiply by:
2						OBL	species	x 1	=
3							v species	X 2	=
4								X 3	=
J				-Total Cove	٥r			× 4	-
Herb Stratum	(Plot size:) –		-10101 0011		Colum	n totals	XO) (B)
1.	(1.10101201	/				Preva	lence Inde	x = B/A =	
2.								-	
3.						Hydro	ophytic Ve	getation Ir	ndicators:
4.							Rapid test	for hydropl	nytic vegetation
5.							Dominance	e test is >5	0%
6.							Prevalence	e index is ≤	3.0*
7						_	Morpholog	ical adapta	tions* (provide
8							supporting	data in Re	marks or on a
9							separate s	heet)	
10							Problemati	ic hydrophy	tic vegetation*
Woody Vine Stratum	(Plot size:)		=Total Cove	er	*Indicato	(explain)	soil and wetl	and hydrology must be
1						present,	uniess distu	rbed or prob	Iematic
2				=Total Cove	er	— Hyd Veg Pre	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo Recently tilled agricultura	numbers her I field. Bare ç	e or on a separat ground: 100%	te sheet)						

NWA044A

Depth	Matrix		Re	dox Fea	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textur	e	Remarks
0-14	10YR 2/1	100					Clay Loa	am	
14-16	2.5Y 3/1	98	2.5Y 4/2	2	D	М	Clay Loa	am	
16.25	2.57 4/4	00	10VP 5/6	1	-	DI	Sandy C	lav	Distinct or Prominont
10-20	2.51 4/4	99	101K 5/6	1	C	PL	Sandy C	лау	Distinct of Prominent
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mat	rix, MS =	Masked S	Sand Grains.	**Locatior	n: PL = Pore Lining, M = Ma
Hydric Soil	Indicators:					(2.1)	Indicators	for Proble	matic Hydric Soils*:
His	stosol (A1)		Sai	ndy Gley	ed Matrix	(S4)	Coast	Prairie Red	ox (A16) (LRR K, L, R)
His	stic Epipedon (A2)		Sai	ndy Red	ox (S5)		Dark S	Surface (S7)) (LRR K, L)
Bla	ack Histic (A3)		Stri	ipped Ma	atrix (S6)		Iron-M	anganese M	Masses (F12) (LRR K, L, R)
Hy	arogen Sulfide (A	4) \	Loa	amy Muc	ky Minera	u (⊢1) . (⊏2)	Very S	nallow Darl	k Surface (TE12)
Str	autieo Layers (A5)		army GIey	ea Matrix	. (F∠)	Other (explain in r	emarks)
2 c	m NUCK (A1U)			pietea M	arrix (F3)				
De	pleted Below Dark		e (A11)Re	dox Dark		(F6)			
In	ick Dark Surface (A12)	De	pieted D	ark Surrac	се (г7)	*Indicators	of hydrophy	ytic vegetation and wetland
5a	ndy Mucky Minera	al (51) Deet (S	Ke	dox Dep	ressions (F8)	problematic	nust be pre	sent, unless disturbed of
	m Mucky Feat Of	real (S	3)				•		
estrictive L	ayer (if observed)-							
ype: epth (inches emarks:	;): 				-		Hydric So	oil Present	? <u>No</u>
ype: epth (inches emarks:	;):	<i>.</i>			-		Hydric So	oil Present	? <u>No</u>
ype: epth (inches emarks:	GY				-		Hydric So	oil Present	? <u>No</u>
ype: epth (inches emarks: YDROLO /etland Hyd	GY	,, 			- -		Hydric So	oil Present	? <u>No</u>
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica	GY rology Indicators	s: one is r	equired; check a	Il that ap	- - - 	12)	Hydric So	dary Indicat	? No
rpe: epth (inches emarks: YDROLO Vetland Hyd rimary Indica Surfac	GY rology Indicators ators (minimum of e Water (A1) (ctor Table (A2)	;: one is r	equired; check a	Il that ap Aquatic	- 	113)	Hydric So	dary Indicat	? No
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surface High W	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)	s: one is r	equired; check a	II that ap Aquatic True Ac	- 	13) nts (B14)	Hydric So Second	dary Indicat Surface S Drainage	? No ors (minimum of two requires Soil Cracks (B6) Patterns (B10) on Water Table (C2)
ype: epth (inches emarks: YDROLO /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd Satura Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)	s: one is r	equired; check a	Il that ap Aquatic True Ac Hydrog	- 	13) hts (B14) Odor (C	Hydric So Second	dary Indicat Surface S Drainage Dry-Seas	? No ors (minimum of two require Goil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)
ype: epth (inches emarks: YDROLO Yetland Hyd rimary Indica Surface High W Satura Water Sedime	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	s: one is r	equired; check a	Il that ap Aquatic True Ac Hydrog Oxidize Roots (I	- - Fauna (B juatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C oheres on	Hydric So Second 1) Living	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturation	? No ors (minimum of two required soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) o Visible on Aerial Imagery (Calify)
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surface High W Satura Satura Water [Sedime Drift De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	;: one is r	equired; check a	Il that an Aquatic True Ac Hydrog Oxidize Roots (I Presend	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) hts (B14) Odor (C ⁻ oheres on uced Iron	Hydric So Second 1) Living (C4)	dary Indicat Surface S Drainage Dry-Seas Crayfish B Saturatior Stunted o	No
ype: epth (inches emarks: YDROLO /etland Hyd /etland Hyd /et	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)	s: one is r	equired; check a	II that ap Aquatic True Ac Hydroge Oxidize Roots (Presend Recent	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) nts (B14) Odor (C oheres on uced Iron uction in T	Hydric So Second 1) Living (C4) Tilled Soils	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturatior Stunted o Geomorp	No
ype: epth (inches emarks: IYDROLO /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd Satura Sedime Drift De Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5)	s: one is r	equired; check a	Il that an Aquatic True Ac Hydrog Oxidize Roots (I Present Recent (C6)	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C [.] oheres on uced Iron uction in T	Hydric So Second 1) Living (C4) illed Soils	dary Indicat Surface S Drainage Dry-Seas Crayfish B Saturatior Stunted o Geomorp FAC-Neu	No
ype: epth (inches emarks: YDROLOG Yetland Hyd rimary Indica Surface High W Satura Water Satura Unift De Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Ae	s: one is r	equired; check a	Il that ap Aquatic True Ac Hydrog Oxidize Roots ((Presend Recent (C6) Thin Mu	- 	13) hts (B14) Odor (C oheres on uced Iron uction in T ction in T	Hydric So Second 1) Living (C4) Tilled Soils	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturation Stunted o Geomorp FAC-Neu	No
ype: epth (inches emarks: YDROLO Yetland Hyd rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Con-	rial Imag	equired; check a	Il that an Aquatic True Ac Hydrog Oxidize Roots (1 Present (C6) Thin Mu Gauge	pply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu uck Surfac or Well Da	13) hts (B14) Odor (C ² oheres on uced Iron uction in T ice (C7) ata (D9)	Hydric So Second 1) Living (C4) Tilled Soils	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturatior Stunted o Geomorp FAC-Neu	? No
ype: epth (inches emarks: YDROLO /etland Hyd /etland Hyd /etland Hyd /etland Hyd /etland Hyd /satura Satura // High W Satura // Satura // Satura // Jingh W // Satura // Satura // Jingh W // Satura // Satura	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Con- Stained Leaves (E	rial Imag cave Su 39)	equired; check a	II that an Aquatic True Ac Hydroge Oxidize Roots (f Presend Recent (C6) Thin Mu Gauge Other (f	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in	13) hts (B14) Odor (C- wheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Hydric So Second 1) Living (C4) Tilled Soils)	dary Indicat Surface S Drainage Dry-Seas Crayfish E Saturatior Stunted o Geomorp FAC-Neu	? No
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com- Stained Leaves (E ations:	rial Imag cave Su 39)	gery (B7)	Il that ap Aquatic True Ac Hydrog Oxidize Roots (I Present (C6) Thin Mu Gauge Other (I	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu Ick Surfac or Well Da Explain in	13) hts (B14) Odor (Co oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Hydric So Second 1) Living (C4) illed Soils)	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturation Stunted o Geomorp FAC-Neu	? No
ype: epth (inches emarks: PYDROLOG /etland Hyd /etland Hyd rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com- Stained Leaves (E ations: r Present?	rial Ima cave Su 39) Yes	gery (B7)	Il that an Aquatic True Ac Hydrog Oxidize Roots (I Presenc Recent (C6) Thin Mu Gauge Other (I X	pply) Fauna (B Fauna (B Fauna (B ran Sulfide d Rhizosp C3) ce of Redu Iron Redu Ick Surfac or Well Da Explain in	13) ots (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Hydric So Second 1) Living (C4) illed Soils)	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturatior Stunted o Geomorp FAC-Neu	? No ors (minimum of two requires Goil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)
ype: epth (inches emarks: YDROLO /etland Hyd rimary Indica Surface High W Satural Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com- Stained Leaves (E ations: r Present? Present?	rial Imag cave Su 39) Yes Yes	equired; check a	Il that ap Aquatic True Ac Hydrog Oxidize Roots (1 Presend Recent (C6) Thin Mu Gauge Other (I X X	Pply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Hydric So Second 1) Living (C4) illed Soils)	dary Indicat Surface S Drainage Dry-Seas Crayfish E Saturatior Stunted o Geomorp FAC-Neu	? No Ors (minimum of two required from two req
ype: epth (inches emarks: IYDROLO /etland Hyd /etland Hyd /etland Hyd /etland Hyd /saturat Sedime Drift De Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? llary fringe)	rial Imag cave Su 39) Yes Yes Yes	equired; check a	II that an Aquatic True Ac Hydroge Oxidize Roots (f Presend Recent (C6) Thin Mu Gauge Other (f X X X X	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in Depth (ir Depth (ir	113) hts (B14) Odor (C- oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Hydric So Second 1) Living (C4) illed Soils)	dary Indicat 	? No Ors (minimum of two required twite two required two required two r
ype: epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surface High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre ncludes capi escribe Rec	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? llary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes	equired; check a gery (B7) mface (B8)NoNoNoNoNo	Il that an Aquatic True Ac Hydrog Oxidize Roots (I Present (C6) Thin Mu Gauge Other (I X X X X	- 	13) hts (B14) Odor (Co heres on uced Iron uced Iron iction in T ce (C7) ata (D9) Remarks nches): nches): evious in	Hydric So Second 1) Living (C4) illed Soils))	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturation Stunted o Geomorp FAC-Neu	? No
ype: epth (inches emarks: IYDROLOG /etland Hyd rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre ncludes capi escribe Rec	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? Ilary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes Yes m gauge	gery (B7)	Il that ap Aquatic True Ac Hydrog Oxidize Roots (I Present (C6) Thin Mu Gauge Other (I X X X X	- 	13) hts (B14) Odor (C oheres on uced Iron uction in T ata (D9) Remarks nches): nches): nches): evious in	Hydric So Second 1) (C4) (C4) illed Soils) spections), if av	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturatior Stunted o Geomorp FAC-Neu Wet	? No
ype: epth (inches emarks: IYDROLO /etland Hyd rimary Indica Surface High W Saturat Water Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre ncludes capi escribe Rec	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com- Stained Leaves (E ations: r Present? Present? esent? llary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; check a	Il that ap Aquatic True Ac Hydrog Oxidize Roots (i Presend Recent (C6) Thin Mu Gauge Other (I X X X X	pply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu Iron Redu Iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in Depth (in	a13) hts (B14) Odor (C ²) oheres on uced Iron uction in T ata (D9) Remarks nches): nches): evious in	Hydric So Second 1) Living (C4) illed Soils) spections), if av	dary Indicat Surface S Drainage Dry-Seas Crayfish F Saturatior Stunted o Geomorp FAC-Neu	? No ors (minimum of two required for two r









Feature ID: NWA044

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot \bigcirc
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINAT	ON DATA	FORM -	Midwes	st Regior	า	
Project/Site:	Lake Cl	narlotte	City/	County:	Marti	n	Sampling	Date:	10/20/2022
Applicant/Owner:		Lake Charlotte So	olar, LLC		State:	MN	Sampling	Point:	NWA047A
Investigator(s):		Apryl Jennrich		Section	on, Townshij	p, Range:		Sec.17 T	103N R30W
Landform (hillslope, terrac	;e, etc.):	Depress	sion	Local r	elief (concav	ve, conve	k, none):		Concave
Slope (%): 1	Lat:	43.72739		Long:	-94.452	201	Datum:		WGS84
Soil Map Unit Name:	Glencoe c	lay loam, 0 to 1 pe	ercent slop	es	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of t	he site typical for	this time c	of the year?	Yes (lf no, expl	ain in rema	rks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circ	umstances	s present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, exp	lain any ai	nswers in remarks.)
SUMMARY OF FIND	DINGS								
Hydrophytic Vegetati	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	a within a	wetland?		Νο
Wetland Hydrology F	vresent?	No		lf yes, op	otional wetla	nd site ID	:		
Remarks:									
Recently tilled agricultur	al field. R	ecently harvested	agricultur	al field.					
VEGETATION Use	e scientifi	c names of pla	ants.	-					
Trace Christian (D		,	Absolute	Dominant	Indicator	Domi	nance lest	Workshe	et
<u>Tree Stratum</u> (P)	% Cover	Species	Status	Numbe	er of Domina	ant Species	0 (4)
2.						that ar	e OBL, FAC	VV, OF FAC:	<u> </u>
3.						Total N Specie	Number of D s Across Al	ominant Strata:	(B)
4	-					Percer	nt of Domina	nt Species	0/ (A/D)
5				-Total Cove	r	that ar	e OBL, FAC	W, or FAC:	<u>%</u> (A/B)
Sapling/Shrub Stratum	(Plot size:) -			1	Preva	alence Inde	x Worksh	eet
1.	(11010120.	/				Total	% Cover of	:	Multiply by:
2.						OBL	species	x 1	=
3.						FACV	· V species	x 2	=
4.						FAC	species	x 3	=
5.						FACL	J species	x 4	=
		_		=Total Cove	r	UPL s	species	x 5	=
Herb Stratum	(Plot size:)				Colun	nn totals	(A	(B)
1		_				Preva	lence Index	c = B/A =	
2						_			
3						Hydro	ophytic Ve	getation Ir	ndicators:
4							Rapid test	tor nyaropi	
56							Prevalence	index is <	3 0*
7.							Morpholog	ical adapta	tions* (provide
8.						_	supporting	data in Re	marks or on a
9.							separate s	neet)	
10.							Problemati	c hydrophy	tic vegetation*
				=Total Cove	r		(explain)		
Woody Vine Stratum 1.	(Plot size:)				*Indicate	ors of hydric : , unless distu	soil and wet rbed or prob	and hydrology must be lematic
2				=Total Cove	r	Hyo Veç Pre	drophytic getation esent?	No	
Remarks: (Include photo r Recently tilled agricultural	iumbers he	re or on a separa ground: 100%	te sheet)						

