

| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/24/14 |
|---|---|--|-------------------------|--|---|--|--|---|--|---------------------------------------|---|
| Applicant: | | aconite, LLC | | | | | Otanico i roject #. | 100701100 | | County: | Ashland |
| Investigator #1: | • | | | Investi | gator #2: | C. Roge | re | | | State: | Wisconsin |
| Soil Unit: | | bic complex, 0 to 6 | nercent o | | | | I/WWI Classification: | NI/A | | Wetland ID: | WA-1002 |
| Landform: | Side slope | | percent | | al Relief: | | ii vv vvi Glassiii Cation. | IN/A | | Sample Point: | WA-1002 WA-1002-01u |
| Slope (%): | 3 | Latitude: | NI/A | | ongitude: | | | Datum: | NI/A | Community ID: | upland HW forest/mostly logged |
| | | ditions on the site ty | | | | | in in romarks) | | No | Section: | 31 |
| | | or Hydrology 🔽 sig | | | | (II IIO, expir | Are normal circumsta | | | | 45N |
| | | | | | | | ☐ Yes | ances presem ☑No | .: | Township: | |
| CUMMARY OF | □, SOII □, | or Hydrology □ na | lurally pr | Oblemal | IC? | | <u> </u> | ⊙10 | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | - V | - Na | | | Livelyin Onita | D+0 | | □ V □ N- |
| Hydrophytic Ve | | | | | ☑ No | | | Hydric Soils | | \A/:41=: A \A/-41=- | ☐ Yes ☑ No |
| Wetland Hydro | | | A === == | ☐ Yes | | 4 . 4 | | | oling Point | Within A Wetlar | nd? ■ Yes ■ No |
| Remarks: | Conditions | wetter than normal | . Area re | cently cl | earcut, ve | egetation | and soils significantly | alsturbea. | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indic | ators (Check here | if indicate | ors are r | not preser | ıt ☑): | | | | | |
| <u>Prim</u> ary | | | | | - | | | | Secondary: | | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil | |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage P | |
| | A3 - Saturation | | | | B15 - Mar C1 - Hydr | | de Odor | | | B16 - Moss Trim C2 - Dry-Season | |
| | B2 - Sedimer | | | | | | spheres on Living Roots | | | | |
| | B3 - Drift De | | | | | | duced Iron | | | | isible on Aerial Imagery |
| | B4 - Algal Ma | | | | | | duction in Tilled Soils | | | | |
| | B5 - Iron Dep | | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima Vegetated Concave S | | Ц | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aqu D4 - Microtopogra | |
| | po - Oparsei) | y vegetated Concave t | buriace | | | | | | | D5 - FAC-Neutral | |
| Field Observat | tiono. | | | | | | | _ | | | |
| | | | | | (im.) | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hyd | drology Pr | resent? | Yes ☑ No |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Saturation Pres | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Describe Record | ded Data (str | eam gauge, monitori | ng well, a | erial pho | otos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | Recent log | ging disturbance | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| SUILS | | | | | | | | | | | |
| Map Unit Name | e: | Tula-Gogebic com | olex, 0 to | 6 perce | ent slopes | , stonyS | eries Drainage Class: | #N/A | | | |
| | | Tula-Gogebic com | olex, 0 to | 6 perce | ent slopes | , stonyS | eries Drainage Class: | #N/A | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | #N/A | | | | | , and the second | | d Grains; Location: F | PL=Pore Lining, M=Matrix) | |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): | #N/A | | | of indicators.) (Typ | | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | d Grains; Location: F | PL=Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | #N/A the depth needed to document the in | dicator or confirm | m the absence o | of indicators.) (Typ | | tion, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sand | | 1 | |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the in Horizon | dicator or confirm | Matrix (Moist) | of indicators.) (Type | | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 7 | #N/A the depth needed to document the in Horizon 1 | dicator or confirm | Matrix (Moist) 3/3 | of indicators.) (Type % 100 | e: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, OR Rei Color (Moist) | CS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 7 | ogroup): otion (Describe to Bottom Depth 7 9 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 | % 100 100 | De: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | CS=Covered/Coated Sanc | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | pogroup): potion (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 | % 100 100 100 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | CS=Covered/Coated Sance | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | pogroup): otion (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 — | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 | % 100 100 100 100 100 100 100 100 100 10 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | CS=Covered/Coated Sance | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | ogroup): otion (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 | % 100 100 100 100 100 100 100 100 100 10 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) | CS=Covered/Coated Sanc dox Features % | Type | | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | pogroup): potion (Describe to Bottom Depth 7 9 111 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 | % 100 100 100 100 100 100 100 100 100 10 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | CS=Covered/Coated Sanc dox Features % | Type | | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | pgroup): ption (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 | % 100 100 100 100 100 100 100 100 100 10 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) | CS=Covered/Coated Sand | Type | | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | pogroup): potion (Describe to Bottom Depth 7 9 111 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 | % 100 100 100 100 100 100 100 100 100 10 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | CS=Covered/Coated Sanc dox Features % | Type | | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 | pgroup): ption (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 cicators a | % 100 100 100 re not pre | esent 🗷 | ition, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) | CS=Covered/Coated Sand | Type | | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (pescribe to Bottom Depth 7 9 11 Soil Field Ir A1- Histosol | #N/A the depth needed to document the in Horizon 1 2 2 ndicators (check he | Color 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent value Belov | Ilon, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) | CS=Covered/Coated Sanc dox Features % | Type s. for Proble | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Depth 7 9 111 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 re not pre S8 - Polyv S9 - Thin | ecent a | tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist)): v Surface (LRR R, MLRA 1498) | CS=Covered/Coated Sanc dox Features % Indicator | Type s for Proble A10 - 2 cm | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 7 9 111 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi | #N/A the depth needed to document the in Horizon 1 2 2 ndicators (check hepipedon istic | Color 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 re not pre \$8 - Polyv \$9 - Thin F1 - Loam | ee C=Concentra | Color (Moist) | CS=Covered/Coated Sand | Type s.for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mi | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 100 100 100 100 100 100 10 | ee C=Concentra | Color (Moist) | CS=Covered/Coated Sand | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark Si | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 100 100 100 100 100 100 10 | esent of talled Belov Dark Surfay Mucky Ny Mucky Ny Gleyed Matrix | Iton, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand 1498) KK, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 100 100 100 100 100 100 10 | esent alue Belor Dark Surfa y Mucky N y Gleyed teted Matrix x Dark Su | tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator | Type sfor Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mt S7 - Dark S3 S8 - Polyval S9 - Thin Da | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand (49B) R.K.L.R) (LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 100 100 100 100 100 100 10 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sand | Type sfor Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand (49B) RK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Depth 7 9 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Depth 7 9 111 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator | Type sfor Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mt S7 - Dark S3 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F14 - Red P TA6 - Mesic | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | Soil Field Ir A4 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P F21 - Red P F21 - Wery | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | Soil Field Ir A4 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator Indicators of light and light an | Type sfor Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mt S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F14 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | Soil Field Ir A4 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator Indicators of light and light an | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | Soil Field Ir A4 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | mthe absence of Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator Indicators of light and light an | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 7 9 NRCS Hydric | pgroup): ption (Describe to Depth 7 9 11 11 11 11 11 11 11 11 11 11 11 11 | #N/A the depth needed to document the in Horizon 1 2 2 | Color 7.5YR 7.5YR 7.5YR | mthe absence of Matrix (Moist) 3/3 3/4 4/4 icators a | % 100 100 100 | esent alue Belor Dark Surfa y Mucky N y Gleyed sted Matrix x Dark Su ted Dark | Color (Moist) | CS=Covered/Coated Sanc dox Features % Indicator Indicators of disturbed of disturbed of the sanc sanc sanc sanc sanc sanc sanc sanc | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam loamy sand 149B) K. L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (LRR K, L, R) Is (MLRA 149B) face rount be present, unless |



Northeast and Northcentral Region

| Project/Site: | Gogenic Taconite Mine | | | | welland ID: WA-1002 Sample PointA-1002-510 |
|-------------------|---|------------|----------|------------|--|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| Tree Stratum (Pla | ot size: 10 meter radius) | | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 20 | Υ | FACU | |
| 2. | Acer rubrum | 30 | Υ | FAC | Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) |
| 3. | | | | | ·· |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 7 (B) |
| 5. | | | | | (D) |
| 6. | | | | | Descent of Deminent Coasies That Are ODL FACIAL or FAC: 14 39/ (A/D) |
| | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 14.3% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. $0 	 x 	 1 = 0$ |
| | Total Cover = | 50 | | | FACW spp. 5 x 2 = 10 |
| | | | | | FAC spp. 37 x 3 = 111 |
| Capling/Chrub Ctr | atum (Plot size: 5 meter radius) | | | | FACU spp. 155 x 4 = 620 |
| | Fraxinus americana | 15 | Υ | FACU | |
| 1. | | | | | UPL spp40 |
| 2. | Acer saccharum | 10 | Υ | FACU | |
| 3. | Abies balsamea | 5 | N | FAC | Total <u>237</u> (A) <u>941</u> (B) |
| 4. | Prunus serotina | 5 | N | FACU | |
| 5. | Populus tremuloides | 2 | N | FAC | Prevalence Index = B/A = 3.970 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| | | | | | |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 37 | | | Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Prunus serotina | 30 | Υ | FACU | 2 1 to 2 1 to 3 1 to 3 1 to 3 to 3 to 3 to 3 to |
| 2. | Eurybia macrophylla | 40 | Y | UPL | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | 20 | N | FACU | present, unless disturbed or problematic. |
| | Fraxinus americana | | | | |
| 4. | Carex gracillima | 35 | Υ | FACU | Definitions of Vegetation Strata: |
| 5. | Pteridium aquilinum | 20 | N | FACU | |
| 6 | Onoclea sensibilis | 5 | N | FACW | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| | | | | | |
| 11. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 13. | | | | | ···· y • · · · · · · · · · · · · · · · · · · |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 150 | | | |
| | | | | | |
| Moody Vino Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present □Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Additional Ren | marks: | | | | |
| | | | | | |
| 1 | | | | | |



| | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/24/14 |
|---|--|--|--------------------------|-------------------------------------|--|---|---|--|---|---|--|
| Project/Site: Applicant: | | aconite, LLC | | | | | otantoo i rojoot ii. | 100701100 | | County: | Ashland |
| Investigator #1: | - | | | Investi | gator #2: | C. Roge | rs | | | State: | Wisconsin |
| Soil Unit: | | bic complex, 0 to 6 | percent s | | | | I/WWI Classification: | N/A | | Wetland ID: | WA-1002 |
| Landform: | Logging de | • | | | al Relief: | | | | | Sample Point: | WA-1002-01w |
| Slope (%): | 1 | Latitude: | N/A | L | ongitude: | N/A | | Datum: | N/A | Community ID: | Sedge Meadow |
| | drologic cond | ditions on the site ty | | this time | e of year? | (If no, expla | in in remarks) | | No | Section: | 31 |
| | | or Hydrology ☑ sig | | | | | Are normal circumsta | ances present | 1? | Township: | 45N |
| | | or Hydrology □ na | | | | | ☐ Yes | ⊡No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pre | sent? | | ✓ Yes | □ No | | | Hydric Soils | Present? | | |
| Wetland Hydrol | | | | ✓ Yes | | | | Is This Samp | oling Point | Within A Wetlar | nd? ☑ Yes ■ No |
| Remarks: | Conditions | wetter than normal | Wetland | d appear | rs to be re | cently ci | eated due to logging | activity. | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | ology Indic | ators (Check here | if indicate | ors are n | not nreser | t 🗆). | | | | | |
| Primary | | ators (Check here | ii iiiuicat | JIS ale I | ioi presei | ı. 🗆). | | | Secondary: | | |
| | A1 - Surface | Water | | V | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage P | |
| | A3 - Saturation | | | | B15 - Mar | | | | | B16 - Moss Trim | |
| _ | B1 - Water M B2 - Sedimer | | | | C1 - Hydro | | spheres on Living Roots | | | C2 - Dry-Season C8 - Crayfish Bur | |
| | B3 - Drift Dep | | | | C4 - Presi | | | | | | isible on Aerial Imagery |
| | B4 - Algal Ma | | | | | | duction in Tilled Soils | | | D1 - Stunted or S | |
| | B5 - Iron Dep | | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | | | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aqu | |
| | Bo - Sparsely | / Vegetated Concave S | ourrace | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| Field Observat | tiono. | | | | | | | _ | | | |
| Surface Water | | | Donatha | | (in) | | | | | | |
| Water Table Pr | | ☐Yes ☑ No ☑Yes ☐ No | Depth: | 0 | (in.) | | | Wetland Hyd | drology Pr | esent? | Yes □ No |
| Saturation Pres | | | Depth: | 9 5 | (in.) | | | | | | |
| | | ☑ Yes ☐ No | Depth: | | (in.) | | | | | | |
| Describe Record | | eam gauge, monitori | ng well, a | erial pho | otos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | Recent log | ging disturbance | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | | | olex, 0 to | 6 perce | ent slopes | , stonyS | eries Drainage Class: | #N/A | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | #N/A | | | | | | | | | |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | #N/A | | n the absence o | of indicators.) (Typ | | ion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | d Grains; Location: F | PL=Pore Lining, M=Matrix) | |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | #N/A the depth needed to document the in | dicator or confirm | n the absence o | of indicators.) (Typ | oe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | T | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the in Horizon | dicator or confirm | n the absence of Matrix (Moist) | of indicators.) (Type | oe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, © Re Color (Moist) | CS=Covered/Coated Sand | Туре | Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 2 | #N/A the depth needed to document the in Horizon 1 | Color (7.5YR | Matrix (Moist) 3/2 | of indicators.) (Type % 85 | oe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sand dox Features % 15 | | T | |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the in Horizon | dicator or confirm | n the absence of Matrix (Moist) | of indicators.) (Type | oe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, © Re Color (Moist) | CS=Covered/Coated Sand | Туре | Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 2 | #N/A the depth needed to document the in Horizon 1 | Color (7.5YR | Matrix (Moist) 3/2 | of indicators.) (Type % 85 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 4/4 | cs=Covered/Coated Sand dox Features % 15 | Type c | Location m | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | pogroup): potion (Describe to Bottom Depth 2 11 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | cs=covered/Coated Sand | Type c | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | pogroup): otion (pescribe to Bottom Depth 2 11 | #N/A the depth needed to document the in Horizon 1 2 - | Color 7.5YR 7.5YR — | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 15 | Type C | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | pogroup): potion (pescribe to Bottom Depth 2 11 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR — | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 15 | Type c | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | pagroup): pation (Describe to Bottom Depth 2 11 | #N/A the depth needed to document the in Horizon 1 2 | Color (7.5YR 7.5YR — — — | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | CS=Covered/Coated Sand | Type c | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | pgroup): ption (Describe to Bottom Depth 2 11 | #N/A the depth needed to document the in Horizon 1 2 | Color (7.5YR 7.5YR — — — | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | CS=Covered/Coated Sand | Type | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | pgroup): pation (Describe to Bottom Depth 2 11 | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR — — — — — — — — — — — — — — — — — — — | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | CS=Covered/Coated Sand | Type | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | pgroup): pation (Describe to Bottom Depth 2 11 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 re not pre | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 15 Indicators | Type | Location m | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Depth 2 111 Soil Field Ir A1- Histosol A2 - Histic E | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 re not pre S8 - Polyv S9 - Thin | 7.5YR esent alue Belo' Dark Surfa | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) | CS=Covered/Coated Sand dox Features % 15 Indicators | Type | Location m matic Soils ¹ Muck (LRR K, L, MLRA · Prairie Redox (LRR | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi | #N/A Horizon 1 2 ndicators (check head) | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 re not pre \$8 - Polyv \$9 - Thin F1 - Loam | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) | CS=Covered/Coated Sand dox Features % 15 Indicator: | Type C s.for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mi | Location m matic Soils Prairie Redox (LRR K, L, MLRA * Prairie Redox (LRR Locky Peat of Peat | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ation (Describe to Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic Et A3 - Black Hi A4 - Hydroge | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 | % 85 100 | 7.5YR seent □ alue Belor Dark Surfa y Mucky N y Gleyed | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix | CS=Covered/Coated Sand dox Features % 15 Indicators | Type C s for Proble A10 - 2 cm A16 - Coast A3 - 5 cm Mi S7 - Dark Si | Location m matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR Loky Peat of Peat | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified | #N/A Horizon 1 2 dicators (check heading to document the interpretation of the company of the | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Deptetion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 15 Indicators | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval | Location m matic Soils Wuck (LRR K, L, MLRA - Prairie Redox (LRR LCKY Peat of Peat LCKY Peat of Peat | (e.g. clay, sand, loam) loam loam 1498) K.K. L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Depth 2 111 | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4 y: v Surface (LRR R, MLRA 149B) cce (LRR R, MLRA 149B) fineral (LRR K, L) Matrix fface | CS=Covered/Coated Sand dox Features % 15 Indicators | Type C sfor Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mt S7 - Dark S7 S8 - Polyval S9 - Thin Da | Location m matic Soils Muck (LRR K, L, MLRA · Prairie Redox (LRR ick, L, M) ue Below Surface ark Surface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) loam loam (49B) R.K.L.R) (LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicator | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S9 - Thin Da F12 - Iron-N | Location m matic Soils Wuck (LRR K, L, MLRA - Prairie Redox (LRR LCKY Peat of Peat LCKY Peat of Peat | (e.g. clay, sand, loam) loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E; S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy M | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | Location m matic Soils Wuck (LRR K, L, MLRA Prairie Redox (LRR LOK) Peat of Peat LOKY Peat of Peat LOKY Surface (LRR K, L Langanese Masses ont Floodplain Soi arent Material | (e.g. clay, sand, loam) loam 149B) K.K., R, (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy N S5 - Sandy F | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators | Type C sfor Proble A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S7 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F14 - Red P TA6 - Mesic | Location m matic Soils Muck (LRR K, L, MLRA - Prairie Redox (LRR K, L, MLRA - Prairie Redox (LRR K, L, MLRA - Rodpin Surface (LRR K, L, MLRA - Rodpin Surface (LRR K, L) anganese Masses ont Floodplain Soi | (e.g. clay, sand, loam) loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 111 | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P F21 - Red P F21 - Wery | Location m matic Soils ¹ Muck (LRR K, L, MLRA - Prairie Redox (LRR K, L, MLRA - Locky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 111 | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators 'Indicators of | Type C | Location m matic Soils Muck (LRR K, L, MLRA - Prairie Redox (LRR K, L, MLRA - Prairie Redox (LRR K, L, MLRA - Rodpin Surface (LRR K, L, MLRA - Rodpin Surface (LRR K, L) anganese Masses ont Floodplain Soi | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 111 | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators 'Indicators of | Type C | Location m matic Soils Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR K, L, M) ue Below Surface tark Surface (LRR K, L, M) ue Below Surface Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 111 | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators 'Indicators of | Type C sfor Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mt S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F112 - Very Other (Expla of hydrophytic veget | Location m matic Soils Wuck (LRR K, L, MLRA - Prairie Redox (LRR E, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 2 11 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E; S1 - Sandy M S4 - Sandy M S4 - Sandy M S6 - Stripped S7 - Dark Su | #N/A Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/4 cators a | % 85 100 rre not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Re Color (Moist) 4/4): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) wlatrix rface Surface Surface | CS=Covered/Coated Sand dox Features % 15 Indicators 'Indicators of disturbed of dis | Type C sfor Proble A10 - 2 cm l A16 - Coast S3 - 5cm Mt S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F112 - Very Other (Expla of hydrophytic veget | Location m matic Soils Wuck (LRR K, L, MLRA - Prairie Redox (LRR E, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) loam |



Northeast and Northcentral Region

Wetland ID: WA-1002 Sample Point WA-1002-01w Project/Site: Gogebic Taconite Mine **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) % Cover Dominant Ind.Status Dominance Test Worksheet Species Name 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) 7. **Prevalence Index Worksheet** 8. 9. Total % Cover of: --Multiply by: 10. OBL spp. x 1 = 60 x 2 = Total Cover = 0 FACW spp. 30 60 x 3 = FAC spp. 0 0 Sapling/Shrub Stratum (Plot size: 5 meter radius) x 4 = FACU spp. 50 200 UPL spp. 0 x 5= 0 2. 3. 140 320 Total 4. 5. Prevalence Index = B/A = 2.286 6. 7 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes √ No Rapid Test for Hydrophytic Vegetation 10. --✓ Yes ☐ No Dominance Test is > 50% Total Cover = 0 ✓ Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ✓ No Problem Hydrophytic Vegetation (Explain) * Schoenoplectus tabernaemontani OBL 20 Ν * Indicators of hydric soil and wetland hydrology must be 2. 40 **OBL** Scirpus cyperinus present, unless disturbed or problematic. Υ 30 3. Carex cristatella **FACW** 4. 50 **FACU Definitions of Vegetation Strata:** Carex gracillima 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 140 Woody Vine Stratum (Plot size: 10 meter radius) 1. ----2. Hydrophytic Vegetation Present ☑ Yes ☐ No 3. 4 5. Total Cover = Remarks: Additional Remarks:



| | Godebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/25/14 |
|--|---|---|------------------------------|---|---|--|--|--|-----------------------|--|--|
| Project/Site: Applicant: | • | aconite, LLC | | | | | | | | County: | Iron |
| Investigator #1: | • | | | Investi | gator #2: | M Knick | relhine | | | State: | Wisconsin |
| Soil Unit: | | gebic-Peshekee-Ro | ock outer | | | | I/WWI Classification: | NI/Δ | | Wetland ID: | WC-1-20 |
| Landform: | • | gebic-resilence-ix | JCK Outer | | al Relief: | | i/ vv vv i Ciassification. | IN/A | | 7 | WC-1-20-06u |
| | Side slope | Latituda | NI/A | | | | | Detum | NI/A | Sample Point: | |
| Slope (%): | 5 | Latitude: | | | ongitude: | | | Datum: | | Community ID: | upland HW forest |
| • | | ditions on the site ty | • | | | (If no, expla | | ☐ Yes ☑ | | Section: | 5 |
| _ | | or Hydrology □ sig | - | | | | Are normal circumsta | • | ť? | Township: | 44N |
| | | or Hydrology 🛭 na | turally pr | oblemat | ic? | | Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pre | sent? | | ☐ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | ology Present? □ Yes ☑ No | | | | | | | Is This Sam | pling Point | Within A Wetlar | nd? ■ Yes ☑ No |
| Remarks: | | wetter than normal | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | | | | | | 1 \ | | | | | |
| | • | ators (Check here | if indicate | ors are r | ot preser | nt ☑): | | | | | |
| Primary: | | \\/_+ | | _ | DO 14/-4- | Ota:a.d | | | Secondary: | | Ownelse |
| | A1 - Surface A2 - High Wa | | | _ | B9 - Wate B13 - Aqu | | | | 님 | B6 - Surface Soil B10 - Drainage P | |
| l | A3 - Saturation | | | | B15 - Aqu | | | | | B16 - Moss Trim | |
| l ä | B1 - Water M | | | | C1 - Hydr | • | | | H | C2 - Dry-Season | |
| | B2 - Sedimer | | | | - | - | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift Dep | oosits | | | C4 - Pres | ence of Re | educed Iron | | | C9 - Saturation V | isible on Aerial Imagery |
| | B4 - Algal Ma | | | _ | | | duction in Tilled Soils | | _ | D1 - Stunted or S | |
| | B5 - Iron Dep | | | _ | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | • | Ц | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aqu | |
| | B8 - Sparsely | Vegetated Concave S | Surrace | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| | | | | | | | | | | D3 - 1 AC-Neutral | |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | Present? | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes ☑ No |
| Water Table Pr | esent? | ☐ Yes ☑ No | Depth: | | (in.) | | | wettallu riy | diology Fi | esent: | 162 M 140 |
| Saturation Pres | ent? | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Describe Record | led Data (etr | eam gauge, monitori | na well s | acrial pho | otos provid | nue inene | ctions) if available: | | N/A | | |
| | Tod Bala (oliv | Sam gaago, monton | 119 11011, 0 | derial pric | , provi | | | | | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| SOILS Map Unit Name |): | Dishno-Gogebic-P | eshekee | -Rock ou | utcrop cor | nplex, S | eries Drainage Class: | #N/A | | | |
| | | Dishno-Gogebic-Pe #N/A | eshekee | -Rock ou | utcrop cor | nplex, S | eries Drainage Class: | #N/A | | | |
| Map Unit Name Taxonomy (Sub | group): | #N/A | | | • | • | | | d Grains; Location: F | PL=Pore Lining, M=Matrix) | |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | #N/A | | | of indicators.) (Ty | • | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated San | | PL=Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | #N/A the depth needed to document the in | dicator or confire | m the absence o | of indicators.) (Ty | • | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated San | 3 | T | - ∤ . |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A | dicator or confire | m the absence of Matrix (Moist) | of indicators.) (Type | • | tion, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrack cdox Features | Туре | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR | Matrix (Moist) | of indicators.) (Type 100 % | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | Bottom Depth 5 24 | #N/A the depth needed to document the in | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 | of indicators.) (Type | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrage dox Features % | Type | T | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR | Matrix (Moist) | of indicators.) (Type 100 % | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 | % 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): Dition (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 | % 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sanda | Type | Location | (e.g. clay, sand, loam) sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | bgroup): btion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 | % 100 100 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sanda | Type | Location | (e.g. clay, sand, loam) sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 | % 100 100 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C | ccs=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 | % 100 100 | ee: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | cs=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | bgroup): btion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 4/4 | % 100 100 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | bgroup): Dtion (Describe to Bottom Depth 5 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 icators a | % 100 100 are not pre | esent 🗸 | tion, D=Depletion, RM=Reduced Matrix, CRecord (Moist) | cs=Covered/Coated Sandard Sand | Type | Location matic Soils 1 | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | bgroup): btion (Describe to Bottom Depth 5 24 Soil Field In A1- Histosol | #N/A the depth needed to document the in Horizon 1 2 adicators (check he | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 icators a | % 100 100 are not pre | esent v | tion, D=Depletion, RM=Reduced Matrix, CReduced Matrix, CR | cs=Covered/Coated Sandard Sand | Type | Location matic Soils 1 Muck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | bgroup): Dtion (Describe to Bottom Depth 5 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 adicators (check head) | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent arabete Belov | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) V Surface (LRR R, MLRA 149B) ICE (LRR R, MLRA 149B) | cs=Covered/Coated Sandard Sand | Type | Location Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep | #N/A the depth needed to document the in Horizon 1 2 adicators (check head) | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent aralue Belor Dark Surfa | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location matic Soils 1 Muck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) sandy loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) pipedon stic en Sulfide | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 4/4 icators a | % 100 100 see not presser Polyx S9 - Thin F1 - Loam | esent alue Belov Dark Surfa by Mucky I | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) N Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | cs=Covered/Coated Sandard Sand | Type | Location matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat | (e.g. clay, sand, loam) sandy loam sandy loam (149B) R K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic on Sulfide d Layers ed Below Dark Surface | Color 7.5YR 7.5YR ere if ind | Matrix (Moist) 3/2 4/4 icators a | % 100 100 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist)): v Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix fface | cs=Covered/Coated Sandard Sand | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) sandy loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic in Sulfide d Layers ed Below Dark Surface Dark Surface | Color 7.5YR 7.5YR ere if ind | Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) sandy loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic on Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral | Color 7.5YR 7.5YR ere if ind | Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral sleyed Matrix | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses nont Floodplain Soil arent Material | (e.g. clay, sand, loam) sandy loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic in Sulfide d Layers ed Below Dark Surface and Surface luck Mineral sleyed Matrix edox | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil earent Material Spodic (MLRA 144A, 1 | (e.g. clay, sand, loam) sandy loam sandy loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic on Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral ileyed Matrix edox Matrix | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cos=Covered/Coated Sandard San | Type | Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, 1) Shallow Dark Surface | (e.g. clay, sand, loam) sandy loam sandy loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic in Sulfide d Layers ed Below Dark Surface and Surface luck Mineral sleyed Matrix edox | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cos=Covered/Coated Sandard San | Type | Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil earent Material Spodic (MLRA 144A, 1 | (e.g. clay, sand, loam) sandy loam sandy loam (LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic on Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral ileyed Matrix edox Matrix | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Coated San | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=Covered/Coated Sandard Coated San | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped S7 - Dark Su | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 4/4 icators a | % 100 100 | esent avalue Belov Dark Surfa by Gleyed eted Matrix x Dark Su eted Dark | tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cos=Covered/Coated Sandard San | Type | Location | (e.g. clay, sand, loam) sandy loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face must be present, unless |



Project/Site: Gogebic Taconite Mine WC-1-20 Sample Point WC-1-20-06u

| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
|--------------------|---|--------------|----------|------------|--|
| | ot size: 10 meter radius) | ' | , | | |
| | Species Name | | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 85 | Υ | FACU | |
| 2. | Betula alleghaniensis | 20 | N | FAC | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 5 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 $\times 1 = 0$ |
| | Total Cover = | 105 | | | FACW spp. $0 	 x 2 = 0$ |
| | | | | | FAC spp. ${35}$ $\times 3 = {105}$ |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. 150 $x 4 = 600$ |
| 1. | Acer saccharum | 20 | Υ | FACU | UPL spp. $\frac{30}{30}$ $\times 5 = \frac{150}{1}$ |
| 2. | Quercus rubra | 5 | Υ | FACU | |
| 3. | | | | | Total 215 (A) 855 (B) |
| 4. | | | | | (2) |
| 5. | | | | | Prevalence Index = $B/A = 3.977$ |
| 6. | | | | | Trevalence mack = Birk = |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | |
| | _ | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | Total Cover = | 25 | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | rotal Cover = | 25 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| , | t size: 2 meter radius) | 20 | | LIDI | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Carex pensylvanica | 30 | Y | UPL | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Quercus rubra | 10 | N | FACU | present, unless disturbed or problematic. |
| 3. | Trientalis borealis | 5 | N | FAC | |
| 4. | Maianthemum canadense | 20 | Y | FACU | Definitions of Vegetation Strata: |
| 5. | Carex gracillima | 10 | N | FACU | <u> </u> |
| 6 | Abies balsamea | 10 | N | FAC | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | พบบนุ คเลาเธาธรร แสก 3.20 น. เสแ. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 85 | | | |
| | | | | | |
| Woody Vine Stratu | um (Plot size: 10 meter radius) | _ | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| - | Total Cover = | 0 | | | |
| Remarks: | | = | | | |
| | | | | | |
| | | | | | |
| Additional Ren | narks: | | | | |
| , waitional iten | | | | | |
| | | | | | |



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/25/14 |
|--|--|--|--|--|--|---|---|--|--|---|---|
| Applicant: | • | aconite, LLC | | | | | otantoo i rojoot ii. | 100701100 | | County: | Iron |
| Investigator #1: | • | | | Investi | gator #2: | M. Knicl | kelbine | | | State: | Wisconsin |
| Soil Unit: | | ay, stony complex, (| to 2 per | | | | I/WWI Classification: | T3/8K | | Wetland ID: | WC-1-20 |
| Landform: | Toeslope | | • | | al Relief: | Concav | Э | | | Sample Point: | WC-1-20-06w |
| Slope (%): | 1 | Latitude: | N/A | Lo | ongitude: | N/A | | Datum: | N/A | Community ID: | Evergreen Swamp |
| Are climatic/hyc | drologic conc | ditions on the site ty | pical for | this time | of year? | (If no, expla | nin in remarks) | □ Yes ☑ | No | Section: | 5 |
| Are Vegetation | □, Soil □, € | or Hydrology □ sig | nificantly | / disturbe | ed? | | Are normal circumsta | ances present | t? | Township: | 44N |
| Are Vegetation | □ , Soil □ , ○ | or Hydrology □ na | turally pr | oblemati | ic? | | Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pres | sent? | | | □ No | | | Hydric Soils | Present? | | |
| Wetland Hydrol | ogy Present | ? | | | □ No | | | Is This Samp | oling Point | Within A Wetlar | nd? ☑ Yes ■ No |
| Remarks: | Conditions | wetter than normal | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here | f indicate | ors are n | ot preser | nt □): | | | | | |
| Primary: | | atoro (orroon noro | i iiiaioat | | iot procor | ·· 🗀 /• | | | Secondary: | | |
| | A1 - Surface | Water | | 7 | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| $\overline{\mathcal{Q}}$ | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturation B1 - Water M | | | | B15 - Mar C1 - Hydr | | | | 님 | B16 - Moss Trim C2 - Dry-Season | |
| l H | B2 - Sedimer | | | | • | • | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift Dep | • | | | | | educed Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | | | _ | | | duction in Tilled Soils | | | D1 - Stunted or S | |
| | B5 - Iron Dep | | 2001 | _ | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima / Vegetated Concave S | 0 , | | Other (Ex | piain in Re | marks) | | | D3 - Shallow Aqui D4 - Microtopogra | |
| | 20 3 pa.33. | , vogotatou comouvo t | Janass | | | | | | | D5 - FAC-Neutral | |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Water Table Pr | | ☑ Yes ☐ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes □ No |
| Saturation Pres | | ☑ Yes ☐ No | Depth: | _ | (in.) | | | | | | |
| | | | <u> </u> | | | | | | | | |
| | | | | | | | | | K I / A | | |
| | ied Data (stre | eam gauge, monitori | ng well, a | aerial pho | otos, previo | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | led Data (Stre | eam gauge, monitori | ng well, a | aerial pho | otos, previo | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | ied Data (stre | eam gauge, monitori | ng well, a | aerial pho | otos, previo | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | | | | · | | Ì | · | | N/A | | |
| Remarks: SOILS Map Unit Name |): | Foxpaw-Gay, stony | | · | | Ì | ctions), if available: eries Drainage Class: | | N/A | | |
| Remarks: SOILS Map Unit Name Taxonomy (Sub | e: ogroup): | Foxpaw-Gay, stony #N/A | comple / | x, 0 to 2 | percent s | lopes S | eries Drainage Class: | #N/A | | | |
| Remarks: SOILS Map Unit Name Taxonomy (Sub | e: ogroup): otion (Describe to | Foxpaw-Gay, stony #N/A | comple / | x, 0 to 2 | percent s | lopes S | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | #N/A CS=Covered/Coated Sanc | d Grains; Location: F | PL=Pore Lining, M=Matrix) | Toyturo |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip | e: ogroup): otion (Describe to | Foxpaw-Gay, stony #N/A the depth needed to document the in | comple | x, 0 to 2 m the absence of Matrix | percent s | lopes S | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | #N/A CS=Covered/Coated Sance dox Features | d Grains; Location: F | | Texture |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | e: ogroup): otion (Describe to Bottom Depth | Foxpaw-Gay, stony #N/A | dicator or confirm | x, 0 to 2 m the absence of Matrix (Moist) | percent soft indicators.) (Type | e: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 | dicator or confirmation Color 10YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 | percent soft indicators.) (Type 100) | oe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) muck |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | e: ogroup): otion (Describe to group) Bottom Depth 8 9 | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 | comple dicator or confirm Color 10YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 | percent soft indicators.) (Type 100 100 100 | e: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) muck sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 | Bottom Depth 8 9 18 | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 | dicator or confirmation Color 10YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 | percent soft indicators.) (Type 100) | e: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) muck |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 | e: ogroup): otion (Describe to possible to | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 | percent soft indicators.) (Type 100 100 100 100 100 100 100 100 100 10 | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 | Bottom Depth 8 9 18 | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 | percent soft indicators.) (Type 100 100 100 100 100 100 100 100 100 10 | e: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 | e: ogroup): otion (Describe to possible to | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 | percent soft indicators.) (Type 100 100 100 100 100 100 100 100 100 10 | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 | Bottom Depth 8 9 18 | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 | percent s of indicators.) (Type % 100 100 | De: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 | e: ogroup): otion (Describe to the post of | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 | % 100 100 | e: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent s f indicators.) (Type % 100 100 re not pre | e: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type s for Proble | Location matic Soils ¹ | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check he | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent s f indicators.) (Type % 100 100 100 re not pre S8 - Polyv | esent are related as the related to | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type s for Proble A10 - 2 cm | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution of indicators.) (Type of in | esent □ value Belov | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type s for Proble A10 - 2 cm I | Location Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent s f indicators.) (Type % 100 100 100 re not pre S8 - Polyw S9 - Thin F1 - Loam | esent calue Belov Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi | Location Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat (| (e.g. clay, sand, loam) muck sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide | compledicator or confirmation Color 10YR 7.5YR 7.5YR | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution of indicators.) (Type of in | esent calue Below Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist)): w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St | Location Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) muck sandy loam sandy loam (49B) k, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent s f indicators.) (Type % 100 100 100 re not pre S8 - Polyw S9 - Thin F1 - Loam F2 - Loam | e: C=Concentra esent value Belov Dark Surfa by Mucky N by Gleyed eted Matrix | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Pe | (e.g. clay, sand, loam) muck sandy loam sandy loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution indicators.) (Type of indic | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) muck sandy loam sandy loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent s f indicators.) (Type % 100 100 100 re not pre S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat outface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses | (e.g. clay, sand, loam) muck sandy loam sandy loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution indicators.) (Type of indic | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S5 - Sandy R | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Gleyed Matrix Redox | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution indicators.) (Type of indic | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance cdox Features % Indicator | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ourface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ant Floodplain Soil arent Material Spodic (MLRA 144A, 1 | (e.g. clay, sand, loam) muck sandy loam sandy loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Gleyed Matrix Redox | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution indicators.) (Type of indic | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type Type Type Toleration: Final Proble Final Proble Type Toleration: Final Proble Type Toleration: Final Proble Type Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution indicators.) (Type of indic | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator Indicator Indicator | Type Type Type Toleration: Final Proble Final Proble Type Toleration: Final Proble Type Toleration: Final Proble Type Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat | (e.g. clay, sand, loam) muck sandy loam sandy loam (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix rface (LRR R, MLRA 149B) | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | x, 0 to 2 m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent s f indicators.) (Type % 100 100 100 re not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator Indicator | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 9 NRCS Hydric | Bottom Depth 8 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Foxpaw-Gay, stony #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix rface (LRR R, MLRA 149B) | comple dicator or confirmation Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/1 3/1 4/4 icators a | percent solution indicators.) (Type of indic | esent | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Ref Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator Indicator Indicator | Type | Location | (e.g. clay, sand, loam) muck sandy loam sandy loam (LRR K, L, R) |