NWA047A

Depth	Profile Description: (Describe to the depth ne							
(I I)	Matrix	1	<u>Re</u>	dox Feat	tures	1		
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-23	10YR 2/1	100					Clay Loam	
23-27	2.5Y 5/3	99	10YR 5/6	1	С	PL	Clay	Distinct or Prominent
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	uced Mat	rix. MS =	Masked S	Sand Grains. **Locat	ion [.] PI = Pore Lining M = Matrix
Hydric Soil	Indicators:	- Dopic			nx, mo =		Indicators for Prob	lematic Hydric Soils*:
His	stosol (A1)		Sa	ndv Glev	ed Matrix	(S4)	Coast Prairie R	edox (A16) (LRR K. L. R)
His	stic Epipedon (A2))	Sa	ndv Rede	ou (S5)	(0.)	Dark Surface (S	S7) (I RR K. I.)
Bla	ack Histic (A3)		Str	ipped Ma	atrix (S6)		Iron-Manganes	e Masses (F12) (I RR K. L. R)
Hv	/drogen Sulfide (A	4)		amy Muc	kv Minera	al (F1)	Verv Shallow D	ark Surface (TF12)
Str	ratified Lavers (A5	5)	Loa	amy Glev	ed Matrix	(F2)	Other (explain i	n remarks)
2 c	cm Muck (A10))	De	pleted M	atrix (F3)	. ()		() () () () () () () () () ()
= • De	epleted Below Dar	k Surfac	e (A11) Re	dox Dark	Surface	(F6)		
= 0 Th	ick Dark Surface ((A12)	De	pleted D	ark Surfac	(F7)	*logiaataos of buildes	
Sa	andy Mucky Miner	al (S1)		dox Depi	ressions (F8)	hvdrology must be r	present, unless disturbed or
6u 5 c	cm Mucky Peat or	Peat (S	3)			10)	problematic	
		n	- /			1		
	ayer (if observed.	1):					Undria Cail Draga	
Type: Donth (inchos					-		Hydric Soli Prese	int? NO
Boptin (moneo					-			
Remarks:								
HYDROLO	GY							
HYDROLO Wetland Hyd	GY Irology Indicators	5:						
HYDROLO Wetland Hyd Primary Indica	GY Irology Indicators ators (minimum of	s:	equired; check a	Ill that ap	uply)		Secondary India	cators (minimum of two required)
HYDROLO Wetland Hyd Primary Indica Surface	GY Irology Indicators ators (minimum of re Water (A1)	s: ¹ one is 1	equired; check a	<u>Ill that ap</u> Aquatic	<u>ply)</u> Fauna (B	113)	Secondary India Surface	cators (minimum of two required) e Soil Cracks (B6)
HYDROLO Wetland Hyd Primary Indica Surface High W	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2)	s:	equired; check a	Ill that ap Aquatic True Aq	<u>ply)</u> Fauna (B uatic Plar	:13) hts (B14)	<u>Secondary India</u> Surface Drainag	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10)
HYDROLO Wetland Hyd Primary Indica Surface High W Satural	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3)	s: one is I	equired; check a	all that ap Aquatic True Aq Hydroge	<u>ply)</u> Fauna (B juatic Plar en Sulfide	13) hts (B14)	<u>Secondary India</u> Surface Drainag I)Dry-Se	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) ttion (A3) Marks (B1)	s: i one is r	equired; check a	Ill that ap Aquatic True Aq Hydroge Oxidize	<u>ply)</u> Fauna (B juatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C ²	<u>Secondary India</u> Surface Drainag)Dry-Se Living Crayfis	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8)
HYDROLO Wetland Hyd Primary Indica Surfaca High W Satural Water Sedime	GY Irology Indicators ators (minimum of ee Water (A1) Vater Table (A2) ttion (A3) Marks (B1) ent Deposits (B2)	s: one is i	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidize Roots ((<u>ply)</u> Fauna (B juatic Plar en Sulfide d Rhizosp C3)	13) nts (B14) Odor (C ² oheres on	Secondary India Surface Drainag I)Dry-Se LivingCrayfis Saturat	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9
HYDROLO Wetland Hyd Primary Indica Surfaca High W Saturat Water I Sedime Drift De	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s: Fone is r	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidize Roots (0 Presence	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) hts (B14) Odor (C ² oheres on uced Iron	Secondary India Surface Drainag Drainag Dry-Se Living Crayfis Saturat (C4) Stunted	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) ttion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	s:	equired; check a	All that ap Aquatic True Aq Hydroge Oxidize Roots ((Presenc Recent	ply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	113) hts (B14) Odor (C ² oheres on uced Iron uction in T	Secondary India Surface Drainag Dry-Se Living Crayfis Satural (C4) Stunted illed Soils X Geomo	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) rphic Position (D2)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De	GY Irology Indicators ators (minimum of ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	s: one is r	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidize Roots (0 Presenc Recent (C6)	ply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) nts (B14) Odor (C ⁷ oheres on uced Iron uction in T	Secondary India Surface Drainag Dry-Se Living Crayfis (C4) Saturat (C4) Stunted Tilled Soils X Geomo	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Satural Water I Sedime Drift De Algal M Iron De Inunda	GY Irology Indicators ators (minimum of ee Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae	s: one is r	equired; check a gery (B7)	all that ap Aquatic True Aq Hydroge Oxidized Roots ((Presence Recent (C6) Thin Mu	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) odor (C ² oheres on uced Iron uction in T	Secondary India Surface Drainag Dry-Se Living Crayfis Saturat (C4) Stunted C4) Stunted FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) irphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con	s: <u>one is r</u> rial Ima cave Su	equired; check a	All that ap Aquatic True Aq Hydroge Oxidized Roots (0 Presend Recent (C6) Thin Mu Gauge o	ply) Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu lick Surfac or Well Da	a13) odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9)	Secondary India Surface Drainag Dry-Se Living Crayfis Satural (C4) Stunted illed Soils X Geomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water I Sedime Drift De Algal M Iron De Inunda Sparse Water-	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con total Leaves (B4)	s: one is r rial Ima cave Su 39)	equired; check a	Il that ap Aquatic True Aq Hydroge Oxidize Roots (0 Presenc Recent (C6) Thin Mu Gauge 0 Other (E	ply) Fauna (B puatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in	13) ts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Secondary India Surface Drainag I) Dry-Se Living Crayfis (C4) Sturted (C4) Sturted illed Soils X Geomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- Field Observe	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con -Stained Leaves (B vations:	s: one is r one is r	equired; check a	All that ap Aquatic True Aq Hydroge Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E	ply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ick Surfac or Well Da Explain in	113) hts (B14) Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Secondary India Surface Drainag I) Dry-Se Living Crayfis (C4) Stunted (C4) Stunted Tilled Soils X Geomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con -Stained Leaves (B rations: er Present?	s: one is r one is r	gery (B7)	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc (C6) Thin Mu Gauge (Other (E X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu ck Surfac or Well Da Explain in	a13) odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Secondary India Surface Drainag I) Dry-Se Living Crayfis (C4) Stunted (C4) Stunted iilled Soils X Geomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con -Stained Leaves (B vations: er Present? Present?	rial Imag cave Su 39) Yes Yes	gery (B7)	Il that ap Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ck Surfac or Well Da Explain in Depth (ii	a13) odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches):	Secondary India Surface Surface Drainag Dry-Se Living Crayfis Saturat (C4) Stunted (C4) Stunted FAC-N)	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) rrphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surfaca High W Saturai Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre	GY Irology Indicators ators (minimum of a Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con -Stained Leaves (B vations: er Present? Present?	rial Ima cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge o Other (E X X X X	ply) Fauna (B puatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu iron Redu iron Redu cr Well Da Explain in Depth (in Depth (in	a13) odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary India Surface Surface Drainag Dry-Se Living Crayfis (C4) Stunted (C4) Stunted (C4) FAC-N)	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) urphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Vater Table F Saturation Pre (includes capi	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con -Stained Leaves (B vations: er Present? Present? esent? illary fringe)	rial Ima cave Su 39) Yes Yes Yes	equired; check a	Aquatic True Aq Hydroge Oxidizer Roots (0 Presenc Recent (C6) Thin Mu Gauge 0 Other (E X X X	ply) Fauna (B Fauna (B rauna (B ran Sulfide d Rhizosp C3) ce of Redu rch Redu rch Surfac or Well Da cor Well Da Explain in Depth (in Depth (in	a13) odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary India Surface Drainae Dry-Se Living Crayfis (C4) Stunted Tilled Soils X Geomo FAC-N	Cators (minimum of two required) Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) Vetland Hydrology Present? No
HYDROLO Wetland Hyd Primary Indica Surface High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (B vations: er Present? Present? esent? illary fringe) corded Data (strea	rial Imag cave Su 39) Yes Yes Yes Magaug	gery (B7)	All that ap Aquatic True Aq Hydroge Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge C Other (E X X X X	ply) Fauna (B puatic Plar en Sulfide d Rhizosp C3) ce of Redu lron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in	a13) hts (B14) Odor (C ² oheres on uced Iron uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches): revious in:	Secondary India Surface Drainag Dry-Se Living Crayfis (C4) Sturted (C4) Sturted FAC-N	Cators (minimum of two required) a Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5) //etland Hydrology Present?No
HYDROLO Wetland Hyd Primary Indica Surface High W Satura' Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con -Stained Leaves (B vations: er Present? Present? esent? illary fringe) corded Data (strea	rial Imag cave Su 39) Yes Yes Yes m gauge	gery (B7)	All that ap Aquatic True Aq Hydroge Oxidize Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in Depth (in	a13) ants (B14) odor (C ² oheres on uced Iron uced Iron uced Iron ata (D9) Remarks nches): nches): revious in:	Secondary India Surface Drainag Dry-Se Living Crayfis (C4) Stunted (C4) Stunted FAC-N	Cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
HYDROLO Wetland Hyd Primary Indica Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Water- Field Observe Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	GY Irology Indicators ators (minimum of the Water (A1) Vater Table (A2) tition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Ae ely Vegetated Con Stained Leaves (B vations: er Present? Present? esent? illary fringe) corded Data (strea	rial Imag cave Su 39) Yes Yes Yes m gaug	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots ((Presenc Recent (C6) Thin Mu Gauge (Other (E X X X X	ply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu iron Redu ick Surfac or Well Da Explain in Depth (in Depth (in Depth (in bohotos, pr	a13) ants (B14) odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches): revious ins	Secondary India Surface Drainag Dry-Se Living Crayfis Saturat (C4) Stunted (C4) Stunted FAC-N) M spections), if available:	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) h Burrows (C8) ion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)









Feature ID: NWA047

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINATI	ON DATA	FORM -	Midwes	st Region		
Project/Site:	Lake C	narlotte	City/	County:	Martir	<u>ו</u>	Sampling D	Date:	10/20/2022
Applicant/Owner:		Lake Charlotte Se	olar, LLC		State:	MN	Sampling F	oint:	NWA048A
Investigator(s):		Apryl Jennrich		Sectio	on, Township	o, Range:		Sec.17 T1	03N R30W
Landform (hillslope, terrac	;e, etc.):	Plair	า	Local r	elief (concav	/e, conve	k, none):		None
Slope (%): 1	Lat:	43.72833		Long:	-94.451	41	Datum:		WGS84
Soil Map Unit Name:	Glencoe c	lay loam, 0 to 1 pe	ercent slop	es	NW	I Classific	ation:		NA
Are climatic/hydrologic co	nditions of t	he site typical for	this time c	of the year?	Yes (lf no, expl	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	Imstances	present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, expla	ain any an	swers in remarks.)
SUMMARY OF FINE	DINGS								
Hydrophytic Vegetati	ion Present	? No							
Hydric Soil Present?		No		Is the sa	ampled area	within a	wetland?		No
Wetland Hydrology F	vresent?	No		lf yes, op	otional wetla	nd site ID	:		
Remarks:									
Recently tilled agricultur	al field.	ecently harvested	agricultur	al field.					
VEGETATION Use	e scientifi	c names of pla	ants.	<u> </u>					
Troc Stratum (D		``		Dominant	Indicator	Domi	nance Test	worksnee	t
<u>Tree Stratum</u> (P)	% Cover	Species	Status	Numbe	er of Domina	nt Species	0 (1)
2						that ar	e OBL, FAC\	V, or FAC:	(A)
3.						Total N Specie	Number of Do s Across All	ominant Strata:	(B)
4						Percer	nt of Dominar	nt Species	
5				-Total Cova		that ar	e OBL, FAC\	V, or FAC:	<u>%</u> (A/B)
Sanling/Shrub Stratum	(Plot size:) -			1	Prova	alence Inde	Workshe	of
1	(1 101 3126.)				Total	% Cover of	N WOLKSHE	Aultiply by:
2.						OBL	species	x 1	=
3.						FACV	V species	x 2	=
4.						FAC s	species	x 3	=
5.						FACL	J species	x 4	=
				=Total Cove	er	UPL	species	x 5	=
Herb Stratum	(Plot size:)				Colun	nn totals	(A)	(B)
1						Preva	lence Index	= B/A =	
2									
3						Hydro	ophytic Veg	etation In	dicators:
4							Rapid test f	or hydroph	ytic vegetation
5							Dominance	index is </td <td>% ⊱∩*</td>	% ⊱∩*
7							Morphologi	al adaptat	ions* (provide
8.						_	supporting	data in Rer	narks or on a
9.							separate sh	eet)	
10.							Problematic	hydrophy	ic vegetation*
				=Total Cove	er		(explain)		
Woody Vine Stratum 1.	(Plot size:)				*Indicate present,	ors of hydric s unless distur	oil and wetla bed or probl	nd hydrology must be ematic
2.				=Total Cove	٢	– Hyo Veç Pre	drophytic getation sent?	<u>No</u>	
Remarks: (Include photo r Recently tilled agricultural	iumbers he	re or on a separa ground: 100%	te sheet)						