Project/Site: Gogebic Taconite Mine Wc-1-20 Sample Point Wc-1-20-06w

| VEGETATION (Planting) | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
|-------------------------------|---|------------|-----------------|------------|--|
| Tree Stratum (Plo | t size: 10 meter radius) | 0/ 0 | <u> </u> | 1 10: : | Deminance Test Werksheet |
| 4 | Species Name | | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 20 | N | FACU | N |
| 2. | Thuja occidentalis | 50 | Y | FACW | Number of Dominant Species that are OBL, FACW, or FAC:4 (A) |
| 3. | Tsuga canadensis | 20 | N | FACU | |
| 4. | Betula alleghaniensis | 25 | Υ | FAC | Total Number of Dominant Species Across All Strata: 6 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp |
| | Total Cover = | 115 | | | FACW spp. $\frac{25}{75}$ $\times 2 = \frac{150}{150}$ |
| | 10101 00001 = | 110 | | | |
| Capling/Chrub Ctro | tum (Diet eizer E meter redius) | | | | |
| | tum (Plot size: 5 meter radius) | 20 | Υ | EACH | FACU spp. 87 $\times 4 = 348$ |
| 1. | Acer saccharum | 20 | | FACU | UPL spp. $0 	 x 	 5 = 0$ |
| 2. | Fraxinus americana | 5 | N | FACU | |
| 3. | Quercus rubra | 2 | N | FACU | Total <u>217</u> (A) <u>613</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.825 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes ☑ No Dominance Test is > 50% |
| 10. | Total Cover = | 27 | | | |
| | Total Cover = | 21 | | | |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| , | size: 2 meter radius) | | \ <u>\</u> | E4011 | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 20 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Carex crinita | 25 | Y | OBL | present, unless disturbed or problematic. |
| 3. | Dryopteris carthusiana | 25 | Υ | FACW | |
| 4. | Trientalis borealis | 5 | N | FAC | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| | | | | | |
| 14. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | | | | | Woody Vines - All Woody Vines greater than 3.28 ft. In neight. |
| | Total Cover = | 75 | | | |
| | | | | | |
| Woody Vine Stratu | ım (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | 13101 00001 - | | | | |
| | | | | | |
| | | | | | |
| A al alliel a ac a l D | a a alca . | | | | |
| Additional Ren | narks: | | | | |
| | | | | | |



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/10/14 |
|---|---|--|----------------------------|---|-----------------------|----------------------------------|--|--|--|---------------------------------------|--|
| Applicant: | • | aconite, LLC | | | | | • | | | County: | Iron |
| Investigator #1: | • | | | Investi | gator #2: | P. Piepe | er | | | State: | Wisconsin |
| Soil Unit: | | ery stony-Pence, ve | erv stonv | | _ | | /I/WWI Classification: | N/A | | Wetland ID: | WC-3-13 |
| Landform: | Saddle | ,,, | | | al Relief: | | | | | Sample Point: | WC-3-13-01u |
| Slope (%): | 3 | Latitude: | N/A | | ongitude: | | | Datum: | N/A | Community ID: | upland HW forest |
| · · · · · · · | | ditions on the site ty | | | | | ain in remarks) | ☐ Yes ☑ | | Section: | 9 |
| · · | | or Hydrology □ sig | • | | | (II TIO, OXPI | Are normal circumsta | | | Township: | 44N |
| • | | or Hydrology ⊟ na or Hydrology ⊟ na | - | | | | ✓ Yes | □No | | | 1 Dir: W |
| SUMMARY OF | | or riyurology 🗆 na | lurally pr | oblemat | 10: | | ₩ 100 | | | Range: | I DII. VV |
| | | 0.010 | | — V. | — No | | | Lludria Caila | Dragonto | | □ Vaa □ Na |
| Hydrophytic Ve | • | | | ☐ Yes | _ | | | Hydric Soils | | \ | ☐ Yes ☑ No |
| Wetland Hydrol | | | | ☐ Yes | ☑ No | | | is This Sam | oling Point | Within A Wetlar | nd? ■ Yes ■ No |
| Remarks: | Conditions | wetter than normal | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here | if indicate | ors are r | ot preser | nt ৷): | | | | | |
| <u>Primary:</u> | • | • | | | • | _ / | | | Secondary: | | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil | |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturation | | | | B15 - Mar | • | | | | B16 - Moss Trim | |
| | B1 - Water M B2 - Sedimer | | | | C1 - Hydr | - | ge Odor spheres on Living Roots | | | C2 - Dry-Season C8 - Crayfish Burn | |
| l H | B3 - Drift Dep | | | | | | educed Iron | | | • | isible on Aerial Imagery |
| l H | B4 - Algal Ma | | | | | | eduction in Tilled Soils | | | D1 - Stunted or S | 0 , |
| l ä | B5 - Iron Dep | | | _ | C7 - Thin | | | | _ | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | agery | | Other (Ex | plain in Re | emarks) | | | D3 - Shallow Aqui | |
| | B8 - Sparsely | / Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | Present? | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | ., |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes ☑ No |
| Saturation Pres | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| | | | • | | | | | | | | |
| | led Data (str | eam gauge, monitori | ng well, a | aerial pho | otos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| itemarks. | | | | | | | | | | | |
| ixemarks. | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| | e: | Gogebic, very ston | y-Pence | , very sto | ony-Cathr | o comp ® | eries Drainage Class: | #N/A | | | |
| SOILS | | Gogebic, very ston #N/A | y-Pence | , very sto | ony-Cathr | o comp & | eries Drainage Class: | #N/A | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | #N/A | | | | | | | d Grains; Location: F | PL=Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub | ogroup): otion (Describe to | #N/A | | | of indicators.) (Ty | | ation, D=Depletion, RM=Reduced Matrix, 0 | CS=Covered/Coated San | | PL=Pore Lining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to Bottom | #N/A the depth needed to document the in | dicator or confin | m the absence o | of indicators.) (Ty | | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated San | 1 | T | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A | dicator or confin | m the absence of Matrix (Moist) | of indicators.) (Ty | | ation, D=Depletion, RM=Reduced Matrix, 0 | cS=Covered/Coated Sanda dox Features | | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR | Matrix (Moist) 2.5/3 | % 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | Bottom Depth 5 24 | #N/A the depth needed to document the in | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sanda dox Features % | Type | T | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR | Matrix (Moist) 2.5/3 | % 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sandrage dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sanda dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sanda | Type | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Degroup): Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sanda | Type | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): Dition (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | ccs=Covered/Coated Sandard San | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | bgroup): Dtion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentra | Color (Moist) | ccs=Covered/Coated Sandard San | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | bgroup): Dition (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 are not pre | e: C=Concentra | Color (Moist) | cs=Covered/Coated Sanda | Type s for Proble | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | Bottom Depth 5 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 ndicators (check he | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 are not pre | esent | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sandard Sand | Type s for Proble A10 - 2 cm | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 andicators (check head) | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent □ value Belov Dark Surfa | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep | #N/A the depth needed to document the in Horizon 1 2 andicators (check here) | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sandard Sand | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi | #N/A the depth needed to document the in Horizon 1 2 andicators (check here) stic en Sulfide | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent alue Belovark Surfa | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cs=Covered/Coated Sandard Sand | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface | Color 7.5YR 5YR ere if ind | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E | #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) cipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral | Color 7.5YR 5YR ere if ind | Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M | #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic En A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) cipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cos=Covered/Coated Sanda dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) sils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check he cipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cs=Covered/Coated Sandard Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) sils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check here) cipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cos=Covered/Coated Sandardox Features % Indicator | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 adicators (check he cipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox I Matrix | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cos=Covered/Coated Sanda dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | Bottom Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon | Color 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | % 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, (Color (Moist) | cos=Covered/Coated Sanda dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ills (MLRA 149B) face |



Northeast and Northcentral Region

Project/Site: WC-3-13 Sample Point WC-3-13-01u Gogebic Taconite Mine Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Acer saccharum 1. 40 Y **FACU** 2. Y Populus tremuloides 40 FAC Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) 3. Abies balsamea 5 Ν FAC 4. Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: **37.5%** (A/B) --7. 8. **Prevalence Index Worksheet** --9. Total % Cover of: Multiply by: 10. -x 1 =OBL spp. 0 Total Cover = 85 x 2 =FACW spp. 70 x 3 =FAC spp. 105 315 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 170 680 15 **FACU** 1. Corylus cornuta x = 5UPL spp. 125 **FACU** 2. Acer saccharum 25 Υ 3. Acer rubrum 15 Ν FAC 1190 Total 335 (B) Populus tremuloides Υ FAC 4. 40 5. Prunus serotina 5 Ν **FACU** Prevalence Index = B/A = 3.552 6. ----7. ----8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ☑ No 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 100 ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * 15 **FACU** Acer saccharum Ν 1. * Indicators of hydric soil and wetland hydrology must be Υ 2. 35 **FACW** Coptis trifolia present, unless disturbed or problematic. 20 3. Maianthemum canadense Ν **FACU Definitions of Vegetation Strata:** 4. HIERACIUM AURANTIACUM 25 Υ UPL 5. Mitchella repens 25 Υ **FACU** Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 Trientalis borealis 5 Ν FAC height (DBH), regardless of height. Y 7. Lonicera canadensis 25 **FACU** 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. -tall. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ----14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 150 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** □ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/10/14 |
|--|---|---|--------------------|---|--|--|--|--|--|---|---|
| Applicant: | | aconite, LLC | | | | | • | | | County: | Iron |
| Investigator #1: | A. Michalsl | ki | | Investi | gator #2: | P. Piepe | er | | | State: | Wisconsin |
| Soil Unit: | Minocqua-l | Pleine-Cathro compl | lex, 0 to | 2 percer | 1 | NW | /I/WWI Classification: | N/A | | Wetland ID: | WC-3-01 |
| Landform: | Toeslope | | | Loc | al Relief: | Concav | Э | | | Sample Point: | WC-3-01-13w |
| Slope (%): | 1 | Latitude: | N/A | Lo | ongitude: | N/A | | Datum: | N/A | Community ID: | HW/Evergreen swamp |
| | | ditions on the site typ | | | | (If no, expla | | □ Yes ☑ | | Section: | 9 |
| | | or Hydrology ☐ sig | | | | | Are normal circumsta | | t? | Township: | 44N |
| Are Vegetation | □, Soil □, | or Hydrology | urally pr | oblemati | ic? | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pre | sent? | | | □ No | | | Hydric Soils | | | |
| Wetland Hydrol | | | | Yes | □ No | | | Is This Samp | oling Point \ | Within A Wetlan | d? ☑ Yes ■ No |
| Remarks: | Conditions | wetter than normal. | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here if | indicate | ors are no | ot present | · 🗆): | | | | | |
| Primary: | | atoro (orroon moro ii | maioaic | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | or procern | | | | Secondary: | | |
| | A1 - Surface | Water | | V | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturation | | | | B15 - Mar | | | | | B16 - Moss Trim I | |
| | B1 - Water M B2 - Sedimer | | | | C1 - Hydro | | de Odor spheres on Living Roots | | | C2 - Dry-Season V C8 - Cravfish Burn | |
| | B3 - Drift De | | | | | | educed Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | | | _ | | | duction in Tilled Soils | | | D1 - Stunted or St | |
| | B5 - Iron Dep | | | | C7 - Thin | | | | V | D2 - Geomorphic | Position |
| | | on Visible on Aerial Ima | | | Other (Exp | olain in Re | marks) | | | D3 - Shallow Aqui | |
| | B8 - Sparsely | y Vegetated Concave S | urface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | Present? | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | esent? | Yes □ No |
| Water Table Pr | | | Depth: | 2 | (in.) | | | Trottana my | u.o.ogy | | 100 🖺 110 |
| Saturation Pres | ent? | ☑ Yes □ No | Depth: | 0 | (in.) | | | | | | |
| Describe Record | ed Data (stre | am gauge, monitoring | well. ae | rial photo | s. previous | s inspecti | ons), if available: | | N/A | | |
| | | 3-1-3-7 | , . , | | - / 1 | | ,, | | | | |
| Romarke: | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | Minagua Plaina C | othro oo | mploy 0 | to 2 pore | ont alo | orion Drainago Class | #NI/A | | | |
| SOILS Map Unit Name | | | athro co | mplex, 0 | to 2 perc | ent slo ß | eries Drainage Class: | #N/A | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | #N/A | | | • | | | | | | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | #N/A | | n the absence of | • | | ion, D=Depletion, RM=Reduced Matrix, C | S=Covered/Coated Sand | | _=Pore Lining, M=Matrix) | Taytura |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | #N/A the depth needed to document the ind | icator or confirm | n the absence of Matrix | indicators.) (Type | | ion, D=Depletion, RM=Reduced Matrix, Ci | S=Covered/Coated Sand | | T | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the ind Horizon | icator or confirm | Matrix (Moist) | indicators.) (Type | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, Ci Re Color (Moist) | S=Covered/Coated Sand | Туре | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | cator or confirm | Matrix (Moist) | indicators.) (Type | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, Ci Re Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): ption (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color | Matrix (Moist) 2/0 | indicators.) (Type | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | Matrix (Moist) 2/0 | % 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): ption (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color | Matrix (Moist) 2/0 | indicators.) (Type | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | Matrix (Moist) 2/0 | % 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | Matrix (Moist) 2/0 | % 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): tition (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | Matrix (Moist) 2/0 | 9% 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): tition (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | Matrix (Moist) 2/0 | 9% 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): ption (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | m the absence of Matrix (Moist) 2/0 | % 100 | e: C=Concentrat | con, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric : | pgroup): ption (Describe to Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color N | Matrix (Moist) 2/0 cators ar | % 100 e not pre | e: C=Concentrat | con, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth | #N/A Horizon 1 ndicators (check he | Color N | Matrix (Moist) 2/0 cators ar | % 100 e not pre S8 - Polyv S9 - Thin | s: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1. Prairie Redox (LRR | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth 5 | #N/A Horizon 1 | Color N | Matrix (Moist) 2/0 cators ar | "Moderators" (Type "Moderators") (Type "Modera | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mo | Location matic Soils Prairie Redox (LRR KL MLRA 1. Prairie Redox (LRR KL MLRA L) LOCATION (LRR MLRA 1. Prairie Redox (LRR KL MLRA L) LOCATION (LRR MLRA 1. ML | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 5 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge | #N/A Horizon 1 | Color N | m the absence of Matrix (Moist) 2/0 cators ar | "Moderators.) (Type "Moderato | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % Indicato | Type | Location matic Soils Muck (LRR K, L, MLRA 1- Prairie Redox (LRR Joky Peat of Peat (urface (LRR K, L, M, L, M) | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 5 Soil Field In A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifiee | #N/A Horizon 1 | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | % | s: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % Indicatol | Type | Location matic Soils Muck (LRR K, L, MLRA 1: Prairie Redox (LRR K, L, MLRA 1: Prairie Redox (LRG K, L, MLRA 1: Matic Soils Mucky Peat of Peat (LIT ACE) Matic Soils Mucky Peat of Peat (LIT ACE) Mucky Peat of Peat (MIT ACE) | (e.g. clay, sand, loam) muck 49B) K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth 5 | #N/A Horizon 1 ndicators (check he pipedon istic sen Sulfide d Layers ed Below Dark Surface | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | % 100 e not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple | sent alue Belo Dark Surfa y Mucky N y Mucky N y Dark Su | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered'Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S3 - 5cm Mt S3 - 5cm S8 - Polyval S9 - Thin Da | Location matic Soils Muck (LRR K, L, MLRA 1- Prairie Redox (LRR LCky Peat of Peat (Lufface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth | #N/A Horizon 1 adicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface park Surface park Surface | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M | Location | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth 5 | #N/A Horizon 1 | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | % 100 e not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicatol | Type | Location matic Soils Muck (LRR K, L, MLRA 1- Prairie Redox (LRR LCky Peat of Peat (Lufface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) | (e.g. clay, sand, loam) muck |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth | #N/A Horizon 1 | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck 49B) K. L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth | #N/A Horizon 1 adicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface duck Mineral Seleyed Matrix tedox I Matrix | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck 49B) K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth | #N/A Horizon 1 ndicators (check he pipedon stic en Sulfide d Layers ed Below Dark Surface Auck Mineral Sleyed Matrix ledox | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicatol | Type | Location | (e.g. clay, sand, loam) muck 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, S) (LRR K, L, S) (MLRA 149B) 45, 149B) acce |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth | #N/A Horizon 1 adicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface duck Mineral Seleyed Matrix tedox I Matrix | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered'Coated Sand dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, B) S (MLRA 149B) 45, 149B) acce |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth O NRCS Hydric: | pgroup): ption (Describe to Depth | #N/A Horizon 1 | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, B) ace must be present, unless |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | pgroup): ption (Describe to Depth 5 | #N/A Horizon 1 | Color N re if indi | m the absence of Matrix (Moist) 2/0 cators ar | " " " " " " " " " " " " " " " " " " " | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C: Re Color (Moist) | S=Covered'Coated Sand dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) muck 49B) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, B) S (MLRA 149B) 45, 149B) acce |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WC-3-01 Sample Point >-3-01-1 |
|--------------------|---|-----------|----------|------------|---|
| V=0== | | | | | |
| VEGETATION | (Species identified in all uppercase are non-nat size: 10 meter radius) | tive spec | ies.) | | |
| Tree Stratum (Pio | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Betula alleghaniensis | 60 | Y | FAC | |
| 2. | Fraxinus nigra | 30 | Υ | FACW | Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) |
| 3. | Thuja occidentalis | 25 | N | FACW | ·· |
| 4. | Abies balsamea | 15 | N | FAC | Total Number of Dominant Species Across All Strata:6 (B) |
| 5. | | | | | |
| 6. | <u></u> | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. 10. | | | | | Total % Cover of: Multiply by: |
| 10. | Total Cover = | 130 | | | OBL spp. 0 |
| | Total Cover = | 130 | | | · · · · · · · · · · · · · · · · · · · |
| Sanling/Shrub Stra | tum (Plot size: 5 meter radius) | | | | FAC spp. 115 |
| 1. | Alnus incana | 50 | Υ | FACW | UPL spp. 0 |
| 2. | Corylus cornuta | 20 | Υ | FACU | |
| 3. | Picea mariana | 5 | N | FACW | Total 290 (A) 735 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.534 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation |
| 10. | Total Cover = | 75 | | | ☑ Yes ☐ No Dominance Test is > 50% |
| | Total Cover = | 75 | | | ✓ Yes☐ NoPrevalence Index is ≤ 3.0 *☐ Yes☑ NoMorphological Adaptations (Explain) * |
| Herh Stratum (Plot | size: 2 meter radius) | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Rubus pubescens | 20 | Υ | FACW | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| 2. | Cornus canadensis | 40 | Υ | FAC | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Dryopteris carthusiana | 10 | N | FACW | present, unless disturbed or problematic. |
| 4. | Equisetum sylvaticum | 5 | N | FACW | Definitions of Vegetation Strata: |
| 5. | Fraxinus nigra | 10 | N | FACW | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 9. | | | | | tall. |
| 10. 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, |
| 13. | | | | | and woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 85 | | | |
| | | | | | |
| | m (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | 11 1 1 2 W 4 2 B 4 5 W 5 W |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. 5. | | | | | |
| ა. | Total Cover = | 0 | | | |
| Remarks: | Total Cover = | U | | | |
| | | | | | |
| | | | | | |
| Additional Ren | narks: | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/10/14 |
|--|--|---|----------------------------|---|---|------------------------|---|--|--|---|--|
| Applicant: | | aconite, LLC | | | | | Ctaritoo i rojoot ii. | 100701100 | | County: | Iron |
| Investigator #1: | • | | | Investi | gator #2: | P. Piene | er | | | State: | Wisconsin |
| Soil Unit: | | ery stony-Pence, ve | rv stony | | | | /I/WWI Classification: | N/A | | Wetland ID: | WC-3-44 |
| Landform: | Saddle | 0., 0.0, . 00, . 0 | ., σισ, | | al Relief: | | | | | Sample Point: | WC-3-44-01u |
| Slope (%): | 3 | Latitude: | N/A | | ongitude: | | | Datum: | N/A | Community ID: | upland HW forest |
| | - | ditions on the site ty | | | | | nin in remarks) | ☐ Yes ☑ | | Section: | 9 |
| | | or Hydrology □ sig | | | | | Are normal circumsta | ances present | ? | Township: | 44N |
| • | | or Hydrology □ nat | | • | | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | , , , , , | , , , | | | | | | | 3 | |
| Hydrophytic Ve | | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | | | | ☐ Yes | _ | | | | | Within A Wetlan | |
| Remarks: | Conditions | wetter than normal. | | | | | | | ., | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | nlogy Indica | ators (Check here if | indicato | nrs are no | nt nresent | · 🖂)• | | | | | |
| Primary: | | CHECK HEIE II | illuicaic | ns are in | or bieseii | · 🖭)- | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturation | | | | B15 - Mar | | | | | B16 - Moss Trim L | |
| | B1 - Water M B2 - Sedimer | | | | C1 - Hydro | | spheres on Living Roots | | | C2 - Dry-Season \ C8 - Crayfish Burr | |
| | B3 - Drift Der | | | | | | educed Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | | | | C6 - Rece | nt Iron Re | duction in Tilled Soils | | | D1 - Stunted or St | ressed Plants |
| | B5 - Iron Dep | | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima / Vegetated Concave S | | Ц | Other (Exp | olain in Re | emarks) | | | D3 - Shallow Aqui D4 - Microtopogra | |
| | Do - Oparser | vegetated Concave C | ullace | | | | | | | D5 - FAC-Neutral | |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | | □ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hyd | drology Pr | esent? | Yes ☑ No |
| Saturation Pres | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| | | | | | . , | | \ ''\ ''\ ''\ ''\ ''\ ''\ ''\ ''\ ''\ ' | | NI/A | | |
| | ed Data (Stre | am gauge, monitoring | y weii, ae | riai pnoto | s, previous | sinspecti | ons), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| COLLC | | | | | | | | | | | |
| SOILS | | O-makin warmantan | . D | | O4h | | orion Doning on Olympia | (/\) | | | |
| Map Unit Name | | | y-Pence | , very sto | ony-Cathr | o comp& | eries Drainage Class: | #N/A | | | |
| Map Unit Name Taxonomy (Sub | group): | #N/A | | | | | | | | | |
| Map Unit Name Taxonomy (Sub Profile Descrip | group): otion (Describe to | #N/A | | n the absence of | | | ion, D=Depletion, RM=Reduced Matrix, C | S=Covered/Coated Sand | | L=Pore Lining, M=Matrix) | Teyture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | group): otion (Describe to Bottom | #N/A the depth needed to document the ind | icator or confirm | n the absence of Matrix | indicators.) (Type | | ion, D=Depletion, RM=Reduced Matrix, C | S=Covered/Coated Sand | | | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to) Bottom Depth | #N/A the depth needed to document the ind Horizon | icator or confirm | Matrix (Moist) | indicators.) (Typi | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand dox Features % | Туре | Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): otion (Describe to) Bottom Depth 5 | #N/A the depth needed to document the ind Horizon 1 | Color 7.5YR | Matrix (Moist) 2.5/3 | indicators.) (Type | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | group): stion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): stion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR | Matrix (Moist) 2.5/3 3/4 | indicators.) (Type | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | group): stion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | group): tion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | group): tion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | 9% 100 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | group): tion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 | 9% 100 100 | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 | group): tion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/3 3/4 | % 100 100 | e: C=Concentrat | con, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): tion (Describe to Bottom Depth 5 24 Soil Field In | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 cators ar | % 100 100 er not pre | e: C=Concentrat | con, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble | Location matic Soils ¹ | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric: | group): tion (Describe to Bottom Depth 5 24 | #N/A the depth needed to document the ind Horizon 1 2 adicators (check he | Color 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/3 3/4 | % 100 100 e not pre \$8 - Polyv. | e: C=Concentrat | con, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): tion (Describe to Depth 5 24 Soil Field In A1- Histosol A3 - Black Hi | #N/A Horizon 1 2 Idicators (check he objeedon stic | Color 7.5YR 5YR | Matrix (Moist) 2.5/3 3/4 cators ar | "Mindicators) (Type % 100 100 e not pre \$8 - Polyx \$9 - Thin \$F1 - Loarn | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm M | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): ption (Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ef A3 - Black Hi A4 - Hydroge | #N/A the depth needed to document the ind Horizon 1 2 dicators (check he bipedon stic an Sulfide | Color 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/3 3/4 cators ar | % 100 100 e not pre S8 - Polyv S9 - Than F1 - Loam | e: C=Concentrat | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark St | Location matic Soils ¹ Muck (LRR K, L, MLRA 12 Prairie Redox (LRR LOKY Peat of Peat (LUTface (LRR K, L, M.) | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): ption (Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratifiee | #N/A Horizon 1 2 dicators (check he objection stice in Sulfide di Layers | Color 7.5YR 5YR re if indi | m the absence of Matrix (Moist) 2.5/3 3/4 cators ar | % 100 100 e not pre 88 - Polyx 99 - Thin F1 - Loam F3 - Deple F2 - Loam F3 - Deple F3 - Depl | e: C=Concentrat | con, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval | Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LCky Peat of Peat (LI Inface (LRR K, L, M) ue Below Surface (2 | (e.g. clay, sand, loam) silt loam sandy loam sysb, K, L, R) LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): stion (Describe to Describe to Depth 5 24 | #N/A Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface | Color 7.5YR 5YR re if indi | m the absence of Matrix (Moist) 2.5/3 3/4 cators ar | % 100 100 e not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple | sc C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5cm Mu S3 - 5cm Mu S3 - 7 - Dark Su S8 - Polyval S9 - Thin Da | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): ption (Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratifiee | #N/A Horizon 1 2 Idicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface bark Surface | Color 7.5YR 5YR re if indi | m the absence of Matrix (Moist) 2.5/3 3/4 cators ar | % 100 100 e not pre 88 - Polyx 99 - Thin F1 - Loam F3 - Deple F2 - Loam F3 - Deple F3 - Depl | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LCky Peat of Peat (LI Inface (LRR K, L, M) ue Below Surface (2 | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): ption (Describe to Describe to Depth | #N/A the depth needed to document the ind Horizon 1 2 | Color 7.5YR 5YR re if indi | Matrix (Moist) 2.5/3 3/4 cators ar | "midcators) (Type """"""""""""""""""""""""""""""""""" | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F12 - Piedm F21 - Red P | Location | (e.g. clay, sand, loam) silt loam sandy loam syb, K. L. R) LRR K, L, R) LLRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): stion (Describe to Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R | #N/A Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface fluck Mineral sleved Matrix leedox | Color 7.5YR 5YR re if indi | Matrix (Moist) 2.5/3 3/4 cators ar | "midcators) (Type """"""""""""""""""""""""""""""""""" | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type sfor Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark Sü S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F14 - Red P TA6 - Mesic | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): tion (Describe to Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 | #N/A Horizon 1 2 adicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface duck Mineral Sleyed Matrix tedox I Matrix | Color 7.5YR 5YR re if indi | Matrix (Moist) 2.5/3 3/4 cators ar | "midcators) (Type """"""""""""""""""""""""""""""""""" | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm l ^N A16 - Coast S3 - 5cm Mc S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P F21 - Red P F21 - Red P F21 - Very | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): tion (Describe to Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 | #N/A Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface fluck Mineral sleved Matrix leedox | Color 7.5YR 5YR re if indi | Matrix (Moist) 2.5/3 3/4 cators ar | "midcators) (Type """"""""""""""""""""""""""""""""""" | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type sfor Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark Sti S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F14 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): tion (Describe to Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 | #N/A Horizon 1 2 adicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface duck Mineral Sleyed Matrix tedox I Matrix | Color 7.5YR 5YR re if indi | Matrix (Moist) 2.5/3 3/4 cators ar | "midcators) (Type """"""""""""""""""""""""""""""""""" | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type sfor Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark Sti S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): tion (Describe to Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 | #N/A Horizon 1 2 | Color 7.5YR 5YR re if indi | m the absence of Matrix (Moist) 2.5/3 3/4 cators an | "midcators) (Type """"""""""""""""""""""""""""""""""" | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type sfor Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark Sti S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) silt loam sandy loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 5 NRCS Hydric | group): stion (Describe to Describe to Depth 5 24 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A11 - Deplet A12 - Thick E S1 - Sandy M S5 - Stripped S7 - Dark Su | #N/A Horizon 1 2 | Color 7.5YR 5YR re if indi | m the absence of Matrix (Moist) 2.5/3 3/4 cators an | " " " " " " " " " " " " " " " " " " " | e: C=Concentrate Sent | Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type sfor Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark Sti S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) silt loam sandy loam |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WC-3-44 Sample Point >-3-44-0 |
|-------------------|---|-----------|----------|-------------|--|
| VEGETATION | (Species identified in all uppercase are non-na | tivo cooo | ios) | | |
| | ot size: 10 meter radius) | tive spec | ies.) | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 40 | Υ | FACU | |
| 2. | Populus tremuloides | 40 | Υ | FAC | Number of Dominant Species that are OBL, FACW, or FAC:3(A) |
| 3. | Abies balsamea | 5 | N | FAC | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:8(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B) |
| 7. | | | | | Decordon so Index Westerland |
| 8. 9. | | | | | Prevalence Index Worksheet |
| 10. | | | | | Total % Cover of: Multiply by: OBL spp 0 x 1 = 0 |
| 10. | Total Cover = | 85 | | | OBL spp. 0 |
| | Total Cover = | 00 | | | FAC spp. 105 X 3 = 315 |
| Sanling/Shrub Str | ratum (Plot size: 5 meter radius) | | | | FACU spp. 170 x 4 = 680 |
| 1. | Corylus cornuta | 15 | N | FACU | UPL spp. 25 X 5 = 125 |
| 2. | Acer saccharum | 25 | Y | FACU | |
| 3. | Acer rubrum | 15 | N | FAC | Total 335 (A) 1190 (B) |
| 4. | Populus tremuloides | 40 | Υ | FAC | |
| 5. | Prunus serotina | 5 | N | FACU | Prevalence Index = B/A = 3.552 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | <u></u> | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 100 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| | ot size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 15 | N N | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Coptis trifolia | 35 | Y | FACW | present, unless disturbed or problematic. |
| 3. 4. | Maianthemum canadense HIERACIUM AURANTIACUM | 20 25 | N Y | FACU UPL | Definitions of Variation Strate. |
| 5. | Mitchella repens | 25 | Y | FACU | Definitions of Vegetation Strata: |
| 6 | Trientalis borealis | 5 | N I | FACO | Tree - Washington Oir (7 Com) as made in discrete at heavy |
| 7. | Lonicera canadensis | 25 | Y | FACU | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, |
| 13. | | | | | and woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 150 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | Total Cover | | | | |
| Remarks: | Total Cover = | 0 | | | |
| Nemaiks. | | | | | |
| L | | | | | |
| Additional Re | marke: | | | | |
| Auditional Re | iliai no. | | | | 7 |
| | | | | | |
| | | | | | |



| | | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/10/14 |
|---|---|---|--------------------|--|--|--|--|---|--|--|--|
| Applicant: | | aconite, LLC | | | | D D: | | | | County: | Iron |
| Investigator #1: | | | | | gator #2: | | | NI/A | | State: | Wisconsin |
| Soil Unit: Landform: | Gogebic, v | ery stony-Pence, ve | ery stony | | c :al Relief: | | I/WWI Classification: | N/A | | Wetland ID: | WC-3-44 WC-3-44-01w |
| Slope (%): | 0 | Latitude: | NI/A | | ongitude: | | , | Datum: | NI/A | Sample Point: | shallow marsh |
| | | ditions on the site ty | | | | | in in annual a | ☐ Yes ☑ | | Community ID: Section: | 9 |
| | | or Hydrology □ sig | | | | (if no, expir | Are normal circumsta | | | Township: | 9 44N |
| | | or Hydrology ☐ sig | | | | | ✓ Yes | ances presem □No | l: | Range: | 1 Dir: W |
| SUMMARY OF | | or riyurology 🗀 ria | turally pi | Oblemati | iC: | | □ 103 | | | Kange. | I DII. VV |
| Hydrophytic Ve | | cont? | | ✓ Yes | □ No | | | Hydric Soils | Drocont? | | |
| Wetland Hydrol | | | | ☑ Yes | | | | | | Within A Wetlar | |
| Remarks: | | wetter than normal. | | <u> </u> | LI INO | | | is this Same | Jilly Follit | willin A wellar | iu: <u>• res • No</u> |
| Remarks. | Conditions | wetter triair normal. | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | ology Indio | ators (Check here i | findicate | ore ore no | ot procon | + ¬ \• | | | | | |
| Primary | | ators (Check here i | illulcall | ns are m | ot presen | · 🗆). | | | Secondary: | | |
| | A1 - Surface | Water | | V | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | l | | | B10 - Drainage P | |
| | | | | | B15 - Mar | | 1. 01. | | | B16 - Moss Trim | |
| | | | | | C1 - Hydr | | de Odor spheres on Living Roots | | | C2 - Dry-Season C8 - Crayfish Bur | |
| | | | | | | | duced Iron | | ä | | isible on Aerial Imagery |
| | | | | | | | duction in Tilled Soils | | | D1 - Stunted or S | |
| | B5 - Iron Dep | osits | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Im | | | Other (Ex | plain in Re | marks) | | | Do Onanon riqu | |
| | B8 - Sparsely | / Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| F: 1101 | | | | | | | | | | D3 - FAC-Neutral | 1 1651 |
| Field Observat | | | | | | | | | | | |
| Surface Water | | ☑ Yes □ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | esent? | Yes □ No |
| Water Table Pr | | ☑ Yes □ No | Depth: | | (in.) | | | • | | | _ |
| Saturation Pres | sent? | ☑ Yes ☐ No | Depth: | 0 | (in.) | | | | | | |
| Describe Record | led Data (stre | am gauge, monitorin | g well, ae | rial photo | s, previou | s inspecti | ons), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| 0011.0 | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | e: | Gogebic, very ston | y-Pence | , very sto | ony-Cathr | o comp& | eries Drainage Class: | #N/A | | | |
| | | Gogebic, very ston #N/A | y-Pence | , very sto | ony-Cathr | o comp& | eries Drainage Class: | #N/A | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | #N/A | | | | | eries Drainage Class: | | Grains; Location: Pl | L=Pore Lining, M=Matrix) | |
| Map Unit Name Taxonomy (Sub | ogroup): | #N/A | | | indicators.) (Typ | | on, D=Depletion, RM=Reduced Matrix, C | | | L=Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | #N/A | dicator or confirm | n the absence of | indicators.) (Typ | | on, D=Depletion, RM=Reduced Matrix, C | S=Covered/Coated Sand | | L=Pore Lining, M=Matrix) Location | |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to | #N/A the depth needed to document the inc | dicator or confirm | n the absence of Matrix | indicators.) (Typ | | on, D=Depletion, RM=Reduced Matrix, C | S=Covered/Coated Sand | ı | T | |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the inc | dicator or confirm | Matrix (Moist) | indicators.) (Typ | e: C=Concentrat | on, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | S=Covered/Coated Sand edox Features % | Туре | Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the inc Horizon 1 | Color 7.5YR | Matrix (Moist) 4/2 | indicators.) (Typ | e: C=Concentrat | on, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | edox Features % | Type | Location | (e.g. clay, sand, loam) sandy clay loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | pogroup): potion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 | % 100 95 | e: C=Concentrat | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | edox Features % 5 | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | ogroup): otion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 | % 100 95 | e: C=Concentrat | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type c | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | ogroup): otion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the ine Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 | % 100 95 | 7.5YR | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | SS=Covered/Coated Sand | Type c | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | ogroup): otion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 | % 100 95 | e: C=Concentrat | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | ogroup): otion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 | % 100 95 | e: C=Concentrat | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 | ogroup): potion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | n the absence of Matrix (Moist) 4/2 4/3 | % 100 95 | | con, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | ogroup): ption (Describe to Bottom Depth 2 20 Soil Field In | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 cators ar | % 100 95 er not pre | 7.5YR | con, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand dox Features % 5 Indicator | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | ogroup): potion (Describe to Bottom Depth 2 20 | #N/A the depth needed to document the inc Horizon 1 2 adicators (check he | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 cators ar | % 100 95 er e not pre S8 - Polyv | 7.5YR | on, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type C | Location m matic Soils ¹ | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Bottom Depth 2 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black His | #N/A the depth needed to document the inc Horizon 1 2 adicators (check he objeedon stic | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 cators ar | % 100 95 e not pre \$8 - Polyn \$9 - Tolyn \$1 - Loarn F1 - Loarn F1 - Loarn | 7.5YR sent □ ralue Belo Dark Surfar | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand edox Features % 5 Indicator | Type C s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Me | Location m matic Soils ¹ Wuck (LRR K, L, MLRA + Prairie Redox (LR | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 idicators (check he bipedon stic en Sulfide | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % | 7.5YR sent □ ralue Belo Dark Surfa y Mucky N by Gleyed | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand edox Features % 5 Indicator | Type C S for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mt S7 - Dark Sr | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 adicators (check he be) stic en Sulfide d Layers | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR sent ale Belo Dark Surfay Mucky Ny Mucky Ny Mucky Ny Gleyed deted Matrix | con, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand dox Features % 5 Indicator | Type C S for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval | Location m matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR Lycky Peat of Peat urface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) sandy clay loam sandy loam 149B) R.K.L., R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 cators an | % 100 95 1. Loam F2 - Loam F2 - Loam F3 - Deplo F6 - Redo | 7.5YR sent ralue Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su | on, D-Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type C | Location m matic Soils Whuck (LRR K, L, MLRA + Prairie Redox (LRR L, L, M) Prairie Redox (LRR L, L, M) Urface (LRR K, L, M) | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Bottom Depth 2 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick E | #N/A the depth needed to document the ince Horizon 1 2 Idicators (check here) Dipedon stic en Sulfide di Layers ed Below Dark Surface Dark Surface | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand edox Features % 5 Indicator | Type C s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N | Location m matic Soils Prairie Redox (LRR K, L, MLRA † Article (LRR K, L) MLRA † Article (| (e.g. clay, sand, loam) sandy clay loam sandy loam (LRR K, L, R) (LRR K, L, L)) S (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 Idicators (check he objecton stic on Sulfide d Layers ed Below Dark Surface duck Mineral | Color 7.5YR 7.5YR | Matrix (Moist) 4/2 4/3 cators an | % 100 95 1. Loam F2 - Loam F2 - Loam F3 - Deplo F6 - Redo | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand edox Features % 5 Indicator | Type | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam (LRR K, L, R) (LRR K, L, L)) S (LRR K, L, R) |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface duck Mineral sleyed Matrix ledox | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand | Type C | Location m matic Soils mutic Soils MUck (LRR K, L, MLRA + Prairie Redox (LRR K, L, ML) Urface (LRR K, L, M) ur Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain So arent Material Spodic (MLRA 144A, | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand cdox Features % 5 Indicator | Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P F21 - Very | Location m matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L, L, M) ue Below Surface ark Surface (LRR K, L L langanese Masses ont Floodplain So arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface duck Mineral sleyed Matrix ledox | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand cdox Features % Indicator | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand cdox Features % 5 Indicator | Type C | Location m matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L, L, M) ue Below Surface ark Surface (LRR K, L L langanese Masses ont Floodplain So arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Auck Mineral sleyed Matrix eddox I Matrix rface (LRR R, MLRA 149B) | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | % 100 95 | 7.5YR Sent □ value Belo Dark Surfa y Mucky N y Gleyed eted Matrix x Dark Su ted Dark | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S=Covered/Coated Sand cdox Features % 5 Indicator | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |
| Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 NRCS Hydric | pogroup): potion (Describe to Depth 2 2 20 | #N/A the depth needed to document the inc Horizon 1 2 Idicators (check he objecton stic en Sulfide d Layers ed Below Dark Surface fuck Mineral Sleyed Matrix ledox I Matrix Iface (LRR R, MLRA 149B) N/A | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 4/2 4/3 cators ar | "Modestors) (Type indicators) (Type 100 95 - | e: C=Concentrat 7.5YR sent □ ralue Belo Dark Surfa ny Mucky h ny Gleyed ated Matrix x Dark Su eted Dark x Depress | on, D-Depletion, RM-Reduced Matrix, C Re Color (Moist) 4/6 | S-Covered/Coated Sand cdox Features % 5 Indicator | Type C | Location m | (e.g. clay, sand, loam) sandy clay loam sandy loam |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WC-3-44 Sample Point :-3-44-0 |
|-------------------|---|------------|--------------|------------|--|
| | | | | | |
| | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| Tree Stratum (Plo | ot size: 10 meter radius) | | | | Danimana Tari Washahari |
| 1 | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. 2. | | | | | Number of Demisers Species that are ODL FACIAL or FAC: |
| 3. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:3(A) |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 3 (B) |
| 5. | | | | | Total Number of Dominant Species Across All Strata. |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | | | | | (12) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 90 x 1 = 90 |
| | Total Cover = | 0 | | | FACW spp. 5 x 2 = 10 |
| | | | | | FAC spp. $0 	 x 	 3 = 0$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp x 4 = |
| 1. | Spiraea alba | 5 | Υ | FACW | UPL spp. $0 	 x 	 5 = 0$ |
| 2. | | | | | |
| 3. | | | | | Total(A)(B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 1.053 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☑ Yes ☐ No Rapid Test for Hydrophytic Vegetation |
| 10. | T.110 | | | | ☑ Yes ☐ No Dominance Test is > 50% |
| | Total Cover = | 5 | | | |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| | t size: 2 meter radius) | F0 | | ODI | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. 2. | Scirpus cyperinus | 50 10 | Y N | OBL OBL | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Dulichium arundinaceum Carex magellanica | 25 | Y | OBL | present, unless disturbed or problematic. |
| 4. | Carex canescens | 5 | N | OBL | Definitions of Vegetation Strata: |
| 5. | | | | | Definitions of Vegetation Strata. |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, |
| 13. | | | | | and woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 90 | | | |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| D | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Rei | narks: | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | | er Drawdown Proje aconite, LLC | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/04/14 |
|---|--|--|-------------------------------------|---|--|---|--|---|--|--|---|
| Applicant: Investigator #1: | • | · | | Investi | gator #2: | P Piene | ar | | | County: State: | Iron Wisconsin |
| Soil Unit: | | gebic-Peshekee-Ro | nck outer | | | | /I/WWI Classification: | N/A | | Wetland ID: | WD-09 |
| Landform: | Side slope | gobio i cononco in | ok oatoi | | al Relief: | | 1/ VV VVI Olaboliloation. | 14/71 | | Sample Point: | WD-09-01u |
| Slope (%): | 8 | Latitude: | N/A | | ongitude: | | | Datum: | N/A | Community ID: | upland HW forest |
| | | ditions on the site ty | | | | | ain in remarks) | ☐ Yes ☑ | | Section: | 4 |
| | | or Hydrology □ sig | | | • | (, 6,4,5,1, | Are normal circumsta | | | Township: | 44N |
| | | or Hydrology ☐ na | | | | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | or riyurology 🗀 ma | iarany pr | 00.011101 | | | _ | | | r tarigo: | . 5 |
| Hydrophytic Ve | | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | ~ | | | ☐ Yes | | | | | | Within A Wetlar | |
| Remarks: | | wetter than normal | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | ology Indica | ators (Chack hara | f indicat | ore are n | ot procor | ot 🖂 🕽 . | | | | | |
| Primary: | | ators (Check here | indicat | ors are r | iot preser | IL 🗸): | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | er-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | _ | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturation | | | | B15 - Mar | • | | | | B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydr | • | | | | C2 - Dry-Season | |
| | B2 - Sedimer B3 - Drift Dep | • | | | | | spheres on Living Roots educed Iron | | | C8 - Crayfish Buri | rows isible on Aerial Imagery |
| l H | B4 - Algal Ma | | | | | | duction in Tilled Soils | | | D1 - Stunted or St | 9 . |
| | B5 - Iron Dep | | | _ | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | 0 , | | Other (Ex | plain in Re | emarks) | | | D3 - Shallow Aqui | |
| | B8 - Sparsely | / Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| | | | | | | | | | Ш | D5 - FAC-Neutral | |
| Field Observat | | | | | | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hyd | droloav Pr | esent? | Yes ☑ No |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | _ | |
| Saturation Pres | ent? | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Describe Record | led Data (stre | eam gauge, monitori | ng well a | erial pho | tos previ | ous inspe | ctions) if available: | | N/A | | |
| | • | Jan 11 Ja | ng won, c | AOIIAI PIIO | too, provi | odo mopo | onono,, n avanabio. | | 14/74 | | |
| Remarks: | · · · · · · · · · · · · · · · · · · · | gaage, memer | 119 11011, 0 | aonai piio | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | ononey, ii available. | | 14// (| | |
| Remarks: | · · | oam gaage, memen | ng won, c | ional prio | , provi | | otionoj, ii avaliabio. | | 107. | | |
| | · | oam gaage, memer | ng won, c | ional prio | , 100, provi | | otiono), ii availabio. | | | | |
| SOILS | 2: | | | · | | Ì | | | | | |
| | | | | · | | Ì | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | Dishno-Gogebic-Po #N/A | eshekee | -Rock ou | utcrop cor | mplex, S | eries Drainage Class: | #N/A | | PL=Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub | group): | Dishno-Gogebic-Po #N/A | eshekee | -Rock ou | utcrop cor | mplex, S | eries Drainage Class: | #N/A | d Grains; Location: F | ^P L=Pore Lining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to the Bottom) | Dishno-Gogebic-Po #N/A | eshekee | -Rock ou m the absence of Matrix | utcrop cor | mplex, S | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | #N/A CS=Covered/Coated Sand | d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | - |
| SOILS Map Unit Name Taxonomy (Sub | ogroup): otion (Describe to t | Dishno-Gogebic-Po #N/A the depth needed to document the in | eshekee dicator or confin | -Rock ou m the absence of Matrix (Moist) | utcrop cor | mplex, S | eries Drainage Class: | #N/A CS=Covered/Coated Sand dox Features | d Grains; Location: F | | Texture (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to the Bottom Depth 3 | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon | dicator or confirmation Color 7.5YR | m the absence of Matrix (Moist) 2.5/2 | utcrop cor of indicators.) (Type % 100 | mplex, Some | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to the Bottom) Depth | Dishno-Gogebic-Po #N/A the depth needed to document the in | eshekee dicator or confin | -Rock ou m the absence of Matrix (Moist) | utcrop cor | mplex, Some | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | Bottom Depth 3 24 | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon | color 7.5YR 7.5YR | Matrix (Moist) 2.5/2 3/4 | yterop cor of indicators.) (Type % 100 100 | pe: C=Concentra | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | d Grains; Location: F Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): Dition (Describe to the Depth 3 24 | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 | color 7.5YR 7.5YR | Matrix (Moist) 2.5/2 3/4 | yterop cor of indicators.) (Type % 100 100 | mplex, Some | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): Difion (Describe to the Depth 3 24 | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 | color 7.5YR 7.5YR | -Rock ou m the absence of Matrix (Moist) 2.5/2 3/4 | witcrop cores of indicators.) (Type of indic | pe: C=Concentra | eries Drainage Class: ttion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | Bottom Depth 3 24 | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 | color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/2 3/4 | y which indicators.) (Type of indicators.) (| pe: C=Concentra | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): Dtion (Describe to the Depth 3 24 | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 | color 7.5YR 7.5YR | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 | ## Comparison of Indicators.) (Type | pe: C=Concentra | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): Difion (Describe to the state of th | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 | ## Comparison of Indicators.) (Type | pe: C=Concentra | eries Drainage Class: ttion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cores of indicators.) (Type of indic | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicator | Type s for Proble | Location matic Soils 1 | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 andicators (check he | Color 7.5YR 7.5YR | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cores of indicators.) (Type of indic | pe: C=Concentra | eries Drainage Class: ttion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicator: | Type | Location matic Soils ¹ Vuck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 andicators (check here) | Color 7.5YR 7.5YR | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop core findicators.) (Type // 100 // 100 // 100 // | nplex, Sometime of the period | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features | Type s for Proble A10 - 2 cm I | Location Matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) | Color 7.5YR 7.5YR | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | y with the second secon | mplex, Some concentration of the concentration of | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicators | Type | Location matic Soils ¹ Vuck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon stic en Sulfide d Layers | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cores indicators.) (Type of indicato | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LCKY Peat of Peat (urface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cores indicators.) (Type of indicato | pe: C=Concentra esent value Below Dark Surfa ny Mucky M | eries Drainage Class: ttion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicator: | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da | Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) silt loam silt loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 100 // 100 // / | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicator: | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) langanese Masses | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M | Dishno-Gogebic-Pour MN/A the depth needed to document the interpretation of the document the depth needed to document the depth needed to document the depth needed to document the document the document the doc | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cores indicators.) (Type of indicato | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicators | Type | Location | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G | Dishno-Gogebic-Po #N/A the depth needed to document the in Horizon 1 2 ndicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 100 // 100 // / | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicator | Type Type | Location | (e.g. clay, sand, loam) silt loam silt loam (49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M | Dishno-Gogebic-Pour HN/A the depth needed to document the interpretation of the depth needed to document th | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 100 // 100 // / | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicators | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-Me F19 - Piedm F21 - Red P TA6 - Mesic | Location | (e.g. clay, sand, loam) silt loam silt loam (49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Dishno-Gogebic-Pour HN/A the depth needed to document the interpretation of the depth needed to document th | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 100 // 100 // / | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicators | Type Type | Location | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (45, 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Dishno-Gogebic-Pour HN/A the depth needed to document the interpretation of the depth needed to document th | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 100 // 100 // / | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicators Indicators 1 Indicators of | Type Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (45, 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Dishno-Gogebic-Postal Matrix rface (LRR R, MLRA 149B) | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 10 | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sance dox Features % Indicators Indicators | Type Type | Location | (e.g. clay, sand, loam) silt loam silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) 45, 149B) face must be present, unless |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 NRCS Hydric | Bottom Depth 3 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Dishno-Gogebic-Postal Matrix rface (LRR R, MLRA 149B) | color Color 7.5YR 7.5YR ere if ind | -Rock out the absence of Matrix (Moist) 2.5/2 3/4 icators a | witcrop cor indicators.) (Type // 100 // 100 // 100 // / | pe: C=Concentra | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % Indicators Indicators 1 Indicators of | Type Type | Location | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (45, 149B) face |



Northeast and Northcentral Region

Project/Site: WD-09 Sample Point WD-09-01u **Groundwater Drawdown Project** Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Acer saccharum 75 Y **FACU** 25 Y 2. Betula alleghaniensis FAC Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) Ostrya virginiana 3. 15 Ν **FACU FAC** 4. Abies balsamea 10 Ν Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B) --7. 8. **Prevalence Index Worksheet** --9. Total % Cover of: Multiply by: 10. x 1 =--OBL spp. 0 Total Cover = 125 x 2 =FACW spp. 0 x 3 =FAC spp. 55 165 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 165 660 40 **FACU** UPL spp. 1. Acer saccharum x = 50 **FACU** 2. Tilia americana 10 Ν 3. Abies balsamea 10 Ν FAC 825 Total 220 (B) 4. 5. --Prevalence Index = B/A = *3.750* ----6. --7. ----8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ☑ No 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 60 ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * 25 Υ **FACU** Acer saccharum 1. * Indicators of hydric soil and wetland hydrology must be Υ 2. 10 FAC Dryopteris intermedia present, unless disturbed or problematic. 3. 4. **Definitions of Vegetation Strata:** --5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. ---tall. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ----14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 35 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



| Project/Site: | Groundwat | er Drawdown Proje | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/04/14 |
|---|--|---|---|--|--|---|--|---|---|---|---|
| Applicant: | | aconite, LLC | | | | | • | | | County: | Iron |
| Investigator #1: | A. Michalsk | ki . | | Investi | gator #2: | | | | | State: | Wisconsin |
| Soil Unit: | Dishno-Go | gebic-Peshekee-Ro | ck outcr | op comp |) | NW | I/WWI Classification: | N/A | | Wetland ID: | WD-09 |
| Landform: | Terrace | | | Loc | al Relief: | Concave | Э | | | Sample Point: | WD-09-01w |
| Slope (%): | 2 | Latitude: | | | ongitude: | | | Datum: | N/A | Community ID: | Wooded Swamp |
| | | ditions on the site ty | | | | (If no, expla | ain in remarks) | | No | Section: | 4 |
| | | or Hydrology □ sig | | | | | Are normal circumsta | | t? | Township: | 44N |
| Are Vegetation | ☑, Soil □, | or Hydrology □ nat | turally pro | oblemati | ic? | | ☑ Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | | | | | _ | | | Hydric Soils | | | |
| Wetland Hydrol | | | | | | | | | | Within A Wetlar | |
| Remarks: | Conditions | wetter than normal. | Ruts are | e presen | it from his | storic log | ging but this is the nev | w normal circu | umstance. | Vegetation prob | plematic due to |
| | dominance | of FACO species b | ut nyanc | sons, n | yarology i | ndicators | s, and topographic pos | silion conside | rea. BPJ w | as used. | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indic | ators (Check here i | f indicato | ors are n | ot presen | ıt □): | | | | | |
| <u>Prim</u> ary: | | | | _ | | . | | | Secondary: | | |
| | A1 - Surface A2 - High Wa | | | | B9 - Wate B13 - Aqu | | | | | B6 - Surface Soil B10 - Drainage P | |
| | A3 - Saturation | | | | B15 - Aqu | | | | | B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydro | ogen Sulfi | de Odor | | | C2 - Dry-Season | Water Table |
| | B2 - Sedimer | | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift Dep B4 - Algal Ma | | | | | | educed Iron duction in Tilled Soils | | | C9 - Saturation V D1 - Stunted or S | isible on Aerial Imagery |
| | B5 - Iron Dep | | | | C7 - Thin | | | | _ | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | agery | | Other (Ex | | | | | D3 - Shallow Aqu | |
| | B8 - Sparsely | / Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | | | | | | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | _ | (in.) | | | Wetland Hyd | drology Pr | esent? | Yes □ No |
| Water Table Pr | | ☑ Yes □ No | Depth: | 6 | (in.) | | | | | _ | |
| Saturation Pres | | ☑ Yes ☐ No | Depth: | 0 | (in.) | | | | | | |
| Describe Record | led Data (str | eam gauge monitori | na well a | orial pho | toc provid | oue inene | ctions) if available: | | N/A | | |
| | | | | ieriai piic | nos, previo | ous mspe | cuoris), il avallable. | | IV/A | | |
| Remarks: | | due to rocks/loggir | | ieriai pric | nos, previo | ous inspe | cuoris), ii available. | | IN/A | | |
| Remarks: | | | | leriai piic | nos, previ | ous inspe | cuons), ii available. | | IN/A | | |
| Remarks: | Hummocky | due to rocks/loggir | ng ruts | | | | | | IVA | | |
| Remarks: SOILS Map Unit Name | Hummocky e: | due to rocks/loggir | ng ruts | | | | eries Drainage Class: | | IVA | | |
| Remarks: SOILS Map Unit Name Taxonomy (Sub | Hummocky e: ogroup): | due to rocks/loggir Dishno-Gogebic-Pe | ng ruts eshekee- | -Rock ou | utcrop cor | mplex, S | eries Drainage Class: | #N/A | | | |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip | Hummocky e: ogroup): otion (Describe to | due to rocks/loggir Dishno-Gogebic-Pe | ng ruts eshekee- | -Rock ou | utcrop cor | mplex, S | eries Drainage Class: | #N/A CS=Covered/Coated Sand | | PL=Pore Lining, M=Matrix) | |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | Hummocky e: e: pgroup): otion (Describe to Bottom | Dishno-Gogebic-Pe#N/A | ng ruts eshekee- dicator or confirm | -Rock ou nthe absence o Matrix | utcrop cor | nplex, So | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rei | #N/A CS=Covered/Coated Sand dox Features | d Grains; Location: F | T | Texture |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth | e: ogroup): otion (Describe to Bottom Depth | Dishno-Gogebic-Pe#N/A the depth needed to document the in | eshekee- dicator or confirm Color (| -Rock ou nthe absence of Matrix (Moist) | utcrop cor | nplex, \$ | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) | #N/A CS=Covered/Coated Sand dox Features % | g Grains; Location: F | Location | (e.g. clay, sand, loam) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Hummocky cogroup): otion (Describe to Bottom Depth 8 | Dishno-Gogebic-Pe#N/A the depth needed to document the in Horizon 1 | eshekee- dicator or confirm Color (7.5YR | nthe absence of Matrix (Moist) | utcrop cor of indicators.) (Type % 95 | mplex, \$\footnote{S}\text{on C=Concentra} | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 | J Grains; Location: F Type C | Location m | (e.g. clay, sand, loam) |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Experiment of the second of th | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 | eshekee- dcator or confirm Color (7.5YR) 7.5YR | -Rock ou mithe absence of Matrix (Moist) 3/2 4/2 | utcrop cor findicators.) (Type % 95 95 | nplex, Some C=Concentra 7.5YR 7.5YR | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 5 | Type C C | Location m m | (e.g. clay, sand, loam) silty clay loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 | Hummocky cogroup): otion (Describe to Bottom Depth 8 | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 | eshekee- dicator or confirm Color (7.5YR | mthe absence of Matrix (Moist) 3/2 4/2 3/4 | # Indicators.) (Type | nplex, \$\square \text{c=concentra} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ \\ 7.5\text{YR} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ | eries Drainage Class: tion. D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 4/6 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 | Type C C C | Location m m m | (e.g. clay, sand, loam) |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 | Bottom Depth 8 12 24 | Dishno-Gogebic-Per #N/A the depth needed to document the in 1 1 2 3 - 1 | eshekee- deator or confirm Color (7.5YR) 7.5YR - | -Rock of Matrix (Moist) 3/2 4/2 3/4 | witcrop cor findicators.) (Type % 95 95 95 | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 | Type C C C | Location m m m | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 | Bottom Depth 8 12 24 | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 | eshekee- dicator or confirm Color (7.5YR) 7.5YR 7.5YR | mthe absence of Matrix (Moist) 3/2 4/2 3/4 | # Indicators.) (Type | nplex, \$\square \text{c=concentra} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ 7.5\text{YR} \\ \\ 7.5\text{YR} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ | eries Drainage Class: tion. D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 4/6 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 | Type C C C | Location m m m | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 | Bottom Depth 8 12 24 | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR - | nthe absence of Matrix (Moist) 3/2 4/2 3/4 | # indicators.) (Type of indicators.) (Type o | 7.5YR 7.5YR 7.5YR - | eries Drainage Class: Rei Color (Moist) 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 | Type C C C | Location m m m | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 | Bottom Depth 8 12 24 | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 | color of 7.5YR 7.5YR - | -Rock ou Matrix (Moist) 3/2 4/2 3/4 | ## indicators.) (Tygen | 7.5YR 7.5YR 7.5YR - | eries Drainage Class: Rei Color (Moist) 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 | Type C C C | Location m m m | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 | Bottom Depth 8 12 24 | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- color of 7.5YR 7.5YR 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 | # indicators.) (Type of indicators.) (Type o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Ret Color (Moist) 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 | Type C C C | Location m m m | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 12 | Bettom Depth 8 12 24 | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- color of 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/2 4/2 3/4 | # Indicators) (Try % 95 95 90 re not pre | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6): | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicators | Type C C C s for Proble | M m m matic Soils 1 | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Hummocky bicogroup): btion (Describe to Depth 8 12 24 Soil Field Ir A1- Histosol | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 ndicators (check he | eshekee- color of 7.5YR 7.5YR 7.5YR | Rock of Matrix (Moist) 3/2 4/2 3/4 | ## Indicators (Try % % 95 95 90 re not pre S8 - Polyv | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6); w Surface (LRR R, MLRA 1498) | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicators | Type C C C s for Proble | Location m m matic Soils ¹ Muck (LRR K, L, MLRA ' | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Ep | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 ndicators (check he | eshekee- color of 7.5YR 7.5YR 7.5YR | Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### ################################## | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 1498) | #N/A CS=Covered/Costed Sand dox Features % 5 5 10 Indicators | Type C C C s for Proble A10 - 2 cm | Location m m m matic Soils Muck (LRR K, L, MLRA . Prairie Redox (LRR | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Hummocky bicogroup): btion (Describe to Depth 8 12 24 Soil Field Ir A1- Histosol | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 ndicators (check he | eshekee- color of 7.5YR 7.5YR 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### ################################## | 7.5YR 7.5YR 7.5YR asent □ alue Belov Dark Surfa y Mucky M | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): % Surface (LRR R, MLRA 149B) fineral (LRR K, L) | #N/A CS=Covered/Coated Sand dox Features % 5 5 10 Indicators | Type C C C sfor Proble A10 - 2 cm III A16 - Coast S3 - 5cm Mi | Location m m matic Soils ¹ Muck (LRR K, L, MLRA ' | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A3 - Black Hi | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) | eshekee- color of 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/2 4/2 3/4 | # indicators.) (Type of indicators.) (Type o | 7.5YR 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicator: | Type C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si | Location m m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR pucky Peat of Peat | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A11 - Deplette | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock out mathe absence of Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of the indicato | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix irface | #N/A CS=Covered/Coated Sand dox Features % 5 5 10 Indicator | Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mt S7 - Dark S0 S8 - Polyval S9 - Thin Da | Location m m m matic Soils Muck (LRR K, L, MLRA · Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam (149B) R.K. L. R) (LRR K. L. R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick IC | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of Indicators o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicator: | Type C C C s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-N | Location m m m matic Soils ¹ Muck (LRR K, L, MLRA - Prairie Redox (LRR k, L, MLRA - Urface (LRR K, L, MLRA - Urface (LRR K, L, MLRA - Language (LRR K, L, M) Language (LRR K | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam (t49B) RK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bettom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic E1 A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M | Dishno-Gogebic-Per#N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock out mathe absence of Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of the indicato | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicator: | Type C C C sfor Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm | M m m m matic Soils Muck (LRR K, L, MLRA A Prairrie Redox (LRR kuther | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam (t49B) RK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick IC | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of Indicators o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicators | Type C C C sfor Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | Location m m m matic Soils ¹ Muck (LRR K, L, MLRA - Prairie Redox (LRR k, L, MLRA - Urface (LRR K, L, MLRA - Urface (LRR K, L, MLRA - Language (LRR K, L, M) Language (LRR K | (e.g. clay, sand, loam) silty clay loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of Indicators o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicator | Type C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm F21 - Red P F21 - Red P F21 - Red P F21 - Very | Location m m m matic Soils Muck (LRR K, L, MLRA - Prairie Redox (LRR k, L, MLRA - Prairie Redox (LRR K, L, M) uc Below Surface eark Surface (LRR K, L, M) carent Material carent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of Indicators o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 10 Indicator: | Type C C C C sfor Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location m m m matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR k, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface int Surface (LRR K, L, M) Syndia (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of Indicators o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 5 10 Indicators 'Indicators of | Type C C C C sfor Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location m m m matic Soils Muck (LRR K, L, MLRA - Prairie Redox (LRR k, L, MLRA - Prairie Redox (LRR K, L, M) uc Below Surface eark Surface (LRR K, L, M) carent Material carent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Bottom Depth 8 12 24 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | color σ confirmation of the color of the co | -Rock ou Matrix (Moist) 3/2 4/2 3/4 cators a | ### Indicators of Indicators o | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 5 10 Indicators cdisturbed of | Type C C C C sfor Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm T21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location m m m matic Soils Muck (LRR K, L, MLRA - Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam 149B) K. L. R) (LRR K. L. R) (LRR K. L. R) (LRR K. L. R) (S (LRR K. |
| Remarks: SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 12 NRCS Hydric | Hummocky biogroup): btion (Describe to Depth 8 12 24 | Dishno-Gogebic-Per #N/A the depth needed to document the in Horizon 1 2 3 | eshekee- deator or confirm Color (7.5YR) 7.5YR | Rock out me absence of Matrix (Moist) 3/2 4/2 3/4 cators a | ## Indicators of | 7.5YR 7.5YR 7.5YR | eries Drainage Class: Rei Color (Moist) 4/6 4/6 4/6): w Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix fface Surface Surface | #N/A CS=Covered/Coated Sand dox Features % 5 5 10 Indicators 'Indicators of | Type C C C C sfor Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm T21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location m m m matic Soils Muck (LRR K, L, MLRA - Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) silty clay loam sandy loam sandy loam |

WD-09 Sample Point WD-09-01w



Groundwater Drawdown Project

Project/Site:

WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Wetland ID:

| VEGETATION | (0) | | | | |
|-----------------|--|-------------|----------|------------|--|
| VEGETATION | (Species identified in all uppercase are non- ot size: 10 meter radius) | native spec | cies.) | | |
| Tree Stratum (P | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 35 | Y | FACU | Dominance Test Worksheet |
| 2. | Betula alleghaniensis | 30 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) |
| 3. | | | | | Number of Bollinant openies that are OBE, 1 Now, of 1 No(A) |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 5 (B) |
| 5. | | | | | Total Number of Dominant Species Across All Strata(D) |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B) |
| 7. | | | | | (A/D) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | |
| 9. 10. | | | | | Total % Cover of: Multiply by: |
| 10. | Total Cover = | | | | OBL spp. 0 x 1 = 0 |
| | Total Cover | = 65 | | | FACW spp. 10 x 2 = 20 |
| 0 11 101 1 01 | (5) | | | | FAC spp. 45 X 3 = 135 |
| | ratum (Plot size: 5 meter radius) | 4.5 | | FAC | FACU spp. 100 x 4 = 400 |
| 1. | Betula alleghaniensis | 15 | Y | FAC | UPL spp 0 |
| 2. | Ostrya virginiana | 10 | N | FACU | |
| 3. | Acer saccharum | 30 | Y | FACU | Total 155 (A) 555 (B) |
| 4. | Fraxinus nigra | 10 | N | FACW | |
| 5. | | | | | Prevalence Index = B/A = 3.581 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | = 65 | | | ☐ Yes ☐ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| , | ot size: 2 meter radius) | | | | ☑ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 25 | Υ | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 2. | | | | | present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | - | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | tall. |
| 11. | | | | - | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | = 25 | | | |
| | | | | | |
| Woody Vine Stra | tum (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| J | Total Cover = | | | | |
| Remarks: | 10101 00001 | | | | |
| | | | | | |
| | | | | | |

Additional Remarks:

hydric soils, hydrology indicators and topographic position were evident and relied upon to make the wetland/upland boundary determination.



| Are Vegetation | Gogebic Ta A. Michalsk Gogebic sil Side slope NA Irologic cond | er Drawdown Projectonite, LLC ki It loam, 6 to 18 pero Latitude: ditions on the site ty or Hydrology nai | cent slop N/A pical for nificantly | es, very Loc L this time disturb | cal Relief: ongitude: of year? ed? | NW Convex N/A | /I/WWI Classification: | Datum: □ Yes ☑ | N/A No | Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: | 06/05/14 Iron Wisconsin WD-17 WD-17-03u logged HW forest 33 45N 1 Dir: W |
|---|---|---|--|--|--|---|---|---|---|---|--|
| SUMMARY OF | | , 0, _ | , | | | | | | | Ü | |
| Hydrophytic Ve | getation Pres | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | ogy Present | ? | | ☐ Yes | | | | Is This Samp | oling Point \ | Within A Wetlar | nd? ■ Yes ■ No |
| Remarks: | Recently lo | gged-most tree laye | er is rem | oved wit | h few shr | ubs and | herbaceous species re | emaining. Su | rface soils | also disturbed i | n most areas. |
| | | | | | | | | | | | |
| HYDROLOGY Wetland Hydro Primary: | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundation | ater Table on Marks ont Deposits posits at or Crust | agery | | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxid C4 - Pres | er-Stained atic Fauna I Deposits ogen Sulfi zed Rhizo ence of Re ent Iron Re Muck Surf | de Odor spheres on Living Roots educed Iron eduction in Tilled Soils | | | B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim I C2 - Dry-Season C8 - Crayfish Burn C9 - Saturation Vi D1 - Stunted or St D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra | atterns Lines Water Table rows sible on Aerial Imagery tressed Plants Position |
| Field Observat Surface Water Water Table Pr Saturation Pres | Present? esent? ent? | ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitori | Depth: Depth: Depth: ng well, a | | (in.) (in.) (in.) | ous inspe | ctions), if available: | Wetland Hye | | D5 - FAC-Neutral | Test Yes ☑ No |
| Remarks: | The site ha | d wetter than avera | ge cond | itions at | the time o | of the vis | it. | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | | Gogebic silt loam, 6 to 1 | 8 percent | slopes, ve | ry stony, roc | ky S | eries Drainage Class: | #N/A | | | |
| Taxonomy (Sub | | #N/A | | | | | | | | | |
| | | the depth needed to document the in | dicator or confir | | | oe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | | | L=Pore Lining, M=Matrix) | |
| Тор | Bottom | | | | | | | | | | Toyturo |
| · · | | Horizon | Color | Matrix | | | Re | dox Features | | Location | Texture |
| Depth | Depth | Horizon | | (Moist) | % | | | % | Туре | Location | (e.g. clay, sand, loam) |
| Depth 0 | Depth 4 | 1 | 7.5YR | (Moist) | % 100 | | Re | % | Type | | (e.g. clay, sand, loam) silt loam |
| Depth | Depth 4 24 | Horizon 1 2 | 7.5YR 7.5YR | (Moist) 3/2 4/3 | % 100 100 | | Re | % | Type | Location | (e.g. clay, sand, loam) |
| Depth 0 | Depth 4 24 | 1 | 7.5YR 7.5YR | (Moist) | % 100 | | Re | % | Type | | (e.g. clay, sand, loam) silt loam |
| Depth 0 | Depth 4 24 | 1 | 7.5YR 7.5YR | (Moist) 3/2 4/3 | % 100 100 | | Re | % | Type | | (e.g. clay, sand, loam) silt loam |
| Depth 0 | Depth 4 24 | 1 2 | 7.5YR 7.5YR | (Moist) 3/2 4/3 | % 100 100 | | Re | % | Type | | (e.g. clay, sand, loam) silt loam sandy loam |
| Depth 0 4 | Depth 4 24 | 1 2 | 7.5YR 7.5YR | (Moist) 3/2 4/3 | % 100 100 | | Re- Color (Moist) | % | Type | | (e.g. clay, sand, loam) silt loam sandy loam |
| Depth 0 | Depth 4 24 | 1 2 | 7.5YR 7.5YR | (Moist) 3/2 4/3 | % 100 100 | | Re | % | Type | | (e.g. clay, sand, loam) silt loam sandy loam |
| Depth 0 4 | Depth 4 24 | 1 2 | 7.5YR 7.5YR | (Moist) 3/2 4/3 | % 100 100 | | Re- Color (Moist) | % | Type | | (e.g. clay, sand, loam) silt loam sandy loam |
| Depth 0 4 NRCS Hydric | Depth 4 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | 1 2 | 7.5YR 7.5YR ere if ind | (Moist) 3/2 4/3 icators a | % 100 100 see not pre | esent alue Belo Dark Surfa by Mucky I by Gleyed eted Matrix x Dark Su eted Dark | Color (Moist) | % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | | (e.g. clay, sand, loam) silt loam sandy loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) 45, 149B) face |
| Depth 0 4 NRCS Hydric | Depth 4 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | 1 2 | 7.5YR 7.5YR ere if ind | (Moist) 3/2 4/3 icators a | % 100 100 | esent alue Belo Dark Surfa by Mucky I by Gleyed eted Matrix x Dark Su eted Dark | Color (Moist) | % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget r problematic. | | (e.g. clay, sand, loam) silt loam sandy loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) 45, 149B) face |
| Depth 0 4 NRCS Hydric | Depth 4 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su Type: | 1 2 | 7.5YR 7.5YR ere if ind | Moist) 3/2 4/3 icators a | % 100 100 | esent esent or alue Belo Dark Surfa by Mucky I by Gleyed eted Matrix x Dark Su eted Dark x Depress | Color (Moist) | 9% Indicator Indi | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic. | | (e.g. clay, sand, loam) silt loam sandy loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) Is (MLRA 149B) face must be present, unless Yes No |