NWA048A

Profile Descr	iption: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)	
Depth	Matrix		Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-20	10YR 2/1	100					Clay Loam		
20-22	10VP 2/1	85	2 5V 1/2	15	р	М	Sandy Clay		
20 22	0.51(1/2	00	2.01 4/2	10	D	101			
22-25	2.5 ¥ 4/2	100					Sandy Clay		
25-27	2.5Y 5/3	100					Sandy Clay		
*** 0									
^Type: C =	Concentration, D	= Deple	etion, RM = Redu	iced Mati	rix, MS =	Masked	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:		6.		od Motrix	(64)	Indicators for Proble	ematic Hydric Solls*:	
His	siosof (AT)		Sa	nuy Gley		(34)		dox (A16) (LRR R, L, R)	
His	stic Epipedon (A2)		Sa	nay Read	DX (55)				
Bia	ACK HISTIC (A3)	4)	Str		itrix (56)			Masses (F12) (LRR K, L, R)	
Hy	arogen Suillae (Ar	4) \	Lo		ky Minera	(F1)	Very Snallow Da	remarka)	
3	auneu Layers (A5)	L0	nlotod M	eu Mallix	(FZ)		Temarks)	
20	ni Muck (A10)	< Surface		dox Dork	Surface	(E6)			
	ick Dark Surface ((Juliau (A12)				(FO)			
	ndy Mucky Minor	AIZ)	De	dox Door	ark Suriat		*Indicators of hydroph	nytic vegetation and wetland	
3a	m Mucky Peat or	Doot (S	3)		65510115 (FO)	problematic	esent, unless disturbed of	
Restrictive La	ayer (if observed):							
Type:	<u>۱</u>				-		Hydric Soil Presen	t? <u>No</u>	
Depth (inches					-				
Remarks:									
HYDROLO	GY								
Wetland Hyd	rology Indicators	5:	and the standard standard						
Primary Indica	ators (minimum of	one is r	equired; check a	ill that ap	<u>piy)</u>		Secondary Indica	ators (minimum of two required)	
Surface	e Water (A1)			Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)	
High W	/ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)	
Saturat	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)	
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)	
Sealme	ent Deposits (B2)			ROOTS (C	J3) So of Body	upped Iron	Saturation	on Visible on Aerial Imagery (C9)	
Algal M	At or Crust (B4)			Recent	Iron Redu	iction in T	Tilled Soils Geomori	ohic Position (D2)	
Iron De	(B5)			(C6)	non neut		FAC-Nei	utral Test (D5)	
Inunda	tion Visible on Ae	rial Imad	perv (B7)	Thin Mu	ick Surfac	e (C7)			
Sparse	lv Vegetated Con	cave Su	Irface (B8)	Gauge	or Well Da	ata (D9)			
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	6)		
Field Observ	ations:								
Surface Wate	r Present?	Yes	No	х	Depth (ii	nches):			
Water Table F	Present?	Yes	No	X	Depth (ii	nches):	We	tland Hydrology Present?	
Saturation Pre	esent?	Yes	No	Х	Depth (ii	nches):		No	
(includes capi	llary fringe)								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Domenter									
Remarks:									





TE TETI

A1





Feature ID: NWA048

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WETL	AND DETER		ION DATA	FORM -	Midwes	st Region	
Project/Site:	Lake Cha	arlotte	City/	County:	Marti	n	Sampling Date:	10/20/2022
Applicant/Owner:	L	ake Charlotte So	olar, LLC		State:	MN	Sampling Point	NWA049A
Investigator(s):	A	pryl Jennrich		Sectio	on, Townshi	p, Range:	Se	c.8 T103N R30W
Landform (hillslope, terrad	ce, etc.):	Plair	า	Local re	elief (conca	ve, conve	(, none):	None
Slope (%): 1	Lat:	43.73124		Long:	-94.44	81	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gl	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic co	nditions of th	e site typical for	this time c	of the year?	Yes (If no, expl	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumst	ances present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, explain a	any answers in remarks.)
SUMMARY OF FINI	DINGS							
Hydrophytic Vegetat	ion Present?	No						
Hydric Soil Present?	1	No		Is the sa	mpled area	a within a	wetland?	No
Wetland Hydrology F	Present?	No		lf yes, op	tional wetla	nd site ID:		
Remarks:								
Recently tilled agricultur	ral field. Re	cently harvested	l agricultur	al field.				
VEGETATION US	e scientinc	names of pla	Ants.	Dominant	Indicator	Domi	anco Tost Wor	kshoot
Tree Stratum (P	lot size.)	% Cover	Species	Status	Domin		KSHEEL
<u>1</u>	101 3126.	/		opecies	Olalus	Numbe	er of Dominant Sp	Decies
2.						that an	UDL, FACIV, O	FAC. <u> </u>
3						Total N Specie	Number of Domina s Across All Strat	ant ta: <u> </u>
4 5						Percer	nt of Dominant Sp e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
		-		=Total Cove	r			
Sapling/Shrub Stratum	(Plot size: _)				Preva	lence Index Wo	orksheet
1						Total	% Cover of:	Multiply by:
2								X1 =
3								
5						FACL	l species	x 4 =
·				=Total Cove	r	UPLs		x 5 =
Herb Stratum	(Plot size:) -				Colun	nn totals	(A) (B)
1.	· -	/				Preva	lence Index = B	/A =
2.								
3.						Hydro	ophytic Vegetat	ion Indicators:
4.							Rapid test for hy	drophytic vegetation
5							Dominance test	is >50%
6							Prevalence inde	ex is ≤3.0*
7							Morphological a	daptations* (provide
8						_	supporting data	In Remarks or on a
9 10							Problematic byd	Irophytic vegetation*
10				-Total Cove	r	_	(evolain)	
Woody Vine Stratum 1.	(Plot size: _)				*Indicato present,	ors of hydric soil ar unless disturbed o	nd wetland hydrology must be or problematic
2.				=Total Cove	r	– Hyo Veç Pre	drophytic getation sent?	<u>No</u>
Remarks: (Include photo Recently tilled agricultural	numbers here	∋ or on a separat round: 100%	te sheet)					<u>110</u>

NWA049A

Profile Descr	iption: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)	
Depth	Matrix		Re	dox Feat	tures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-12	10YR 2/1	100					Clay Loam		
12-14	10YR 2/1	90	2.5Y 5/2	10	D	М	Sandy Clay		
14.20	2 5V 6/3	100		-			Sandy Clay		
14-20	2.51 0/5	100					Sanuy Clay		
+T 0									
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix	
Hydric Soil	Indicators:		0			(0.4)	Indicators for Proble	ematic Hydric Soils*:	
His	itosol (A1)		Sa	ndy Gley	ed Matrix	(S4)		dox (A16) (LRR K, L, R)	
His	tic Epipedon (A2)		Sa	ndy Redo	DX (S5)		Dark Surface (S	() (LRR K, L)	
Bla	ick Histic (A3)	•	Str	ipped Ma	atrix (S6)			Masses (F12) (LRR K, L, R)	
Hy	drogen Sulfide (A	4)	Lo:	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)	
Str	atified Layers (A5)	Lo:	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)	
2 c	m Muck (A10)	0	De	pleted Ma	atrix (F3)				
De	pleted Below Dari		e (A11) Re	dox Dark		(F6)			
Ini	ck Dark Surface (A12)	De	pleted Da	ark Surfac	Ce (F7)	*Indicators of hydrop	nytic vegetation and wetland	
Sa	ndy Mucky Minera	al (S1) Dect (O	Re	dox Depr	essions (F8)	problematic	esent, unless disturbed or	
50	m Mucky Peat or	Peat (S	3)			1	· · · · · · ·		
Restrictive La	ayer (if observed):							
Туре:					-		Hydric Soil Presen	t? <u>No</u>	
Depth (inches):				-				
Remarks:						•			
HYDROLO	GY								
Wetland Hyd	rology Indicators	5:							
Primary Indica	ators (minimum of	one is r	equired; check a	all that ap	ply)		Secondary Indica	ators (minimum of two required)	
Surface	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)	
High W	ater Table (A2)			True Aq	uatic Plai	nts (B14)	Drainage	e Patterns (B10)	
Saturat	ion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)	
Water I	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)	
Sedime	ent Deposits (B2)			Roots (C	C3)		Saturatio	on Visible on Aerial Imagery (C9)	
Drift De	eposits (B3)			Presenc	e of Red	uced Iron	(C4) Stunted	or Stressed Plants (D1)	
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in	Tilled Soils Geomor	phic Position (D2)	
Iron De	posits (B5)	iol Imo		(C6)	ol Curto		FAC-Ne	utral Test (D5)	
Inunda	tion visible on Ae	nai imag				ce (C7)			
Sparse	Stained Leaves (F			Othor (E		ala (D9) Pomorko	-)		
						incinai Ka	<i>יו</i>		
Field Observa	ations:	Vaa	No	v	Dooth (i				
Water Table F	Present?	T US Yee			Depth (ii	nches):	We	tland Hydrology	
Saturation Pre	sent?	Yes	No	X	Depth (i	nches):		Present?	
(includes capi	llary fringe)	. 00							
Describe Reco	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks:									









Feature ID: NWA049

- Survey Area
 - Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



Aerial Photograph Review

	WETL	AND DETER	MINATI	ON DATA	FORM -	Midwes	t Region		
Project/Site:	Lake Cha	rlotte	City/	County:	Marti	n	Sampling D	Date:	10/20/2022
Applicant/Owner:	La	ake Charlotte Sc	olar, LLC		State:	MN	Sampling P	oint:	NWA050A
Investigator(s):	Ар	ryl Jennrich		Sectio	on, Townshi	p, Range:		Sec.17 T10	3N R30W
Landform (hillslope, terra	ce, etc.):	Plain	1	Local re	elief (conca	ve, convex	, none):		None
Slope (%): 1	Lat:	43.73109		Long:	-94.450	003	Datum:	V	VGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	1	NA
Are climatic/hydrologic co	onditions of the	site typical for t	this time o	of the year?	Yes (lf no, expla	ain in remar	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	imstances p	resent? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expla	ain any ans	wers in remarks.)
SUMMARY OF FIN	DINGS								
Hydrophytic Vegeta	tion Present?	No							
Hydric Soil Present?	?	No		Is the sa	mpled area	a within a	wetland?	1	10
Wetland Hydrology	Present?	No		lf yes, op	tional wetla	nd site ID:			
Remarks:									
	ral field. Rec	ently harvested	agricultur	al field.					
VEGETATION US		names or pla	Absolute	Dominant	Indicator	Domir	anco Tost	Worksheet	
Tree Stratum (F	Plot size.)	% Cover	Species	Status	Donni		WorkSheet	
1.		/		opooloo	Clarab	Number	er of Dominar	nt Species	0 (A)
2.						Tatal	bursh sa sí Da		()
3.						Specie	s Across All	Strata:	(B)
5.						Percer that are	nt of Dominar e OBL, FACV	nt Species V, or FAC:	% (A/B)
		-		=Total Cove	r				
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index	www.workshee	t
1							% Cover of:	M	ultiply by:
2								X1=	
3 4						FAC S	necies	x 3 -	
5.						FACU	species	x 4 =	
-				=Total Cove	r	UPLs	pecies	x 5 =	
Herb Stratum	(Plot size:) —				Colum	nn totals	(A)	(B)
1.						Preva	lence Index	= B/A =	
2.									
3.						Hydro	ophytic Veg	etation Indi	cators:
4.							Rapid test for	or hydrophyt	ic vegetation
5							Dominance	test is >50%	5
6							Prevalence	index is ≤3.0)*
7							Morphologic	cal adaptatio	ns* (provide
8								ata in Rema	arks or on a
9 10							Problematic	eel) bydrophytic	vegetation*
10				-Total Cove	r			nyuropnyuc	vegetation
Woody Vine Stratum 1.	(Plot size:)			ſ	*Indicato present,	ors of hydric s unless disturl	oil and wetlan bed or probler	d hydrology must be natic
2.				=Total Cove	r	– Hyo Veç Pre	drophytic jetation sent?	<u>No</u>	
2 Remarks: (Include photo Recently tilled agricultura	numbers here I field. Bare gr	or on a separat	e sheet)	=Total Cove	r	Hyo Veç Pre	drophytic jetation sent?	<u>No</u>	