Northeast and Northcentral Region

Project/Site: **WD-17** Sample Point wp-17-03u **Groundwater Drawdown Project** Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 1. Acer saccharum 5 Υ **FACU** 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 6 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B) 6. 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. x 1 =--OBL spp. 0 Total Cover = 5 x 2 =FACW spp. 0 x 3 =FAC spp. 20 60 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 100 400 15 **FACU** 1. Acer saccharum x = 5UPL spp. 0 **FACU** 2. 20 Υ Fraxinus americana Υ 3. 15 FAC Betula alleghaniensis 460 Total 120 (B) 4. 5. --Prevalence Index = B/A = 3.833 ----6. --7. ----8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ☑ No 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 50 ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * 40 Υ **FACU** Allium tricoccum 1. * Indicators of hydric soil and wetland hydrology must be Υ 2. 15 **FACU** Acer saccharum present, unless disturbed or problematic. 5 3. Rubus idaeus var. strigosus Ν FAC **Definitions of Vegetation Strata:** 4. 5 Rubus allegheniensis Ν **FACU** 5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. ----10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ----14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 65 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



| Project/Site: | Groundwate | er Drawdown Proje | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/05/14 |
|--|--|---|---|--|--|--|---|--|---|--|--|
| Applicant: | | aconite, LLC | | | | | Ctaritoo i rojoot ii. | 100701100 | | County: | Iron |
| | • | | | Invocti | aatar #2: | D Dione | A.P. | | | State: | Wisconsin |
| Investigator #1: | | | () | | gator #2: | | | NI/A | | 1 | |
| Soil Unit: | • | t loam, 6 to 18 perc | ent slop | _ | | | I/WWI Classification: | N/A | | Wetland ID: | WD-17 |
| Landform: | Side slope | | | Loc | al Relief: | Concav | 9 | | | Sample Point: | WD-17-03w |
| Slope (%): | 2 | Latitude: | N/A | Lo | ongitude: | N/A | | Datum: | N/A | Community ID: | logged HW swamp |
| Are climatic/hyd | drologic cond | ditions on the site ty | pical for | this time | of year? | (If no, expla | ain in remarks) | ☐ Yes ☑ | No | Section: | 33 |
| - | | or Hydrology □ sig | • | | | | Are normal circumsta | | | Township: | 45N |
| Ŭ . | | | - | | | | □ Yes | ⊒No ☑No | | | |
| | | or Hydrology 🛮 na | lurally pr | obiemau | U? | | ☐ 163 | 110 | | Range: | 1 Dir: W |
| SUMMARY OF | | | | | | | | | | | |
| Hydrophytic Ve | getation Pres | sent? | | | □ No | | | Hydric Soils | Present? | | |
| Wetland Hydrol | ogy Present | ? | | Yes | □ No | | | Is This Samp | oling Point ' | Within A Wetlar | nd? ☑ Yes ■ No |
| Remarks: | Recently lo | gged-most tree lay | er is rem | oved wit | h few shr | ubs and | herbaceous species re | emaining. Su | ırface soils | also disturbed i | n most areas. |
| | | , | | | | | | 9 | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here | if indicate | ors are n | ot preser | nt □): | | | | | |
| Primary: | | () | | | | , · | | | Secondary: | | |
| <u> </u> | A1 - Surface | Water | | V | B9 - Wate | er-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | _ | B13 - Aqu | | | | ī | B10 - Drainage P | |
| _ _ | A3 - Saturation | | | | B15 - Mar | | | | $\overline{\Box}$ | B16 - Moss Trim | |
| | B1 - Water M | larks | | | C1 - Hydr | • | | | | C2 - Dry-Season | Water Table |
| | B2 - Sedimer | nt Deposits | | | C3 - Oxidi | ized Rhizo | spheres on Living Roots | | | C8 - Crayfish Bur | rows |
| | B3 - Drift Dep | oosits | | | C4 - Pres | ence of Re | educed Iron | | | C9 - Saturation V | isible on Aerial Imagery |
| | B4 - Algal Ma | at or Crust | | | C6 - Rece | ent Iron Re | duction in Tilled Soils | | | D1 - Stunted or S | tressed Plants |
| | B5 - Iron Dep | osits | | | C7 - Thin | Muck Surf | ace | | V | D2 - Geomorphic | Position |
| | B7 - Inundation | on Visible on Aerial Ima | agery | | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aqu | itard |
| | B8 - Sparsely | Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | aphic Relief |
| | | | | | | | | | V | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| | | | Danth | 2 | (in) | | | | | | |
| Surface Water | | ☑ Yes ☐ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? ☑ | Yes □ No |
| Water Table Pr | | ☑ Yes □ No | Depth: | 0 | (in.) | | | • | 0, | | |
| Saturation Pres | ent? | | Depth: | 0 | (in.) | | | | | | |
| Describe Record | led Data (str | eam gauge, monitori | na well s | erial nho | tos previe | nue inene | ctions) if available: | | N/A | | |
| Bescribe Record | ica Data (Str | carri gaage, monton | ing won, c | aciiai piio | LOG, DIGVI | | onorio,, ii avanabio. | | 1 4/ / 3 | | |
| D | T-1 | 1 | | • | | | <u> </u> | | | | |
| Remarks: | The site ha | d wetter than avera | ge cond | • | | | <u> </u> | | | | |
| Remarks: | The site ha | d wetter than avera | ge cond | • | | | <u> </u> | | | | |
| | The site ha | d wetter than avera | ge cond | • | | | <u> </u> | | | | |
| SOILS | | | | tions at | the time o | of the vis | t. | #N/A | | | |
| SOILS Map Unit Name |): | Gogebic silt loam, 6 to 1 | | tions at | the time o | of the vis | <u> </u> | #N/A | | | |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): | Gogebic silt loam, 6 to 1 | 8 percent | slopes, ver | the time of | of the vis | t. eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): otion (Describe to | Gogebic silt loam, 6 to 1 | 8 percent | slopes, ver | the time of | of the vis | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | PL=Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): | Gogebic silt loam, 6 to 1 | 8 percent | slopes, ver | the time of | of the vis | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | | | PL=Pore Lining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): otion (Describe to | Gogebic silt loam, 6 to 1 | 8 percent | slopes, ver | the time of | of the vis | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | 1 | PL=Pore Lining, M=Matrix) Location | Texture (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | e: ogroup): otion (Describe to Bottom Depth | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in | 8 percent | slopes, ver | ry stony, roc | of the vis | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | T | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth 12 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 | 8 percent dicator or confirmation Color 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 | ry stony, roo | of the vis | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 | e: ogroup): otion (Describe to Bottom Depth 12 14 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 | 8 percent dicator or confirmation Color 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 | ry stony, room | of the vis | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | dox Features % 10 | Type C | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth 12 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 | 8 percent dicator or confirmation Color 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 | ry stony, roo | of the vis | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 | e: ogroup): otion (Describe to Bottom Depth 12 14 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 | 8 percent dicator or confirmation Color 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 | ry stony, room | of the vis | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | dox Features % 10 | Type C | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 | Bottom Depth 12 14 24 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 | dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 | ry stony, room | cky S ce: C=Concentra 7.5YR | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand dox Features % 10 | Type c | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 | e: ogroup): otion (Describe to Depth 12 14 24 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 | ry stony, room | cky S pe: C=Concentra 7.5YR | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand dox Features % 10 | Type c | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 | Bottom Depth 12 14 24 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 | dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 | the time of the ti | cky S De: C=Concentra 7.5YR | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | cs=Covered/Coated Sand dox Features % 10 | Type c | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 | Bottom Depth 12 14 24 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 | the time of the ti | cky S pe: C=Concentra 7.5YR | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 | Type | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 | Bottom Depth 12 14 24 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 | dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 | the time of the ti | cky S De: C=Concentra 7.5YR | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | cs=Covered/Coated Sand | Type c | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 | Bottom Depth 12 14 24 | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, vere the absence of Matrix (Moist) 2.5/2 5/2 4/4 | the time of the ti | cky S pe: C=Concentra 7.5YR | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 | Type C | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, vere the absence of Matrix (Moist) 2.5/2 4/4 icators a | the time of the ti | of the vises Seky Secondary Seky Secondary Secondary Seky Secondary Secondar | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 Indicator | Type s for Proble | Location m matic Soils 1 | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check he | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, vere the absence of Matrix (Moist) 2.5/2 4/4 icators a | the time of the ti | reiche vis | t. eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4): w Surface (LRR R, MLRA 149B) | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C s for Proble A10 - 2 cm | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check head) | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, vere the absence of Matrix (Moist) 2.5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin | reky S pe: C=Concentra 7.5YR esent □ value Belov Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C s for Proble A10 - 2 cm I | Location m Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin | of the vises Seky Seky Secky S | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C | Location m matic Soils 1 Muck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check horizon (check horizon) (check ho | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | the time of the ti | resent result with the state of the visual st | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grain Re Color (Moist) 4/4 N Surface (LRR R, MLRA 149B) Aice (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark S | Location m matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (149B) R.K., L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check horizon (check horizon) (check ho | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | the time of the ti | of the vis cky S pe: C=Concentra 7.5YR esent value Belov Dark Surfa ny Mucky N ny Gleyed eted Matrix | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/4 N Surface (LRR R, MLRA 149B) Aice (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C | Location m Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LICKY Peat of Peat | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (149B) R K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | the time of the ti | cky S pe: C=Concentra 7.5YR esent value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Su | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/4): w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix crface | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da | Location m Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (49B) R.K. L., R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, ver m the absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Type % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C | Location m Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (L49B) k K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 4/4 | CS=Covered/Coated Sand dox Features % 10 Indicator | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P | Location m matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soilarent Material | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral sleyed Matrix Ledox | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 Indicator | Type C | Location m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (49B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S6 - Stripped | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix Ledox Matrix | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 Indicator | Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very | Location m matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (49B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S6 - Stripped | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral sleyed Matrix Ledox | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 | Type C | Location m Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat Lucky Pe | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (LAPB) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S6 - Stripped | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix Ledox Matrix | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 | Type C | Location m matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (LAPB) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check horizon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, vere the absence of Matrix (Moist) 2.5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 | Type C | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S6 - Stripped | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check horizon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, verenthe absence of Matrix (Moist) 2.5/2 5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 | Type C | Location m Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat Lucky Pe | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand (LAPB) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 14 NRCS Hydric | Bottom Depth 12 14 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Gogebic silt loam, 6 to 1 #N/A the depth needed to document the in Horizon 1 2 3 adicators (check horizon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | 8 percent dicator or confirmation Color 7.5YR 7.5YR 7.5YR | slopes, vere the absence of Matrix (Moist) 2.5/2 4/4 icators a | y stony, roo f indicators.) (Ty % 100 90 100 re not pre S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | of the vises cky S pe: C=Concentra 7.5YR value Below Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Surfa | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, Grace Re Color (Moist) 4/4 N: Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix Crface Surface | dox Features % 10 | Type C | Location m | (e.g. clay, sand, loam) mucky silt loam silty clay loam loamy mucky sand |



Northeast and Northcentral Region

| Project/Site: | Groundwater Drawdown Project | _ | | | Wetland ID: WD-17 Sample Point WD-17-03w |
|-----------------------|---|------------|-----------------|------------|---|
| | | | • | , | |
| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| | ot size: 10 meter radius) | | | | |
| , | <u>Species Name</u> | % Cover | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Ostrya virginiana | 5 | Y | FACU | |
| | | | Y | | Number of Deminent Species that are OPL EACW or EAC: 5 (A) |
| 2. | Ulmus americana | 5 | | FACW | Number of Dominant Species that are OBL, FACW, or FAC:5(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B) |
| 7. | | | | | · 5.55 5. 55 5p55.65 (5 = 5, 5, 5) |
| | | | | | December 1 |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp15 |
| | Total Cover = | 10 | | | FACW spp. $\frac{45}{}$ $\times 2 = \frac{90}{}$ |
| | | | | | FAC spp. $0 \times 3 = 0$ |
| 0 line/ Oberralb Oter | of an /Districtor Franchism and inch | | | | |
| | atum (Plot size: 5 meter radius) | - 10 | | = 4 011 | FACU spp. 15 $\times 4 = 60$ |
| 1. | Acer saccharum | 10 | Y | FACU | UPL spp. $0 	 x 	 5 = 0$ |
| 2. | Fraxinus nigra | 5 | Υ | FACW | |
| 3. | Ulmus americana | 10 | Υ | FACW | Total 75 (A) 165 (B) |
| 4. | | | | | |
| | | | | | Dravelance Index D/A 2200 |
| 5. | | | | | Prevalence Index = B/A = 2.200 |
| 6. | | | | | |
| 7. | | | | | l |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| 10. | | | | | |
| | Total Cover = | 25 | | | |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | _ | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Carex stricta | 15 | Υ | OBL | |
| 2. | Equisetum sylvaticum | 15 | Υ | FACW | * Indicators of hydric soil and wetland hydrology must be |
| 3. | · · · · · · · · · · · · · · · · · · · | 5 | N | FACW | present, unless disturbed or problematic. |
| | Fraxinus nigra | | | | |
| 4. | Dryopteris carthusiana | 5 | N | FACW | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 9. | | | | | tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| | | | | | |
| 14. | | | | | All was deviced assets then 2.00 ft. in height |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 40 | | | |
| | | | | | |
| Moody Vine Strati | um (Plot size: 10 meter radius) | | | | |
| | | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| <u> </u> | Total Cover = | 0 | | | |
| Demonto | I Ulai GUVGi — | | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Ren | marke: | | | | |
| Additional No. | ilains. | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Gogebic Ta | aconite iviine | | | | | Stantec Project #: | 193701133 | | Date: | 06/24/14 |
|---|--|---|---|--|---|--------------------------------|--|---|--|-------------------------------------|---|
| Applicant: | • | aconite, LLC | | | | | , | | | County: | Iron |
| Investigator #1: | • | | | Investi | gator #2: | C. Roge | ers | | | State: | Wisconsin |
| Soil Unit: | | oic complex, 0 to 6 | percent : | | • | | /I/WWI Classification: | N/A | | Wetland ID: | WD-30 |
| Landform: | Shoulder sl | • | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | al Relief: | | | | | Sample Point: | WD-30-01u |
| Slope (%): | 1 | Latitude: | N/A | | ongitude: | | | Datum: | N/A | Community ID: | upland HW forest |
| • • • | drologic conc | ditions on the site ty | | | | | ain in remarks) | ☐ Yes ☑ | | Section: | 5 |
| • | | or Hydrology □ sig | • | | | (II TIO, OXPI | Are normal circumsta | | | Township: | 44N |
| _ | | or Hydrology □ sig or Hydrology □ na | - | | | | ✓ Yes | □No | | • | 1 Dir: W |
| SUMMARY OF | | or riyurology 🗌 na | lurally pr | oblemat | 10 : | | ₩ 100 | | | Range: | I DII. VV |
| | | | | — V | — N. | | | Lludaia Caila | Draggerto | | □ Vaa □ Na |
| Hydrophytic Ve | _ | | | ☐ Yes | _ | | | Hydric Soils | | \ | ☐ Yes ☑ No |
| Wetland Hydrol | | | | ☐ Yes | ☑ No | | | is This Sam | oling Point | Within A Wetlar | nd? ■ Yes ■ No |
| Remarks: | Conditions | wetter than normal | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here | if indicate | ors are r | not preser | nt ৷ : | | | | | |
| Primary: | • | (0110011111010 | | | | ,- | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage P | |
| | A3 - Saturation | | | | B15 - Mar | • | | | | B16 - Moss Trim | |
| l H | B1 - Water M | | | | C1 - Hydr | - | | | | C2 - Dry-Season | |
| ᅵ | B2 - Sedimer | | | | | | spheres on Living Roots educed Iron | | | C8 - Crayfish Bur | rows isible on Aerial Imagery |
| l | B3 - Drift Dep B4 - Algal Ma | | | _ | | | eduction in Tilled Soils | | | D1 - Stunted or S | 0 , |
| l H | B5 - Iron Dep | | | _ | C7 - Thin | | | | _ | D2 - Geomorphic | |
| l H | | on Visible on Aerial Ima | agerv | _ | Other (Ex | | | | | D3 - Shallow Aqu | |
| l – – | | Vegetated Concave S | • | _ | (| | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | | | Donth | | (in) | | | | | | |
| | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes ☑ No |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Saturation Pres | ent? | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Describe Record | ed Data (stre | eam gauge, monitori | ng well, a | aerial pho | otos, previ | ous inspe | ections), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | Tula-Gogebic com | olex 0 to | o 6 perce | ent slones | stony S | eries Drainage Class: | #N/Δ | | | |
| SOILS Map Unit Name | | | olex, 0 to | 6 perce | ent slopes | , stony S | eries Drainage Class: | #N/A | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | #N/A | | • | • | • | • | | | | |
| SOILS Map Unit Name Taxonomy (Sub | ogroup): otion (Describe to | #N/A | | m the absence o | of indicators.) (Ty | • | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated San | | PL=Pore Lining, M=Matrix) | Toyturo |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to Bottom | #N/A the depth needed to document the in | dicator or confire | m the absence o | of indicators.) (Ty | • | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | 1 | 1 | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A | dicator or confire | m the absence of Matrix (Moist) | of indicators.) (Ty | • | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated San | | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | egroup): otion (Describe to Bottom Depth 3 | #N/A the depth needed to document the in | Color 7.5YR | m the absence of Matrix (Moist) 3/2 | of indicators.) (Ty | • | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | 1 | 1 | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the in | dicator or confire | m the absence of Matrix (Moist) | of indicators.) (Ty | • | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sand | Туре | 1 | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | egroup): otion (Describe to Bottom Depth 3 | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR | m the absence of Matrix (Moist) 3/2 | of indicators.) (Type 100 % 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): otion (Describe to Bottom Depth 3 16 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/2 3/3 | % 100 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) loam loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | Bottom Depth 3 16 24 | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/2 3/3 | % 100 100 | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): Dificial (Describe to Bottom Depth 3 16 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/2 3/3 | % 100 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | ccs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 | bgroup): btion (Describe to Bottom Depth 3 16 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 | % 100 100 | e: C=Concentra | Color (Moist) | cS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | pgroup): Dition (Describe to Bottom Depth 3 16 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 3/2 3/3 | % 100 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 | pgroup): Dition (Describe to Bottom Depth 3 16 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | pgroup): otion (Describe to Bottom Depth 3 16 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 are not pre | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type s for Proble | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field In | #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check he | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 are not pre | esent value Belov | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type s for Proble A10 - 2 cm | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | pgroup): Display (Describe to Bottom Depth 3 16 24 Soil Field In A1 - Histosol A2 - Histic Ep | #N/A the depth needed to document the in Horizon 1 2 3 andicators (check head) | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 are not presser Polyx S9 - Thin | esent value Belov | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check head) | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent avalue Belov Dark Surfa | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge | #N/A the depth needed to document the in Horizon 1 2 3 andicators (check here) pipedon stic en Sulfide | Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S | Location | (e.g. clay, sand, loam) loam loamy sand sand (149B) R K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide ed Layers | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 are not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple | e: C=Concentra esent | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)): w Surface (LRR R, MLRA 149B) Acce (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K urface | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Bleyed Matrix | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M | #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral sleyed Matrix Ledox | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral sleyed Matrix Ledox | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cos=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ills (MLRA 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix Ledox Matrix | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loamy sand sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ills (MLRA 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 16 NRCS Hydric | Bottom Depth 3 16 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped S7 - Dark Su | #N/A the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | Color 7.5YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/2 3/3 4/4 icators a | % 100 100 100 | esent | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cos=Covered/Coated Sand codox Features % Indicator Indicator Indicator Indicator Ind | Type | Location | loam loamy sand sand 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ills (MLRA 149B) 145, 149B) face must be present, unless |

WD-30-01u

WD-30 Sample Point

Wetland ID:



Gogebic Taconite Mine

Project/Site:

WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Acer saccharum 50 Y **FACU** 2. Fraxinus nigra 20 Υ **FACW** Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 10 Ν FAC Betula alleghaniensis **FACU** 4. 10 Ν Prunus serotina Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 22.2% (A/B) --7. 8. **Prevalence Index Worksheet** --9. Total % Cover of: Multiply by: 10. -x 1 =OBL spp. 0 Total Cover = 90 x 2 =FACW spp. 120 x 3 =FAC spp. 20 60 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 165 660 40 **FACU** 1. Acer saccharum x = 5UPL spp. 100 **FACU** 2. 15 Υ Corylus cornuta Υ 3. 20 **FACW** Fraxinus nigra 940 Total 265 (B) 4. 5. ----Prevalence Index = B/A = 3.547 --6. --7. ----8. **Hydrophytic Vegetation Indicators:** 9. ☑ No ☐ Yes Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 75 ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * Pteridium aquilinum 15 Υ **FACU** 1. * Indicators of hydric soil and wetland hydrology must be 20 Υ 2. **FACU** Acer saccharum present, unless disturbed or problematic. Thalictrum dasycarpum 3. 10 Ν **FACW Definitions of Vegetation Strata:** 4. Fraxinus nigra 10 Ν **FACW** 5. Maianthemum canadense 15 Υ **FACU** Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 Trillium cernuum 5 Ν FAC height (DBH), regardless of height. Dryopteris intermedia 7. 5 Ν FAC 8. 20 Y UPL Carex pensylvanica Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ----14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/24/14 |
|---|---|---|------------------------------------|--|--|---|---|--|--|---|--|
| Applicant: | | aconite, LLC | | | | | otantoo i rojoot ii. | 100701100 | | County: | Iron |
| | | | | lavonti | ~~t~~ #0. | C Dono | | | | , | |
| Investigator #1: | | | | | gator #2: | | | | | State: | Wisconsin |
| Soil Unit: | • | Arnheim complex, 0 | to 1 per | | • | | I/WWI Classification: | N/A | | Wetland ID: | WD-30 |
| Landform: | Floodplain | | | Loc | al Relief: | Concave | • | | | Sample Point: | WD-30-01w |
| Slope (%): | 1 | Latitude: | N/A | L | ongitude: | N/A | | Datum: | N/A | Community ID: | Alder Thicket |
| Are climatic/hvo | Irologic con | ditions on the site ty | pical for | this time | e of year? | (If no expla | in in remarks) | □ Yes ☑ | No | Section: | 5 |
| Are Venetation | | or Hydrology □ sig | nificantly | dicturb | od2 | (ii iio, expic | Are normal circumsta | | | | |
| | | | | | | | | • | l! | Township: | 44N |
| Are Vegetation | □, Soil ☑, | or Hydrology □ nat | turally pr | oblemat | IC'? | | ☑ Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF Hydrophytic Ve | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pre | sent? | | | □ No | | | Hydric Soils | Present? | | ☑ Yes ☐ No |
| Wetland Hydrol | oay Present | 2 | | | □ No | | | | | Within A Wetla | |
| | | | Floodal | | | Tulor Fo | | is Tills Sairi | Jillig F Ollit | vviuiiii A vveliai | nu: <u>u les ino</u> |
| Remarks: | Conditions | wetter than normal. | riooapii | am weda | and along | Tyler Fo | IKS. | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | مالومار برومالو | -t (Chook horo i | findiaata | | ot proces | t - \. | | | | | |
| | | ators (Check here i | Tindicato | ors are r | iot preser | ιτ □): | | | | | |
| <u>Prim</u> ary: | | | | _ | | | | | Secondary: | 5 | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil | |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage P | |
| | A3 - Saturati | | | | B15 - Mar | | | | | B16 - Moss Trim | |
| | B1 - Water N | | | | C1 - Hydr | | | | | C2 - Dry-Season | |
| | B2 - Sedime | | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift De | | | | | | duced Iron | | | | isible on Aerial Imagery |
| | B4 - Algal Ma | | | | | | duction in Tilled Soils | | | D1 - Stunted or S | |
| | B5 - Iron Dep | | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | | | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aqu | |
| | B8 - Sparsely | / Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | ✓ | D5 - FAC-Neutra | l Test |
| Field Observat | ions: | | | | | | | , | | | |
| | | _,, _ ,, | | | (: \ | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes □ No |
| Water Table Pr | esent? | ☑ Yes □ No | Depth: | 0 | (in.) | | | | | _ | . 55 🗀5 |
| Saturation Pres | ent? | ☑ Yes □ No | Depth: | 0 | (in.) | | | | | | |
| December Decemb | D-t- /otr | eam gauge, monitori | na well a | orial pha | too provi | oue inene | ations) if available: | <u> </u> | NI/A | | |
| | ed Data (Sti | eam gauge, monitori | ily well, a | enai piic | nos, previ | ous mape | ciions), ii avaliable. | | N/A | | |
| | | | | | | | | · | | | |
| Remarks: | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | |
| | | | | | · | | | | | | |
| SOILS | | Dougstring Arphoim | complex | , 0 to 1 | norcent | longs & | orios Proinces Class: | #11/4 | | | |
| SOILS Map Unit Name | | | complex | c, 0 to 1 | percent s | lopes, 180 | eries Drainage Class: | #N/A | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | #N/A | | | | • | | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | #N/A | | | | • | eries Drainage Class: | | d Grains; Location: F | PL=Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip | ogroup): otion (Describe to | #N/A | | n the absence o | | • | ion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | PL=Pore Lining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | #N/A the depth needed to document the in | dicator or confirm | n the absence o | of indicators.) (Typ | oe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | 1 | | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the in Horizon | dicator or confirm | Matrix (Moist) | of indicators.) (Type | pe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=covered/Coated Sand | Туре | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): otion (Describe to Bottom Depth 3 | #N/A the depth needed to document the in Horizon 1 | Color | Matrix (Moist) 3/2 | f indicators.) (Type 100 % 100 | pe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | CS=Covered/Coated Sand | 1 | | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A the depth needed to document the in Horizon | dicator or confirm | Matrix (Moist) | of indicators.) (Type | pe: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | cs=covered/Coated Sand | Туре | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 | ogroup): ption (Describe to Bottom Depth 3 18 | #N/A the depth needed to document the in Horizon 1 2 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 | % 100 90 | e: C=Concentra | ion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 3/4 | cs=covered/Coated Sand | Type c | Location m | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 18 | pgroup): ption (Describe to Bottom Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 | % 100 90 90 | 7.5YR 7.5YR | ion, D=Deptetion, RM=Reduced Matrix, Red Red Color (Moist) 3/4 4/6 | CS=Covered/Coated Sand dox Features % 10 10 | Type C C | Location m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
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| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 18 | pgroup): ption (Describe to Bottom Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 | % 100 90 90 | 7.5YR 7.5YR | ion, D=Deptetion, RM=Reduced Matrix, Red Red Color (Moist) 3/4 4/6 | CS=Covered/Coated Sand dox Features % 10 10 | Type C C | Location m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
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| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 18 | pgroup): tion (pescribe to Bottom Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR — | Matrix (Moist) 3/2 3/2 4/2 | % 100 90 90 | 7.5YR 7.5YR | ion, D=Deptetion, RM=Reduced Matrix, C Red Color (Moist) 3/4 4/6 | CS=Covered/Coated Sand | Type C C | Location m m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
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| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 | pgroup): ption (Describe to Bottom Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR — — — — — — | Matrix (Moist) 3/2 3/2 4/2 | % 100 90 90 | | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6 | CS=Covered/Coated Sand | Type | Location m m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): Ition (Describe to Bottom Depth 3 18 24 Soil Field II | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR — — — — — — | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 re not pre | | ion, D=Depletion, RM=Reduced Matrix, C Ret Color (Moist) 3/4 4/6); | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C cs for Proble | Location m m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | ogroup): otion (Describe to Depth 3 18 24 Soil Field It A1- Histosol | #N/A the depth needed to document the in Horizon 1 2 3 ndicators (check he | Color 10YR 7.5YR 7.5YR — — — — — — | Matrix (Moist) 3/2 3/2 4/2 cators a | 90 90 re not pre | 7.5YR 7.5YR | ion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 1498) | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C C s for Proble | Location m m matic Soils Muck (LRR K, L, MLRA | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): Ition (Describe to Bottom Depth 3 18 24 Soil Field II | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR — — — — — — | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 re not pre \$8 - Polyx \$9 - Thin | 7.5YR 7.5YR | ion, D=Depletion, RM=Reduced Matrix, C Ret Color (Moist) 3/4 4/6); | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A16 - Coast | Location m m matic Soils Muck (LRR K, L MLRA Prairie Redox (LR | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR — — — — — — | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 re not pre \$8 - Polyx \$9 - Thin | 7.5YR 7.5YR | ion, D=Deptetion, RM=Reduced Matrix, CRet Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi | Location m m matic Soils Muck (LRR K, L, MLRA | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (Describe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR 7.5YR — — — — — — | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | - 7.5YR 7.5YR | ion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) (Ineral (LRR K, L) Matrix | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S | Location m m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (Describe to Depth 3 18 24 Soil Field It A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | 90 90 re not pre S8 - Polyv S9 - Thin F1 - Loam F3 - Deple F3 - D | 7.5YR 7.5YR | ion, D=Depletion, RM=Reduced Matrix, C Rei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - Dank S S8 - Polyval | Location m m Muck (LRR K, L, MLRA Prairip Redox (Lera turface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) sandy loam sandy loam silt loam 149B) RK, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifies A11 - Deplet | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR | ion, D=Depletion, RM=Reduced Matrix, Rel Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) ce (LRR R, MLRA 149B) fineral (LRR K, L) Matrix fface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C sfor Proble A10 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da | Location m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L) urface (LRR K, L) urface (LRR K, L) urface (LRR K, L) | (e.g. clay, sand, loam) sandy loam sandy loam silt loam 149B) RK, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick II | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm H A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | Location m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) Labelow Surface ark Surface (LRR K, L, M) Langanese Masse: | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (Describe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A12 - Thick [S1 - Sandy N | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm H33 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm | Location m m m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (Describe to Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | Location m m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) ont Floodplain So darent Material | (e.g. clay, sand, loam) sandy loam sandy loam silt loam 149B) R.K. L., R) (LRR K, L, R) (LRR K, L, R) ills (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic | Location m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR LUTface (LRR K, L, MLRA Urface (LRR K, L, MLRA Locky Peat of Peat urface (LRR K, L, MLRA Langanese Masse: ont Floodplain So arent Material Spodic (MLRA 144A, | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C sfor Proble A10 - Coast S3 - 5cm M S7 - Dark S S9 - Thin Da F12 - Iron-N F19 - Red P F21 - Red P F21 - Red P F21 - Red P F21 - West | Location m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface erk Surface (LRR K, L langanese Masse: ont Floodplain So rerlo Material Spodic MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C sfor Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla | Location m m m | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Costed Sand dox Features % 10 10 Indicator Indicators | Type C C sfor Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla | Location m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat urface (LRR K, L, M) ue Below Surface erk Surface (LRR K, L langanese Masse: ont Floodplain So rerlo Material Spodic MLRA 144A, Shallow Dark Sur | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (Describe to Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | 9% 100 90 90 re not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Costed Sand dox Features % 10 10 Indicator Indicators of disturbed o | Type C C C sfor Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF12 - Very Of hydrophytic veget x problematic. | Location m m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L) ucky Peat of Peat ucky Peat of Peat ucky Peat of Peat ucky Surface ark Surface (LRR K, L) anganese Masse oorarent Material Spodic (MLRA 144A, Shallow Dark Sur ain in Remarks) | (e.g. clay, sand, loam) sandy loam sandy loam silt loam 149B) R.K. L. R) (LRR K, L. R) (LRR K, L. R) (LRR K, L. R) (IS (MLRA 149B) 145, 149B) face y must be present, unless |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (pescribe to Depth 3 18 24 Soil Field II A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | Matrix (Moist) 3/2 3/2 4/2 cators a | % 100 90 90 | 7.5YR 7.5YR alue Belov Dark Surfay Mucky N y Gleyed I sted Matrix x Dark Su sted Dark six | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Costed Sand dox Features % 10 10 Indicator Indicators | Type C C C sfor Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF12 - Very Of hydrophytic veget x problematic. | Location m m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L) ucky Peat of Peat ucky Peat of Peat ucky Peat of Peat ucky Surface ark Surface (LRR K, L) anganese Masse oorarent Material Spodic (MLRA 144A, Shallow Dark Sur ain in Remarks) | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 3 18 NRCS Hydric | pgroup): ption (Describe to Depth 3 18 24 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 10YR 7.5YR | mithe absence of Matrix (Moist) 3/2 3/2 4/2 cators a | 90 90 | 7.5YR 7.5YR alue Belov Dark Surfa y Mucky N y Gleyed I sted Matrix x Dark Su ted Dark : x Depress | ion, D=Depletion, RM=Reduced Matrix, CRei Color (Moist) 3/4 4/6): v Surface (LRR R, MLRA 149B) tineral (LRR K, L) Matrix rface Surface Surface Surface | CS=Covered/Coated Sand dox Features % 10 10 Indicator | Type C C C S for Proble A16 - Coast S3 - 5cm M S3 - 5cm M S57 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F21 - Red P TA6 - Mesic TF12 - Very Other (Expl of hydrophytic vege of problematic. Present? | Location m m m matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L) ucky Peat of Peat ucky Peat of Peat ucky Peat of Peat ucky Surface ark Surface (LRR K, L) langanese Masseo ornert Material Spodic (MLRA 144A, Shallow Dark Sur ain in Remarks) ation and wetland hydrology | (e.g. clay, sand, loam) sandy loam sandy loam silt loam |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WD-30 Sample Point WD-30-01w |
|-------------------|-----------------------------------|------------|----------|------------|--|
| | | | | | |
| VEGETATION | | itive spec | cies.) | | |
| Tree Stratum (Pl | lot size: 10 meter radius) | | | | D . T . W . L |
| | <u>Species Name</u> | | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Abies balsamea | 5 | Υ | FAC | |
| 2. | Fraxinus nigra | 15 | Υ | FACW | Number of Dominant Species that are OBL, FACW, or FAC:6(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 6 (B) |
| 5. | | | | | · · · · · · · · · · · · · · · · · · · |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | | | | | (· -) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | |
| | | | | | |
| 10. | | | | | OBL spp. 18 x 1 = 18 |
| | Total Cover = | 20 | | | FACW spp. 215 x 2 = 430 |
| | | | | | FAC spp. <u>25</u> x 3 = <u>75</u> |
| Sapling/Shrub Str | ratum (Plot size: 5 meter radius) | | | | FACU spp. 15 x 4 = 60 |
| 1. | Ulmus americana | 60 | Υ | FACW | UPL spp. 0 |
| 2. | Fraxinus nigra | 20 | Υ | FACW | |
| 3. | Acer saccharum | 15 | N | FACU | Total 273 (A) 583 (B) |
| 4. | | | | | · · · · · · · · · · · · · · · · · · · |
| 5. | | | | | Prevalence Index = B/A = 2.136 |
| 6. | | | | | Trovalidade Birt - 2,100 |
| | | | | | |
| 7. | | | | | Lludranhutia Vagatatian Indiagtara |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes ☐ No Dominance Test is > 50% |
| | Total Cover = | 95 | | | ☑ Yes ☐ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Pl | ot size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Thalictrum dasycarpum | 60 | Υ | FACW | |
| 2. | Ranunculus hispidus | 20 | N | FAC | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Carex crinita | 15 | N | OBL | present, unless disturbed or problematic. |
| 4. | Carex bromoides | 30 | Υ | FACW | Definitions of Vegetation Strata: |
| 5. | Solidago gigantea | 5 | N | FACW | 20111110110011011011011 |
| 6 | Rubus pubescens | 15 | N | FACW | Tree - w |
| 7. | • | 10 | N | FACW | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| | Fraxinus nigra | | | | g (= = : -),g |
| 8. | Galium asprellum | 3 | N | OBL | O II IO I Washington to the O's DDU and market has 0.00 ft |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | woody piants less than 3.28 π. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 158 | | | , |
| | Total Gover = | 100 | | | |
| Moody) (== Cl | tum (Diet eizer 10 meter dire) | | | | |
| | tum (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | · | |
| | | | | | |
| 1 | | | | | |
| A .1.11(1) | | | | | |
| Additional Re | marks: | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | | ter Drawdown Proje | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/04/14 |
|--|--|--|---|--|--|--|---|--|--|---|--|
| Applicant: | • | aconite, LLC | | | | D D: | | | | County: | Iron |
| Investigator #1: | | | | | gator #2: | • | | | | State: | Wisconsin |
| Soil Unit: | • | It loam, 6 to 18 perc | ent siop | | | | /I/WWI Classification: | | | Wetland ID: | WE-07 |
| Landform: Slope (%): | Shoulder s | Latitude: | NI/A | | al Relief: | | | Datum: | NI/A | Sample Point: | WE-07-02u upland HW forest |
| | trologic con | ditions on the site ty | | | ongitude: | | ain in remarke) | ☐ Yes ☑ | | Community ID: Section: | 33 |
| • | | or Hydrology □ sig | • | | | (II IIO, expir | Are normal circumsta | | | Township: | 45N |
| _ | | or Hydrology ☐ sig | | • | | | ✓ Yes | Mo □No | | Range: | 1 Dir: W |
| SUMMARY OF | | or rigarology _ na | tarany pr | obicinat | | | | | | range. | I DII. VV |
| Hydrophytic Ve | | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | _ | | | ☐ Yes | | | | | | Within A Wetlar | |
| Remarks: | | | recent c | | | | nis wetland from S. to I | | | | |
| | | | | | | | | | • | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indic | ators (Check here | f indicat | ors are r | ot preser | nt 🕡): | | | | | |
| Primary: | | · | | | | | | | Secondary: | | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil | |
| I H | A2 - High Wa A3 - Saturation | | | 님 | B13 - Aqu B15 - Mar | | | | | B10 - Drainage Pa B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydr | | | | _ | C2 - Dry-Season | |
| | B2 - Sedimer | • | | | C3 - Oxid | zed Rhizo | spheres on Living Roots | | | C8 - Crayfish Buri | rows |
| | B3 - Drift Dep | - | | | | | educed Iron eduction in Tilled Soils | | | C9 - Saturation Vi D1 - Stunted or S | isible on Aerial Imagery |
| l H | B4 - Algal Ma B5 - Iron Dep | | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | agery | | Other (Ex | | | | | D3 - Shallow Aqui | |
| | B8 - Sparsely | y Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | | | | | <i>(</i> ;) | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes ☑ No |
| Water Table Pr Saturation Pres | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| | | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Describe Record | led Data (str | eam gauge, monitori | na well a | aerial nho | otos previ | ous inspe | ections) if available: | | N/A | | |
| | | | | | | | | | 14// (| | |
| Remarks: | | nd wetter than avera | | | | | | | | | |
| | | | | | | | | | 1077 | | |
| SOILS | The site ha | ad wetter than avera | ge cond | itions at | the time o | of the vis | it. | | | | |
| SOILS Map Unit Name | The site ha | ad wetter than avera | ge cond | itions at | the time o | of the vis | | | | | |
| SOILS Map Unit Name Taxonomy (Sub | The site ha | Gogebic silt loam, | ge cond | itions at ercent s | the time of | of the vis | it. eries Drainage Class: | CS=Covered/Coated Sand | | PL=Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub | The site hate: Site of the site hate hate hate hate hate hate hate ha | Gogebic silt loam, | ge cond | ercent s | the time of lopes, very strictly the time of the time | of the vis | it. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | | d Grains; Location: F | ² L=Pore Lining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | The site had be: Describe to Bottom | Gogebic silt loam, | ge cond 6 to 18 p | ercent s m the absence of Matrix | the time of lopes, very strictly the time of the time | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | dox Features | d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | |
| SOILS Map Unit Name Taxonomy (Sub | The site hate: Site of the site hate hate hate hate hate hate hate ha | Gogebic silt loam, | ge cond 6 to 18 p | ercent s | lopes, ve | of the vis | it. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | | d Grains; Location: F | | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | The site had been been been been been been been bee | Gogebic silt loam, | ge cond 6 to 18 p | ercent s m the absence of Matrix (Moist) | lopes, ve | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | The site hate to be site to be si | Gogebic silt loam, the depth needed to document the in Horizon | ge cond 6 to 18 p dicator or confir Color 7.5YR | m the absence of Matrix (Moist) 2.5/3 | lopes, very stindicators.) (Ty | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Correct Reduced Moist) | dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | The site had be: Describe to Bottom Depth 4 10 | Gogebic silt loam, the depth needed to document the in Horizon 1 2 | ge cond 6 to 18 p dicator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 | lopes, ve | ry stonys | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | dox Features % | d Grains; Location: F | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | The site has been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 | ge cond 6 to 18 p dicator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 | lopes, ve | ry stonys | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Red Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | The site hate hate hate be: Degroup): Describe to Bottom Depth 4 10 24 | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 | ge cond 6 to 18 p dicator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 | lopes, ventral findicators.) (Type 100 100 100 100 100 100 100 100 100 10 | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Classical Reduced Matrix Reduced Matrix | dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | The site have: Describe to Bottom Depth 4 10 24 | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 | the time of lopes, very log indicators.) (Ty | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | The site has been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 | the time (state of indicators.) (Ty | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) | dox Features | Type | Location | (e.g. clay, sand, loam) silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site has been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very log indicators.) (Type of indicators.) (Ty | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Control (Moist) | dox Features % Indicator | Type | Location matic Soils ¹ | (e.g. clay, sand, loam) silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site has been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very log indicators.) (Ty | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Control (Moist) | dox Features % Indicator | Type | Location | (e.g. clay, sand, loam) silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site has been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very serior indicators.) (Ty | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Control (Moist) | dox Features % Indicator | Type | Location matic Soils ¹ | (e.g. clay, sand, loam) silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had be composed by th | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very logical | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type | Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) | (e.g. clay, sand, loam) silt loam silt loam sandy loam (49B) (K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had be composed by th | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very logical | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Correct Reduced Reduced Matrix, Correct Reduced | dox Features % Indicator | Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) silt loam silt loam sandy loam (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very logical findicators.) (Type of indicators.) (Type of indicators. | of the vis | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type Type | Location Matic Soils ¹ Vuck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) silt loam silt loam sandy loam (LRR K, L, R) (LRR K, L) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had be composed by th | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very logical | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) silt loam silt loam sandy loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very serior property serior | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type Type | Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material | (e.g. clay, sand, loam) silt loam silt loam sandy loam (49B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had a site of the site had a site of the site | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very serior property serior | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 | (e.g. clay, sand, loam) silt loam silt loam sandy loam (49B) EK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very serior property serior | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type Type | Location matic Soils ¹ Vuck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 Shallow Dark Surf | (e.g. clay, sand, loam) silt loam silt loam sandy loam (49B) EK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very serior property serior | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi arent Material Spodic (MLRA 144A, 1 | (e.g. clay, sand, loam) silt loam silt loam sandy loam (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B) | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/4 icators a | lopes, ve findicators.) (Ty % 100 100 100 re not pre \$8 - Polyo \$9 - Thin \$1 - Loam \$7 - Deple \$6 - Redo \$7 - Deple \$7 - Redo \$7 - Red | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator Indicators of disturbed of disturbed of the seatures | Type Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LUCKY Peat of Peat (LUCKY Peat of Peat of Peat (LUCKY Peat of Pea | (e.g. clay, sand, loam) silt loam silt loam sandy loam 49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) Is (MLRA 149B) face must be present, unless |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | The site had been been been been been been been bee | Gogebic silt loam, the depth needed to document the in Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B) | ge cond 6 to 18 p dicator or confir Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2.5/3 3/3 3/4 icators a | the time of lopes, very serior property serior | esent any Mucky North Color of the vision o | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Concord (Moist) | dox Features % Indicator | Type Type | Location | (e.g. clay, sand, loam) silt loam silt loam sandy loam (LRR K, L, R) |