NWA050A

•	Matrix			Redox Fea	tures						
(Inches)	Color (moist)	%	Color (moist)	noist) % Type*			Textur	ture	Remarks		
0-20	10YR 2/1	100	. ,				Clay Loa	ım			
20.21	2.5 × 2/2	100					Sandy C	21/			
20-21	2.51 5/2	100					Sandy C	ay			
21-27	2.5Y 6/3	100			-		Sandy Clay Tra	ce Gravel			
*Type: C =	Concentration, D	= Deple	etion, RM = Re	duced Mat	trix, MS =	Masked	Sand Grains.	**Locatio	n: PL = Pore Lining, M = Ma		
Hydric Soil	Indicators:		_				Indicators f	or Proble	matic Hydric Soils*:		
His	stosol (A1)		S	andy Gley	ed Matrix	(S4)	Coast Prairie Redox (A16) (LRR K, L, R)				
His	stic Epipedon (A2)		S	andy Red	ox (S5)		Dark S	urface (S7)) (LRR K, L)		
Bla	ack Histic (A3)		S	tripped M	atrix (S6)		Iron-Ma	Iron-Manganese Masses (F12) (LRR K, L, R)			
Hy	drogen Sulfide (A	4)	L	oamy Muo	cky Minera	al (F1)	Very S	Very Shallow Dark Surface (TF12)			
Str	ratified Layers (A5)	L	oamy Gle	yed Matrix	(F2)	Other (explain in i	remarks)		
2 c	cm Muck (A10)		C	epleted N	latrix (F3)	(— -)					
De	epleted Below Darl	k Surfac	e (A11) R	ledox Darl	k Surface	(F6)					
Th	ick Dark Surface (A12)	C	epleted D	ark Surfac	ce (F7)	*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic				
Sa	indy Mucky Minera	al (S1)	F	ledox Dep	ressions ((F8)					
5 c	cm Mucky Peat or	Peat (S	3)				problematic				
estrictive L	ayer (if observed	l):									
уре:					_		Hydric Sc	oil Present	? <u>No</u>		
epth (inches	s):				_						
Remarks:											
emarks:											
emarks:	GY					I					
emarks: IYDROLO Vetland Hyd	GY Irology Indicators	5:				<u> </u>					
temarks: IYDROLO /etland Hyd rimary Indica	GY Irology Indicators ators (minimum of	s: one is r	equired; check	all that ap	oply)		Second	lary Indicat	ors (minimum of two require		
IYDROLO IYDROLO Vetland Hyd rimary Indica Surfac	GY Irology Indicators ators (minimum of e Water (A1)	s: one is r	equired; check	<u>all that a</u>	oply) ; Fauna (B	313)	Second	lary Indicat	ors (minimum of two require Soil Cracks (B6)		
IYDROLO Vetland Hyd rimary Indica Surfac High W	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)	s: one is r	equired; check	all that an Aquatic	<u>oply)</u> : Fauna (B quatic Plar	1 313) nts (B14)	<u>Seconc</u>	lary Indicat Surface S Drainage	ors (minimum of two require Soil Cracks (B6) Patterns (B10)		
emarks: IYDROLO /etland Hyd rimary Indica Surfac High W Satura	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)	s: one is r	equired; check 	<u>all that ar</u> Aquatic True Ac Hydrog	oply) Fauna (B quatic Plai en Sulfide	1 313) nts (B14) : Odor (C	<u>Seconc</u>	lary Indicat Surface S Drainage Dry-Seas	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2)		
IYDROLO /etland Hyd /rimary Indica Surface High W Satura Water	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	s: one is r	equired; check 	<u>all that a</u> Aquatic True Ao Hydrog Oxidize	oply) : Fauna (B quatic Plai en Sulfide ed Rhizosp	13) hts (B14) c Odor (C oheres or	<u>Seconc</u> 	lary Indicat Surface S Drainage Dry-Seas Crayfish I	ors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8)		
IYDROLO Vetland Hyd rimary Indica Surfac High W Satura Water Sedim	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	s: one is r	equired; check	<u>all that an</u> Aquatic True Ao Hydrog Oxidize Roots (<u>oply)</u> : Fauna (B quatic Plai en Sulfide id Rhizosp C3)	113) hts (B14) Odor (C oheres or	<u>Seconc</u> 1) Living	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturatio	ors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery		
emarks: IYDROLO /etland Hyd rimary Indica Surfac High W Satura Water Sedimo Drift D	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s: one is r	equired; check	all that an Aquatic True Ac Hydrog Oxidize Roots (Presen	<u>oply)</u> Fauna (B quatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) nts (B14) Odor (C bheres or uced Iron	Second 1) Living (C4)	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation	rors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1)		
IYDROLO Vetland Hyd rimary Indica Surfac High W Satura Water Sedima Drift Da Algal M	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (P5)	s: one is r	equired; check	Aquation Aquation True Aquation Hydrog Oxidize Roots (Presen Recent	oply) Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu Iron Redu	13) nts (B14) Odor (C oheres or uced Iron uction in	<u>Seconc</u> 1) Living (C4) Filled Soils	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2)		
Itemarks: Itemarks: Vetland Hyd Vetland Hyd Surfac Surfac High W Satura Sedime Drift De Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Acc	s: one is r	equired; check	all that ag Aquatic True Ac Hydrog Oxidize Roots (Presen Recent (C6)	oply) Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu	B13) Ints (B14) Odor (C Oheres or uced Iror uced Iror uction in	Seconc 1) Living (C4) Filled Soils	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
IYDROLO Vetland Hyd Vetland Hyd Vetland Hyd Satura Satura Satura Orift De Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5) tion Visible on Ae	s: one is r rial Imag	equired; check	all that ag Aquatic True Ac Hydrog Oxidize Roots (Presen Recent (C6) Thin Mu	oply) Fauna (B quatic Plan en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac	B13) hts (B14) Odor (C oheres or uced Iron uced Iron uced Iron ce (C7) ota (D0)	<u>Seconc</u> 1) Living (C4) Filled Soils	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	Cors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
emarks: YDROLO /etland Hyd rimary Indica Surface High W Satura Water Drift De Algal M Iron De Inunda Sparse Water	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae by Vegetated Con Stained Leaves (B3)	s: one is r rial Imag cave Su	equired; check	all that an Aquatic True Ac Hydrog Oxidize Roots (Presen Recent (C6) Thin Mu Gauge	<u>oply)</u> : Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da	113) hts (B14) Odor (C oheres or uced Iron uction in ce (C7) ata (D9) Pemarka	Second 1) Living (C4) Tilled Soils	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	ors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
IYDROLO Vetland Hyd rimary Indica Surfac High W Satura Vater Sedime Algal M Iron De Inunda Sparse Water-	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (B	s: one is r rial Imag cave Su 39)	equired; check	all that an Aquatic True Ac Hydrog Oxidize Roots (Presen Recent (C6) Thin Ma Gauge Other (<u>oply)</u> : Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in	13) hts (B14) Odor (C oheres or uced Iron uction in ce (C7) ata (D9) Remarks	Second Second	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	ors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
IYDROLO Vetland Hyd rimary Indica Surfac High W Satura Water Sedima Inunda Iron De Inunda Sparse Water- ield Observ	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Brocent2	s: one is r rial Imag cave Su 39)	equired; check	all that ag Aquatic True Ad Hydrog Oxidize Roots (Presen Recent (C6) Thin Mu Gauge Other (oply) Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in	313) Ints (B14) Odor (C oheres or uced Iror uction in ⁻ ce (C7) ata (D9) Remarks	Signature Sciences Sc	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
temarks: IYDROLO Vetland Hyd Trimary Indica Surfaca High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: rr Present?	s: one is r rial Imag cave Su 39) Yes	equired; check	all that ag Aquatic True Ac Hydrog Oxidize Roots (Presen Recent (C6) Thin Mi Gauge Other (X	pply) Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in	B13) hts (B14) Odor (C oheres or uced Iror uced Iror uced Iror ata (D9) Remarks nches): nches):	Second Second	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
IYDROLO Vetland Hyd Yrimary Indica Surface High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate Atter Table F aturation Pre	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: ar Present? Present?	s: one is r rial Imag cave Su 39) Yes Yes Yes	equired; check	Aquatic True Ad True Ad Hydrog Oxidize Roots (Presen Recent (C6) Thin Mu Gauge Other (X X	pply) Fauna (B quatic Plan en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (i Depth (i	113) hts (B14) codor (C oheres or uced Iron uced Iron uction in ce (C7) ata (D9) Remarks nches): nches):	Second 1) Living (C4) Filled Soils S)	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	Cors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
Remarks: IYDROLO Vetland Hyd Yrimary Indica Surfac High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre ncludes capi	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? esent? esent? esent?	s: one is r rial Imag cave Su 39) Yes Yes Yes	equired; check	Aquatic True Aquatic True Ad Hydrog Oxidize Roots (Presen Recent (C6) Thin Mu Gauge Other (X X X	<u>oply)</u> Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	113) hts (B14) Odor (C oheres or uced Iron uced Iron uction in ce (C7) ata (D9) Remarks nches): nches): nches):	Second 1) Living (C4) Tilled Soils S)	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	Cors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5) Iand Hydrology Present? No		
Remarks: IYDROLO Vetland Hyd Yrimary Indica Surfac High W Satura Water Drift De Algal M Iron De Inunda Sparse Water- ield Observ Jurface Wate Jurface Wate Jurface Wate Jurface Rec Nater Table F aturation Pre ncludes capi Pescribe Rec	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? illary fringe) orded Data (stream	s: one is r rial Imag cave Su 39) Yes Yes Yes	equired; check	Aquatic True Aquatic True Aquatic Hydrog Oxidize Roots (Presen Recent (C6) Thin Mu Gauge Other (X X X	<u>oply)</u> Fauna (B quatic Plar en Sulfide ed Rhizosp C3) ce of Redr Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii	13) hts (B14) Odor (C oheres or uced Iron uced Iron uced Iron ce (C7) ata (D9) Remarks nches): nches): revious in revious in	Second Second	ary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	Cors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
Remarks: IYDROLO Vetland Hyd Yrimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- Tield Observ Vater Table F aturation Pre ncludes capi vescribe Rec	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes Yes m gauge	equired; check	Aquatic True Aquatic True Aquatic Hydrog Oxidize Roots (Presen Recent (C6) Thin Ma Gauge Other (X X X x	pply) Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii 	B13) Ints (B14) Odor (C oheres or uced Iror uced Iror uction in ce (C7) ata (D9) Remarks nches): nches): nches): revious in	Second 1)	lary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		
Remarks: IYDROLO Vetland Hyd 'rimary Indica Surface High W Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Water- ield Observ urface Wate /ater Table F aturation Pre ncludes capi 'escribe Rec	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: er Present? Present? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; check	Aquatic True Ac True Ac Hydrog Oxidize Roots (Presen Recent (C6) Thin Mc Gauge Other (X X X rell, aerial	pply) Fauna (B quatic Plai en Sulfide ed Rhizosp C3) ce of Redu Iron Redu uck Surfac or Well Da Explain in Depth (ii Depth (ii Depth (ii Depth (ii) Depth (ii)	B13) Ints (B14) Odor (C oheres or uced Iror uction in ce (C7) ata (D9) Remarks nches): nches): 	Second 1)	ary Indicat Surface S Drainage Dry-Seas Crayfish I Saturation Stunted c Geomorp FAC-Neu	tors (minimum of two require Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) In Visible on Aerial Imagery or Stressed Plants (D1) hic Position (D2) tral Test (D5)		









40



1156

E.

1154



Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500



Feature ID: NWA050

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate



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Aerial Photograph Review

Project/Site:	Lake C	harlotte		City/	County:	Mart	in	Sampling	Date:	10/21/2022	
Applicant/Owner:		Lake Charl	otte S	olar, LLC	· _	State:	MN	Sampling	Point:	NWA052A	
		Apryl Jennr	ich		Secti	on, Townsh	ip, Range:		Sec.16 T	103N R30W	
Landform (hillslope, terra	ace, etc.):		Plai	n	Local	relief (conca	ve, conve	, none):		Concave	
Slope (%): 1 Lat:		43.71768			Long:	-94.43	181 Datum:		WGS84		
Soil Map Unit Name:	Crippin lo	am, 1 to 3 p	ercent	slopes		NW	/I Classific	ation:		NA	
Are climatic/hydrologic c	onditions of	the site typi	cal for	this time of	of the year?	Yes	(If no, expl	ain in rema	rks)		
Are vegetation X	, soil	, or hydr	ology		Significantly	/ disturbed?	Are "	normal circ	umstances	s present? N	lo
Are vegetation	, soil	, or hydr	ology		naturally pr	oblematic?	(If ne	eded, exp	lain any a	nswers in rema	rks.)
SUMMARY OF FIN	IDINGS										
Hydrophytic Vegeta	ation Presen	t?	No								
Hydric Soil Present	t?	_	No		Is the s	ampled are	a within a	wetland?		No	
Wetland Hydrology	Present?		No		lf yes, o	ptional wetla	and site ID:	d site ID:			
Remarks:											
	se scienti	ic names	ofnl	ants							
		io nameo		Absolute	Dominant	Indicator	Domii	nance Tes	t Workshe	et	
Tree Stratum	Plot size:	30)	% Cover	Species	Status					
1.	·						Numbe that ar	er of Domina e OBL. FAC	ant Species W. or FAC:	0 (A)	
2.							Total N	lumber of D	ominant		
3.							Specie	s Across Al	l Strata:	(B)	
4							Percer	t of Domina	ant Species		
5							that ar	e OBL, FAC	W, or FAC:	<u>0%</u> (A/B)
Cooling/Charle Ctrature			, -		= I otal Cove	er	Dreve				
Sapling/Shrub Stratum	(Plot size	15	_)				Total		ex worksn	eet Multiply by:	
2.							OBL	species	0 x 1	= 0	
3.							FACV	v species	0 x 2	2 = 0	
4.							FAC s	species	0 x 3	= 0	
5.							FACL	species	0 x 4	= 0	
			-		=Total Cove	er	UPLs	pecies	50 x 5	= 250	
Herb Stratum	(Plot size	5)				Colun	nn totals	50 (A	A) 250 (E	3)
1. Zea mays				50	Y	UPL	Preva	lence Inde	x = B/A =	5	
2											
3							Hydro	ophytic Ve	getation li	ndicators:	
4								Rapid test	tor nyarop		
5 6								Prevalence	e index is <	0 /0 :3 0*	
7.								Morpholog	ical adapta	itions* (provide	
8.								supporting	data in Re	marks or on a	
9.								separate s	heet)		
10.								Problemat	ic hydrophy	/tic vegetation*	
				50	=Total Cove	er		(explain)			
Woody Vine Stratum	(Plot size	15)				*Indicate present,	ors of hydric unless distu	soil and wet irbed or prob	and hydrology mus lematic	st be
2.					=Total Cove	er	Hyo Veç	drophytic getation			
							Pre	sent?	No		
Remarks: (Include photo	o numbers h	ere or on a s	separa	ite sheet)							

NWA052A

Profile Descr	iption: (Describe	to the	depth needed t	o docum	ent the i	ndicator	or confirm the absence	of indicators.)		
Depth <u>Matrix</u>			Re	edox Feat	tures					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-20	10YR 2/1	100					Clay			
20-27	10VP 2/2	95	2.57 3/2	5	П	м	Clay			
20-27	1011 2/2	90	2.51 5/2	3	D	IVI	Ciay			
27-35	2.5Y 6/3	100					Clay			
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	uced Mat	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix		
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:		
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)		
His	tic Epipedon (A2)	1	Sa	ndy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)		
Bla	ack Histic (A3)		Sti	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)		
Hy	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)		
Str	atified Layers (A5)	Lo	amy Gley	ved Matrix	(F2)	Other (explain in remarks)			
2 c	m Muck (A10)	,	 De	pleted M	atrix (F3)	()	、 、			
De	pleted Below Darl	k Surfac	e (A11) Re	dox Dark	Surface	(F6)				
Thi	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydrophytic vegetation and wetland			
Sa	ndv Mucky Minera	al (S1)		dox Deni	ressions (F8)				
0u	m Mucky Peat or	Peat (S	3)			10)	problematic			
	ayer (if observed	l):								
Type:	<u>`````````````````````````````````````</u>				-		Hydric Soil Presen	t? <u>No</u>		
Depth (inches					_					
Remarks:										
HYDROLO	GY									
Wetland Hyd	rology Indicators	8:								
Primary Indica	ators (minimum of	one is r	equired; check a	all that ap	ply)		Secondary Indica	ators (minimum of two required)		
Surface Water (A1)				Aquatic	Fauna (B	513)	Surface Soil Cracks (B6)			
High Water Table (A2)				True Aq	uatic Plar	nts (B14)) Drainage Patterns (B10)			
Saturation (A3)				Hydroge	en Sulfide	Odor (C	C1) Dry-Season Water Table (C2)			
Water Marks (B1)				Oxidize	d Rhizosp	heres on	n Living Crayfish Burrows (C8)			
Sedime	ent Deposits (B2)		Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)			
Drift De	eposits (B3)		Presenc	ce of Redu	uced Iron	(C4) Stunted or Stressed Plants (D1)				
Algal M	lat or Crust (B4)		Recent	Iron Redu	uction in T	Tilled Soils Geomor	phic Position (D2)			
Iron De	eposits (B5)			(C6)			FAC-Net	utral Test (D5)		
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	ce (C7)				
Sparse	ly Vegetated Con	cave Su	rface (B8)	Gauge	or Well Da	ata (D9)				
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	s)			
Field Observ	ations:									
Surface Wate	r Present?	Yes	No	Х	Depth (ii	nches):	14/0	tland Hydrology		
Water Table F	Present?	Yes	No	Х	Depth (ii	nches):	vve	Present?		
Saturation Pre	esent?	Yes	No	X	Depth (ii	nches):		No		
(includes capi	llary tringe)									
Describe Rec	orded Data (strea	m gauge	e, monitoring we	II, aerial p	onotos, pr	evious in	spections), if available:			
Pomorke										
INCINGINS.										




Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWA052

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WETL	AND DETER	MINAT	ON DATA	FORM -	Midwes	st Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Marti	n	Sampling Date:	10/21/2022
Applicant/Owner:	L	ake Charlotte Sc	olar, LLC		State:	MN	Sampling Point:	NWA053A
Investigator(s):	Ap	oryl Jennrich		Sectio	on, Townshi	p, Range:	Sec.1	16 T103N R30W
Landform (hillslope, terra	ice, etc.):	Plain	l	Local r	elief (conca	ve, conve	, none):	None
Slope (%): 1	Lat:	43.72094		Long:	-94.432	247	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic c	onditions of the	e site typical for t	this time c	of the year?	Yes	lf no, expl	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumstar	nces present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain an	y answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present	?	No		Is the sa	mpled area	a within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, op	otional wetla	nd site ID:	:	
Remarks:								
Pocontly tilled agriculty	ural field Po	contly hanvastad	ogricultur	al field				
Recently lined agricult			agricultur	ai neiu.				
VEGETATION Us	se scientific	names of pla	ints.					
			Absolute	Dominant	Indicator	Domii	nance Test Work	sheet
Tree Stratum (I	Plot size:)	% Cover	Species	Status	Numbe	er of Dominant Spe	cies
2.						Total N	Jumber of Dominar	t
3						Specie	s Across All Strata	0 (B)
5.						Percer that are	nt of Dominant Spe e OBL, FACW, or F	cies FAC: <u>%</u> (A/B)
		_		=Total Cove	r			
Sapling/Shrub Stratum	(Plot size:)				Preva	lence Index Wor	ksheet
1						Total	% Cover of:	Multiply by:
2						OBL		x 1 =
3								x 2 =
4 5								x 4 -
J				=Total Cove	r	UPLS		× 5 =
Herb Stratum	(Plot size:) –				Colun	nn totals	(A) (B)
1.	·	,				Preva	lence Index = B/A	(// (//
2.						_		
3.						Hydro	ophytic Vegetatio	on Indicators:
4.							Rapid test for hyd	rophytic vegetation
5							Dominance test is	s >50%
6							Prevalence index	is ≤3.0*
7						_	Morphological ada	aptations* (provide
8							supporting data ir	Remarks or on a
9							separate sheet)	
10							Problematic hydro	ophytic vegetation*
				=Total Cove	r		(explain)	
Woody Vine Stratum 1.	(Plot size:)				*Indicate present,	ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2.				=Total Cove	r	– Hyo Veç Pre	drophytic getation sent? <u>N</u>	0
Remarks: (Include photo Recently tilled agricultura	numbers here al field. Bare gi	or on a separat	e sheet)					

NWA053A

Depth	Motrix		П	day Fact				
(Inchec)	<u>Matrix</u>		<u>R</u> (edox Feat	ures			
(incries)	Color (moist)	%	Color (moist)	%	I ype*	Loc**	lexture	Remarks
0-16	10YR 2/1	100					Clay	
16-19	2.5Y 3/3	100					Sandy Clay	
19-22	2.5Y 6/3	100					Clay	
*Type: C =	Concentration, D	= Deple	tion, RM = Red	uced Mati	ix, MS =	Masked \$	Sand Grains. **Lo	ocation: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for P	roblematic Hydric Soils*:
- His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairi	e Redox (A16) (LRR K, L, R)
His	stic Epipedon (A2)	1	Sa	ndy Redo	ox (S5)		Dark Surfac	e (S7) (LRR K, L)
Bla	ack Histic (A3)		St	ipped Ma	trix (S6)		Iron-Manga	nese Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallo	w Dark Surface (TF12)
St	ratified Layers (A5)	Lo	amy Gley	ed Matrix	: (F2)	Other (expla	ain in remarks)
2 0	cm Muck (A10)		De	pleted Ma	atrix (F3)			
De	pleted Below Darl	k Surfac	e (A11) Re	dox Dark	Surface	(F6)		
Th	ick Dark Surface ((A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hy	drophytic vegetation and wetland
Sa	indy Mucky Minera	al (S1)	Re	dox Depr	essions (F8)	hydrology must l	be present, unless disturbed or
5 0	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive I	aver (if observed).						
Tvne:		·)·					Hydric Soil Pr	acant?
Depth (inches	s): 							
Depth (inches Remarks:	s): 							
Depth (inches Remarks:	s):							
Depth (inches Remarks:	s):							
Depth (inches Remarks:	<u></u>							
Depth (inches Remarks: HYDROLO Wetland Hyd	GY	<u> </u>						
Depth (inches Remarks: HYDROLO Netland Hyd Primary Indica	GY Irology Indicators	s: one is r	equired; check	all that ap	<u></u>		Secondary I	ndicators (minimum of two required)
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indic: Surfac	GY GY Irology Indicators ators (minimum of e Water (A1)	s: one is r	equired; check :	all that ap Aquatic	<u>ply)</u> Fauna (B	13)	<u>Secondary I</u> Sur	ndicators (minimum of two required) face Soil Cracks (B6)
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High V	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2)	s: one is r	equired; check	all that ap Aquatic True Aq	<u>ply)</u> Fauna (B uatic Plar	-13) hts (B14)	<u>Secondary I</u> Sur Dra	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10)
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High V Satura	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)	s: one is r	equired; check :	all that ap Aquatic True Aq Hydroge	<u>plv)</u> Fauna (B uatic Plar en Sulfide	-13) nts (B14) Odor (C	<u>Secondary I</u> Sur Dra 1)Dry	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)
Depth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	s: one is r	equired; check :	all that ap Aquatic True Aq Hydroge Oxidized	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C oheres on	Secondary I <u>Secondary I</u> Sur Dra 1) Living Cra	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
Depth (inches Remarks: APPROLO Vetland Hyd Primary Indica Surfac High V Satura Satura Sedim	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	s: one is r	equired; check : 	all that ap Aquatic True Aq Hydroge Oxidized Roots (0	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3)	13) hts (B14) Odor (C bheres on	Secondary I Secondary I Sur Dra 1) Living Sat	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9
Depth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Satura Satura Sedim Drift D	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s: one is r	equired; check	all that ap Aquatic True Aq Hydroge Oxidized Roots (0 Presenc	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu	13) hts (B14) Odor (C oheres on	Secondary ISurDra 1)Dry LivingCraSat (C4)Stu	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1)
Pepth (inches Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Satura Water Sedim Drift D Algal M	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	s: one is r	equired; check a	Aquatic Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent	<u>ply)</u> Fauna (B uatic Plar on Sulfide d Rhizosp C3) co of Redu Iron Redu	13) hts (B14) Odor (C oheres on uced Iron uction in T	Secondary I Sur Dra 1) Living CC4 Sur Geo	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) pmorphic Position (D2)
Depth (inches Remarks: Remarks: Attemption Primary Indica Primary Indica Surfac Surfac High V Satura Satura Satura Unift D Algal M Iron Do	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	s: one is r	equired; check	Aquatic Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6)	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu	13) hts (B14) Odor (C oheres on uced Iron uction in T	Secondary I Sur Dra 1) Living (C4) Sur Filled Soils Gec FAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Pepth (inches Remarks: Attand Hyd Primary Indic: Surfac High V Satura Water Sedim Drift D Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae	s: one is r	equired; check : 	all that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp 23) 23) 23 iron Redu ck Surfac	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7)	Secondary I Sur Sur I) Living CC4) Sur Gec FAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Depth (inches Remarks: APPROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con	s: one is r rial Imag cave Su	gery (B7)	all that ap Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu Gauge o	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9)	Secondary I Sur Sur Dra 1) Living (C4) Stur Filled Soils FAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Pepth (inches Remarks: Armark:	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E	s: one is r rial Imag cave Su 39)	gery (B7)	all that ap Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu Gauge C Other (E	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu Iron Redu Iron Redu ck Surfac or Well Da	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	Secondary ISurDra 1)Dry LivingCraSat (C4)Stu Filled SoilsGecFAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Depth (inches Remarks: Remarks: AYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Da Inunda Sparse Water- Field Observ	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations:	rial Imag cave Su 39)	equired; check : 	All that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge c Other (E	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu Iron Redu ck Surfac or Well Da Explain in	13) hts (B14) Odor (C oheres on uced Iron uction in T uce (C7) ata (D9) Remarks	Secondary ISurDra 1)Dry LivingCraSat (C4)Stu Filled SoilsGeoFAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
Depth (inches Remarks: Remarks: Attand Hyd Primary Indic: Surfac High V Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Water- Field Observ	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E r Present?	rial Imag cave Su 39)	gery (B7)	all that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge c Other (E	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in	13) hts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks hches):	Secondary ISurDra 1)Dry LivingCraSatu (C4)Stu Filled SoilsGecFAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5)
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Pepth (inches Remarks: Attand Hyd Primary Indica Surfac High V Satura Water Drift D Algal M Iron De Inunda Sparse Water- Field Observ Surface Water Saturation Pro	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E ations: rr Present? esent? esent?	rial Imag cave Su 39) Yes Yes Yes	gery (B7)	Aquatic True Aq Hydroge Oxidized Roots (C Presend (C6) Thin Mu Gauge c Other (E X X	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches):	Secondary ISurDra 1)Dry LivingCraSat (C4)Stu Filled SoilsGedFAG	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5) Wetland Hydrology Present?
Depth (inches Remarks: HYDROLO Netland Hyd Primary Indica Surfac High W Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse Water- Field Observ Surface Wate Vater Table F Saturation Pre- includes cap	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Aat or Crust (B4) eposits (B5) tion Visible on Ae- ely Vegetated Con Stained Leaves (E rations: or Present? Present? esent? illary fringe)	rial Imag cave Su 39) Yes Yes Yes	equired; check : 	All that ap Aquatic True Aq Hydroge Oxidized Roots (C Presend Recent (C6) Thin Mu Gauge C Other (E X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) e of Redu Iron Redu iron Redu ck Surfac or Well Da explain in Depth (in Depth (in	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): nches):	Secondary ISurDra 1)Dry LivingCraSat (C4)Stu Filled SoilsGec	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5) Wetland Hydrology Present?
Depth (inches Remarks: TYDROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron De Inunda Sparse Water- Field Observ Surface Water Saturation Pro- includes cap Describe Rec	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E vations: r Present? Present? esent? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	equired; check : gery (B7) urface (B8) No No o, monitoring we	All that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu Gauge c Other (E X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C oheres on uced Iron uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): evious in	Secondary ISurDra 1)Dry LivingCraSat (C4)StuFAC	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5) Wetland Hydrology Present?
Depth (inches Remarks: Attraction Production Petland Hyd Primary Indica Surfac Migh W Satura Water Sedim Drift D Satura Water Sedim Iron De Inunda Sparse Water- Field Observ Surface Water Saturation Pro- includes cap Describe Rec	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Ae ely Vegetated Con Stained Leaves (E rations: r Present? Present? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes Yes m gauge	equired; check a	Aquatic True Aq Hydroge Oxidized Roots (C Presenc (C6) Thin Mu Gauge C Other (E X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in bootos, pr	13) hts (B14) Odor (C oheres on uced Iron uction in 1 ce (C7) ata (D9) Remarks nches): nches): nches): evious in	Secondary ISurDra 1)Dry LivingCraSatu (C4)Stu [Filled SoilsGec]	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5) Wetland Hydrology Present?
Pepth (inches Remarks: APPROLO Vetland Hyd Primary Indica Surfac High V Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse Water- Field Observ Surface Water Field Observ Surface Water Field Observ Surface Water Coscribe Reco	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aele lay Vegetated Con Stained Leaves (E rations: r Present? esent? esent? illary fringe) orded Data (stream	rial Imag cave Su 39) Yes Yes Yes m gauge	gery (B7)	all that ap Aquatic True Aq Hydroge Oxidized Roots (C Present (C6) Thin Mu Gauge C Other (E X X X	ply) Fauna (B uatic Plar en Sulfide d Rhizosp 23) e of Redu Iron Redu ck Surfac or Well Da Explain in Depth (in Depth (in Depth (in Depth (in	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks nches): nches): evious in	Secondary ISurDra 1)Dry LivingCraSat (C4)Stu Filled SoilsGed	ndicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9 nted or Stressed Plants (D1) omorphic Position (D2) C-Neutral Test (D5) Wetland Hydrology Present?

















146

<u>4949</u>

ARAS

-1933



Feature ID: NWA053

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

	WET	LAND DETER	MINAT	ION DATA	FORM -	Midwes	st Regio	n		
Project/Site:	Lake C	harlotte	City/	County:	Mart	in	Sampling	Date:	10/21/2	2022
Applicant/Owner:		Lake Charlotte S	olar, LLC		State:	MN	Sampling	Point:	NWAC	54A
Investigator(s):		Apryl Jennrich		Sectio	on, Townsh	ip, Range:		Sec.16 T	103N R30	W
Landform (hillslope, terrad	ce, etc.):	Depres	sion	Local re	elief (conca	ve, conve	x, none):		Concave	
Slope (%): 1	Lat:	43.72365		Long:	-94.43	047	Datum:		WGS84	
Soil Map Unit Name:	Canisteo-0	Glencoe complex,	0 to 2 per	cent slopes	NV	/I Classific	ation:		NA	
Are climatic/hydrologic co	nditions of	the site typical for	this time c	of the year?	Yes	(If no, expl	ain in rema	arks)		
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	'normal circ	cumstances	present?	No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(lf ne	eded, exp	lain any a	nswers in	remarks.)
SUMMARY OF FINE	DINGS									
Hydrophytic Vegetat	ion Present	t? No								
Hydric Soil Present?	,	No		Is the sa	ampled are	a within a	wetland?		No	
Wetland Hydrology F	Present?	No		lf yes, op	otional wetla	and site ID	:			-
Remarks:										
Recently tilled agricultur	ral field.	Recently harvested	d agricultur	al field.						
VEGETATION Us	e scientifi	ic names of pla	ants.	Devicent	Le Perster	Dent		· \	- 1	
Trac Stratum (F		``	Absolute	Dominant	Indicator	Domi	nance les	t Workshe	et	
<u>Tree Stratum</u> (P)	% Cover	Species	Status	Numbe	er of Domina	ant Species	0	(A)
1 2						that an	e OBL, FAC	SW, or FAC:	0	_ (A)
3.						Total N Specie	Number of D es Across A	Dominant Il Strata:	0	(B)
4 5						- Percer	nt of Domina	ant Species	9/	(A/B)
J				=Total Cove	r	that an	e OBL, FAC	VV, or FAC:	70	_ (\\\D)
Sapling/Shrub Stratum	(Plot size:)				Preva	alence Inde	ex Worksh	eet	
1.		,				Total	% Cover o	f:	Multiply b	y:
2.						OBL	species	x 1	=	
3.						FACV	V species	x 2	=	
4.						FAC s	species	x 3	=	
5						FACU	J species	x 4	=	
		-		=Total Cove	r	UPLs	species	x 5	=	
Herb Stratum	(Plot size:)				Colun	nn totals	(A	.)	(B)
1						Preva	alence Inde	x = B/A =		
2										
3						Hydro	ophytic Ve	getation In	ndicators	
4							Rapid test	tor nyaropi	nytic vege	tation
56							Dominanci	e lest is >0 e indev is <	070 3.0*	
7							Morpholog	ical adapta	tions* (pro	ovide
8.							supporting	i data in Re	marks or (on a
9.							separate s	heet)		
10.							Problemat	ic hydrophy	/tic vegeta	ition*
				=Total Cove	r		(explain)		-	
Woody Vine Stratum 1.	(Plot size:)				*Indicate present,	ors of hydric , unless distu	soil and wet	and hydrolo lematic	ogy must be
2.				=Total Cove	r	— Hyo Veç Pre	drophytic getation esent?	<u>No</u>		
1. 2. Remarks: (Include photo in the second photo photo in the second photo photo in the second photo p	numbers he	ere or on a separa	te sheet)	=Total Cove	r	Present,	drophytic getation esent?	<u>No</u>	lematic	