Project/Site: Groundwater Drawdown Project Wetland ID: WE-07 Sample Point WE-07-02u

| VEGETATION | (Species identified in all uppercase are non-na | itive spec | cies.) | | |
|--------------------|---|------------|-----------------|------------|--|
| | ot size: 10 meter radius) | <u>'</u> | , | | |
| | <u>Species Name</u> | % Cover | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 60 | Υ | FACU | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:3(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp |
| | Total Cover = | 60 | | | FACW spp. 20 $x 2 = 40$ |
| | | | | | FAC spp. |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. 225 x 4 = 900 |
| 1. | Acer saccharum | 80 | Υ | FACU | UPL spp. $\underline{\qquad}$ \times 5 = $\underline{\qquad}$ |
| 2. | Fraxinus nigra | 10 | N | FACW | |
| 3. | Ostrya virginiana | 15 | N | FACU | Total <u>245</u> (A) <u>940</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 3.837 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 105 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 40 | Υ | FACU | |
| 2. | Fraxinus nigra | 10 | N | FACW | * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | Sanguinaria canadensis | 15 | N | FACU | present, unless disturbed of problematic. |
| 4. | Tilia americana | 10 | N | FACU | Definitions of Vegetation Strata: |
| 5. | Uvularia sessilifolia | 5 | N | FACU | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 80 | | | |
| | | | | | |
| Woody Vine Strate | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | - | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | _ | _ | _ | |
| Additional Ren | marks: | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | | | | | | | | | | I | |
|---|--|--|---------------------------------|---|--|---|--|--|--|--|--|
| i rojectione. | Groundwate | er Drawdown Projed | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/04/14 |
| Applicant: | Gogebic Ta | aconite, LLC | | | | | | | | County: | Iron |
| Investigator #1: | A. Michalsk | (i | | Invest | igator #2: | P. Piepe | er | | | State: | Wisconsin |
| Soil Unit: | | oic complex, 0 to 6 | nercent (| | • | | /I/WWI Classification: | T3/S3K | | Wetland ID: | WE-07 |
| | • | old complex, o to o | ociociii (| • | | | | 10/0010 | | | |
| Landform: | Terrace | 1 (1) | | | cal Relief: | | e | ъ. | N. 1 / A | Sample Point: | WE-07-02w |
| Slope (%): | 1 | Latitude | | | ongitude: | | | Datum: | | Community ID: | wet meadow/shrub car |
| Are climatic/hyd | drologic cond | litions on the site ty | pical for | this time | of year? | (If no, expla | in in remarks) | ☐ Yes ☑ | No | Section: | 33 |
| Are Vegetation | □, Soil □, | or Hydrology ☐ sig | nificantly | / disturbe | ed? | | Are normal circumsta | ances present | ? | Township: | 45N |
| _ | | or Hydrology ☐ na | - | | | | | _No | | Range: | 1 Dir: W |
| SUMMARY OF | | or riyarology 🗀 ha | ion only pr | | | | | | | r taniger | |
| | | 10 | | \ | NI | | | | D 10 | | - V = N |
| Hydrophytic Ve | • | | | ✓ Yes | | | | Hydric Soils I | | | |
| Wetland Hydrol | | | | Yes | | | | | | Within A Wetlan | |
| Remarks: | This sample | e site is within an ol | d logging | g road bu | ut this are | a has no | been disturbed in ma | ny years and | has develo | ped into a wet n | neadow/shrub-carr. |
| | • | new normal circums | | | | | | | | • | |
| HADBOLOCA | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here if | indicato | rs are no | ot present | ! □): | | | | | |
| Primary | | () | | | | - Ш /- | | | Secondary: | | |
| <u>s</u> . | | Water | | V | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | | | ī | B13 - Aqu | | | | ī | B10 - Drainage Pa | |
| | | | | $\overline{\Box}$ | B15 - Mar | | | | ī | B16 - Moss Trim L | |
| l Ä | B1 - Water M | | | ī | C1 - Hydr | • | | | _ | C2 - Dry-Season \ | |
| l ī | B2 - Sedimer | nt Deposits | | $\overline{\sqcap}$ | • | - | spheres on Living Roots | | | C8 - Crayfish Burr | |
| l | B3 - Drift Dep | • | | ī | | | educed Iron | | | | sible on Aerial Imagery |
| l | B4 - Algal Ma | | | $\overline{\Box}$ | | | duction in Tilled Soils | | | D1 - Stunted or St | • • |
| l n | B5 - Iron Dep | | | Ē | C7 - Thin | | | | _ | D2 - Geomorphic | |
| I == | | on Visible on Aerial Ima | agery | | Other (Ex | | | | | D3 - Shallow Aqui | |
| I | | Vegetated Concave S | 0 , | _ | ` ' | | , | | | D4 - Microtopogra | |
| _ | | | | | | | | | | D5 - FAC-Neutral | |
| Field Observat | tionar | | | | | | | | | | |
| | | | | | <i>a</i> | | | | | | |
| Surface Water | | | Depth: | 1 | (in.) | | | Wetland Hyd | drology Pr | esent? | Yes □ No |
| Water Table Pro | esent? | | Depth: | 0 | (in.) | | | Wettania riye | arology i i | Cociii. | 163 🖺 110 |
| Saturation Pres | sent? | | Depth: | 0 | (in.) | | | | | | |
| | | <u> </u> | | | | | | | | | |
| Describe Record | ded Data (stre | eam gauge, monitorii | ng well, a | erial pho | tos, previd | us inspe | ctions), if available: | | N/A | | |
| Remarks: | The site ha | d wetter than avera | ge cond | itions at | the time o | of the vis | it. | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| SOILS | | T. 1. 0 1: | | | | | | | | | |
| Map Unit Name | | Tula-Gogebic comp | olex, 0 to | 6 perce | nt slopes | , stony S | series Drainage Class: | | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | | | | | | | | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | | | | | | | | Grains; Location: PL: | =Pore Lining, M=Matrix) | |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to t | | | n the absence of | indicators.) (Type | | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand C | | =Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to the | he depth needed to document the inc | icator or confirm | n the absence of Matrix | indicators.) (Type | | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand C | r | Γ | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to the | | icator or confirm | Matrix (Moist) | indicators.) (Type | | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand C | | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to the | he depth needed to document the inc | icator or confirm | n the absence of Matrix | indicators.) (Type | | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand C | r | Γ | |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to the | he depth needed to document the inc | icator or confirm | Matrix (Moist) | indicators.) (Type | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Codox Features | r | Γ | (e.g. clay, sand, loam) mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 | Degroup): Describe to the Bottom Depth 1 6 | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR | Matrix (Moist) 2/1 2.5/1 | % 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Cedox Features % | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | Depth 1 6 24 | he depth needed to document the inc Horizon | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 | % 100 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Cotton | Type | Γ | (e.g. clay, sand, loam) mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 | Degroup): Describe to the Bottom Depth 1 6 | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR | Matrix (Moist) 2/1 2.5/1 | % 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Cedox Features % | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 | Depth 1 6 24 | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 | % 100 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Cotton | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 | Depth 1 6 24 | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 | % 100 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Cotton | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 | Depth 1 6 24 | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 | % 100 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Coated Sand Coate | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 | Degroup): Bottom Depth 1 6 24 | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 | % 100 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand Cooking Features % | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 | Degroup): Degroup): Degroup): Depth Depth Control Cont | Horizon 1 2 3 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 | % 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Coated Sand Coate | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 | Degroup): Degroup): Degroup): Depth Depth Control Cont | he depth needed to document the inc Horizon 1 2 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 | % 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Coated Sand Coate | Type | Γ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Degroup): Degroup): Degroup): Depth Depth Control Cont | Horizon 1 2 3 | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 re not pres | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Codox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Depth Depth 1 6 24 Soil Field In | Horizon 1 2 3 dicators (check he | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 re not pres | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Codox Features % | Type | Location matic Soils ¹ | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Depth Depth 1 6 24 Soil Field In | Horizon 1 2 3 dicators (check he | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 e not pres | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Codox Features % | Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Degroup): Dion (Describe to | Horizon 1 2 3 dicators (check he | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist)): w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) | S=Covered/Coated Sand Control Sedox Features % Indicator | Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5cm Mu | Location matic Soils ¹ Muck (LRR K, L, MLRA 14 | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Degroup): Degroup): Degroup Bottom Depth 1 | Horizon 1 2 3 dicators (check he | Color N 7.5YR 7.5YR | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 e not pres | e: C=Concentration sent □ value Below Dark Surfa | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm Mu S7 - Dark Su | Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR JICKY Peat of Peat (L | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | Horizon 1 2 3 dicators (check here) pipedon stic en Sulfide d Layers | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 se not pres S8 - Polyx S9 - Thin F1 - Loam F2 - Loam | e: C=Concentration sent | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist)): w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | S=Covered/Coated Sand Control Sedox Features % Indicator | Type | Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Icky Peat of Peat (L Irface (LRR K, L, M) ue Below Surface (| (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Horizon 1 2 3 dicators (check headipedon stices Sulfide dayers ed Below Dark Surface | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration sent | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type | Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Icky Peat of Peat (L Irface (LRR K, L, M) ue Below Surface (LRR K, L) | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam RPB) K, L, R) LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Degroup): Dion (Describe to | Horizon 1 2 3 dicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type | Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LICKY Peat of Peat (L LIFface (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | Horizon 1 2 3 dicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Icky Peat of Peat (L Irface (LRR K, L, M) ue Below Surface (LRR K, L) | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G | Horizon 1 2 3 dicators (check here) cipedon stic en Sulfide di Layers ed Below Dark Surface duck Mineral Sleyed Matrix | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LCKY Peat of Peat (L LIFface (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R | Horizon 1 2 3 dicators (check here) stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Control of Sedox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam SPB) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Horizon 1 2 3 dicators (check here) stic n Sulfide d Layers ed Below Dark Surface Oark Surface Juck Mineral Gleyed Matrix Ledox Matrix | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Control of Section Secti | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam SPB) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (MLRA 149B) 45, 149B) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Horizon 1 2 3 dicators (check here) stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (PBB) K, L, R) LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Horizon 1 2 3 dicators (check here) stic n Sulfide d Layers ed Below Dark Surface Oark Surface Juck Mineral Gleyed Matrix Ledox Matrix | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F11 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (PBB) K, L, R) LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Horizon 1 2 3 dicators (check here) oipedon stic en Sulfide et Layers et Below Dark Surface fluck Mineral sileyed Matrix etedox Matrix M | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (PBB) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Horizon 1 2 3 dicators (check here) oipedon stic en Sulfide et Layers et Below Dark Surface fluck Mineral sileyed Matrix etedox Matrix M | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (PBB) K, L, R) LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 1 6 NRCS Hydric S | Bottom Depth 1 6 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Horizon 1 2 3 dicators (check here) oipedon stic en Sulfide et Layers et Below Dark Surface fluck Mineral sileyed Matrix etedox Matrix M | Color N 7.5YR 7.5YR re if indic | Matrix (Moist) 2/1 2.5/1 3/4 cators ar | % 100 100 100 | e: C=Concentration | on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | S=Covered/Coated Sand Cook Features % | Type | Location | (e.g. clay, sand, loam) mucky silt loam mucky silt loam sandy loam (PBB) K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) |



Project/Site: Groundwater Drawdown Project Wetland ID: WE-07 Sample Point WE-07-02w

| VEGETATION | (Species identified in all uppercase are non-n | ative spec | cies.) | | |
|--------------------|--|-------------|-----------------|------------|--|
| Tree Stratum (Plo | t size: 10 meter radius) | | | | |
| | <u>Species Name</u> | % Cover | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | <u></u> | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:4(A) |
| 3. | | | | | Total Number of Deminerat Creasing Agrees All Chate. (D) |
| 4. 5. | | | | | Total Number of Dominant Species Across All Strata: 4 (B) |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | _ | | | | (A/B) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 x 1 = 0 |
| | Total Cover = | 0 | | | FACW spp. 140 x 2 = 280 |
| | . 3 (4) | | | | FAC spp. 45 x 3 = 135 |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. 15 x 4 = 60 |
| 1. | Salix discolor | 20 | Υ | FACW | UPL spp. $0 \times 5 = 0$ |
| 2. | Fraxinus nigra | 15 | Υ | FACW | |
| 3. | Betula alleghaniensis | 15 | Υ | FAC | Total 200 (A) 475 (B) |
| 4. | | | | | ··· |
| 5. | | | | | Prevalence Index = B/A = 2.375 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes ☐ No Dominance Test is > 50% |
| | Total Cover = | 50 | | | |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Osmunda claytoniana | 15 | N | FAC | * Indicators of hydric soil and watland hydrology must be |
| 2. | Onoclea sensibilis | 80 | Y | FACW | * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | Equisetum sylvaticum | 25 | N | FACW | process, emisso and en process. |
| 4. | Euthamia graminifolia | 15 | N | FAC | Definitions of Vegetation Strata: |
| 5. | Carex gracillima | 15 | N | FACU | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | <u></u> | | | | height (DBH), regardless of height. |
| 8. | | | | | O II (OI I Wood) plants loss than 2 in DDU and prosted than 2.00 ft |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | All herhanous (non woods) plants, recordings of size, and |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | Moody Vince All woody vines greater than 3.28 ft, in height |
| 15. | Total Cover - | 450 | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 150 | | | |
| Woody Vine Strate | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Ren | narks: | | | | |



| Project/Site: | | er Drawdown Proje | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/04/14 |
|--|--|---|------------------------------|---|--|--|---|---|-----------------------|---|---|
| Applicant: | • | aconite, LLC | | Invocti | actor #2: | D Diona | ar. | | | County: | Iron Wisconsin |
| Investigator #1: Soil Unit: | | t loam, 6 to 18 perc | ent clon | | gator #2: | | /I/WWI Classification: | NI/A | | State: Wetland ID: | WE-08 |
| Landform: | Shoulder | it loain, o to 16 perc | ent slop | | : :al Relief: | | | IN/A | | Sample Point: | WE-08-01u |
| Slope (%): | 8 | Latitude: | Ν/Δ | | ongitude: | | | Datum: | Ν/Δ | Community ID: | upland HW forest |
| _ ' ' | | ditions on the site ty | | | | | ain in remarks) | ☐ Yes ☑ | | Section: | 33 |
| | | or Hydrology □ sig | • | | | (II IIO, CAPI | Are normal circumsta | | | Township: | 45N |
| • | | or Hydrology ☐ na | • | | | | ✓ Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | or rigarology _ na | tarany pr | obioinat | | | | | | rango. | , Bii. ** |
| Hydrophytic Veg | | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | _ | | | ☐ Yes | | | | | | Within A Wetlar | |
| Remarks: | | | recent c | | | | nis wetland from S. to I | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | | ators (Check here | if indicate | ors are r | not preser | nt ☑): | | | | | |
| Primary: | | \\/_t | | _ | DO Wete | Ota:a | Laguag | | Secondary: | DC Comford Call | One also |
| _ | A1 - Surface A2 - High Wa | | | 님 | B9 - Wate B13 - Aqu | | | | | B6 - Surface Soil B10 - Drainage P | |
| | A3 - Saturation | | | ä | B15 - Aqu | | | | | B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydr | | | | | C2 - Dry-Season | |
| | B2 - Sedimer | • | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| l H | B3 - Drift De _l B4 - Algal Ma | | | | | | educed Iron eduction in Tilled Soils | | | D1 - Stunted or S | isible on Aerial Imagery tressed Plants |
| | B5 - Iron Dep | | | | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | 0 , | | Other (Ex | plain in Re | emarks) | | | D3 - Shallow Aqu | |
| | B8 - Sparsely | y Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| Field Observet | ·! aa. | | | | | | | | | | |
| Field Observat | | - Van - Na | D 11- | | /: \ | | | | | | |
| Surface Water I Water Table Pro | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes ☑ No |
| Saturation Pres | | ☐ Yes ☑ No ☐ Yes ☑ No | Depth: Depth: | | (in.) (in.) | | | | | | |
| | | | • | | | | | | | | |
| | | eam gauge, monitori | | | | | | | N/A | | |
| Remarks: | The site ha | d wetter than avera | ige cond | itions at | the time of | of the vis | it. | | | | |
| | | | | | | | | | | | |
| SOIL S | | | | | | | | | | | |
| SOILS | \· | Cogobio silt loam | 6 to 19 p | orcent c | lonos vo | av stopy S | orios Drainago Class: | | | | |
| Map Unit Name | | Gogebic silt loam, | 6 to 18 p | ercent s | lopes, ve | ry stony\$ | eries Drainage Class: | | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | | | | • | | - | | d Grains: Location: F | 21 - Pera Lining M-Matrix) | |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | | | m the absence c | of indicators.) (Ty | | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | PL=Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | the depth needed to document the in | dicator or confin | m the absence o | of indicators.) (Ty | | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | 1 | | Texture (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | | dicator or confin | m the absence of Matrix (Moist) | of indicators.) (Ty | | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to Bottom Depth 8 | the depth needed to document the in Horizon 1 | color 7.5YR | m the absence of Matrix (Moist) 3/1 | of indicators.) (Ty | pe: C=Concentra | Red Color (Moist) | CS=Covered/Coated Sand | Туре | Location | (e.g. clay, sand, loam) silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | the depth needed to document the in | dicator or confin | m the absence of Matrix (Moist) | of indicators.) (Ty | pe: C=Concentra | Red Color (Moist) | CS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 18 | the depth needed to document the in Horizon 1 | color 7.5YR 7.5YR | Matrix (Moist) 3/1 3/3 | % 100 100 | pe: C=Concentra | Red Color (Moist) | CS=Covered/Coated Sand dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Depth 8 18 | the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 3/1 3/3 | % 100 100 | pe: C=Concentra | Color (Moist) | CS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Degroup): Describe to Bottom Depth 8 18 | the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 | % 100 100 | e: C=Concentra | Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Depth 8 18 | the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 | % 100 100 | e: C=Concentra | Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 18 | the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 | % 100 100 | De: C=Concentra | Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | ogroup): otion (Describe to Bottom Depth 8 18 | the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 | % 100 100 | | Color (Moist) | CS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Depth 8 18 Soil Field In A1- Histosol | Horizon 1 2 ndicators (check he | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 are not pre | esent value Belov | ation, D=Depletion, RM=Reduced Matrix, CRed Color (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type | Location Matic Soils ¹ Vuck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field In A1- Histosol A2 - Histic E | Horizon 1 2 | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent value Belov | ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi | Horizon 1 2 ndicators (check here) | Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | e: C=Concentra | Color (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type | Location Matic Soils ¹ Vuck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, Corolor (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat (LRR 1) | (e.g. clay, sand, loam) silt loam silt loam (49B) s. K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Horizon 1 2 ndicators (check head) istic en Sulfide d Layers ed Below Dark Surface | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 se not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | e: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C Rec Color (Moist)): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix Curface | CS=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) silt loam silt loam (49B) R.K., L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact X Dark Surfac | Color (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 se not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | CS=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | cs=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lucky Peat Luck | (e.g. clay, sand, loam) silt loam silt loam (49B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | cs=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses and Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface | (e.g. clay, sand, loam) silt loam silt loam (49B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | cs=Covered/Coated Sand dox Features % Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses and Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | cs=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses and Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | cs=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses and Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) | (e.g. clay, sand, loam) silt loam silt loam (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 18 Soil Field In A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy N S6 - Stripped S7 - Dark Su | Horizon 1 2 | Color 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 3/1 3/3 icators a | % 100 100 | esent any Mucky May Gleyed eted Matrix Dark Surfact Matrix Dark Surfact Dark | Color (Moist) | cs=Covered/Coated Sand dox Features % Indicator Indicator Indicator | Type | Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR LUCKY Peat of Peat Jurface (LRR K, L, M) ue Below Surface Ark Surface (LRR K, L Janganese Masses Jont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) ation and wetland hydrology | (e.g. clay, sand, loam) silt loam silt loam |



Northeast and Northcentral Region

Project/Site: WE-08 Sample Point WE-08-01u **Groundwater Drawdown Project** Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 75 1. Acer saccharum Υ **FACU** 2. Number of Dominant Species that are OBL, FACW, or FAC: $\mathbf{0}$ (A) 3. 4. Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. x 1 =OBL spp. 0 Total Cover = 75 FACW spp. x 2 =x 3 =FAC spp. 0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 185 740 40 **FACU** 1. Acer saccharum x = 5UPL spp. 0 2. 20 **FACU** Fraxinus americana Y 3. Ostrya virginiana 15 **FACU** 740 Total 185 (A) (B) 4. 5. --Prevalence Index = B/A = 4.000 ----6. 7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ☑ No 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 75 ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * 25 Y **FACU** Acer saccharum 1. * Indicators of hydric soil and wetland hydrology must be 5 2. Ν **FACU** Fraxinus americana present, unless disturbed or problematic. 5 3. Uvularia sessilifolia Ν **FACU** 4. **Definitions of Vegetation Strata:** 5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. ----10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 35 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



| Are Vegetation | Gogebic Ta A. Michalsk Tula-Gogek Toeslope 1 drologic cond , Soil , , Soil , , Soil , FINDINGS getation Present | Latitude ditions on the site ty or Hydrology or Hydrology na sent? | percent s N/A pical for pificantly turally pr | this time y disturbe oblemat Yes | cal Relief: ongitude: of year? ed? ic? No | NV Concave N/A (If no, expla | /I/WWI Classification: e in in remarks) Are normal circumsta ☑ Yes | Datum: ☐ Yes ☑ ances present ☐No Hydric Soils F | No? Present? | Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: | 06/04/14 Iron Wisconsin WE-08 WE-08-01w Hardwood Swamp 33 45N 1 Dir: W ✓ Yes □ No d? ✓ Yes □ No |
|---|---|--|---|-----------------------------------|--|---|--|---|--|--|--|
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr Primary | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep | ater Table on larks ot Deposits posits at or Crust | agery | | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxid C4 - Pres | er-Stained latic Fauna I Deposits ogen Sulfici ized Rhizo ence of Re ent Iron Re Muck Surf | de Odor spheres on Living Roots duced Iron duction in Tilled Soils ace | | | B6 - Surface Soil (B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Season (C8 - Crayfish Burr C9 - Saturation Vis D1 - Stunted or St D2 - Geomorphic (D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral | atterns Lines Vater Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief |
| Field Observater Surface Water Water Table Pres | Present? esent? sent? | ☑ Yes ☐ No ☑ Yes ☐ No ☑ Yes ☐ No | Depth: Depth: Depth: | 0 | (in.) (in.) (in.) | | | Wetland Hyd | | esent? ☑ | Yes □ No |
| | | eam gauge, monitori | | | | | | | N/A | | |
| Remarks: | The site ha | d wetter than avera | ige cond | itions at | the time of | of the visi | t. | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | ٠. | Tula-Gogehic com | nlev 0 to | 6 nerce | nt slones | stony S | eries Drainage Class: | | | | |
| Taxonomy (Sub | | Tala Cogodio com | 0107, 0 10 | o perce | пт оюроо | , otorry C | Chico Diamage Glace. | | | | |
| | • • • | he depth needed to document the inc | dicator or confirm | n the absence of | indicators.) (Type | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand G | Grains; Location: PL: | =Pore Lining, M=Matrix) | |
| Тор | Bottom | | | Matrix | | | | dox Features | | | |
| - 1- | | | | 1110001171 | | 1 | Rec | | | | Texture |
| Depth | Depth | Horizon | Color | (Moist) | % | | Color (Moist) | % | Type | Location | |
| • | Depth 5 | Horizon 1 | Color 7.5YR | (Moist) | T | | | % | Type | Location | |
| Depth | ' | Horizon 1 2 | + | (Moist) 2.5/1 | % | | | | Type | Location | (e.g. clay, sand, loam) |
| Depth 0 | 5 | 1 | 7.5YR | (Moist) 2.5/1 3/1 | % 100 | | | | | Location | (e.g. clay, sand, loam) mucky silt loam |
| Depth 0 5 | 5 9 | 1 2 | 7.5YR 7.5YR | (Moist) 2.5/1 3/1 | % 100 100 | | | | | Location | (e.g. clay, sand, loam) mucky silt loam clay loam |
| Depth 0 5 | 5 9 18 | 1 2 | 7.5YR 7.5YR 7.5YR | (Moist) 2.5/1 3/1 | % 100 100 100 | | | | | Location | (e.g. clay, sand, loam) mucky silt loam clay loam |
| Depth 0 5 | 5 9 18 | 1 2 | 7.5YR 7.5YR 7.5YR | (Moist) 2.5/1 3/1 | % 100 100 100 | | | | | Location | (e.g. clay, sand, loam) mucky silt loam clay loam |
| Depth 0 5 | 5 9 18 | 1 2 | 7.5YR 7.5YR 7.5YR | (Moist) 2.5/1 3/1 | % 100 100 100 | | | | | Location | (e.g. clay, sand, loam) mucky silt loam clay loam |
| Depth 0 5 9 | 5 9 18 | 1 2 3 | 7.5YR 7.5YR 7.5YR | (Moist) 2.5/1 3/1 3/1 | % 100 100 100 | | Color (Moist) | | | | (e.g. clay, sand, loam) mucky silt loam clay loam |
| Depth 0 5 9 NRCS Hydric | 5 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | 1 2 3 | 7.5YR 7.5YR 7.5YR ere if indi | (Moist) 2.5/1 3/1 3/1 cators ar | % 100 100 100 re not presser services S8 - Polys S9 - Thin | sent □ value Belo Dark Surfa ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark | Color (Moist) | Indicators of | s for Proble A10 - 2 cm M A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyvalu S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) mucky silt loam clay loam with gravel (BB) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) ace |
| Depth 0 5 9 | 5 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | 1 2 3 | 7.5YR 7.5YR 7.5YR ere if indi | (Moist) 2.5/1 3/1 3/1 cators ar | % 100 100 100 | sent □ value Belo Dark Surfa ny Mucky M ny Gleyed eted Matrix ex Dark Su eted Dark | Color (Moist) | Indicators of | s for Proble A10 - 2 cm M A16 - Coast S3 - 5 cm Mu S7 - Dark Su S8 - Polyvali S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | | (e.g. clay, sand, loam) mucky silt loam clay loam with gravel (BB) K, L, R) RR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) ace |



Northeast and Northcentral Region

| Project/Site: | Groundwater Drawdown Project | | | | Wetland ID: WE-08 Sample Point WE-08-01w |
|-------------------|---|------------|-----------------|------------|--|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| Tree Stratum (Plo | ot size: 10 meter radius) | | | | Dawinanaa Taat Walkahaat |
| 4 | Species Name | <u> </u> | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Fraxinus nigra | 60 | Y | FACW | |
| 2. | Ostrya virginiana | 20 | Υ | FACU | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | Betula alleghaniensis | 10 | N | FAC | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:6(B) |
| 5. | | | | - | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | —————————————————————————————————————— |
| 10. | Total Cover = | | | | '' |
| | Total Cover – | 90 | | | · · · <u></u> |
| 0 11 101 1 01 | | | | | FAC spp. $\frac{60}{100} \times 3 = \frac{180}{100}$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | 00 | | E40 | FACU spp. 25 x 4 = 100 |
| 1. | Betula alleghaniensis | 30 | Y | FAC | UPL spp. |
| 2. | Acer saccharum | 5 | N | FACU | |
| 3. | Fraxinus nigra | 15 | Υ | FACW | Total <u>175</u> (A) <u>450</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.571 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes ☐ No Dominance Test is > 50% |
| 10. | Total Cover = | 50 | | | |
| | Total Cover – | 30 | | | |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | | | E40 | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Osmunda claytoniana | 20 | Y | FAC | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Caltha palustris | 10 | Υ | OBL | present, unless disturbed or problematic. |
| 3. | Rubus pubescens | 5 | N | FACW | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | - | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | _ | | | | woody plants less than 3.28 ft. tall. |
| | | | | | |
| 14. | | | | | Manada Minana All woody vinos groater than 2.20 ft, in height |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 35 | | | |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1 | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| <u> </u> | Total Cover = | 0 | | | |
| Remarks: | Total Gover – | <u> </u> | | | |
| Acmand. | | | | | |
| | | | | | |
| | | | | | |
| Additional Rei | marks: | | | | |
| | | | | | |
| | | | | | |



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

| Are Vegetation Are Vegetation | Gogebic Ta A. Michalsk Gogebic sil Terrace 0 drologic cond , Soil , Soil , | er Drawdown Project aconite, LLC ki t loam, 6 to 18 perc Latitude: litions on the site ty or Hydrology nat | ent slop N/A pical for nificantly | es, very Loc L this time disturbe | cal Relief: ongitude: of year? ed? | NV Convex N/A | VI/WWI Classification: | Datum: ☐ Yes ☑ | N/A No | Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: | 06/04/14 Iron Wisconsin WE-09 WE-09-01u upland HW forest 33 45N 1 Dir: W |
|---|---|--|--------------------------------------|---|---|--|---|-------------------------|--|---|---|
| SUMMARY OF | | | | | | | | | | | |
| Hydrophytic Ve | _ | | | □ Yes | _ | | | Hydric Soils I | | A/:41 : A >A/ 41 | ☐ Yes ☑ No |
| Wetland Hydrol Remarks: | ogy Present | ! | | ☐ Yes | ☑ No | | | Is This Samp | oling Point V | Within A Wetlan | d? ■ Yes ☑ No |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| 1 | • | ntors (Check here if | indicato | rs are no | ot present | ∵ ⊘): | | | | | |
| Primary: | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio | ater Table on larks ot Deposits posits at or Crust | • | _ | C4 - Pres | atic Fauna I Deposits ogen Sulfi zed Rhizo ence of Re ent Iron Re Muck Surf | de Odor espheres on Living Roots educed Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim I C2 - Dry-Season C8 - Crayfish Burr C9 - Saturation Vi D1 - Stunted or St D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral | atterns Lines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water I Water Table Pro Saturation Pres | esent? | ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No | Depth: Depth: Depth: | | (in.) (in.) (in.) | | | Wetland Hyd | drology Pr | esent? | Yes ☑ No |
| Describe Record | led Data (stre | eam gauge, monitorir | ng well, a | erial pho | tos, previo | us insped | ctions), if available: | | N/A | | |
| Remarks: | The site ha | d wetter than avera | ge cond | itions at | the time o | of the vis | it. | | | | |
| 0011.0 | | | | | | | | | | | |
| SOILS Map Unit Name | • | Cogobio cilt loom | S to 10 n | orcont c | longs voi | ry ctonyS | Series Drainage Class: | | | | |
| Taxonomy (Sub | | Gogenic siit loam, t | σιοτορ | ercent s | iopes, vei | y Storry | belles Dialilage Class. | | | | |
| | <u> </u> | he depth needed to document the ind | icator or confirn | n the absence of | indicators.) (Type | e: C=Concentrati | ion, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand (| Grains; Location: PL | =Pore Lining, M=Matrix) | |
| Тор | Bottom | · | | Matrix | | | | dox Features | | | Texture |
| Depth | Depth | Horizon | Color | (Moist) | % | | Color (Moist) | % | Туре | Location | (e.g. clay, sand, loam) |
| 0 | 7 | 1 | 7.5YR | 2.5/3 | 100 | | | | | | silt loam |
| 7 | 12 | 2 | 7.5YR | 3/4 | 100 | | | | | | silt loam |
| 12 | 24 | 3 | 7.5YR | 3/4 | 100 | | | | | | sandy loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | 1 | |
| | A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | stic In Sulfide Id Layers Ied Below Dark Surface Park Surface Iuck Mineral Bleyed Matrix Ledox | | | S8 - Poly S9 - Thin | value Belo Dark Surfa ny Mucky M ny Gleyed eted Matrix x Dark Su eted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c rface Surface | Indicators o | A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR ucky Peat of Peat (LUTACE (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 14 Shallow Dark Surfain in Remarks) ation and wetland hydrology | K, L, R) LRR K, L, R) (LRR K, L) (LRR K, L, R) (S (MLRA 149B) 45, 149B) ACCE |
| Restrictive Layer (If Observed) | Type: | N/A | | Depth: | N/A | | | Hydric Soil I | Present? | | Yes ☑ No |
| Remarks: | | | | | | | | | | | |

Sample Point WE-09-01u



Groundwater Drawdown Project

Project/Site:

WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Wetland ID:

WE-09

| VEGETATION Tree Stretum (D | | ative spe | cies.) | | |
|----------------------------|---|------------|---------------|----------------|--|
| Tree Stratum (P | Plot size: 10 meter radius) Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1 | | % Cover 70 | Dominant Y | FACU | Dominance rest worksneet |
| 1. | Acer saccharum | | | | Nevertine of Developert Organiza that are ODL FAOW or FAO: |
| 2. | Betula alleghaniensis | 40 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:5(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. $0 	 X 	 1 = 0$ FACW spp. $0 	 X 	 2 = 0$ |
| | Total Cover = | 110 | | | FACW spp 0 |
| | | | | | FAC spp. $90 	 X 	 3 = 270$ |
| Sapling/Shrub S | tratum (Plot size: 5 meter radius) | | | | FACU spp. 113 $x 4 = 452$ |
| 1. | Betula alleghaniensis | 50 | Υ | FAC | UPL spp. $x = 5 = 75$ |
| 2. | Acer saccharum | 15 | N | FACU | |
| 3. | Fraxinus americana | 15 | N | FACU | Total 218 (A) 797 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = $B/A = 3.656$ |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| 10. | Total Cover = | 80 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | Total Cover = | 00 | | | _ |
| Llamb Ctratura (D | let eiger (2 meeten ne dire) | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| , | lot size: 2 meter radius) | 15 | Υ | UPL | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Trillium grandiflorum | | <u>т</u> Ү | | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Acer saccharum | 10 | | FACU | present, unless disturbed or problematic. |
| 3. | Fraxinus americana | 3 | N | FACU | Definitions of Vanatation Ctuata |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | - |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | BRU AND A World alook has the a Cir. BRU as how that 0.00 ft |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | needy plante lede than 6.20 th tall |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 28 | | | |
| | | | | | |
| Woody Vine Stra | atum (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | _ _ | |
| | | | | | |
| | | | | | |
| Additional Re | emarks: | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

| D ' '/O'' | | | | | | | | | | | |
|---|--|--|---|--|--|--|---|---|---|--|--|
| Project/Site: | Groundwat | er Drawdown Projec | ct | | | | Stantec Project #: | 193701133 | | Date: | 06/04/14 |
| Applicant: | Gogebic Ta | aconite, LLC | | | | | | | | County: | Iron |
| Investigator #1 | A. Michalsl | ki . | | Investi | gator #2: | P. Piepe | er | | | State: | Wisconsin |
| Soil Unit: | | It loam, 6 to 18 perc | ent slon | | | | /I/WWI Classification: | N/A | | Wetland ID: | WE-09 |
| Landform: | Terrace | it loam, o to ro poro | ont olop | | al Relief: | | | 14/74 | | Sample Point: | WE-09-01w |
| | | 1 - 4141 | NI/A | | | | 5 | Deture | NI/A | ' | |
| Slope (%): | 0 | Latitude: | | | ongitude: | | | Datum: | | Community ID: | Hardwood Swamp |
| | | ditions on the site ty | | | | (If no, explain | ain in remarks) | ☐ Yes ☑ | No | Section: | 33 |
| Are Vegetation | ☑, Soil ☑, | or Hydrology | nificantl | y disturb | ed? | | Are normal circumsta | ances present | t? | Township: | 45N |
| Are Vegetation | □. Soil □. | or Hydrology I na | turally pi | roblemat | ic? | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | у 3, Ц | , , , | | | | | | | , J. | |
| | | 00040 | | □ V | □ Ne | | | Hydric Soils | Dunnanta | | □ Vas □ Na |
| Hydrophytic Ve | | | | | □ No | | | | | Afficial A NAT of | ☑ Yes □ No |
| Wetland Hydro | | | | | | | | | | Nithin A Wetlan | |
| Remarks: | | | | | | | ance has occurred in years | | | | |
| | to lack of sat | uration with upper 12 ir | iches of s | oil profile | but other h | ydrology ir | ndicators were present alo | ong with hydric s | soils indicatin | g this area is wetla | ınd. |
| HYDROLOGY | | | | | | | | | | | |
| | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here it | indicate | ors are n | ot presen | t 🗆): | | | | | |
| Primary | <u>:</u> | | | | | | | | Secondary: | | |
| | A1 - Surface | Water | | ✓ | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | ater Table | | | B13 - Aqu | atic Fauna | a | | | B10 - Drainage Pa | atterns |
| | A3 - Saturati | on | | | B15 - Mar | I Deposits | | | | B16 - Moss Trim L | ines |
| | B1 - Water M | | | | C1 - Hydr | ogen Sulfi | de Odor | | | C2 - Dry-Season \ | Nater Table |
| | | | | | | | spheres on Living Roots | | | C8 - Crayfish Burr | |
| | | | | | | | educed Iron | | | | sible on Aerial Imagery |
| | | | | | | | duction in Tilled Soils | | | D1 - Stunted or St | |
| | | | | | C7 - Thin | Muck Surf | ace | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | | | Other (Exp | olain in Re | emarks) | | | D3 - Shallow Aqui | |
| | B8 - Sparsely | y Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observa | tions: | | | | | | | | | | |
| Surface Water | | □ V □ N- | Danilla. | | (in) | | | | | | |
| | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hyd | drology Pr | esent? | Yes □ No |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | • | | | _ |
| Saturation Pres | sent? | | Depth: | 15 | (in.) | | | | | | |
| Describe Becord | lad Data (atra | eam gauge, monitoring | n well oc | rial photo | o proviou | o inanasti | one) if eveilable: | | N/A | | |
| | | am gauge, monitorin | y wen, ac | | | | | | | | |
| | | | | | | | | | | | |
| Remarks: | The site ha | d wetter than avera | | | | | it. Hummocky but no s | saturation pre | sent within | 12 inches. | |
| Remarks: | The site ha | d wetter than avera | | | | | | saturation pre | sent within | 12 inches. | |
| | The site ha | d wetter than avera | | | | | | saturation pre | sent within | 12 inches. | |
| SOILS | | | ge cond | itions at | the time o | of the vis | it. Hummocky but no s | saturation pre | sent within | 12 inches. | |
| SOILS Map Unit Name | e: | | ge cond | itions at | the time o | of the vis | | saturation pre | sent within | 12 inches. | |
| SOILS Map Unit Name Taxonomy (Sul | e: ogroup): | Gogebic silt loam, (| ge cond | itions at | the time of | of the vis | it. Hummocky but no s eries Drainage Class: | · | | | |
| SOILS Map Unit Name Taxonomy (Sul | e: ogroup): | Gogebic silt loam, (| ge cond | itions at | the time of | of the vis | it. Hummocky but no s | · | | | |
| SOILS Map Unit Name Taxonomy (Sul | e: ogroup): | Gogebic silt loam, (| ge cond | itions at | the time of lopes, ve | of the vis | it. Hummocky but no s eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | · | d Grains; Location: P | | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | e: ogroup): otion (Describe to Bottom | Gogebic silt loam, the depth needed to document the inc | ge cond | percent something the subsence of Matrix | lopes, ve | of the vis | it. Hummocky but no s eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re | S=Covered/Coated Sand | d Grains; Location: P | L=Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | e: ogroup): otion (Describe to Bottom Depth | Gogebic silt loam, (| ge cond to 18 p | percent something the absence of Matrix (Moist) | lopes, ve | of the vis | it. Hummocky but no s eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sanc dox Features % | d Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth | Gogebic silt loam, the depth needed to document the inc. Horizon 1 | ge cond to 18 p | percent s the absence of Matrix (Moist) 2.5/1 | lopes, ve | ry ston\S | eries Drainage Class: eries Drainage Class: Recolor (Moist) | S=Covered/Coated Sand | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | e: ogroup): otion (Describe to Bottom Depth | Gogebic silt loam, the depth needed to document the inc | ge cond to 18 p | percent something methods at the absence of Matrix (Moist) | lopes, ve | of the vis | it. Hummocky but no s eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sanc dox Features % | d Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth | Gogebic silt loam, the depth needed to document the inc. Horizon 1 | ge cond to 18 p | percent s the absence of Matrix (Moist) 2.5/1 | lopes, ve | ry ston\S | eries Drainage Class: eries Drainage Class: Recolor (Moist) | S=Covered/Coated Sand | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 | e: pgroup): ption (Describe to Bottom Depth 15 17 | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 | ge cond to 18 p to 18 p to 18 p Color 7.5YR 7.5YR | percent sometheadsence of Matrix (Moist) 2.5/1 5/2 | lopes, ve | ry stonyS e: C=Concentra | eries Drainage Class: eries Drainage Class: Recolor (Moist) | S=Covered/Coated Sand | Type | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 | pogroup): potion (Describe to Depth 15 17 24 | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | percent s methodological methodolog | lopes, ve | of the vis | eries Drainage Class: eries Drainage Class: Recolor (Moist) | SS=Covered/Coated Sanc | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 17 | pogroup): potion (Describe to Depth | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | percent s methe absence of Matrix (Moist) 2.5/1 5/2 3/4 | lopes, ve | of the vis | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sand | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 | pogroup): potion (Describe to Depth 15 17 24 | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | percent s methodological methodolog | lopes, ve | of the vis | eries Drainage Class: eries Drainage Class: Recolor (Moist) | SS=Covered/Coated Sanc | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 17 | pogroup): potion (Describe to Depth | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | percent s methe absence of Matrix (Moist) 2.5/1 5/2 3/4 | lopes, ve | of the vis | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sand | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 15 17 | pogroup): potion (Describe to Depth | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | percent s methe absence of Matrix (Moist) 2.5/1 5/2 3/4 | lopes, ve | of the vis | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sand | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 | pogroup): potion (Describe to Bottom Depth 15 17 24 | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/1 5/2 3/4 | lopes, ve | of the vision Service Celectors and the vision Service Celebrate Service Celebrate Service | eries Drainage Class: eries Drainage Class: Retion, D=Depletion, RM=Reduced Matrix, C Retolor (Moist) | es=Covered/Coated Sanc | Grains; Location: P | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | pogroup): potion (Describe to Depth 15 17 24 Soil Field Ir | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | n the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators al | lopes, ve findicators) (Typ % 100 100 100 re not pre | of the visit | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sanc dox Features % Indicator | Type s for Proble | LePore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sult Profile Descrip Top Depth 0 15 17 NRCS Hydric | e: Degroup): Describe to Depth 15 17 24 Soil Field Ir A1- Histosol | Gogebic silt loam, the depth needed to document the incention the incention of the depth needed to document the in | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators ar | lopes, ve lindicators) (Typ % 100 100 100 re not pre \$8 - Polyx | of the vision state of the | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix. C Re Color (Moist) | S=Covered/Coated Sano dox Features % Indicator | Type s for Proble | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sult Profile Descrip Top Depth 0 15 17 NRCS Hydric | e: Degroup): Describe to Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 ndicators (check he pipedon | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | ercent s m the absence of Matrix (Moist) 2.5/1 5/2 3/4 ccators al | lopes, ve lindicators) (Typ % 100 100 100 re not pre S8 - Polyv S9 - Thin | of the vis | eries Drainage Class: eries Drainage Class: Recolor (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I | L=Pore Lining, M=Matrix) Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Degroup): Degroup): Degroup): Degroup): Degroup Depth | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 ndicators (check he pipedon istic | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators ar | lopes, ve locators) (Typ locators) (| of the visit | eries Drainage Class: eries Drainage Class: Recolor (Moist) | SS=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm In A16 - Coast S3 - 5cm Mu | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | portion (Describe to Depth 15 17 24 Soil Field Ir A1 - Histosol A2 - Histo E A3 - Black H A4 - Hydroge | Gogebic silt loam, the depth needed to document the inc. Horizon 1 2 3 adicators (check he pipedon istic en Sulfide | ge cond 6 to 18 p icator or confirm Color 7.5YR 7.5YR | m the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators al | lopes, ve lindicators.) (Typ % 100 100 100 er not pre 88 - Poly 99 - Thin F1 - Loam F2 - Loam | of the vision o | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | SS=Covered/Coated Sand | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Bottom Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | Gogebic silt loam, to the depth needed to document the income the | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methodological methodolog | lopes, ve lindicators) (Typ % 100 100 100 te not pre \$8 - Polyv, \$9 - Thin F1 - Loam F3 - Deple | of the visit of th | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix. C Re Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mi S8 - Polyval | L=Pore Lining, M=Matrix) Location matic Soils Muck (LRR K, L, MLRA 12 Prairie Redox (LRR LCKY Peat of Peat (LU LTRACE (LRR K, L, L, M) ue Below Surface (LR | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam sysb, K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Degroup): Degroup): Describe to Depth Dept | Gogebic silt loam, (the depth needed to document the inc Horizon 1 2 3 ndicators (check he pipedon stric en Sulfide d Layers ed Below Dark Surface | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methodological methodolog | lopes, ve lindicators) (Typ % 100 100 100 re not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | of the vision of | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C Recolor (Moist) | S=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark Sg S8 - Polyval S9 - Thin Da | L=Pore Lining, M=Matrix) Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LCKy Peat of Peat (L LUTface (LRR K, L, M) ue Below Surface (LRR K, L) ue Below Surface (LRR K, L) | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Sciporoup): potion (Describe to Depth 15 17 24 Soil Field Ir 41 Hydroga A5 - Stratifier A11 - Deplet A12 - Thick I | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface park Surface | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | SS=Covered/Coated Sand dox Features % Indicator | Type s for Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mt S7 - Dark St S8 - Polyval F12 - Iron-M | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sult Profile Descrip Top Depth 0 15 17 NRCS Hydric | Degroup): Degroup): Degroup): Degroup): Degroup Depth | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 adicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Auck Mineral | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methodological methodolog | lopes, ve lindicators) (Typ % 100 100 100 re not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | SS=Covered/Coated Sanc dox Features % Indicator | Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Degroup): Degroup): Degroup): Degroup): Degroup in Conservation (Describe to Depth 15 17 24 | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 adicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Auck Mineral | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | SS=Covered/Coated Sanc dox Features % Indicator | Type s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Bottom Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy F | Gogebic silt loam, (the depth needed to document the inc Horizon 1 2 3 | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic | L=Pore Lining, M=Matrix) Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LCK) Peat of Peat (L LUTAGE (LRR K, L), M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 14 | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam seps) K, L, R) LRR K, L, R) LLRR K, L, C) (LRR K, L, R) S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Sciporoup): Deption (Describe to Depth 15 17 24 | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Ledox I Matrix | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | S=Covered/Coated Sand dox Features % Indicator | s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Bottom Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S5 - Sandy N S6 - Stripped | Gogebic silt loam, (the depth needed to document the inc Horizon 1 2 3 | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | SS=Covered/Coated Sand dox Features % Indicator | Type sfor Proble A10 - 2 cm If X3 - 5 cm Mt X7 - Dark St X8 - Polyval X9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Bottom Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S5 - Sandy N S6 - Stripped | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Ledox I Matrix | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | S=Covered/Coated Sanc dox Features % Indicator Indicators of | s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF12 - Very Other (Expla | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Bottom Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S5 - Sandy N S6 - Stripped | Gogebic silt loam, to the depth needed to document the inc. Horizon 1 2 3 ndicators (check here) pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Ledox I Matrix | G to 18 p icator or confirm Color 7.5YR 7.5YR re if indi | percent s methods at the absence of Matrix (Moist) 2.5/1 5/2 3/4 cators at | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | S=Covered/Coated Sanc dox Features % Indicator Indicators of | Type sfor Proble A10 - 2 cm If X3 - 5 cm Mt X7 - Dark St X8 - Polyval X9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Bottom Depth 15 17 24 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet A12 - Thick I S1 - Sandy N S5 - Sandy N S6 - Stripped | Gogebic silt loam, (the depth needed to document the inc Horizon 1 2 3 | Ge cond Geto 18 p Color 7.5YR 7.5YR re if indi | percent s methodological methodolog | lopes, ve lopes, | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | S=Covered/Coated Sanc dox Features % Indicator Indicators of | s Grains; Location: P Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 15 17 NRCS Hydric | Silpogroup): otion (Describe to Depth 15 17 24 | Gogebic silt loam, (the depth needed to document the inc Horizon 1 2 3 | Ge cond Geto 18 p Color 7.5YR 7.5YR re if indi | percent s methodological methodolog | lopes, ve lindicators) (Typ % 100 100 100 re not pre S8 - Polyv S9 - Thin F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | of the visity stonys e: C=Concentra | eries Drainage Class: eries Drainage Class: Rei Color (Moist) | S=Covered/Coated Sand dox Features % Indicator Indicator Indicator of indicators of disturbed of indicators of d | s Grains; Location: P Type s for Proble A10 - 2 cm N A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | L=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam fine sandy loam sandy loam |



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

| Project/Site: | Groundwater Drawdown Project | | | | Wetland ID: WE-09 Sample Point WE-09-01w |
|------------------------------|---|------------|----------|------------|---|
| | • | | | | · |
| VEGETATION Tree Stratum (Ple | (Species identified in all uppercase are non-nat size: 10 meter radius) | ative spec | cies.) | | |
| Tiee Stratum (Fic | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Betula alleghaniensis | 30 | Υ | FAC | |
| 2. | Acer saccharum | 50 | Y | FACU | Number of Dominant Species that are OBL, FACW, or FAC:3(A) |
| 3. | | | | | |
| 4. 5. | | | | | Total Number of Dominant Species Across All Strata:4(B) |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B) |
| 7. | | | | | 1 dicent of bolimant operator matrice obs., 171011, 011710. |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp 0 |
| | Total Cover = | 80 | | | FACW spp. 0 x 2 = 0 |
| | | | | | FAC spp. 70 X 3 = 210 |
| | atum (Plot size: 5 meter radius) | 25 | Y | FAC | FACU spp. 55 |
| 1. 2. | Betula alleghaniensis Fraxinus americana | 5 | N T | FACU | UPL spp 0 |
| 3. | | | | | Total 125 (A) 430 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 3.440 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | Total Cover = | 30 | | | ✓ Yes ☐ No Dominance Test is > 50% |
| | Total Cover = | 30 | | | YesNoPrevalence Index is ≤ 3.0 *YesNoMorphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Dryopteris intermedia | 15 | Υ | FAC | |
| 2. | | | | | * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | Tree |
| 6 7. | _ | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | and noosy planto lood than o.20 th tall. |
| 14. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | Total Cover | 15 | | | WOODY VIIIeS - And WOODY VIIIeS greater than 5.20 ft. in Height. |
| | Total Cover = | 15 | | | |
| Woody Vine Strati | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | Total Cover = | | | | |
| Remarks: | i otal Cover = | 0 | | | |
| Remarks. | | | | | |
| | | | | | |
| Additional Ren | narks: | | | | |
| - | | | | | |
| | | | | | |



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

| Project/Site: Applicant: Investigator #1: Soil Unit: | Gogebic Ta N. Molstad | conite Mine conite, LLC gebic-Peshekee-Ro | ock outcr | | igator #2: | | Stantec Project #: rs I/WWI Classification: | 193701133 N/A | | Date: County: State: Wetland ID: | 06/03/14 Ashland Wisconsin WA-01, WA-05 |
|--|--|---|----------------------------------|---|---|-----------------|--|---|--|---|--|
| Landform: | | | | | al Relief: | | | | | Sample Point: | WA-01-04u, WA-05-01u |
| Slope (%): | NA | Latitude: | | | ongitude: | | | Datum: | | Community ID: | upland |
| | | litions on the site ty | | | | (If no, explain | | ☐ Yes ☑ | | Section: | 2 |
| • | | or Hydrology □ sig | | | | | Are normal circumsta ☑ Yes | ances presen □No | ι ? | Township: | 44N |
| SUMMARY OF | | or Hydrology □ na | turally pr | obiemat | IC? | | ⊴ 162 | | | Range: | 2 Dir: W |
| Hydrophytic Ve | | cont? | | □ Yes | . ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | • | | | ☐ Yes | | | | | | Within A Wetlar | |
| Remarks: | | wetter than normal | Shared | | | | | no mio camp | 3111g 1 3111t | vvidini 7 v odal | |
| | | | | | • | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here | f indicat | ors are r | not preser | nt 🕡): | | | | | |
| Primary: | <u>:</u> | · | | | · | _ , | | | Secondary: | | |
| | A1 - Surface | | | _ | B9 - Wate | | | | | B6 - Surface Soil | |
| I H | A2 - High Wa A3 - Saturation | | | | B13 - Aqu B15 - Mar | | | | | B10 - Drainage Pa B16 - Moss Trim | |
| | B1 - Water M | arks | | | C1 - Hydr | ogen Sulfi | de Odor | | | C2 - Dry-Season | Water Table |
| | B2 - Sedimer | • | | | | | spheres on Living Roots educed Iron | | | C8 - Crayfish Burn | |
| | B3 - Drift Dep B4 - Algal Ma | | | _ | | | duction in Tilled Soils | | | D1 - Stunted or S | isible on Aerial Imagery tressed Plants |
| | B5 - Iron Dep | | | _ | C7 - Thin | | | | | D2 - Geomorphic | Position |
| | | on Visible on Aerial Ima | 0 , | | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aqui | |
| | bo - Sparsely | Vegetated Concave S | burrace | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water Water Table Pr Saturation Pres | Present? esent? | ☐ Yes ☑ No ☐ Yes ☑ No ☑ Yes ☐ No | Depth: Depth: Depth: | | (in.) (in.) (in.) | | | Wetland Hy | drology Pr | resent? | Yes 🗵 No |
| Describe Record | led Data (stre | eam gauge, monitori | ng well a | aerial pho | | ous inspe | ctions) if available: | | N/A | | |
| Remarks: | Jea Data (Stre | Jan gaage, monton | rig won, c | acriai pric | 7.00, provi | | otionoj, ii avaliabio. | | 14/71 | | |
| Tromanto. | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| SOILS Map Unit Name | e: | Dishno-Gogebic-P | eshekee | -Rock ou | utcrop coi | mplex, S | eries Drainage Class: | #N/A | | | |
| | | Dishno-Gogebic-Po #N/A | eshekee | -Rock ou | utcrop coi | mplex, S | eries Drainage Class: | #N/A | | | |
| Map Unit Name Taxonomy (Sub | ogroup): | #N/A | | | · | | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | | d Grains; Location: F | L=Pore Lining, M=Matrix) | _ |
| Map Unit Name Taxonomy (Sub | ogroup): | #N/A | | | of indicators.) (Ty | | tion, D=Depletion, RM=Reduced Matrix, C | | | L=Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | #N/A | dicator or confir | m the absence of Matrix (Moist) | of indicators.) (Ty | | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | | L=Pore Lining, M=Matrix) | Texture (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth | #N/A the depth needed to document the in Horizon 1 | Color 7.5YR | Matrix (Moist) 2.5/1 | of indicators.) (Ty | | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | 1 | | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | Degroup): Describe to the state of the stat | #N/A the depth needed to document the in Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 2.5/1 4/4 | % 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cS=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | Bottom Depth 4 10 18 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 5YR | Matrix (Moist) 2.5/1 4/4 4/3 | % 100 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | Bottom Depth 4 10 18 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 5YR | Matrix (Moist) 2.5/1 4/4 4/3 | % 100 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | Bottom Depth 4 10 18 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 5YR | Matrix (Moist) 2.5/1 4/4 4/3 | % 100 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | ccs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | Bottom Depth 4 10 18 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/1 4/4 4/3 | % 100 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | Bottom Depth 4 10 18 | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 5YR | Matrix (Moist) 2.5/1 4/4 4/3 | % 100 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | ccs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 | Degroup): Describe to the state of the state | #N/A the depth needed to document the in Horizon 1 2 3 | Color 7.5YR 7.5YR 5YR | m the absence of Matrix (Moist) 2.5/1 4/4 4/3 | % 100 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | cs=Covered/Coated Sand | Type | Location | (e.g. clay, sand, loam) loam loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | Bottom Depth 4 10 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | #N/A Horizon 1 2 3 Indicators (check horizon check horizon) Layers ed Below Dark Surface chark Surface chark Surface check Mineral check decomposition. | Color 7.5YR 7.5YR 5YR ere if ind | Matrix (Moist) 2.5/1 4/4 4/3 icators a | % 100 100 100 S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cos=Covered/Coated Sand codox Features % Indicator Indicator Indicator | Type | Location | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | Bottom Depth 4 10 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | #N/A Horizon 1 2 3 Idicators (check horizon Stic In Sulfide I Layers I Layer | Color 7.5YR 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/1 4/4 4/3 icators a | % 100 100 100 | esent | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cos=Covered/Coated Sand dox Features % Indicator Indicator Indicator Indica | Type s for Proble A10 - 2 cm Moder S3 - 5 cm Moder S3 - 5 cm Moder S4 - 5 cm Moder S5 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S6 - | Location | (e.g. clay, sand, loam) loam sandy loam (49B) k K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ls (MLRA 149B) face must be present, unless |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 10 NRCS Hydric | Bottom Depth 4 10 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | #N/A Horizon 1 2 3 Idicators (check horizon Stic In Sulfide I Layers I Layer | Color 7.5YR 7.5YR 5YR ere if ind | m the absence of Matrix (Moist) 2.5/1 4/4 4/3 icators a | % 100 100 100 | esent | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | cos=Covered/Coated Sand codox Features % Indicator Indicator Indicator | Type s for Proble A10 - 2 cm Moder S3 - 5 cm Moder S3 - 5 cm Moder S4 - 5 cm Moder S5 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S6 - | Location | (e.g. clay, sand, loam) |



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site: Gogebic Taconite Mine Wetland ID: WA-01, WA-05 Sample Point WA-01-04u

| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
|--------------------|---|------------|-----------------|------------|--|
| Tree Stratum (Plo | t size: 10 meter radius) | | | | |
| | <u>Species Name</u> | % Cover | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 70 | Υ | FACU | |
| 2. | Ostrya virginiana | 20 | Υ | FACU | Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 7 (B) |
| 5. | | | | | (|
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) |
| | | | | | (A/b) |
| 7. | | | | | December of the deservition to the deservition of |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. $\underline{\qquad}$ $\mathbf{x} \ 1 = \underline{\qquad}$ $\underline{\qquad}$ |
| | Total Cover = | 90 | | | FACW spp. $0 	 x 2 = 0$ |
| | | | | | FAC spp. $ 10 $ $ x 3 = 30 $ |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. $\frac{195}{}$ $x 4 = \frac{780}{}$ |
| 1. | Acer saccharum | 20 | Υ | FACU | UPL spp. $0 	 x 	 5 = 0$ |
| 2. | Fraxinus americana | 10 | Υ | FACU | ··· ——— |
| 3. | | | | | Total 205 (A) 810 (B) |
| | | | | | 10tal(A)(B) |
| 4. | _ | | | | Describeras lados D/A |
| 5. | | | | | Prevalence Index = B/A = 3.951 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☐ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 30 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Harb Stratum /Dla | t size: 2 meter redius) | | | | |
| | t size: 2 meter radius) | 15 | Υ | EACH | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | | | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Fraxinus americana | 10 | N | FACU | present, unless disturbed or problematic. |
| 3. | Cardamine concatenata | 20 | Υ | FACU | |
| 4. | Allium tricoccum | 20 | Υ | FACU | Definitions of Vegetation Strata: |
| 5. | Dryopteris intermedia | 10 | Ν | FAC | |
| 6 | Maianthemum canadense | 10 | Ν | FACU | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| | _ | | | | |
| 11. | _ | | | | III All harbassaus (non woods) plants, researdless of size and |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | <u></u> | | | | |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 85 | | | |
| | | | | | |
| Woody Vine Strati | ım (Plot size: 10 meter radius) | | | | |
| 1 | | | | | |
| 2. | | | | | |
| | | | _ | | Hydronbytic Vocatetian Present |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Ren | narks: | | | | |
| | | | | | |



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

| Project/Site: Applicant: Investigator #1: | Gogebic Ta | aconite Mine aconite, LLC | | Invest | igator #2: | C. Roge | Stantec Project #: | 193701133 | | Date: County: State: | 06/03/14 Ashland Wisconsin |
|---|--|--|--|--|--|---|--|---|--|--|---|
| Soil Unit: Landform: Slope (%): | | gebic-Peshekee-Ro Latitude | | rop comp | _ | NW Concav | /I/WWI Classification: | N/A Datum: | NI/A | Wetland ID: Sample Point: Community ID: | WA-01 WA-01-04w hardwood swamp |
| | | ditions on the site ty | | | | | ain in remarks) | ☐ Yes ☑ | | Section: | 2 |
| | | or Hydrology □ sig | | | | (11 110, 62) | Are normal circumsta | | | Township: | 44N |
| • | | or Hydrology □ na | | | | | | □No | | Range: | 2 Dir: W |
| SUMMARY OF | | , | <i>y</i> 1 | | | | | | | Ü | |
| Hydrophytic Ve | getation Pres | sent? | | ✓ Yes | . □ No | | | Hydric Soils | Present? | | |
| Wetland Hydrol | • | | | ✓ Yes | | | | Is This Samp | oling Point | Within A Wetlar | |
| Remarks: | Conditions | wetter than normal | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here | if indicat | ors are r | not preser | nt □): | | | | | |
| Primary: | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio B8 - Sparsely | Water ater Table on larks ot Deposits oosits at or Crust | agery | | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxid C4 - Pres | er-Stained latic Fauna I Deposits ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Surf | de Odor espheres on Living Roots educed Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage P B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur C9 - Saturation V D1 - Stunted or S D2 - Geomorphic D3 - Shallow Aqu D4 - Microtopogra D5 - FAC-Neutral | atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position itard aphic Relief |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | Present? | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | esent? | Yes □ No |
| Water Table Pr | | ☐ Yes ☑ No | Depth: | | (in.) | | | Trottaila ily | arology i i | | 100 🖺 110 |
| Saturation Pres | sent? | ☑ Yes □ No | Depth: | 14 | (in.) | | | | | | |
| Describe Record | ded Data (stre | eam gauge, monitor | ing well, a | aerial pho | otos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | | Dishno-Gogebic-P | eshekee | -Rock or | utcrop coi | mplex, S | eries Drainage Class: | #N/A | | | |
| Taxonomy (Sub | oaroub): | ALKI / A | | | | | | | | | |
| Brofile Decerin | <u> </u> | #N/A | | | | | | | | | |
| | otion (Describe to | | ndicator or confir | | | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | | | PL=Pore Lining, M=Matrix) | Toyturo |
| Тор | Bottom | the depth needed to document the ir | | Matrix | | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | dox Features | 1 | | Texture |
| Top Depth | Bottom Depth | | Color | Matrix (Moist) | % | | Recolor (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) |
| Top Depth 0 | Bottom Depth 5 | the depth needed to document the in | Color 7.5YR | Matrix (Moist) 2.5/1 | % 100 | | Recolor (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt lloam |
| Top Depth 0 5 | Bottom Depth 5 | Horizon 1 2 | Color 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 | % 100 100 | | Recolor (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam |
| Top Depth 0 5 9 | Bottom Depth 5 9 18 | Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 4/3 | % 100 100 100 | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam |
| Top Depth 0 5 9 | Bottom Depth 5 9 18 | Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 4/3 | % 100 100 100 | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam |
| Top Depth 0 5 9 | Bottom Depth 5 9 18 | Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 4/3 | % 100 100 100 | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam |
| Top Depth 0 5 9 | Bottom Depth 5 9 18 | Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 4/3 | % 100 100 100 | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam |
| Top Depth 0 5 9 | Bottom Depth 5 9 18 | Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 4/3 | % 100 100 100 | | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam |
| Top Depth 0 5 9 | Bottom Depth 5 9 18 | Horizon 1 2 3 | Color 7.5YR 7.5YR 7.5YR | Matrix (Moist) 2.5/1 3/1 4/3 | % 100 100 100 | | ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | dox Features | Type | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam |
| Top | Bottom Depth 5 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Horizon 1 2 3 ndicators (check have been Sulfide to Layers and Below Dark Surface Muck Mineral Bleyed Matrix Redox | Color 7.5YR 7.5YR 7.5YR ere if ind | Matrix (Moist) 2.5/1 3/1 4/3 icators a | % 100 100 are not pre | | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | edox Features % Indicator | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam (LRR K, L, R) |
| Top Depth 0 5 9 NRCS Hydric | Bottom Depth 5 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Horizon 1 2 3 ndicators (check horizon (check horizon) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix M | Color 7.5YR 7.5YR 7.5YR ere if ind | Matrix (Moist) 2.5/1 3/1 4/3 icators a | % 100 100 100 | | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | edox Features % Indicator | Type s for Proble A10 - 2 cm Moder S3 - 5 cm Moder S3 - 5 cm Moder S4 - 5 cm Moder S5 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S7 - 5 cm Moder S6 - | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam (LRR K, L, R) |
| Top | Bottom Depth 5 9 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Horizon 1 2 3 ndicators (check horizon (check horizon) stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox Matrix M | Color 7.5YR 7.5YR 7.5YR ere if ind | Matrix (Moist) 2.5/1 3/1 4/3 icators a | % 100 100 100 | | ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | edox Features % Indicator Indicator Indicator Ind | Type s for Proble A10 - 2 cm Moder S3 - 5 cm Moder S3 - 5 cm Moder S4 - 5 cm Moder S5 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S7 - 5 cm Moder S6 - 5 cm Moder S7 - 5 cm Moder S7 - 5 cm Moder S6 - | Location | (e.g. clay, sand, loam) mucky silt lloam loam loam 49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) face must be present, unless |



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site: WA-01 Sample PointWA-01-04w Gogebic Taconite Mine Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status **FACU** 1. Acer saccharum 25 Y Y 2. 40 **FACW** Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) Fraxinus nigra 3. 4. Total Number of Dominant Species Across All Strata: 5 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. x 1 =--OBL spp. 0 Total Cover = 65 x 2 =FACW spp. 120 FAC spp. x 3 =0 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) 55 FACU spp. 220 10 **FACW** Fraxinus nigra x = 51. UPL spp. 0 2. 30 **FACU** Ostrya virginiana 3. --340 --Total 115 (B) 4. 5. --Prevalence Index = B/A = 2.957 ----6. --7. --8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ☑ No 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 40 Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * Dryopteris carthusiana 10 Y **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. --4. **Definitions of Vegetation Strata:** --5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. ---tall. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ----14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 10 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**

| Project/Site: GTAC | | City/C | county: Ashland | | Sampling Date: 6/12/2014 1:34:01 PM |
|--|-----------------------|---|------------------------|--------------------------------|-------------------------------------|
| Applicant/Owner: GTAC | | | , | | Sampling Point: WA-60-01u, WA- |
| | | Section | on, Township, Range: | | |
| Landform (hillslope, terrace, etc.): _ | | | | | |
| | | I ona. | | , | Datum: |
| Solope (%): 0 - 2% Lat: Soil Map Unit Name: Dishno-Go | gebic-Pesheke | e-Rock outcrop co | omplex, 18 to 35 | perca _{NWI classific} | ation: N/A |
| Are climatic / hydrologic conditions | | | | | |
| Are Vegetation, Soil | | | | | |
| | | | | | |
| Are Vegetation, Soil | | | | | |
| SUMMARY OF FINDINGS - | - Attach site m | ap showing sam | ipling point loca | tions, transects | , important features, etc. |
| Hydrophytic Vegetation Present? | Yes | _ No <u> </u> | Is the Sampled Are | | _ |
| Hydric Soil Present? | Yes | _ No <u></u> ✓ | within a Wetland? | Yes | No <u> </u> |
| Wetland Hydrology Present? | Yes | _ No <u></u> ✓ | If yes, optional Wetl | and Site ID: | |
| Remarks: (Explain alternative pro | cedures here or in a | a separate report.) | | | |
| Wetter than normal. | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| HYDROLOGY | | | | | |
| Wetland Hydrology Indicators: | | | | Secondary Indica | ators (minimum of two required) |
| Primary Indicators (minimum of or | ne is required; check | k all that apply) | | Surface Soil | Cracks (B6) |
| Surface Water (A1) | _ | Water-Stained Leave | s (B9) | Drainage Pat | tterns (B10) |
| High Water Table (A2) | | Aquatic Fauna (B13) | | Moss Trim Li | |
| Saturation (A3) | | Marl Deposits (B15) | | | Water Table (C2) |
| Water Marks (B1) | | Hydrogen Sulfide Ode | | Crayfish Burr | |
| Sediment Deposits (B2) | | Oxidized Rhizosphere | | | isible on Aerial Imagery (C9) |
| Drift Deposits (B3) | | Presence of Reduced | | | tressed Plants (D1) |
| Algal Mat or Crust (B4) | | Recent Iron Reductio | | | Position (D2) |
| Iron Deposits (B5) Inundation Visible on Aerial Ir | | Thin Muck Surface (C Other (Explain in Ren | | Shallow Aqui | |
| Sparsely Vegetated Concave | | Other (Explain in Ren | narks) | Microtopogra | aphic Relief (D4) |
| Field Observations: | Surface (DO) | | <u> </u> | 1 AC-Neutral | 1631 (00) |
| | es No. ✓ | Depth (inches): | | | |
| | | Depth (inches): | | | |
| | | Depth (inches): | | d Hydrology Presen | nt? Yes No_ <u>√</u> |
| (includes capillary fringe) | | | | | |
| Describe Recorded Data (stream | gauge, monitoring v | vell, aerial photos, pre | vious inspections), if | available: | |
| | | | | | |
| Remarks: | | | | | |
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Tree Stratum (Plot size: 30