SOIL

NWA054A

Profile Descr	iption: (Describe	to the	depth needed	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		R	edox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10YR 2/1	100					Clay	
5-6	10YR 2/1	98	10YR 2/2	2	C	PI	Clay	Faint
0.05	1011(2/1	400	1011(2)2	-	0			
6-25	10YR 2/1	100					Clay	
25-28	2.5Y 3/2	99	10YR 4/6	1	С	PL	Clay	Distinct or Prominent
28-31	2.5Y 4/3	100					Clay	
*Type: C =	Concentration, D	= Deple	tion, RM = Red	uced Mati	rix, MS =	Masked S	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	tosol (A1)		Sa	andy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sa	andy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ick Histic (A3)		St	ripped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hye	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Stra	atified Layers (A5)	Lc	amy Gley	ed Matrix	: (F2)	Other (explain in	remarks)
2 c	m Muck (A10)		De	epleted Ma	atrix (F3)			
De	pleted Below Darl	k Surfac	e (A11)Re	edox Dark	Surface	(F6)		
Thi	ck Dark Surface ((A12)	De	epleted Da	ark Surfac	ce (F7)	*Indicators of hydropl	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Re	edox Depr	essions (F8)	hydrology must be pr	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive La	ayer (if observed	l):						
Туре:					_		Hydric Soil Presen	t? <u>No</u>
Depth (inches):				_			
Remarks:								
Remarks.								
HYDROLO	GY							
Wetland Hydi	rology Indicators	5:						
Primary Indica	ators (minimum of	one is r	equired; check	all that ap	ply)		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)		·	Aquatic	Fauna (B	13)	Surface	Soil Cracks (B6)
High W	ater Table (A2)			_ . True Aa	uatic Plar	, nts (B14)	Drainage	Patterns (B10)
Saturat	ion (A3)			Hvdroae	en Sulfide	Odor (C	1) Drv-Sea	son Water Table (C2)
Water	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Cravfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presence	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	iction in T	Tilled Soils X Geomor	phic Position (D2)
Iron De	posits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inundat	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	e (C7)		
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	s)	
Field Observa	ations:							
Surface Water	r Present?	Yes	No	Х	Depth (ii	nches):	\\/_	tland Hydrology
Water Table P	Present?	Yes	No	<u>X</u>	Depth (ii	nches):		Present?
Saturation Pre	esent?	Yes	No	X	Depth (ii	nches):		No
(Includes capil	nary tringe)				hot		opportions) if and the	
Describe Reco	braea Data (strear	m gauge	e, monitoring we	en, aerial p	photos, pr	evious in	spections), if available:	
Remarke:								
nomana.								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500





Feature ID: NWA054

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- \bigcirc Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review

5	WET	LAND D	ETER	MINAT		FORM -	Midwes	st Region		
Project/Site:	Lake C	harlotte	rlatta Ca	City/	County:	Marti		Sampling I	Date:	10/21/2022
			rich	ial, LLC	Socti	on Townshi		Sampling r	-0init. 	
Londform (hillolong, torrog			Doproco	ion		oli, Townshi		x nono);	Sec. 10 11	
	,e, eic.).	13	72/10					Datum:		WGS84
Soll Man Unit Name:	 Canisteo-	Glencoe co	mnley () to 2 per	cent slopes	-94.43	U Classific	pation:		NA
Are climatic/bydrologic co	nditions of	the site typ	ical for t	his time (of the year?		If no expl	ain in remar	rks)	
Are vegetation X	soil	or hyd	Irology		Significantly	disturbed?	Are "	'normal circi	umstances	present? No
Are vegetation	_, soil	, or hvd	Iroloav		naturally pro	oblematic?	(lf ne	eded. expl	ain anv an	swers in remarks.)
SUMMARY OF FINE	DINGS	, or riju			including pro		(
Hydrophytic Vegetat	ion Presen	t? _	Yes							
Hydric Soil Present?		_	No		Is the sa	ampled area	a within a	wetland?		No
Wetland Hydrology F	resent?	_	Yes		lf yes, o	ptional wetla	nd site ID	·		
Remarks:										
VEGETATION Use	e scientif	ic names	s of pla	nts.						
Troo Strotum (D		20	, <i>F</i>		Dominant	Indicator	Domi	nance Test	Workshee	t
1(P	IOI SIZE.)	% Cover	Species	Status	Numbe that ar	er of Domina e OBL, FAC	nt Species W, or FAC:	1 (A)
2 3							Total N Specie	Number of Do s Across All	ominant Strata:	(B)
4 5.							Percer	nt of Domina e OBL, FAC	nt Species W, or FAC:	100% (A/B)
					=Total Cove	er				
Sapling/Shrub Stratum	(Plot size:	15)				Preva	alence Inde	x Workshe	et
1							Total	% Cover of:	: 1	Aultiply by:
2							OBL	species	0 x 1	=
3							FACV	V species	70 x 2	= <u>140</u>
4 5							FAC:		$\frac{0}{0}$ x 3	=
J					=Total Cove	er	UPL 9	species _	$\frac{0}{0} \times \frac{1}{2}$	= 0
Herb Stratum	(Plot size:	5)		-		Colun	nn totals	70 (A)	 140 (B)
1. Echinochloa crus-ga	lli			70	Y	FACW	Preva	alence Index	x = B/A =	2
2.									-	
3.							Hydro	ophytic Veg	getation In	dicators:
4.							<u> </u>	Rapid test f	for hydroph	ytic vegetation
5							<u> </u>	Dominance	test is >50	%
6								Prevalence	index is ≤3	3.0*
8								supporting	data in Rer	noris (provide
9.								separate sh	neet)	
10.								Problematio	c hydrophyt	ic vegetation*
				70	=Total Cove	er		(explain)	, , ,	5
Woody Vine Stratum 1.	(Plot size:	15)				*Indicate present,	ors of hydric s , unless distur	soil and wetla	nd hydrology must be ematic
2					=Total Cove	91	Hyo Veç Pre	drophytic getation esent?	Yes	
Remarks: (Include photo r Agricultural field. Bare gro	umbers he ound: 30%	re or on a	separate	e sheet)						

NWA055A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-25	10YR 2/1	100					Clav	
25.26	10VP 2/1	07	2.57 1/2	2	D	M	Clay	
23-20	1011 2/1	97	2.31 4/2	5	D	IVI	Ciay	
26-35	10YR 2/1	100					Clay	
35-38	2.5Y 4/3	100					Clay	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	iced Mati	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sa	ndy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ick Histic (A3)		Stri	ipped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5)	Loa	amy Gley	ed Matrix	: (F2)	Other (explain in	remarks)
2 c	m Muck (A10)		De	pleted Ma	atrix (F3)			
De	pleted Below Darl	< Surfac	e (A11) Re	dox Dark	Surface	(F6)		
Thi	ick Dark Surface (A12)	De	pleted Da	ark Surfac	ce (F7)	*Indicators of hydrop	nytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	Re	dox Depr	essions (F8)	hydrology must be pr	esent, unless disturbed or
5 c	m Mucky Peat or	Peat (S	3)				problematic	
Restrictive L	aver (if observed).						
Type:		,.					Hydric Soil Presen	t? No
Depth (inches):				-			
	,				-			
Remarks:								
	CV.							
	G T							
Drimony Indias	rology indicators	s: ono io r	aquirad: abaak a	ll that an	nhu)		Sacandary India	store (minimum of two required)
Primary Indica		one is i	equired; check a	<u>in that ap</u>	<u>ріу)</u> Балас (В	10)	Secondary Indica	Coll Oracles (DO)
Surface	e vvater (A1)			Aquatic	Fauna (B	(13)		
High W	(ater Table (A2)			Irue Aq	uatic Plar	nts (B14)	Drainage	e Patterns (B10)
Saturat	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water I	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sealme	ent Deposits (B2)			ROOIS (C	ン3) No. of Rodu	upped Iron		on Visible on Aerial Imagery (C9)
	at or Crust (B4)			Recent	Iron Redu	uction in T		of Stressed Flants (DT)
Iron De	Property (B5)			(C.6)	non Reut		FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Ima	nery (B7)	Thin Mu	ick Surfac	e (C7)		
Sparse	ly Vegetated Con	cave Si	urface (B8)	Gauge o	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	3)	
Field Observe		-,	. <u>.</u>				,	
Surface Water	r Present?	Yee	No	x	Denth (ii	nches).		
Water Table F	Present?	Yes	No	X	Depth (ii	nches):	We	tland Hydrology
Saturation Pre	esent?	Yes	No	X	Depth (ii	nches):		Present? Yes
(includes capi	llary fringe)					/-		
Describe Reco	orded Data (strea	m gauge	e, monitoring wel	l, aerial p	photos, pr	evious in	spections), if available:	
		-	-					
Remarks:								





Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:2,000





A1

8

Feature ID: NWA055

Survey Area

Desktop Potential Wetlands and Waters

Wetland Survey

- Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



Aerial Photograph Review



	WETL	AND DETER	MINAT	ON DATA	FORM -	Midwes	st Region	
Project/Site:	Lake Cha	arlotte	City/	County:	Marti	n	Sampling Date:	10/21/2022
Applicant/Owner:	L	ake Charlotte Sc	olar, LLC		State:	MN	Sampling Point:	NWA058A
Investigator(s):	Ar	pryl Jennrich		Sectio	on, Townshi	p, Range:	Sec.1	6 T103N R30W
Landform (hillslope, terra	ace, etc.):	Plain	l	Local r	elief (conca	ve, conve	k, none):	None
Slope (%): 1	Lat:	43.72979		Long:	-94.429	913	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gl	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic c	onditions of the	e site typical for	this time c	of the year?	Yes	lf no, expl	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumstar	nces present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain an	y answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	ation Present?	No						
Hydric Soil Present	?	No		Is the sa	mpled area	a within a	wetland?	No
Wetland Hydrology	Present?	No		lf yes, op	otional wetla	nd site ID:	:	
Remarks:								
Dependent tilled environte	ural field Da	aantly han cated	o origultur	ol field				
Recently tilled agricult		cently narvested	ayncultu	ai lieiu.				
VEGETATION Us	se scientific	names of pla	ints.					
			Absolute	Dominant	Indicator	Domi	nance Test Work	sheet
Tree Stratum (Plot size:)	% Cover	Species	Status	Numbe	er of Dominant Spe	cies
1						that ar	e OBL, FACW, or F	AC: 0 (A)
2 3						Total N Specie	Number of Dominan es Across All Strata	t0(B)
4 5.						Percer	nt of Dominant Spece e OBL. FACW. or F	cies AC: % (A/B)
				=Total Cove	r		- , - ,-	
Sapling/Shrub Stratum	(Plot size:)				Preva	alence Index Wor	ksheet
1						Total	% Cover of:	Multiply by:
2						OBL	species	x 1 =
3						FACV	V species	x 2 =
4						FAC		x 3 =
5				-Total Covo	r			x 4 =
Herb Stratum	(Plot size:) –			1	Colum	on totals	x = (B)
1	(1 101 3126.)				Preva	lence Index – B/A	(A)(D)
2.								
3.						Hvdro	ophytic Vegetatio	on Indicators:
4.							Rapid test for hyd	rophytic vegetation
5.							Dominance test is	s >50%
6.							Prevalence index	is ≤3.0*
7						_	Morphological ada	aptations* (provide
8						_	supporting data in	Remarks or on a
9							separate sheet)	
10						_	Problematic hydro	ophytic vegetation*
		```		= I otal Cove	r		(explain)	
Woody Vine Stratum 1.	(Plot size:	)				*Indicato present,	ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2				=Total Cove	r	— Hyo Veç Pre	drophytic getation esent? <u>N</u>	0
Remarks: (Include photo Recently tilled agricultura	numbers here al field. Bare g	∍ or on a separat round: 100%	e sheet)					

SOIL	
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NWA058A

Profile Descr	iption: (Describe	to the	depth needed to	o docum	ent the i	ndicator	or confirm the absence	of indicators.)
Depth	Matrix		Re	dox Feat	tures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-30	10YR 2/1	100					Clav	
20.25	2 EV 4/2	60					Clay	
30-35	2.51 4/3	60					Clay	
	2.5Y 3/2	40						Mixed Matrix
35-38	2.5Y 4/2	100					Sandy Clay Loam	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Mati	rix, MS =	Masked \$	Sand Grains. **Location	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:						Indicators for Proble	ematic Hydric Soils*:
His	stosol (A1)		Sai	ndy Gley	ed Matrix	(S4)	Coast Prairie Re	dox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sai	ndy Redo	ox (S5)		Dark Surface (S7	7) (LRR K, L)
Bla	ack Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Manganese	Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	Loa	amy Muc	ky Minera	al (F1)	Very Shallow Da	rk Surface (TF12)
Str	atified Layers (A5	)	Loa	amy Gley	ed Matrix	(F2)	Other (explain in	remarks)
2 c	m Muck (A10)		De	oleted Ma	atrix (F3)			
De	pleted Below Darl	<pre>surfac</pre>	e (A11) Re	dox Dark	Surface	(F6)		
Thi	ick Dark Surface (	A12)	De	oleted Da	ark Surfac	ce (F7)	*Indicators of hydroph	with vegetation and wetland
Sa	ndv Muckv Minera	, al (S1)	Re	dox Depr	essions (	F8)	hvdrology must be pr	esent. unless disturbed or
<u> </u>	m Mucky Peat or	Peat (S	3)			)	problematic	
			- ,			1		
Restrictive La	ayer (if observed	):					Undria Cail Dresser	40 No
Type:	١.				-		Hydric Soll Presen	
Deptil (inches	).				-			
Remarks:								
HYDROLO	GY							
Wetland Hyd	rology Indicators	::						
Primary Indica	ators (minimum of	one is r	equired; check a	ll that ap	ply)		Secondary Indica	ators (minimum of two required)
Surface	e Water (A1)			Aquatic	Fauna (B	313)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)			True Aq	uatic Plai	nts (B14)	Drainage	e Patterns (B10)
Saturat	tion (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Sea	son Water Table (C2)
Water I	Marks (B1)			Oxidized	d Rhizosp	heres on	Living Crayfish	Burrows (C8)
Sedime	ent Deposits (B2)			Roots (0	C3)		Saturatio	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)			Presenc	e of Red	uced Iron	n (C4) Stunted	or Stressed Plants (D1)
Algal M	lat or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils Geomor	phic Position (D2)
Iron De	eposits (B5)			(C6)			FAC-Ne	utral Test (D5)
Inunda	tion Visible on Ae	rial Imag	gery (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparse	ly Vegetated Con	cave Su	Irface (B8)	Gauge of	or Well Da	ata (D9)		
Water-	Stained Leaves (E	39)		Other (E	Explain in	Remarks	s)	
Field Observa	ations:							
Surface Wate	r Present?	Yes	No	x	Depth (i	nches):		tional libration
Water Table F	Present?	Yes	No	Х	Depth (i	nches):	We	Present?
Saturation Pre	esent?	Yes	No	Х	Depth (i	nches):		No
(includes capi	llary fringe)							
Describe Reco	orded Data (strear	m gauge	e, monitoring wel	l, aerial p	photos, pr	evious in	spections), if available:	
Remarks:								











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A1

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#### Feature ID: NWA058

Survey Area

Desktop Potential Wetlands and Waters

#### Wetland Survey

- $\bigcirc$ Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



### **Aerial Photograph Review**

	WETL	AND DETER	MINATI	ION DATA	FORM -	Midwes	st Region		
Project/Site:	Lake Cha	arlotte	City/	County:	Mart	in	Sampling D	ate:	0/21/2022
Applicant/Owner:	L	ake Charlotte So	olar, LLC		State:	MN	Sampling P	oint:	NWA059A
Investigator(s):	A	pryl Jennrich		Sectio	on, Townsh	ip, Range:		Sec.16 T103	N R30W
Landform (hillslope, terrae	ce, etc.):	Plair	1	Local re	elief (conca	ve, conve	k, none):	N	one
Slope (%): 0	Lat:	43.72693		Long:	-94.42	845	Datum:	W	GS84
Soil Map Unit Name:	Canisteo-Gl	encoe complex,	0 to 2 per	cent slopes	NW	/I Classific	ation:	N	Ą
Are climatic/hydrologic co	nditions of th	e site typical for	this time c	of the year?	Yes	(If no, expl	ain in remarl	ks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circu	mstances pre	sent? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, expla	ain any answ	ers in remarks.)
SUMMARY OF FINI	DINGS								
Hydrophytic Vegetat	ion Present?	No							
Hydric Soil Present?	j	No		Is the sa	mpled are	a within a	wetland?	Ne	)
Wetland Hydrology I	Present?	No		lf yes, op	otional wetla	and site ID:	:		
Remarks:									
	ral field. Re	cently harvested	l agricultur	ral field.					
VEGETATION US		names of pla	Absolute	Dominant	Indicator	Domi	nanco Tost	Workshoot	
Tree Stratum (F	Plot size:	)	% Cover	Species	Status	Domin		WORKSHEEL	
1		/	/0 00101	opooloo	Olaluo	Number that are	er of Dominar	nt Species	0 (A)
2.								v, or i Ao	()
3.						Total N Specie	Number of Do es Across All :	minant Strata:	0 (B)
4 5						Percer	nt of Dominan e OBL, FACV	t Species V, or FAC:	% (A/B)
				=Total Cove	r				
Sapling/Shrub Stratum	(Plot size:	)				Preva	alence Index	Worksheet	
1							% Cover of:	Mul	tiply by:
2							species	x 1 =	<u> </u>
З Л							v species	x 2 = _	
5.						FACL	J species	x 4 =	
				=Total Cove	r	UPLs	species	x 5 =	
Herb Stratum	(Plot size:	) -				Colun	nn totals	(A)	(B)
1.	`	,				Preva	lence Index	= B/A =	( /
2.									
3.						Hydro	ophytic Veg	etation Indic	ators:
4.							Rapid test for	or hydrophytic	vegetation
5							Dominance	test is >50%	
6							Prevalence	index is ≤3.0*	
7							Morphologic	al adaptation	s* (provide
8							supporting c	lata in Remar	ks or on a
9							Broblomatic	eet) bydropbytic y	vocatation*
10				-Total Cove	r			nyuropnyuc	egetation
Woody Vine Stratum 1.	(Plot size:	)		-10121 0000	I	*Indicato present,	ors of hydric so unless disturb	oil and wetland bed or problema	hydrology must be atic
2.				=Total Cove	r	— Hyo Veç Pre	drophytic getation esent?	<u>No</u>	
Remarks: (Include photo Recently tilled agricultura	numbers here I field. Bare g	∍ or on a separa round: 100%	te sheet)	=Total Cove	r	— пус Veç Pre	getation esent?	<u>No</u>	

NWA059A

Denth	iption: (Describe	to the	depth needeo	to docu	ment the i	ndicator	or confirm the absence	e of indicators.)
	Matrix			Redox Fe	atures			
(Inches)	Color (moist)	%	Color (moist	) %	Type*	Loc**	Texture	Remarks
0-18	10YR 2/1	100					Clay	
18-30	10VR 2/1	90	2 5V 1/2	10	D	м	Clav	
10-50	0.51(1/2	30	2.01 4/2	10		IVI		
30-35	2.5Y 4/2	100					Sandy Clay	
					-			
*Type: C =	Concentration, D	= Deple	tion, RM = Re	duced Ma	atrix, MS =	Masked \$	Sand Grains. **Locati	on: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:					(0.1)	Indicators for Probl	ematic Hydric Soils*:
His	stosol (A1)			Sandy Gle	yed Matrix	(S4)	Coast Prairie Re	edox (A16) (LRR K, L, R)
His	stic Epipedon (A2)			Sandy Re	dox (S5)		Dark Surface (S	7) (LRR K, L)
Bla	ack Histic (A3)			Stripped N	latrix (S6)			Masses (F12) (LRR K, L, R)
Hy	drogen Sulfide (A	4)	L	.oamy Mu	cky Minera	al (F1)	Very Shallow Da	ark Surface (TF12)
Str	atified Layers (A5	)	L	oamy Gle	eyed Matrix	( (⊦2)	Other (explain in	n remarks)
2 c	m Muck (A10)	<b>• · ·</b>	L	pepieted i	Vatrix (F3)			
De	pleted Below Dari		e (A11) F	kedox Da	rk Surface	(F6)		
Ini	ick Dark Surface (	A12)		pepieted I	Jark Surfac		*Indicators of hydrop	hytic vegetation and wetland
Sa	ndy Mucky Minera	al (S1)	H	Redox De	pressions (	F8)	hydrology must be p	resent, unless disturbed or
50	cm Mucky Peat or	Peat (S	3)			1	F	
Restrictive La	ayer (if observed	):						
Туре:					_		Hydric Soil Prese	nt? <u>No</u>
Depth (inches	s):				_			
Remarks:						•		
HYDROLO	GY							
Wetland Hyd	rology Indicators	5:						
Primary Indica	ators (minimum of	one is r	equired; checl	all that a	ipply)		Secondary Indic	ators (minimum of two required)
Surface	e Water (A1)			Aquati	c Fauna (B	313)	Surface	Soil Cracks (B6)
High W	/ater Table (A2)		_	True A	quatic Plai	nts (B14)	Drainag	e Patterns (B10)
Saturat	tion (A3)		_	Hydro	gen Sulfide	odor (C	1) Dry-Sea	ason Water Table (C2)
Water I	Marks (B1)			Oxidiz	ed Rhizosp	pheres on	Living Crayfish	n Burrows (C8)
Sedime	ent Deposits (B2)			Roots	(C3)		Saturati	on Visible on Aerial Imagery (C9)
Drift De	eposits (B3)		_	Prese	t Iron Ded	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal IV	hat or Crust (B4)			Recen	t Iron Real	lction in		pric Position (D2)
IION De	tion Visible on Ac	rial Ima		(C0) 	luck Surfac	$\sim (C7)$		ullar rest (D3)
Inunda	IIIOIT VISIDIE OIT AEI	lai illaç	rface (B8)			D = (CT)		
Inunda Sparse	ly Vegetated Con	Cave Si		_ Outuge	Evoloin in	Remarks	:)	
Inunda Sparse Water-	ely Vegetated Con Stained Leaves (F	cave Su 39)	· · · _	Other		- von lanke		
Inunda Sparse Water-	ely Vegetated Con Stained Leaves (E	cave Su 39)		Other			-,	
Inunda Sparse Water-3 Field Observa	ely Vegetated Con- Stained Leaves (E ations:	cave Su 39)		Other		nches).		
Inunda Sparse Water- Field Observa Surface Water Water Table F	ely Vegetated Con- Stained Leaves (E ations: r Present? Present?	cave Su 39) Yes Yes	No	Other X x	_ Depth (ii	nches):	w	etland Hydrology
Inunda Sparse Water- Field Observa Surface Water Water Table F Saturation Pre	ely Vegetated Con- Stained Leaves (E ations: r Present? Present? esent?	cave Su 39) Yes Yes Yes	No No No No	$\frac{X}{X}$	_ Depth (ii _ Depth (ii _ Depth (ii	nches): _ nches): _ nches):	w	etland Hydrology Present? No
Inunda Sparse Water- Field Observ. Surface Water Water Table F Saturation Pre (includes capi	ely Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? esent? illary fringe)	cave Su 39) Yes Yes Yes	No No No	X X X	_ Depth (ii _ Depth (ii _ Depth (ii	nches): _ nches): _ nches): _	w	etland Hydrology Present?No
Inunda Sparse Water Field Observ Surface Water Water Table F Saturation Pre (includes capi Describe Reco	ely Vegetated Con- Stained Leaves (E ations: r Present? Present? essent? illary fringe) orded Data (stream	cave Su 39) Yes Yes Yes m gauge	No No No No	$\frac{X}{X}$ vell, aeria	Depth (ii Depth (ii Depth (ii Depth (ii	nches): _ nches): _ nches): _	Wasserstein water	etland Hydrology Present?No
Inunda Sparse Water Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	ely Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? esent? illary fringe) orded Data (stream	cave Su 39) Yes Yes Yes m gauge	No No No a, monitoring v	$\frac{X}{X}$ vell, aeria	_ Depth (ii _ Depth (i _ Depth (i _ Depth (ii _ photos, pr	nches): nches): nches): revious in	Wi	etland Hydrology Present?No
Inunda Sparse Water Field Observa Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	ely Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? esent? illary fringe) orded Data (stream	cave Su 39) Yes Yes Yes m gauge	No No No	$\frac{X}{X}$ well, aeria	Depth (ii Depth (ii Depth (ii photos, pr	nches): nches): nches): revious in	W	etland Hydrology Present? <u>No</u>
Inunda Sparse Water Field Observ Surface Wate Water Table F Saturation Pre (includes capi Describe Reco	ely Vegetated Con- Stained Leaves (E ations: r Present? Present? esent? esent? illary fringe) orded Data (stream	cave Su 39) Yes Yes Tes m gauge	No No No o, monitoring v	Other X X vell, aeria	Depth (i Depth (i Depth (i Depth (i	nches): nches): nches): 	spections), if available:	etland Hydrology Present? No













40

0







#### Feature ID: NWA059

Survey Area

Desktop Potential Wetlands and Waters

#### Wetland Survey

- $\bigcirc$ Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



### **Aerial Photograph Review**

	WETL	AND DETER	MINAT	ON DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Marti	n	Sampling Date:	10/21/2022
Applicant/Owner:	L	ake Charlotte So	olar, LLC		State:	MN	Sampling Point:	NWA060A
Investigator(s):	Ap	ryl Jennrich		Sectio	on, Townshi	p, Range:	Sec.	16 T103N R30W
Landform (hillslope, terra	ce, etc.):	Plain	l	Local r	elief (conca	ve, convex	, none):	None
Slope (%): 0	Lat:	43.72649		Long:	-94.433	316	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex,	0 to 2 per	cent slopes	NW	I Classific	ation:	NA
Are climatic/hydrologic co	onditions of the	site typical for t	this time c	of the year?	Yes	lf no, expla	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumsta	nces present? No
Are vegetation	, soil	, or hydrology	_	naturally pro	blematic?	(If ne	eded, explain ar	y answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	tion Present?	No						
Hydric Soil Present	?	No		Is the sa	mpled area	a within a	wetland?	Νο
Wetland Hydrology	Present?	No		If yes, op	otional wetla	nd site ID:	<u> </u>	
Remarks:								
Recently tilled agricultu	ural field. Red	cently harvested	agricultur	al field.				
VEGETATION Us	se scientific	names of pla	ints.					
			Absolute	Dominant	Indicator	Domir	nance Test Work	sheet
Tree Stratum (F	Plot size:	)	% Cover	Species	Status	Numbe that are	er of Dominant Spe e OBL, FACW, or F	cies FAC: 0 (A)
2 3						Total N Specie	lumber of Dominar s Across All Strata	nt : 0 (B)
4 5						Percer that are	t of Dominant Spe e OBL, FACW, or F	cies FAC: <u>%</u> (A/B)
		、 <del>-</del>		= I otal Cove	r	During		
Sapling/Shrub Stratum	(Plot size:	)				Totol		KSneet
1 2								v 1 –
3.						FACV	/ species	x 2 =
4.						FAC	species	x 3 =