Sapling/Shrub Stratum (Plot size: 15

1. Ostrya virginiana

2 Acer saccharum

Herb Stratum (Plot size: 5

Woody Vine Stratum (Plot size: 15

1 Acer saccharum

2 Quercus rubra

1. Acer saccharum

2 Quercus rubra

Absolute

40

Total Cover: 90

Total Cover: 80

_____10

Total Cover: 20

Total Cover: 0

50% of total cover: _____ 20% of total cover: ____

50% of total cover: 20% of total cover:

______10

50% of total cover: _____ 20% of total cover: ____

____)

50% of total cover: _____ 20% of total cover: ____

60

20

Dominant Indicator

FACU

FACU

FACU

FACU

FACU

FACU

% Cover Species? Status

Yes

Yes

Yes

Yes

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

SOIL Sampling Point: WA-60-1u.

| Profile Desc | cription: (Describe | to the dep | th needed to docur | nent the i | ndicator | or confirn | n the absence of ind | icators.) | |
|-------------------|--------------------------------------|--------------|------------------------------|-------------|-------------------|------------------|-------------------------------|--|---------------|
| Depth (inches) | Matrix | % | | x Feature | | Loc ² | Texture | Remarks | |
| (inches) 0 - 4 | Color (moist) 7.5YR 3/1 | | Color (moist) | % | Type' | LOC | <u>rexture</u> | Remarks | |
| 0 - 4 | 7.51R 3/1 | 100 | | · —— | | | <u> </u> | | |
| | | | | <u> </u> | | | | | |
| 4 - 9 | 7.5YR 3/2 | 100 | | | | | L | | |
| | - | | | . ——— | | | | | • |
| | | | | | | | | | |
| 9 - 20 | 5YR 4/3 | 100 | | | | | SL | | |
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| | | | | | | | | | |
| ¹Tvpe: C=C | oncentration. D=De | oletion. RM: | Reduced Matrix, CS | S=Covered | d or Coate | d Sand G | rains. ² Location: | PL=Pore Lining, M= | =Matrix. |
| Hydric Soil | | , | , | | | | | oblematic Hydric S | |
| Histosol | (A1) | | Polyvalue Belov | w Surface | (S8) (LRF | RR, | 2 cm Muck (A | A10) (LRR K, L, MLI | RA 149B) |
| | oipedon (A2) | | MLRA 149B | | | | | $Redox\:(A16)\:(\textbf{LRR}$ | |
| | stic (A3) | | Thin Dark Surfa | | | | | Peat or Peat (S3) (L | RR K, L, R) |
| | en Sulfide (A4) | | Loamy Mucky N | | | , L) | | (S7) (LRR K, L) | |
| | d Layers (A5) d Below Dark Surfac | ce (Δ11) | Loamy Gleyed Depleted Matrix | | .) | | - | low Surface (S8) (LI rface (S9) (LRR K, I | · · |
| | ark Surface (A12) | oc (ATT) | Redox Dark Su | | | | | ese Masses (F12) (L | , |
| | fucky Mineral (S1) | | Depleted Dark | . , | | | | odplain Soils (F19) | |
| Sandy C | Bleyed Matrix (S4) | | Redox Depress | ions (F8) | | | Mesic Spodio | (TA6) (MLRA 144 | A, 145, 149B) |
| - | Redox (S5) | | | | | | | /laterial (F21) | |
| | Matrix (S6) | | | | | | | Dark Surface (TF12 | 2) |
| Dark Su | rface (S7) (LRR R, | MLRA 149E | 3) | | | | Other (Explai | n in Remarks) | |
| 3Indicators o | f hydrophytic yeaets | ation and we | etland hydrology mus | t he prese | ant unless | dieturhed | l or problematic | | |
| | Layer (if observed) | | stiana nyarology mas | it be prese | ont, unicoo | distarbed | Tor problematic. | | |
| Type: | _ayo: (o.co. voa) | • | | | | | | | |
| | ahaa); | | | | | | Hydric Soil Prese | nt? Yes | No. ✓ |
| | ches): | | | | | | Tryuno con ricoc | | <u> </u> |
| Remarks: | | | | | | | | | |
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| Project/Site: GTAC | City/County: As | shland | Sampling Date: 6/12/2014 12:07:02 |
|--|--|------------------------------|---------------------------------------|
| Applicant/Owner: GTAC | | State: WI | Sampling Point: WA-60-01w |
| • • | Section Townsh | nip, Range: S1, T44N, R2 | . • |
| Landform (hillslope, terrace, etc.): Depression | | | |
| Slope (%): 0 - 2% Lat: | | | |
| Soil Map Unit Name: Dishno-Gogebic-Peshekee-Ro | ck outcrop complex | 18 to 35 perce NW/ classic | Datum |
| • | | | |
| Are climatic / hydrologic conditions on the site typical for this | | | |
| Are Vegetation, Soil, or Hydrology significant | | | |
| Are Vegetation, Soil, or Hydrology na | turally problematic? | (If needed, explain any answ | vers in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map s | howing sampling pe | oint locations, transect | ts, important features, etc. |
| Hydrophytic Vegetation Present? Yes _ ✓ No | | mpled Area | |
| Hydric Soil Present? Yes ✓ No | | Wetland? Yes <u>√</u> | No |
| Wetland Hydrology Present? Yes ✓ No | | tional Wetland Site ID: | |
| Remarks: (Explain alternative procedures here or in a sepa | | | |
| Wetter than normal. | | | |
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| HYDROLOGY | | | |
| Wetland Hydrology Indicators: | | Secondary Indi | cators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all th | at apply) | Surface Sc | il Cracks (B6) |
| ✓ Surface Water (A1) Water | -Stained Leaves (B9) | Drainage F | atterns (B10) |
| High Water Table (A2) Aquat | ic Fauna (B13) | Moss Trim | Lines (B16) |
| | Deposits (B15) | | n Water Table (C2) |
| | gen Sulfide Odor (C1) | | urrows (C8) |
| | zed Rhizospheres on Living | | Visible on Aerial Imagery (C9) |
| | nce of Reduced Iron (C4) at Iron Reduction in Tilled | | Stressed Plants (D1) ic Position (D2) |
| | Muck Surface (C7) | | uitard (D3) |
| | (Explain in Remarks) | | raphic Relief (D4) |
| Sparsely Vegetated Concave Surface (B8) | | ✓ FAC-Neutr | al Test (D5) |
| Field Observations: | | | |
| Surface Water Present? Yes ✓ No Dept | | - | |
| Water Table Present? Yes No Dept | | - | |
| Saturation Present? Yes No Dept (includes capillary fringe) | h (inches): 0.00 | Wetland Hydrology Pres | ent? Yes <u>√</u> No |
| Describe Recorded Data (stream gauge, monitoring well, as | erial photos, previous inspe | ections), if available: | |
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| Domado | | | |
| Remarks: | | | |
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| Tree Stratum (Plot size: 30 | Absolute | Dominant | | Dominance Test worksheet: |
|---|--|----------------|------|---|
| 1. Fraxinus nigra | 30 | Species? Yes | FACW | Number of Dominant Species That Are OBL_FACW_or FAC: 6 (A) |
| 2. Acer saccharum | 20 | Yes | FACU | That Are OBL, FACW, or FAC: 6 (A) |
| 3 Betula alleghaniensis | 20 | Yes | FAC | Total Number of Dominant Species Across All Strata: 9 (B) |
| · | • • | | | Species Across All Strata: 9 (B) |
| 4 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 66.67 (A/B) |
| 5 | | | | That Are Obl., FACW, OF FAC. |
| 6 | 70 | | | Prevalence Index worksheet: |
| Total Cover | r: <u>70 </u> | | | Total % Cover of: Multiply by: |
| 50% of total cover: | 20% c | of total cover | r: | OBL species $\frac{25}{100}$ x 1 = $\frac{25}{100}$ |
| Sapling/Shrub Stratum (Plot size: 15 | | | | FACW species $\frac{120}{200}$ x 2 = $\frac{240}{200}$ |
| 1. Fraxinus nigra | 40 | Yes | FACW | FAC species $\frac{30}{60}$ $\times 3 = \frac{90}{240}$ |
| 2. Acer saccharum | 20 | Yes | FACU | FACU species 60 $\times 4 = 240$ |
| 3. Betula alleghaniensis | 10 | No | FAC | UPL species $0 \times 5 = 0$ |
| 4. Ulmus americana | 10 | No | FACW | Column Totals: <u>235</u> (A) <u>595</u> (B) |
| 5. | | | | Prevalence Index = B/A = 2.53 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| Total Cove | | | | Rapid Test for Hydrophytic Vegetation |
| | | - | | ✓ Dominance Test is >50% |
| 50% of total cover: | 20% o | f total cover | : | ✓ Prevalence Index is ≤3.0¹ |
| Herb Stratum (Plot size: 5 | | | 0.51 | Morphological Adaptations ¹ (Provide supporting |
| 1. Carex disperma | 25 | Yes | OBL | data in Remarks or on a separate sheet) |
| 2. Circaea alpina | 15 | Yes | FACW | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 3. Impatiens capensis | 15 | Yes | FACW | ¹ Indicators of hydric soil and wetland hydrology must |
| 4. Ulmus americana | 10 | No | FACW | be present, unless disturbed or problematic. |
| 5 | | | | Definitions of Vegetation Strata: |
| 6 | | | | |
| 7. | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | |
| | | | | Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. |
| 9 | | | | |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11 | 65 | | | |
| Total Cover | | | | Woody vines – All woody vines greater than 3.28 ft in height. |
| 50% of total cover: | 20% c | of total cover | r: | |
| Woody Vine Stratum (Plot size: 15) | | | | |
| Parthenocissus quinquefolia | 20 | Yes | FACU | |
| 2 | | | | |
| 3 | | | | Hydrophytic |
| 4 | | | | Vegetation Present? Yes ✓ No |
| Total Cove | r: <u>20</u> | | | riesent: res NO |
| 50% of total cover: | | of total cover | · | |
| | | | | |
| Remarks: (Include photo numbers here or on a separate s | sneet.) | | | |
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Sampling Point: WA-60-1w

| Profile Desc | ription: (Describe | to the de | pth needed to docun | nent the indicat | or or confirn | n the absence of inc | dicators.) |
|----------------------------|------------------------------|-------------|----------------------------|-------------------|---------------------------------|----------------------|---|
| Depth | Matrix | | | x Features | | | |
| (inches) | Color (moist) | % | Color (moist) | % Type | e ¹ Loc ² | <u>Texture</u> | Remarks |
| 0 - 20 | 7.5YR 2.5/1 | 100 | | | | M | |
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| 1 | | letien DN | Deduced Metric 00 | 0 | -41 01 0 | 21 | Di Dana Linina M Matrix |
| Hydric Soil I | | letion, Riv | I=Reduced Matrix, CS | =Covered or Co | ated Sand G | | PL=Pore Lining, M=Matrix. roblematic Hydric Soils ³ : |
| , | | | Daharaha Dalam | . O f (OO) (I | DD D | | • |
| ✓ Histosol | | | Polyvalue Belov | | KK K, | | A10) (LRR K, L, MLRA 149B) |
| Black Hi | oipedon (A2) | | MLRA 149B) Thin Dark Surfa | | MI DA 140D | | e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) |
| | en Sulfide (A4) | | Loamy Mucky M | | | | e (S7) (LRR K, L, R) |
| | d Layers (A5) | | Loamy Gleyed N | | (K, L) | | elow Surface (S8) (LRR K, L) |
| | d Below Dark Surfac | ۵ (۵11) | Depleted Matrix | | | | urface (S9) (LRR K, L) |
| | ark Surface (A12) | C (A11) | Redox Dark Sur | | | | nese Masses (F12) (LRR K, L, R) |
| | fucky Mineral (S1) | | Depleted Dark S | | | | oodplain Soils (F19) (MLRA 149B) |
| | Gleyed Matrix (S4) | | Redox Depressi | | | | c (TA6) (MLRA 144A, 145, 149B) |
| | ledox (S5) | | Redox Depressi | 0113 (1 0) | | | Material (F21) |
| | Matrix (S6) | | | | | | v Dark Surface (TF12) |
| | rface (S7) (LRR R, N | /ILRA 149 | B) | | | | nin in Remarks) |
| | | | | | | | |
| ³ Indicators of | f hydrophytic vegetat | tion and w | etland hydrology mus | t be present, unl | ess disturbed | d or problematic. | |
| | _ayer (if observed): | | , 0, | | | | |
| Type: | , | | | | | | |
| | -l\- | | | | | Hydric Soil Pros | ent? Yes <u>√</u> No |
| Depth (inc | cnes): | | | | | nyunc son Fresi | ent: res · No |
| Remarks: | | | | | | | |
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| Project/Site: GTAC | City/County: _ | Ashland | | Sampling Date: 6/17/2014 11:29:51 |
|--|----------------------------|------------------|-----------------------|-----------------------------------|
| Applicant/Owner: GTAC | | | | ampling Point: WA-69-02u |
| • • | Section, Tow | | | piing 1 oint |
| Landform (hillslope, terrace, etc.): Backslope | | | | convex |
| | | | | |
| Slope (%): 3 - 7% Lat: Soil Map Unit Name: Gogebic silt loam, 18 to 35 per | Long cent slones verv s | tony rocky | NA/I -1:6 | Datum |
| · · · · · · · · · · · · · · · · · · · | | | | · |
| Are climatic / hydrologic conditions on the site typical for this | | | | _ |
| Are Vegetation, Soil, or Hydrology signs of the second | | | | |
| Are Vegetation, Soil, or Hydrology na | turally problematic? | (If needed | , explain any answers | s in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map s | howing sampling | point locat | ions, transects, | important features, etc. |
| Hydrophytic Vegetation Present? Yes No | √ Is the | Sampled Area | 1 | |
| Hydric Soil Present? Yes No | ✓ within | a Wetland? | Yes | No _ ✓ |
| Wetland Hydrology Present? Yes No | ✓ If yes, | optional Wetlar | nd Site ID: | |
| Remarks: (Explain alternative procedures here or in a sepa | | ' | | |
| Wetter than normal. | | | | |
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| HYDROLOGY | | | | |
| Wetland Hydrology Indicators: | | | Secondary Indicat | ors (minimum of two required) |
| Primary Indicators (minimum of one is required; check all the | at apply) | | Surface Soil C | |
| Surface Water (A1) Wate | r-Stained Leaves (B9) | | Drainage Patt | |
| | tic Fauna (B13) | | Moss Trim Lir | |
| Saturation (A3) Marl | Deposits (B15) | | Dry-Season V | Vater Table (C2) |
| 1 | ogen Sulfide Odor (C1) | | Crayfish Burro | ows (C8) |
| | zed Rhizospheres on Li | | | sible on Aerial Imagery (C9) |
| | ence of Reduced Iron (C | | | ressed Plants (D1) |
| | nt Iron Reduction in Tille | ed Soils (C6) | Geomorphic F | |
| | Muck Surface (C7) | | Shallow Aquit | |
| Inundation Visible on Aerial Imagery (B7) Other Sparsely Vegetated Concave Surface (B8) | (Explain in Remarks) | | Microtopograp | phic Relief (D4) |
| Field Observations: | | | FAC-Neutral | rest (D5) |
| Surface Water Present? Yes No _✓ Dep | h (inches): | | | |
| Water Table Present? Yes No ✓ Dep | , , | | | |
| Saturation Present? Yes No _✓ _ Dep | | | Hvdrology Present | :? Yes No_ <u>√</u> |
| (includes capillary fringe) | | | | |
| Describe Recorded Data (stream gauge, monitoring well, a | erial photos, previous in | spections), if a | vailable: | |
| | | | | |
| Remarks: | | | | |
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VEGETATION – Use scientific names of plants.

| | Absolute | Dominant | Indicator | |
|--|----------|----------------|-----------|---|
| Tree Stratum (Plot size: 30 | | Species? | | Dominance Test worksheet: |
| 1 Acer saccharum | 50 | Yes | FACU | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| | | | | That Are OBL, FACW, or FAC: 1 (A) |
| 2 | | | | Total Number of Dominant |
| 3 | | | | Species Across All Strata: 6 (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 16.67 (A/B) |
| 6. | | | | |
| Total Cover | | | | Prevalence Index worksheet: |
| | | | | Total % Cover of: Multiply by: |
| 50% of total cover: | 20% o | of total cover | r: | OBL species $\frac{0}{0}$ $\times 1 = \frac{0}{0}$ |
| Sapling/Shrub Stratum (Plot size: 15 | | | | FACW species $\frac{0}{40}$ $\times 2 = \frac{0}{20}$ |
| 1. Ostrya virginiana | 70 | Yes | FACU | FAC species $\frac{10}{240}$ x 3 = $\frac{30}{240}$ |
| 2. Acer saccharum | 50 | Yes | FACU | FACU species 210 x 4 = 840 |
| | | | | UPL species $0 \times 5 = 0$ |
| 3 | | | | Column Totals: <u>220</u> (A) <u>870</u> (B) |
| 4 | | | | Prevalence Index = B/A = 3.95 |
| 5 | | | | Hydrophytic Vegetation Indicators: |
| 6 | 120 | | | Rapid Test for Hydrophytic Vegetation |
| Total Cover | : 120 | | | Dominance Test is >50% |
| 50% of total cover: | 20% of | f total cover | · | Prevalence Index is ≤3.0¹ |
| Herb Stratum (Plot size: 5 | | | | Morphological Adaptations ¹ (Provide supporting |
| 1. Acer saccharum | 20 | Yes | FACU | data in Remarks or on a separate sheet) |
| 2. Lonicera tatarica | 20 | Yes | FACU | Problematic Hydrophytic Vegetation¹ (Explain) |
| 3 Dryopteris intermedia | 10 | Yes | FAC | |
| · | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 4 | | | | be present, unless disturbed or problematic. |
| 5 | | | | Definitions of Vegetation Strata: |
| 6 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter |
| 7 | | | | at breast height (DBH), regardless of height. |
| 8 | | | | Sapling/shrub – Woody plants less than 3 in. DBH |
| 9 | | | | and greater than 3.28 ft (1 m) tall. |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless |
| 11. | | | | of size, and woody plants less than 3.28 ft tall. |
| Total Cover: | 50 | | | Woody vines – All woody vines greater than 3.28 ft in |
| | | | | height. |
| 50% of total cover: | 20% o | f total cover | · | |
| Woody Vine Stratum (Plot size: 15 | | | | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | Hydrophytic |
| | | | | Vegetation |
| 4Total Cover | | | | Present? Yes No <u>✓</u> |
| 50% of total cover: | | | | |
| 50% of total cover. | 20 /6 0 | i total cover | | |
| Remarks: (Include photo numbers here or on a separate si | heet.) | | | |
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Sampling Point: WA-69-02u

SOIL Sampling Point: WA-69-02u

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | | |
|---|----------------------|-----------------|----------------------|-------------|-------------------|------------------|---|-------------|--|
| Depth | Matrix | | | Feature | s | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | | |
| 0 - 8 | 7.5YR 3/2 | 100 | | | | | L | | |
| | | | | | | | | | |
| | | | - | | . ——— | | | | |
| 8 - 14 | 7.5YR 4/3 | 100 | - <u></u> - | | | | <u>L</u> | | |
| | | | | | | | | | |
| 14 - 20 | 5YR 4/3 | 100 | | | | | | | |
| 14 - 20 | 31K 4/3 | 100 | | | | | SL | | |
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| | | | | | | | | | |
| ¹ Type: C=C | oncentration, D=Dep | oletion, RM | =Reduced Matrix, CS | =Covere | d or Coate | ed Sand G | rains. ² Location: PL=Pore Lining, M=I | Matrix. | |
| Hydric Soil | | • | · | | | | Indicators for Problematic Hydric Sc | | |
| Histosol | (A1) | | Polyvalue Below | Surface | (S8) (LRI | RR, | 2 cm Muck (A10) (LRR K, L, MLR | A 149B) | |
| | oipedon (A2) | | MLRA 149B) | | ` | • | Coast Prairie Redox (A16) (LRR K | | |
| | stic (A3) | | Thin Dark Surfa | ce (S9) (I | LRR R, M | LRA 149B | 5 cm Mucky Peat or Peat (S3) (LR | R K, L, R) | |
| Hydroge | en Sulfide (A4) | | Loamy Mucky M | ineral (F | 1) (LRR K | , L) | Dark Surface (S7) (LRR K, L) | | |
| Stratified | d Layers (A5) | | Loamy Gleyed N | /latrix (F2 | 2) | | Polyvalue Below Surface (S8) (LR | RK, L) | |
| Depleted | d Below Dark Surfac | e (A11) | Depleted Matrix | (F3) | | | Thin Dark Surface (S9) (LRR K, L |) | |
| | ark Surface (A12) | | Redox Dark Sur | . , | | | Iron-Manganese Masses (F12) (LI | | |
| - | lucky Mineral (S1) | | Depleted Dark S | | - 7) | | Piedmont Floodplain Soils (F19) (MLRA 149B) | | |
| - | Sleyed Matrix (S4) | | Redox Depressi | ons (F8) | | | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) | | |
| - | Redox (S5) | | | | | | Red Parent Material (F21) | | |
| | Matrix (S6) | | | | | | Very Shallow Dark Surface (TF12) |) | |
| Dark Su | rface (S7) (LRR R, I | MLRA 149 | B) | | | | Other (Explain in Remarks) | | |
| 3 | | | | | | | | | |
| | | | etland hydrology mus | be prese | ent, unless | s disturbed | d or problematic. | | |
| Restrictive | Layer (if observed) | : | | | | | | | |
| Type: | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Present? Yes | No <u>√</u> | |
| Remarks: | | | | | | | | | |
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| Project/Site: GTAC C | itv/County: Ashland | Sampling Dat | e: 6/17/2014 11:13:44 |
|--|-----------------------------|---|-----------------------|
| Applicant/Owner: GTAC | | State: WI Sampling Point: | |
| • • | ection, Township, Range: | | |
| Landform (hillslope, terrace, etc.): Depression | | | |
| Slope (%): <u>0 - 2%</u> Lat: L | | | |
| Soil Map Unit Name: Gogebic silt loam, 18 to 35 percent slop | es. verv stony, rocky | NWI classification: N/A | |
| Are climatic / hydrologic conditions on the site typical for this time of year | _ | | |
| | | | |
| Are Vegetation, Soil, or Hydrology significantly d | | | |
| Are Vegetation, Soil, or Hydrology naturally prob | lematic? (If neede | d, explain any answers in Remarks. |) |
| SUMMARY OF FINDINGS – Attach site map showing | sampling point loca | tions, transects, important | features, etc. |
| Hydrophytic Vegetation Present? Yes ✓ No | Is the Sampled Are | | |
| Hydric Soil Present? Yes ✓ No | within a Wetland? | Yes _ ✓ No | _ |
| Wetland Hydrology Present? Yes ✓ No | If yes, optional Wetla | and Site ID: | |
| Remarks: (Explain alternative procedures here or in a separate report. | | | |
| Wetter than normal. | | | |
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| HYDROLOGY | | | |
| Wetland Hydrology Indicators: | | Secondary Indicators (minimum | of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | | Surface Soil Cracks (B6) | |
| Surface Water (A1) Water-Stained Let | | Drainage Patterns (B10) | |
| ✓ High Water Table (A2) — Aquatic Fauna (E | | Moss Trim Lines (B16) | |
| ✓ Saturation (A3) Marl Deposits (B | | Dry-Season Water Table (C | ;2) |
| Water Marks (B1) Hydrogen Sulfide | | Crayfish Burrows (C8) | (00) |
| Sediment Deposits (B2) Oxidized Rhizosp Drift Deposits (B3) Presence of Red | oheres on Living Roots (Ca | Saturation Visible on AerialStunted or Stressed Plants | |
| | uction in Tilled Soils (C6) | ✓ Geomorphic Position (D2) | (D1) |
| Iron Deposits (B5) Thin Muck Surface | | Shallow Aquitard (D3) | |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in | | Microtopographic Relief (D4 | 1) |
| Sparsely Vegetated Concave Surface (B8) | | ✓ FAC-Neutral Test (D5) | |
| Field Observations: | | | |
| Surface Water Present? Yes No _✓ Depth (inches): | | | |
| Water Table Present? Yes <u>✓</u> No Depth (inches): | | | |
| Saturation Present? Yes ✓ No Depth (inches): (includes capillary fringe) | 0.00 Wetlan | d Hydrology Present? Yes <u>√</u> | No |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos | , previous inspections), if | vailable: | |
| | | | |
| Remarks: | | | |
| ivernains. | | | |
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VEGETATION – Use scientific names of plants.

| /EGETATION – Use scientific names of plants | S. | | | Sampling Point: WA-69-02w | | | |
|---|--------------------------|-----------------|----------------|--|--|--|--|
| Tree Stratum (Plot size: 30 | Absolute | Dominant | | Dominance Test worksheet: | | | |
| 1 Acer saccharum | % Cover 20 | Species? Yes | Status FACU | Number of Dominant Species | | | |
| H | 20 | Yes | FACW | That Are OBL, FACW, or FAC: 7 (A) | | | |
| Fraxinus nigra | | | | Total Number of Dominant | | | |
| 3 | | | | Species Across All Strata: 10 (B) | | | |
| l | | | | Percent of Dominant Species That Are ORL FACW or FAC: 70 | | | |
| 5 | | | | That Are OBL, FACW, or FAC: 70 (A/B) | | | |
| S | | | | Prevalence Index worksheet: | | | |
| Total Cov | _{er:} <u>40</u> | | | Total % Cover of: Multiply by: | | | |
| 50% of total cover: | 20% c | of total cove | r: | OBL species 20 x 1 = 20 | | | |
| Sapling/Shrub Stratum (Plot size: 15) | | | | FACW species 130 x 2 = 260 | | | |
| _{1.} Fraxinus nigra | 60 | Yes | FACW | FAC species $30 \times 3 = 90$ | | | |
| Acer saccharum | 30 | Yes | FACU | FACU species 90 x 4 = 360 | | | |
| Betula alleghaniensis | 30 | Yes | FAC | UPL species $0 \times 5 = 0$ | | | |
| · | | - | | Column Totals: <u>270</u> (A) <u>730</u> (B) | | | |
| 4 - | | | | Prevalence Index = B/A = 2.7 | | | |
| 5 | | - | | | | | |
| S | 120 | | | Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation | | | |
| Total Cov | er: <u>120</u> | | | ✓ Dominance Test is >50% | | | |
| 50% of total cover: | 20% o | f total cover | : | ✓ Prevalence Index is ≤3.0¹ | | | |
| Herb Stratum (Plot size: 5) | | | - . . | Morphological Adaptations ¹ (Provide supporting | | | |
| Acer saccharum | | Yes | FACU | data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | |
| 2. Carex disperma | 20 | Yes | OBL | | | | |
| 3. Fraxinus nigra | 20 | Yes | FACW | | | | |
| Rubus hispidus | 20 | Yes | FACW | | | | |
| _{5.} Rubus idaeus | 20 | Yes | FAC | Definitions of Vegetation Strata: | | | |
| 3. Symphyotrichum novae-angliae | 10 | No | FACW | | | | |
| 7 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. | | | |
| 3. | | | | | | | |
| 9. | | | | Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. | | | |
| 10 | _ | | | Herb – All herbaceous (non-woody) plants, regardless | | | |
| i1. | | | | of size, and woody plants less than 3.28 ft tall. | | | |
| Total Cove | | | | Woody vines – All woody vines greater than 3.28 ft in | | | |
| | | £ 4-4-1 | | height. | | | |
| 50% of total cover: | 20% 0 | it total cover | <u></u> | | | | |
| Noody Vine Stratum (Plot size: 15) | | | | | | | |
| l | | | | | | | |
| 2. | | | | | | | |
| 3 | | | | Hydrophytic | | | |
| 4 | | | | Vegetation Present? Yes ✓ No | | | |
| Total Cov | er: 0 | | | | | | |
| 50% of total cover: | 20% o | f total cover | | | | | |
| Remarks: (Include photo numbers here or on a separate | sheet) | | | | | | |
| ternance. (include prioto numbers here of on a separate | Silect.) | | | | | | |
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SOIL Sampling Point: WA-69-02 w

| Profile Desc Depth | cription: (Describe Matrix | to the de | oth needed to docui | ment the in ox Features | | or confirr | n the absence | of indicators.) |
|----------------------------|-------------------------------------|-------------|------------------------------|----------------------------|---|-----------------------|-----------------|--|
| (inches) | Color (moist) | % | Color (moist) | <u>%</u> | Type ¹ | Loc ² | Texture | Remarks |
| 0 - 14 | 7.5YR 3/1 | 100 | | | | | MMI | mucky loam |
| | | | | | | | | |
| 14 - 20 | 7.5YR 4/2 | 90 | 7.5YR 4/6 | 10.00 | С | M | L | |
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| | | pletion, RM | I=Reduced Matrix, C | S=Covered | d or Coat | ed Sand G | | cation: PL=Pore Lining, M=Matrix. |
| Hydric Soil Histosol | | | Polyvalue Belo | w Surface | (SQ) /I E | D D | | for Problematic Hydric Soils ³ : Muck (A10) (LRR K, L, MLRA 149B) |
| | oipedon (A2) | | MLRA 149B | | (30) (LR | in n, | | Prairie Redox (A16) (LRR K, L, R) |
| Black Hi | stic (A3) | | Thin Dark Surfa | | | | | Mucky Peat or Peat (S3) (LRR K, L, R) |
| | en Sulfide (A4) | | ✓ Loamy Mucky I | | | K , L) | | Surface (S7) (LRR K, L) |
| | d Layers (A5) d Below Dark Surfa | ce (A11) | Loamy Gleyed Depleted Matrix | |) | | | alue Below Surface (S8) (LRR K, L) Dark Surface (S9) (LRR K, L) |
| | ark Surface (A12) | , | Redox Dark Su | | | | | langanese Masses (F12) (LRR K, L, R) |
| | Mucky Mineral (S1) | | Depleted Dark | | 7) | | | nont Floodplain Soils (F19) (MLRA 149B) |
| | Gleyed Matrix (S4) Redox (S5) | | Redox Depress | sions (F8) | | | | Spodic (TA6) (MLRA 144A, 145, 149B) Parent Material (F21) |
| | Matrix (S6) | | | | | | | Shallow Dark Surface (TF12) |
| Dark Su | rface (S7) (LRR R, | MLRA 149 | B) | | | | Other | (Explain in Remarks) |
| ³ Indicators of | f hydronhytic yeaet: | ation and w | etland hydrology mus | st he nrese | ent unles | ss disturbed | d or problemati | c |
| | Layer (if observed) | | onana nyarorogy ma | 21 20 p. 000 | ,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 20 4.0.4.20 | 1 | |
| Туре: | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil | Present? Yes No |
| Remarks: | | | | | | | | |
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| Project/Site: GTAC | City/County | Ashland | | Sampling Date: 6/18/2014 12:02:08 |
|---|---|--------------------|---------------------------|-----------------------------------|
| Applicant/Owner: GTAC | | | | Sampling Point: WA-74-03u/WA |
| • • | Section, To | wnshin Range | | |
| Landform (hillslope, terrace, etc.): Backslope | | | | |
| | | | | |
| Slope (%): 8 - 15% Lat: Soil Map Unit Name: Gogebic silt loam, 18 to 3 | 5 percent slopes verv | stony rocky | | N/Δ |
| | | _ | | · |
| Are climatic / hydrologic conditions on the site typical for | | | | _ |
| Are Vegetation, Soil, or Hydrology | significantly disturbed? | Are "Norr | mal Circumstances" p | oresent? Yes <u>√</u> No |
| Are Vegetation, Soil, or Hydrology | naturally problematic? | (If neede | d, explain any answe | rs in Remarks.) |
| SUMMARY OF FINDINGS - Attach site n | nap showing samplin | g point loca | tions, transects | , important features, etc. |
| Hydrophytic Vegetation Present? Yes | _ No _✓ Is th | e Sampled Are | a | |
| Hydric Soil Present? Yes | No ✓ with | in a Wetland? | Yes | No _ <u>√</u> |
| Wetland Hydrology Present? Yes | | s, optional Wetla | and Site ID: | |
| Remarks: (Explain alternative procedures here or in | | · · | · | |
| Wetter than normal. Shared upland point. | | | | |
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| HYDROLOGY | | | | |
| Wetland Hydrology Indicators: | | | Secondary Indica | ators (minimum of two required) |
| Primary Indicators (minimum of one is required; chec | k all that apply) | | Surface Soil | Cracks (B6) |
| Surface Water (A1) | Water-Stained Leaves (B9) | | Drainage Pa | |
| High Water Table (A2) | Aquatic Fauna (B13) | | Moss Trim L | |
| Saturation (A3) | Marl Deposits (B15) | | Dry-Season | Water Table (C2) |
| | Hydrogen Sulfide Odor (C1 | | Crayfish Bur | |
| | Oxidized Rhizospheres on | | | isible on Aerial Imagery (C9) |
| | Presence of Reduced Iron | | | tressed Plants (D1) |
| | Recent Iron Reduction in Ti Thin Muck Surface (C7) | lied Solls (C6) | Geomorphic Shallow Aqu | Position (D2) |
| | Other (Explain in Remarks) | | | aphic Relief (D4) |
| Sparsely Vegetated Concave Surface (B8) | Other (Explain in Remarks) | | FAC-Neutral | |
| Field Observations: | | | | 1001 (20) |
| Surface Water Present? Yes No ✓ | Depth (inches): | | | |
| | Depth (inches): | | | |
| | Depth (inches): | | d Hydrology Preser | nt? Yes No <u>√</u> |
| (includes capillary fringe) | | | | |
| Describe Recorded Data (stream gauge, monitoring | well, aerial photos, previous | inspections), if a | available: | |
| | | | | |
| Remarks: | | | | |
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VEGETATION – Use scientific names of plants.