5.						FACU	species	x 4 =
				=Total Cove	r	UPL s	pecies	x 5 =
Herb Stratum	(Plot size:	)				Colum	nn totals	(A) (B)
1.	_					Preva	lence Index = $B/A$	. =
2.								
3						Hydro	ophytic Vegetatio	on Indicators:
4							Rapid test for hyc	rophytic vegetation
5							Dominance test is	\$ >50%
6							Prevalence index	is ≤3.0*
7							Morphological ad	aptations [*] (provide
8							supporting data in	Remarks or on a
9 10							Problematic bydr	onhytic vegetation*
10				-Total Cove	r		(explain)	
Woody Vine Stratum 1.	(Plot size:	)				*Indicato present,	ors of hydric soil and unless disturbed or	wetland hydrology must be problematic
2.				=Total Cove	r	– Hyc Veg Pre	drophytic getation sent? <u>N</u>	0
Remarks: (Include photo Recently tilled agricultura	numbers here al field. Bare gr	or on a separat	e sheet)					

NWA060A

	Matrix		R	edox Fea	tures				
(Inches)	Color (moist)	%	Color (moist)	%		1.00**	Textu	ro	Remarks
0.20		100		70	туре	LUC			Remarks
0-20	10TR 2/1	100					Ciay	/	
20-26	2.5Y 3/2	99	10YR 5/6	1	С	PL	Clay Trace	Gravel	Distinct or Prominent
		1							
*Type: C =	Concentration D	– Denle	tion RM – Red	uced Mat	rix MS –	Masked S	Sand Grains	**Locatio	n [.] PI = Pore Lining M = Matrix
Hydric Soil	Indicators:	= Depic			iix, iii0 =	Maskeu	Indicators		matic Hydric Soils*:
Hi	stosol (A1)		Se	ndy Glev	od Matrix	(\$4)	Coast	Prairia Rec	$\log (A16) (I RR K   R)$
I II-	stic Eninodon (A2)			undy Oley	CU MALIA	(04)	Coast	Surface (S7	
	siic Epipeuon (A2)		3		JX (33)				(LRR, L)
Di	ack filslic (A3)	4			aurix (50) In : Min and			nanganese i	VIASSES (F12) (LRR K, L, R)
Hy	drogen Suitide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very :	Shallow Dar	K Sufface (TF12)
	ratified Layers (A5	)	LC	amy Gley	ed Matrix	(FZ)	Other	(explain in	remarks)
20		<i>.</i>	De		atrix (F3)	(50)			
De	epleted Below Darl	k Surfac	ce (A11) Re	dox Dark	Surface	(F6)			
Ih	ick Dark Surface (	A12)	De	epleted D	ark Surfac	ce (F7)	*Indicators	of hydroph	ytic vegetation and wetland
Sa	indy Mucky Minera	al (S1)	Re	edox Dep	ressions (	(F8)	hydrology	must be pre	esent, unless disturbed or
50	cm Mucky Peat or	Peat (S	3)				problemati	0	
Restrictive L	ayer (if observed	l):							
Туре:					_		Hydric S	oil Present	? No
	.).						-		
Depth (inches Remarks:	<i></i>				-				
Depth (inches					-				
Depth (inches Remarks: HYDROLO	GY				-				
Depth (inches Remarks: HYDROLO Wetland Hyd	GY	 5:			-				
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic	GY Irology Indicators ators (minimum of	s: one is I	required; check	all that ap	  <u></u> <u></u>		Secon	dary Indica	tors (minimum of two required)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac	GY Irology Indicators ators (minimum of e Water (A1)	s: one is r	required; check	<u>all that ap</u> _Aquatic	pply) Fauna (B	313)	Secon	dary Indica	tors (minimum of two required) Soil Cracks (B6)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac High V	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2)	s: one is I	required; check	all that ap _ Aquatic _ True Ac	- - - Fauna (B juatic Plar	813) nts (B14)	<u>Secon</u>	dary Indica Surface S Drainage	tors (minimum of two required) Soil Cracks (B6) Patterns (B10)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac High V Satura	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3)	s: one is I	required; check	all that ap Aquatic True Ac Hydroge	- 	813) nts (B14) 9 Odor (C	<u>Secon</u> 	dary Indica Surface S Drainage Dry-Seas	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	s: one is I	required; check	all that ap Aquatic True Aq Hydroge Oxidize	<u>pplγ)</u> Fauna (Β juatic Plar en Sulfide d Rhizosp	13) nts (B14) e Odor (C oheres on	<u>Secon</u> 	dary Indica Surface S Drainage Dry-Seas Crayfish	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) Ion Water Table (C2) Burrows (C8)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac Surfac High V Satura Water Sedim	GY Irology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	s: one is r	required; check	all that ap Aquatic True Ac Hydroge Oxidize	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3)	313) nts (B14) 9 Odor (C oheres on	<u>Secon</u> 	dary Indica Surface S Drainage Dry-Seas Crayfish Saturatio	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) Ion Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (CS
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s: one is 1	required; check	all that ap Aquatic True Ac Hydroge Oxidize Roots (0	pply) Fauna (B juatic Plar en Sulfide d Rhizosp C3) ce of Redu	313) nts (B14) e Odor (C oheres on uced Iron	<u>Secon</u> 1) Living (C4)	dary Indica Surface S Drainage Dry-Seas Crayfish Saturatio	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) constit (PE)	s: one is I	required; check	all that ap Aquatic True Ac Hydroge Oxidize Roots (( Present	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) C3 C C3 C C3 C C3 C C3 C C3 C C3 C	13) nts (B14) Odor (C oheres on uced Iron uccion in T	<u>Secon</u> 1) Living (C4) Filled Soils	dary Indica Surface S Drainage Dry-Seas Crayfish Saturatio Stunted o Geomorp	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) hic Position (D2)
Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic Surfac High V Satura Water Sedim Drift D Algal M Iron Du	GY rology Indicators ators (minimum of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	s: one is r	required; check	all that ap Aquatic True Ac Hydroge Oxidize Roots (( Presend Recent (C6)	- Fauna (B Juatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	B13) Ints (B14) Podor (C oheres on uced Iron uced Iron	<u>Secon</u> 1) Living (C4) Filled Soils	dary Indica Surface S Drainage Dry-Seas Crayfish Saturatio Stunted c Geomorp FAC-Neu	tors (minimum of two required) Soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagery (C9 or Stressed Plants (D1) hic Position (D2) tral Test (D5)
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Signature: CS





A1

2013

2019

Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

Signature: CS



Desktop Potential Wetlands and Waters

#### Wetland Survey

- $\bigcirc$ Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- Index
- ----- Intermediate



### **TETRA TECH**

**Aerial Photograph Review** Lake Charlotte Solar Martin County, Minnesota

	WETL	AND DETER	MINATI	ON DATA	FORM -	Midwes	t Region	
Project/Site:	Lake Cha	rlotte	City/	County:	Mart	n	Sampling Date:	10/21/2022
Applicant/Owner:	La	ake Charlotte So	lar, LLC		State:	MN	Sampling Point:	NWA061A
Investigator(s):	Ap	ryl Jennrich		Sectio	on, Townsh	p, Range:	Sec	.16 T103N R30W
Landform (hillslope, terra	ice, etc.):	Plain		Local r	elief (conca	ve, conve>	, none):	None
Slope (%): 1	Lat:	43.72693		Long:	-94.43	405	Datum:	WGS84
Soil Map Unit Name:	Canisteo-Gle	encoe complex,	0 to 2 per	cent slopes	NV	I Classific	ation:	NA
Are climatic/hydrologic c	onditions of the	site typical for t	this time c	of the year?	Yes	If no, expl	ain in remarks)	
Are vegetation X	, soil	, or hydrology		Significantly	disturbed?	Are "	normal circumsta	ances present? No
Are vegetation	, soil	, or hydrology		naturally pro	blematic?	(If ne	eded, explain a	any answers in remarks.)
SUMMARY OF FIN	DINGS							
Hydrophytic Vegeta	ation Present?	No						
Hydric Soil Present	?	No		Is the sa	ampled are	a within a	wetland?	No
Wetland Hydrology	Present?	No		If yes, op	otional wetla	and site ID:		
Remarks:								
Recently tilled agricultu	ural field. Rec	cently harvested	agricultur	al field.				
VEGETATION Us	se scientific	names of pla	ints.	Devices	L. P. star	Duni	<b>—</b> ———————————————————————————————————	11
Tree Stratum (		\ \		Dominant	Indicator	Domii	hance lest wor	KSneet
1(		)	% Cover	Species	Status	Numbe that are	er of Dominant Sp e OBL, FACW, or	FAC: 0 (A)
2 3						Total N Specie	lumber of Domina s Across All Strat	ant a: <u>0</u> (B)
4 5						Percer	nt of Dominant Sp e OBL, FACW, or	ecies FAC: <u>%</u> (A/B)
		_		=Total Cove	r			
Sapling/Shrub Stratum	(Plot size:	)				Preva	lence Index Wo	orksheet
1						Total	% Cover of:	Multiply by:
2						OBL	species	_ x 1 =
3						FACV		_ x 2 =
4								_ x 3 =
J				-Total Cove	r			
Herb Stratum	(Plot size:	) —			•1	Colun	n totals	(A)(B)
1.	(	/				Preva	lence Index = $B/$	(X)(Z)
2.								
3.						Hydro	ophytic Vegetat	ion Indicators:
4.							Rapid test for hy	drophytic vegetation
5.							Dominance test	is >50%
6							Prevalence inde	x is ≤3.0*
7							Morphological a	daptations* (provide
8							supporting data	in Remarks or on a
9							separate sheet)	
10						_	Problematic hyd	rophytic vegetation*
				=Total Cove	r		(explain)	
Woody Vine Stratum 1.	(Plot size:	)				*Indicato present,	ors of hydric soil an unless disturbed c	nd wetland hydrology must be or problematic
2				=Total Cove	r	— Hyo Veç Pre	drophytic getation sent?	<u>No</u>
Remarks: (Include photo Recently tilled agricultura	numbers here al field. Bare gr	or on a separate	e sheet)					

NWA061A

Depth								
	repth <u>Matrix</u>		Re	Redox Features				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-20	10YR 2/1	100					Clay Loam	
20-22	10YR 2/1	90	2.5Y 4/2	10	D	М	Clay	
22-30	2.5Y 5/2	100					Clay	
*Type: C =	Concentration, D	= Deple	tion, RM = Redu	ced Matr	rix, MS =	Masked \$	Sand Grains. **Loca	tion: PL = Pore Lining, M = Matrix
Hydric Soil	Indicators:		0			(04)	Indicators for Prob	lematic Hydric Soils*:
HIS	stosol (A1)		Sai		ed Matrix	(54)		$\frac{1}{2} \frac{1}{2} \frac{1}$
HIS	stic Epipedon (A2)		Sai	nay Read	DX (55)		Dark Surface (	57) (LRR K, L)
Bia	ACK HISTIC (A3)	4)	Str	pped Ma	itrix (56)			e Masses (F12) (LRR K, L, R)
Hy	urogen Suifide (A	+) \		arriy IVIUC	ky winera	ai (⊏1) / (⊑2)	very Shallow L	in remarke)
	ameu Layers (A5)	)			eu matrix atrix (E2)	(FZ)		in remarks)
2	ni Muck (ATU)	( Surfac			Surface			
De	ick Dark Surface (	( Sunac A12)				(FO)		
	ndy Musicy Minare	ATZ)			ark Suriac		*Indicators of hydro	phytic vegetation and wetland
Sa	m Mucky Peat or	ai (ST) Doot (S	3)	JOX Depi	65510115 (	FO)	problematic	
		, our (o						
Restrictive L	ayer (if observed	):					Undrie Ceil Drees	mta No
Type:	<u>۱</u>						Hydric Soll Prese	
Romarks:								
Remarks:					<u> </u>			
Remarks:								
Remarks:	GY							
Remarks: HYDROLO Wetland Hyd	GY rology Indicators							
Remarks: HYDROLO Wetland Hyd Primary Indica	GY rology Indicators ators (minimum of	s: one is r	equired; check a	II that ap	<u>ріу)</u>		Secondary Indi	cators (minimum of two required)
Remarks: HYDROLO Vetland Hyd Primary Indica Surfac	<b>GY</b> rology Indicators ators (minimum of e Water (A1)	: one is r	equired; check a	<u>ll that ap</u> Aquatic	<u>ply)</u> Fauna (B	:13)	<u>Secondary Indi</u> Surfac	cators (minimum of two required) e Soil Cracks (B6)
Remarks: HYDROLO Vetland Hyd Primary Indica Surfact High W	<b>GY</b> rology Indicators ators (minimum of e Water (A1) /ater Table (A2)	: one is r	equired; check a	ll that ap Aquatic True Aq	<u>plv)</u> Fauna (B uatic Plar	13) hts (B14)	<u>Secondary Indi</u> Surfac Draina	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10)
Remarks: HYDROLO Vetland Hyd Primary Indica Surfac High W Satura	<b>GY</b> rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3)	s: one is r	equired; check a	ll that ap Aquatic True Aq Hydroge	<u>ply)</u> Fauna (B uatic Plar en Sulfide	13) hts (B14) Odor (C	<u>Secondary Indi</u> Surfac Draina 1)Dry-Se	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) eason Water Table (C2)
Remarks: HYDROLO Vetland Hyd Primary Indica Surface High W Satura Water	<b>GY</b> rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1)	:: one is r	equired; check a 	ll that ap Aquatic True Aq Hydroge Oxidized	<u>plv)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C oheres on	Secondary Indi Surfac Draina 1)Dry-Se LLivingCrayfis	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) th Burrows (C8)
Remarks: HYDROLO Vetland Hyd Primary Indica Surfact High W Satura Water Sedime Sedime	<b>GY</b> rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	: one is r	equired; check a	ll that ap Aquatic True Aq Hydroge Oxidizec Roots (C	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3)	113) hts (B14) Odor (C oheres on	Secondary Indi Surfac Draina 1) Dry-Se Living Crayfis Satura	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) eason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9
Remarks: HYDROLO Vetland Hyd Primary Indica Surfact High W Satura Water Sedime Drift De	<b>GY</b> rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Act or Cruct (B4)	: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Present	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu	13) hts (B14) Odor (C oheres on uced Iron	Secondary Indi Surfac Draina 1) Dry-Se Living Crayfis Satura (C4) Stunte	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) eason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1)
Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedime Drift De Algal M	<b>GY</b> rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4)	: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent I (C6)	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C oheres on uced Iron uction in T	Secondary Indi Surfac Draina 1) Dry-Se Living Crayfis Satura (C4) Stunte Filled Soils Geomo	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) eason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Tast (D5)
Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedimo Drift Do Algal M Iron De	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) /at or Crust (B4) eposits (B5) tion Visible on Api	one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent I (C6)	ply) Fauna (B uatic Plar en Sulfide d Rhizosp C3) ce of Redu Iron Redu	13) hts (B14) Odor (C oheres on uced Iron uction in 7 action (C7)	Secondary Indi Surfac Draina 1)Dry-Se LivingCrayfis Satura (C4)Stunte Filled SoilsGeomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
Remarks: HYDROLO Wetland Hyd Primary Indica Surfac High W Satura Water Sedima Drift Da Algal M Iron De Inunda	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aer	i: one is r	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent (C6) Thin Mu	<u>plv)</u> Fauna (B Fauna (B en Sulfide d Rhizosp C3) e of Redu iron Redu	13) ts (B14) Odor (C oheres on uced Iron uction in T ce (C7) oto (D9)	Secondary Indi Surfac Draina 1) Dry-Se Living Crayfis Satura (C4) Stunte Filled Soils Geomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) ason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
Remarks: HYDROLO Netland Hyd Primary Indica Surfaca High W Satura Water Sedima Drift Da Algal M Iron De Inunda Sparse Water	GY rology Indicators ators (minimum of e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) tion Visible on Aer ely Vegetated Com-	rial Imag cave Su	equired; check a	II that ap Aquatic True Aq Hydroge Oxidized Roots (C Presenc Recent I (C6) Thin Mu Gauge C	<u>ply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp C3) ee of Redu Iron Redu ck Surfac or Well Da	13) hts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Pomorfor	Secondary Indi Surfac Draina 1)Dry-Se LivingCrayfis Satura (C4)Sturte Filled SoilsGeomo FAC-N	cators (minimum of two required) e Soil Cracks (B6) ge Patterns (B10) eason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9 d or Stressed Plants (D1) orphic Position (D2) eutral Test (D5)
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Signature: CS









0 -11122-2017 Signature: NV Source: Map adapted from NAIP air photos; desktop wetlands by Tetra Tech; 2-foot contours by MN DNR; Project Data by Lake Charlotte Solar, LLC. Scale: 1:1,500

#### Feature ID: NWA061

Survey Area

Desktop Potential Wetlands and Waters

#### Wetland Survey

- $\bigcirc$ Non-Wetland Sample Plot
- Delineated Wetland
- Surveyed Pond
- Surveyed Lake
- Surveyed Stream
- 2-foot Elevation Contour
- _____ Index
- ----- Intermediate

### **Aerial Photograph Review**