| EGETATION – Use scientific names of plants. | | | | Sampling Point: WA-74-03U | | | |
|---|--|----------------------|------|---|--|--|--|
| Tree Stratum (Plot size: 30) | Absolute % Cover | Dominant Species? | | Dominance Test worksheet: | | | |
| 1 Acer saccharum | 70 | Yes | FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) | | | |
| 2 | | · | | | | | |
| | | | | Total Number of Dominant Species Across All Strata: 6 (B) | | | |
| 3 | | | | | | | |
| 4 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B) | | | |
| 5 | | | | | | | |
| 5 | 70 | | | Prevalence Index worksheet: | | | |
| Total Cove | r: <u>70 </u> | - | | Total % Cover of: Multiply by: | | | |
| 50% of total cover: | 20% c | of total cove | r: | OBL species $0 \times 1 = 0$ | | | |
| Sapling/Shrub Stratum (Plot size: 15) | | | | FACW species $\frac{10}{0}$ x 2 = $\frac{20}{0}$ | | | |
| Acer saccharum | | Yes | FACU | FAC species 0 $x 3 = 0$ FACU species 220 $x 4 = 880$ | | | |
| Eraxinus americana | 30 | Yes | FACU | | | | |
| 3. Ostrya virginiana | 30 | Yes | FACU | UPL species 0 $x = 0$ 0 0 0 0 0 0 0 0 0 | | | |
| 4 | | | | | | | |
| 5 | | | | Prevalence Index = $B/A = 3.91$ | | | |
| 5 | | | | Hydrophytic Vegetation Indicators: | | | |
| Total Cove | | | | Rapid Test for Hydrophytic Vegetation | | | |
| | | - | | Dominance Test is >50% | | | |
| 50% of total cover: | 20% o | of total cover | ·: | Prevalence Index is ≤3.0 ¹ | | | |
| Herb Stratum (Plot size: 5 | 20 | Voc | FACU | Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) | | | |
| Acer saccharum | | Yes | | | | | |
| 2. Tilia americana | | Yes | FACU | Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | |
| Quercus rubra | 10 | No | FACU | | | | |
| Laulophyllum thalictrum | 10 | No | UPL | | | | |
| 5 | | | | Definitions of Vegetation Strata: | | | |
| 3 | | | | | | | |
| 7 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. | | | |
| 3 | | | | | | | |
| 9. | | | | Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. | | | |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless | | | |
| | - | | | of size, and woody plants less than 3.28 ft tall. | | | |
| I1 | 60 | | | Woody vines – All woody vines greater than 3.28 ft in | | | |
| Total Cover | | | | height. | | | |
| 50% of total cover: | 20% c | of total cove | r: | | | | |
| Noody Vine Stratum (Plot size: 15) | | | | | | | |
| l | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | Hydrophytic | | | |
| 4. <u> </u> | | | | Vegetation Present? Yes No ✓ | | | |
| Total Cove | r: 0 | _ | | 165 <u>165 165 165 165 165 165 165 165 165 165 </u> | | | |
| 50% of total cover: | 20% c | of total cover | -: | | | | |
| | | | | | | | |
| Remarks: (Include photo numbers here or on a separate s | sheet.) | | | | | | |
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SOIL Sampling Point: WA-74-03 u

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | | | |
|---|-----------------------------------|-----------------|----------------------|------------|-------------------|------------------|--|---|--|--|
| Depth | Matrix | | | K Feature | s | | _ | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | _ | | |
| 0 - 7 | 7.5YR 3/2 | 100 | | | | | L | | | |
| | | | | | | | | _ | | |
| | · · · · · · · · · · · · · · · · · | | | | | | · . | _ | | |
| 7 - 10 | 7.5YR 4/2 | 100 | | | | | _ <u>L</u> | _ | | |
| | | | | | | | | | | |
| 10 - 20 | 7.5YR 4/3 | 100 | | | | | 1 | _ | | |
| 10 - 20 | 7.51R 4/3 | 100 | | | · | | _ <u>L</u> | _ | | |
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| | | | | | | | | | | |
| ¹ Type: C=C | oncentration, D=Dep | letion, RM | =Reduced Matrix, CS | =Covere | d or Coate | ed Sand G | Grains. ² Location: PL=Pore Lining, M=Matrix. | | | |
| Hydric Soil | | | · | | | | Indicators for Problematic Hydric Soils ³ : | | | |
| Histosol | (A1) | | Polyvalue Below | / Surface | (S8) (LRI | RR, | 2 cm Muck (A10) (LRR K, L, MLRA 149B) | | | |
| | oipedon (A2) | | MLRA 149B) | | ` | • | Coast Prairie Redox (A16) (LRR K, L, R) | | | |
| | stic (A3) | | Thin Dark Surfa | ce (S9) (I | LRR R, M | LRA 149B | B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |) | | |
| Hydroge | en Sulfide (A4) | | Loamy Mucky M | lineral (F | 1) (LRR K | , L) | Dark Surface (S7) (LRR K, L) | | | |
| Stratified | d Layers (A5) | | Loamy Gleyed N | ∕atrix (F2 | 2) | | Polyvalue Below Surface (S8) (LRR K, L) | | | |
| Depleted | d Below Dark Surfac | e (A11) | Depleted Matrix | (F3) | | | Thin Dark Surface (S9) (LRR K, L) | | | |
| | ark Surface (A12) | | Redox Dark Sur | , , | | | Iron-Manganese Masses (F12) (LRR K, L, R | | | |
| - | lucky Mineral (S1) | | Depleted Dark S | | 7) | | Piedmont Floodplain Soils (F19) (MLRA 149B) | | | |
| - | Sleyed Matrix (S4) | | Redox Depressi | ons (F8) | | | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) | | | |
| - | Redox (S5) | | | | | | Red Parent Material (F21) | | | |
| | Matrix (S6) | | | | | | Very Shallow Dark Surface (TF12) | | | |
| Dark Su | rface (S7) (LRR R, I | MLRA 149 | B) | | | | Other (Explain in Remarks) | | | |
| 3 | | | | | | | | | | |
| | | | etland hydrology mus | t be prese | ent, unless | s disturbed | ed or problematic. | | | |
| Restrictive | Layer (if observed) | : | | | | | | | | |
| Type: | | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Present? Yes No ✓ | _ | | |
| Remarks: | | | | | | | | | | |
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| Project/Site: GTAC | City/County: Ashland | | Sampling Date:6/18/2014 11:26:22 |
|---|-------------------------------|------------------------|---|
| Applicant/Owner: GTAC | | | ampling Point: WA-74-03w |
| | Section, Township, Range | | F |
| | Local relief (co | | concave |
| Slope (%): 3 - 7% Lat: | | | |
| Soil Map Unit Name: Gogebic silt loam, 18 to 35 percent slo | ppes. verv stony, rock: | V NIMI algorifies | stion: N/A |
| Are climatic / hydrologic conditions on the site typical for this time of y | | | · |
| | | | _ |
| Are Vegetation, Soil, or Hydrology significantly | | | |
| Are Vegetation, Soil, or Hydrology naturally pr | oblematic? (If need | ed, explain any answer | s in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map showing | g sampling point loc | ations, transects, | important features, etc. |
| Hydrophytic Vegetation Present? Yes _ ✓ No | Is the Sampled Ar | ea | |
| Hydric Soil Present? Yes ✓ No | | Yes _ <u> </u> | No |
| Wetland Hydrology Present? Yes ✓ No | | tland Site ID: | |
| Remarks: (Explain alternative procedures here or in a separate repo | | · | |
| Wetter than normal | | | |
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| HYDROLOGY | | | |
| Wetland Hydrology Indicators: | | Secondary Indicat | ors (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | 1 | Surface Soil C | cracks (B6) |
| ✓ Surface Water (A1) Water-Stained | | Drainage Patt | erns (B10) |
| High Water Table (A2) Aquatic Fauna | ı (B13) | Moss Trim Lir | |
| ✓ Saturation (A3) Marl Deposits | | | Vater Table (C2) |
| Water Marks (B1) Hydrogen Sulf | | Crayfish Burro | |
| Sediment Deposits (B2) Oxidized Rhize Drift Deposits (B3) Presence of R | ospheres on Living Roots (0 | | sible on Aerial Imagery (C9) ressed Plants (D1) |
| | eduction in Tilled Soils (C6) | | |
| Iron Deposits (B5) Thin Muck Sui | | Shallow Aquit | |
| Inundation Visible on Aerial Imagery (B7) Other (Explain | | | phic Relief (D4) |
| Sparsely Vegetated Concave Surface (B8) | | FAC-Neutral | Test (D5) |
| Field Observations: | 4.00 | | |
| Surface Water Present? Yes _ ✓ No Depth (inches | | | |
| Water Table Present? Yes No ✓ Depth (inches | | | , |
| Saturation Present? Yes ✓ No Depth (inches (includes capillary fringe) | s): <u>U.UU</u> Wetla | nd Hydrology Present | ? Yes <u>/</u> No |
| Describe Recorded Data (stream gauge, monitoring well, aerial phot | os, previous inspections), if | available: | |
| | | | |
| Remarks: | | | |
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VEGETATION – Use scientific names of plants.

| 'EGETATION – Use scientific names of plants. | | | | Sampling Point: WA-74-03W |
|---|---------------------|-------------------|------|---|
| Tree Stratum (Plot size: 30) | Absolute % Cover | Dominant Species? | | Dominance Test worksheet: |
| 1. Acer saccharum | 30 | Yes | FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A) |
| 2. Fraxinus americana | 30 | Yes | FACU | |
| 3 Fraxinus nigra | 30 | Yes | FACW | Total Number of Dominant Species Across All Strata: 9 (B) |
| · | | | | |
| 5. | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 55.56 (A/B) |
| ** | | | | , , |
| 5 | | . —— | | Prevalence Index worksheet: |
| Total Cover | | - | | Total % Cover of: Multiply by: |
| 50% of total cover: | 20% c | of total cove | r: | OBL species 0 $x = 0$ FACW species 65 $x = 130$ |
| Sapling/Shrub Stratum (Plot size: 15) | 40 | Yes | FACU | FAC species 5 x 3 = 15 |
| Fraxinus americana | | | | FACU species 120 x 4 = 480 |
| Acer saccharum | 20 | Yes | FACU | UPL species 0 $x = 0$ |
| 3. Fraxinus nigra | 20 | Yes | FACW | Column Totals: 190 (A) 625 (B) |
| 4 | | | | |
| 5 | | | | Prevalence Index = B/A = 3.29 |
| 3 | | | | Hydrophytic Vegetation Indicators: |
| Total Cover | 80 | _ | | Rapid Test for Hydrophytic Vegetation |
| 50% of total cover: | | of total cover | : | ✓ Dominance Test is >50% |
| Herb Stratum (Plot size: 5) | _ | | | Prevalence Index is ≤3.0¹ |
| Fraxinus nigra | 10 | Yes | FACW | Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| Impatiens capensis | 5 | Yes | FACW | Problematic Hydrophytic Vegetation¹ (Explain) |
| Ranunculus hispidus | 5 | Yes | FAC | |
| | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| ··· | | | | be present, unless disturbed or problematic. |
| 5 | | | | Definitions of Vegetation Strata: |
| S | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter |
| 7 | | | | at breast height (DBH), regardless of height. |
| 3 | | | | Sapling/shrub – Woody plants less than 3 in. DBH |
| 9 | | | | and greater than 3.28 ft (1 m) tall. |
| 10 | | | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| l1 | | | | of size, and woody plants less than 3.20 it tall. |
| Total Covers | 20 | | | Woody vines – All woody vines greater than 3.28 ft in height. |
| 50% of total cover: | 20% c | of total cover | r: | neight. |
| Noody Vine Stratum (Plot size: 15 | | | | |
| l | | | | |
| 2. | | | | |
| 3 | | | | Hydrophytic |
| 4 | | | | Vegetation |
| Total Cover | | | | Present? Yes ✓ No |
| 50% of total cover: | | of total cover | | |
| 30 / 01 total cover. | | | • | |
| Remarks: (Include photo numbers here or on a separate s | heet.) | | | |
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SOIL Sampling Point: WA-74-03w

| Profile Description: (Describe | to the dep | th needed to docur | ment the i | ndicator | or confirn | n the absence | of indicators.) |
|---|-------------|---------------------------------|------------|-------------------|------------------|------------------------|---|
| Depth Matrix | % | | x Features | | Loc ² | Texture | Remarks |
| (inches) Color (moist) 5 7.5YR 2.5/2 | 100 | Color (moist) | % | Type' | LOC | MMI | |
| 5 7.51R 2.5/2 | 100 | | | | | IVIIVII | mucky loam |
| | | | | | | | |
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| | _ | | | | | | |
| ¹ Type: C=Concentration, D=Dep | oletion, RM | =Reduced Matrix, CS | S=Covered | or Coate | d Sand Gi | rains. ² Lo | cation: PL=Pore Lining, M=Matrix. |
| Hydric Soil Indicators: | | | | | | | for Problematic Hydric Soils ³ : |
| Histosol (A1) | | Polyvalue Belov | | (S8) (LRF | RR, | | Muck (A10) (LRR K, L, MLRA 149B) |
| Histic Epipedon (A2) | | MLRA 149B) | | | D. 4.40D | | Prairie Redox (A16) (LRR K, L, R) |
| Black Histic (A3) Hydrogen Sulfide (A4) | | Thin Dark Surfa ✓ Loamy Mucky N | | | | | Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L) |
| Stratified Layers (A5) | | Loamy Gleyed | | | , ∟) | | alue Below Surface (S8) (LRR K, L) |
| Depleted Below Dark Surface | e (A11) | Depleted Matrix | | , | | - | Dark Surface (S9) (LRR K, L) |
| Thick Dark Surface (A12) | , , | Redox Dark Su | | | | | Manganese Masses (F12) (LRR K, L, R) |
| Sandy Mucky Mineral (S1) | | Depleted Dark | | 7) | | | nont Floodplain Soils (F19) (MLRA 149B) |
| Sandy Gleyed Matrix (S4) | | Redox Depress | ions (F8) | | | | Spodic (TA6) (MLRA 144A, 145, 149B) |
| Sandy Redox (S5) Stripped Matrix (S6) | | | | | | | Parent Material (F21) Shallow Dark Surface (TF12) |
| Dark Surface (S7) (LRR R, I | MLRA 149I | 3) | | | | - | (Explain in Remarks) |
| | | - / | | | | | (=, |
| ³ Indicators of hydrophytic vegeta | | etland hydrology mus | t be prese | nt, unless | disturbed | l or problemati | C. |
| Restrictive Layer (if observed) | : | | | | | | |
| Type: rock | | | | | | | |
| Depth (inches): 5.00 | | | | | | Hydric Soi | I Present? Yes √ No |
| Remarks: | | | | | | · L | |
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| Project/Site: GTAC | | City/C | ounty: IRON | | _ Sampling Date: | 7/7/2014 3:18:51 PM |
|--|---------------------|---------------------|-----------------------|-----------------------|----------------------|---------------------|
| Applicant/Owner: GTAC | | | | State: WI | | |
| Investigator(s): NEM NLR | | | | e: S6, T44N, R1 | | |
| Landform (hillslope, terrace, etc.): Bac | | | | oncave, convex, none | | |
| Slope (%): <u>3 - 7%</u> Lat: | | | | | | |
| Soil Map Unit Name: Dishno-Gogek | ic-Peshekee-R | ock outcrop co | mplex. 18 to 35 | Derce NW aloosi | Datum | |
| • | | | | - | | |
| Are climatic / hydrologic conditions on the | | | | | | |
| Are Vegetation, Soil, or | | | | | | No |
| Are Vegetation, Soil, or | Hydrologyı | naturally problema | tic? (If need | led, explain any answ | ers in Remarks.) | |
| SUMMARY OF FINDINGS - A | ttach site map | showing sam | pling point loc | ations, transect | s, important fe | atures, etc. |
| Hydrophytic Vegetation Present? | Yes N | Jo ✓ | Is the Sampled A | rea | | |
| Hydric Soil Present? | Yes N | 10 1 | within a Wetland | ? Yes | No <u>√</u> | |
| Wetland Hydrology Present? | Yes N | √ <u> </u> | If yes, optional We | etland Site ID: | | |
| Remarks: (Explain alternative procedu | | | | | | |
| Wetter than normal. | | | | | | |
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| HYDROLOGY | | | | | | |
| Wetland Hydrology Indicators: | | | | Secondary Indi | cators (minimum of | two required) |
| Primary Indicators (minimum of one is | required; check all | that apply) | | | il Cracks (B6) | |
| Surface Water (A1) | | ter-Stained Leaves | s (B9) | | atterns (B10) | |
| High Water Table (A2) | | uatic Fauna (B13) | . , | | Lines (B16) | |
| Saturation (A3) | Mar | l Deposits (B15) | | Dry-Seaso | n Water Table (C2) | |
| Water Marks (B1) | Нус | Irogen Sulfide Odo | or (C1) | Crayfish Βι | ırrows (C8) | |
| Sediment Deposits (B2) | | • | es on Living Roots (| C3) Saturation | Visible on Aerial Im | agery (C9) |
| Drift Deposits (B3) | | sence of Reduced | | | Stressed Plants (D | 1) |
| Algal Mat or Crust (B4) | | | n in Tilled Soils (C6 | | c Position (D2) | |
| Iron Deposits (B5) | | n Muck Surface (C | | Shallow Aq | | |
| Inundation Visible on Aerial Image Sparsely Vegetated Concave Surf | | er (Explain in Rem | narks) | Microtopog | raphic Relief (D4) | |
| Field Observations: | | | | FAC-Neutr | ai rest (D5) | |
| | No <u></u> ✓ De | onth (inches): | | | | |
| | No <u>·</u> De | | | | | |
| | No <u>·</u> De | | | and Hydrology Pres | ant? Vae | No 🗸 |
| (includes capillary fringe) | | | | | ent: 165 | 140 |
| Describe Recorded Data (stream gaug | e, monitoring well, | aerial photos, prev | vious inspections), | if available: | | |
| | | | | | | |
| Remarks: | | | | | | |
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|---|------------------|---------------|------|--|
| T Otraction (Dietains 30 | Absolute | Dominant | | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size: 30 | | Species? | | Number of Dominant Species |
| 1. Acer saccharum | 45 | Yes | FACU | That Are OBL, FACW, or FAC: 0 (A) |
| 2 | | | | |
| | | | | Total Number of Dominant Species Across All Strata: 4 (B) |
| 3 | · | | | Species Across All Strata: 4 (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 0 (A/B) |
| | | | | |
| 6 | | | | Prevalence Index worksheet: |
| Total Cove | _{r:} 45 | | | Total % Cover of: Multiply by: |
| | | | | OBL species 0 x 1 = 0 |
| 50% of total cover: | 20% 0 | or total cove | r: | FACW species $0 \times 2 = 0$ |
| Sapling/Shrub Stratum (Plot size: 15 | | | | |
| 1. Acer saccharum | 75 | Yes | FACU | FAC species $0 \times 3 = 0$ |
| | | | | FACU species <u>135</u> x 4 = <u>540</u> |
| 2 | | | | UPL species 0 x 5 = 0 |
| 3 | | | | Column Totals: 135 (A) 540 (B) |
| 4 | | | | Solution Totals: (F) |
| 5 | | | | Prevalence Index = B/A = 4 |
| 6. | | | | Hydrophytic Vegetation Indicators: |
| Total Cove | 75 | | | Rapid Test for Hydrophytic Vegetation |
| Total Cove | r | | | Dominance Test is >50% |
| 50% of total cover: | 20% o | f total cover | : | Prevalence Index is ≤3.0¹ |
| Herb Stratum (Plot size: 5 | | | | |
| 1. Maianthemum canadense | 10 | Yes | FACU | Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| 2. Sanguinaria canadensis | 5 | Yes | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) |
| | | | | |
| 3 | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 4 | | | | be present, unless disturbed or problematic. |
| 5 | | | | Definitions of Vocatation Strate: |
| | | | | Definitions of Vegetation Strata: |
| 6 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter |
| 7 | | | | at breast height (DBH), regardless of height. |
| 8 | | | | 0 II / 1 1 W 1 1 / 1 0: BBU |
| | | | | Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. |
| 9 | | | | and greater than 5.20 ft (1 m) tall. |
| 10 | | | | Herb – All herbaceous (non-woody) plants, regardless |
| 11. | | | | of size, and woody plants less than 3.28 ft tall. |
| | 15 | | | Was desired. All was deviced and the model of the |
| Total Cover | : | | | Woody vines – All woody vines greater than 3.28 ft in height. |
| 50% of total cover: | 20% c | of total cove | r: | |
| Woody Vine Stratum (Plot size: 15 | | | | |
| | | | | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | Hydrophytic |
| | | | | Vegetation |
| 4 | _ | | | Present? Yes No <u>✓</u> |
| Total Cove | | | | |
| 50% of total cover: | 20% o | f total cover | · | |
| Remarks: (Include photo numbers here or on a separate s | heet.) | | | |
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Sampling Point: WA-144-0

| | cription: (Describe | to the dep | | | | or confirn | m the absence of indicators.) |
|------------------------|-----------------------------------|----------------|--|-----------------------|-------------------|------------------|---|
| Depth (inches) | Matrix Color (moist) | % | Redox Color (moist) | <u>k Feature</u> % | Type ¹ | Loc ² | Texture Remarks |
| 0 - 3 | 10YR 2/1 | 100 | | | | | L |
| | _ | | | | | | |
| 3 - 18 | 7.5YR 3/3 | 100 | | | | | SL |
| 3 - 10 | 7.518 3/3 | _ 100 | | | | | <u>SL</u> |
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| ¹ Type: C=C | Concentration D=De | letion RM | =Reduced Matrix, CS | =Covered | d or Coate | nd Sand G | Grains. ² Location: PL=Pore Lining, M=Matrix. |
| | I Indicators: | piction, raivi | -reduced Matrix, Oc | -0000100 | d Or Odate | o Cario C | Indicators for Problematic Hydric Soils ³ : |
| Histoso | ol (A1) | | Polyvalue Belov | v Surface | (S8) (LRI | R, | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| | Epipedon (A2) | | MLRA 149B) | | | | Coast Prairie Redox (A16) (LRR K, L, R) |
| | Histic (A3) | | Thin Dark Surfa | | | | |
| | en Sulfide (A4) ed Layers (A5) | | Loamy Mucky MLoamy Gleyed I | | | , L) | Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) |
| | ed Below Dark Surface | ce (A11) | Depleted Matrix | | , | | Thin Dark Surface (S9) (LRR K, L) |
| | Oark Surface (A12) | | Redox Dark Sur | | | | Iron-Manganese Masses (F12) (LRR K, L, R) |
| | Mucky Mineral (S1) | | Depleted Dark S | - | 7) | | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| | Gleyed Matrix (S4) Redox (S5) | | Redox Depress | ons (F8) | | | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) |
| | d Matrix (S6) | | | | | | Very Shallow Dark Surface (TF12) |
| | urface (S7) (LRR R , | MLRA 149 | 3) | | | | Other (Explain in Remarks) |
| 3Indicators | of hydrophytic yeget | ation and w | etland hydrology mus | t he prese | nt unles | e dieturbec | d or problematic |
| | Layer (if observed) | | eliand flydrology fflus | t be prese | ini, umes | s disturbed | |
| Туре: | | , | | | | | |
| Depth (ir | nches): | | | | | | Hydric Soil Present? Yes No _✓ |
| Remarks: | · - | | | | | | |
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| Project/Site: GTAC Ci | ity/County: IRON Sampling Date: 7/7/2014 2: | 57:26 PM |
|--|--|----------|
| Applicant/Owner: GTAC | State: WI Sampling Point: WA-144-0 |)1w |
| • | ection, Township, Range: S6, T44N, R1W | |
| _ | Local relief (concave, convex, none): | |
| | ong: Datum: | |
| Soil Map Unit Name: Dishno-Gogebic-Peshekee-Rock outcrop | o complex, 18 to 35 perce NW/I classification: N/A | |
| Are climatic / hydrologic conditions on the site typical for this time of year | <u> </u> | |
| | | |
| | sturbed? Are "Normal Circumstances" present? Yes No | |
| Are Vegetation, Soil, or Hydrology naturally probl | ematic? (If needed, explain any answers in Remarks.) | |
| SUMMARY OF FINDINGS – Attach site map showing s | sampling point locations, transects, important features | , etc. |
| Hydrophytic Vegetation Present? Yes _ ✓ No | Is the Sampled Area | |
| Hydric Soil Present? Yes ✓ No | within a Wetland? Yes _ ✓ No | |
| Wetland Hydrology Present? Yes ✓ No | If yes, optional Wetland Site ID: | |
| Remarks: (Explain alternative procedures here or in a separate report.) |) | |
| Wetter than normal. | | |
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| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indicators (minimum of two requi | ired) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil Cracks (B6) | |
| Surface Water (A1) <u>✓</u> Water-Stained Le | eaves (B9) Drainage Patterns (B10) | |
| High Water Table (A2) Aquatic Fauna (B | | |
| ✓ Saturation (A3) Marl Deposits (B1 | | |
| Water Marks (B1) Hydrogen Sulfide | | |
| <u> </u> | theres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9 | 9) |
| Drift Deposits (B3) Presence of Redu | | |
| Algal Mat or Crust (B4) Recent Iron Redu Iron Deposits (B5) Thin Muck Surface | uction in Tilled Soils (C6) | |
| Initiated Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in | | |
| Sparsely Vegetated Concave Surface (B8) | ✓ FAC-Neutral Test (D5) | |
| Field Observations: | | |
| Surface Water Present? Yes No _✓ Depth (inches): _ | | |
| Water Table Present? Yes ✓ No Depth (inches): | 16.00 | |
| Saturation Present? Yes ✓ No Depth (inches): | | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, | provious inspections) if available: | |
| Describe Recorded Data (stream gauge, monitoring well, aerial priotos, | previous inspections), ii available. | |
| | | |
| Remarks: | | |
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| <u> </u> | Ale e e le de | D 1 | Levellon Leve | T |
|---|--|-------------------|---------------|--|
| <u>Tree Stratum</u> (Plot size: 30 | Absolute % Cover | Dominant Species? | | Dominance Test worksheet: |
| | | | | Number of Dominant Species That Are OBL FACW or FAC: 3 |
| 1 | | | | That Are OBL, FACW, or FAC: 3 (A) |
| 2 | | | | Total Number of Dominant |
| 3 | | | | Species Across All Strata: 3 (B) |
| 4 | | | | Percent of Dominant Species |
| | | | | That Are OBL, FACW, or FAC: 100 (A/B) |
| 5 | | | | · · · · · · · · · · · · · · · · · · · |
| 6 | | | | Prevalence Index worksheet: |
| Total Cover | :: <u>0 </u> | | | Total % Cover of: Multiply by: |
| 50% of total cover: | 20% o | f total cove | r: | OBL species <u>20</u> x 1 = <u>20</u> |
| Sapling/Shrub Stratum (Plot size: 15) | | | | FACW species 15 x 2 = 30 |
| | | | | FAC species 5 x 3 = 15 |
| 1 | | | | FACU species $0 \times 4 = 0$ |
| 2 | | | | UPL species 0 $x = 0$ |
| 3 | | | | Column Totals: 40 (A) 65 (B) |
| 4 | | | | Column Totals (7) |
| 5 | | | | Prevalence Index = B/A = 1.62 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| Total Cover | | | | Rapid Test for Hydrophytic Vegetation |
| | | | _ | ✓ Dominance Test is >50% |
| 50% of total cover: | 20% of | r total cover | · | ✓ Prevalence Index is ≤3.0 ¹ |
| Herb Stratum (Plot size: 5 1. Impatiens capensis | 15 | Yes | FACW | Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| 2. Caltha palustris | 10 | Yes | OBL | Problematic Hydrophytic Vegetation ¹ (Explain) |
| | | | | Problematic Hydrophytic Vegetation (Explain) |
| 3. Carex scabrata | 10 | <u>Yes</u> | <u>OBL</u> | ¹ Indicators of hydric soil and wetland hydrology must |
| 4. Dryopteris intermedia | 5 | No | FAC | be present, unless disturbed or problematic. |
| 5. | | | | |
| | | | | Definitions of Vegetation Strata: |
| 6 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter |
| 7 | | | | at breast height (DBH), regardless of height. |
| 8 | | | | Sapling/shrub – Woody plants less than 3 in. DBH |
| 9 | | | | and greater than 3.28 ft (1 m) tall. |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless |
| | | | | of size, and woody plants less than 3.28 ft tall. |
| 11 | 40 | | | |
| Total Cover | = 40 | | | Woody vines – All woody vines greater than 3.28 ft in height. |
| 50% of total cover: | 20% o | f total cover | : | |
| Woody Vine Stratum (Plot size: 15 | | | | |
| 1 | | | | |
| | | | | |
| 2 | | | | |
| 3 | | | | Hydrophytic |
| 4 | | | | Vegetation Present? Yes ✓ No |
| Total Cover | <u> </u> | | | |
| 50% of total cover: | 20% o | f total cover | : | |
| Pamarka: (Ingluda abata numbara bara ar an a canarata a | hoot) | | | |
| Remarks: (Include photo numbers here or on a separate s | neet.) | | | |
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Sampling Point: WA-144-0

| Profile Des | Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | |
|---|---|-----|----------------------|--|--------------------|------------------|--|--------------------------|--|
| Depth | Matrix | | Redo | ox Features | S | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | _Type ¹ | Loc ² | <u>Texture</u> | Remarks | |
| 0 - 6 | 7.5YR 2.5/1 | 95 | 7.5YR 4/4 | 5.00 | <u>C</u> | <u>M</u> | MMI | mucky loam | |
| 6 - 8 | 7.5YR 2.5/1 | 90 | 7.5YR 4/4 | 10.00 | С | M | MMI | | |
| 8 - 16 | 7.5YR 3/4 | 100 | | | | | LS | | |
| | | | | - ———————————————————————————————————— | | | | | |
| ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, | | | | | | | For Problematic Hydric Soils ³ : Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L) Palue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L) Planganese Masses (F12) (LRR K, L, R) Planganese Masses (F12) (LRR K, L, R) Planganese Masses (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B) Parent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks) | | |
| | Layer (if observed) | | vetland hydrology mu | st be prese | iii, uiiies | s disturbed | l or probleman | U | |
| Туре: | , | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil | Present? Yes <u>√</u> No | |
| Remarks: | | | | | | | | | |

| Project/Site: GTAC | City/County: IF | RON | Sampling Date: | | |
|--|--|------------------------------|-----------------------------------|--|--|
| Applicant/Owner: GTAC | | | Sampling Point: WA-149-04u | | |
| | Section, Towns | | | | |
| Landform (hillslope, terrace, etc.): Backslope | | | | | |
| Slope (%): <u>3 - 7%</u> Lat: | | | | | |
| Soil Map Unit Name: Gogebic silt loam, 18 | to 35 percent slopes, very sto | nv. rocky NW/ alagai | Battilli | | |
| • | | | | | |
| Are climatic / hydrologic conditions on the site typi | | | _ | | |
| Are Vegetation, Soil, or Hydrology | | | | | |
| Are Vegetation, Soil, or Hydrology | naturally problematic? | (If needed, explain any answ | wers in Remarks.) | | |
| SUMMARY OF FINDINGS - Attach sit | te map showing sampling p | oint locations, transec | ts, important features, etc. | | |
| Hydrophytic Vegetation Present? Yes | No ✓ Is the Sa | ampled Area | | | |
| Hydric Soil Present? Yes | 110 | | No _ ✓ | | |
| Wetland Hydrology Present? Yes | No ✓ If yes, or | otional Wetland Site ID: | | | |
| Remarks: (Explain alternative procedures here | | | | | |
| Wetter than normal. | | | | | |
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| HYDROLOGY | | | | | |
| Wetland Hydrology Indicators: | | Secondary Indi | icators (minimum of two required) | | |
| Primary Indicators (minimum of one is required; | check all that apply) | Surface So | | | |
| Surface Water (A1) | Water-Stained Leaves (B9) | Drainage F | Patterns (B10) | | |
| High Water Table (A2) | Aquatic Fauna (B13) | | Lines (B16) | | |
| Saturation (A3) | Marl Deposits (B15) | Dry-Season Water Table (C2) | | | |
| Water Marks (B1) | Hydrogen Sulfide Odor (C1) | | surrows (C8) | | |
| Sediment Deposits (B2) | Oxidized Rhizospheres on Livir | | Visible on Aerial Imagery (C9) | | |
| Drift Deposits (B3) | Presence of Reduced Iron (C4) | | Stressed Plants (D1) | | |
| Algal Mat or Crust (B4) Iron Deposits (B5) | Recent Iron Reduction in TilledThin Muck Surface (C7) | | nic Position (D2) quitard (D3) | | |
| Inundation Visible on Aerial Imagery (B7) | Other (Explain in Remarks) | | graphic Relief (D4) | | |
| Sparsely Vegetated Concave Surface (B8) | | | ral Test (D5) | | |
| Field Observations: | | | | | |
| Surface Water Present? Yes No _ | ✓ Depth (inches): | _ | | | |
| Water Table Present? Yes No _ | ✓ Depth (inches): | _ | | | |
| | ✓ Depth (inches): | _ Wetland Hydrology Pres | sent? Yes No <u>√</u> | | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitor | ring well, aerial photos, previous insp | ections), if available: | | | |
| , , , | | ,, | | | |
| | | | | | |
| Remarks: | | | | | |
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VEGETATION – Use scientific names of plants.

| /EGETATION - Use scientific names of plants | | | | Sampling Point: WA-149-04 _u | | |
|---|--------------------------|----------------------|-----------------------|--|--|--|
| Tree Stratum (Plot size: 30) | Absolute % Cover | Dominant Species? | t Indicator Status | Dominance Test worksheet: | | |
| 1. Acer saccharum | 30 | Yes | FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) | | |
| 2 | | | | Total Number of Dominant | | |
| 3 | | | | Species Across All Strata: 3 (B) | | |
| 4 | | | | Percent of Dominant Species | | |
| 5 | | | | That Are OBL, FACW, or FAC: 0 (A/B) | | |
| 6 | | | | Prevalence Index worksheet: | | |
| Total Cove | _{er:} <u>30</u> | <u>-</u> | | Total % Cover of: Multiply by: | | |
| 50% of total cover: | 20% c | of total cove | er: | OBL species 0 x 1 = 0 | | |
| Sapling/Shrub Stratum (Plot size: 15) | | | | FACW species $0 \times 2 = 0$ | | |
| 1 | | | | FAC species $\frac{15}{100}$ $\times 3 = \frac{45}{100}$ | | |
| 2 | | | | FACU species 100 x 4 = 400 | | |
| 3 | | | | UPL species 0 $x = 0$ (B) Column Totals: 115 (A) 445 (B) | | |
| 4 | | | | | | |
| 5 | | | | Prevalence Index = $B/A = 3.87$ | | |
| 6 | | | | Hydrophytic Vegetation Indicators: | | |
| | er: 0 | | | Rapid Test for Hydrophytic Vegetation | | |
| 50% of total cover: | | | r· | Dominance Test is >50% | | |
| Herb Stratum (Plot size: 5 | 2070 0 | n total cove | ' | Prevalence Index is ≤3.0 ¹ | | |
| 1. Uvularia sessilifolia | 40 | Yes | UPL | Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) | | |
| 2. Acer saccharum | 25 | Yes | FACU | Problematic Hydrophytic Vegetation¹ (Explain) | | |
| 3. Dryopteris intermedia | 15 | No | FAC | | | |
| 4. Caulophyllum thalictroides | 5 | No | UPL | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | |
| 5. Adiantum pedatum | 5 | No | FACU | Definitions of Vegetation Strata: | | |
| 6. | | | | | | |
| 7 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. | | |
| 8. | | | | | | |
| 9. | | | | Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. | | |
| 10. | | | · | Herb – All herbaceous (non-woody) plants, regardless | | |
| 11. | | | | of size, and woody plants less than 3.28 ft tall. | | |
| Total Cove | r: 85 | | · <u></u> - | Woody vines – All woody vines greater than 3.28 ft in | | |
| 50% of total cover: | 20% c | of total cove | er: | height. | | |
| Woody Vine Stratum (Plot size: 15 | | | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | Hydrophytic | | |
| 4 | | | | Vegetation Present? Yes No _✓ | | |
| Total Cove | | _ | | resent? resNo | | |
| 50% of total cover: | 20% o | of total cove | r: | | | |
| | | | | | | |
| Remarks: (Include photo numbers here or on a separate | sneet.) | | | | | |
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Sampling Point: WA-149-04 u

SOIL

| | | | oth needed to document the indicator or confir | n the absence of in | dicators.) |
|------------------------|----------------------------------|--------------------|--|------------------------------|---|
| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) % Type ¹ Loc ² | Texture | Remarks |
| 0 - 12 | 7.5YR 3/2 | 100 | | | |
| | | | | | |
| 40.45 | 7.5\/D.0/4 | | | | |
| 12 - 15 | 7.5YR 3/4 | 100 | | <u>SL</u> | |
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| | | | | | |
| ¹ Type: C=C | concentration. D=De | epletion. RM | I=Reduced Matrix, CS=Covered or Coated Sand G | rains. ² Location | : PL=Pore Lining, M=Matrix. |
| | Indicators: | - p c c c c c c c. | | | roblematic Hydric Soils ³ : |
| Histoso | I (A1) | | Polyvalue Below Surface (S8) (LRR R, | 2 cm Muck | (A10) (LRR K, L, MLRA 149B) |
| | pipedon (A2) | | MLRA 149B) | | e Redox (A16) (LRR K, L, R) |
| | listic (A3) | | Thin Dark Surface (S9) (LRR R, MLRA 149E | | Peat or Peat (S3) (LRR K, L, R) |
| | en Sulfide (A4) d Layers (A5) | | Loamy Mucky Mineral (F1) (LRR K, L)Loamy Gleyed Matrix (F2) | | e (S7) (LRR K, L) elow Surface (S8) (LRR K, L) |
| | ed Below Dark Surfa | ace (A11) | Depleted Matrix (F3) | · | urface (S9) (LRR K, L) |
| | ark Surface (A12) | , | Redox Dark Surface (F6) | | nese Masses (F12) (LRR K, L, R) |
| - | Mucky Mineral (S1) | | Depleted Dark Surface (F7) | | oodplain Soils (F19) (MLRA 149B) |
| | Gleyed Matrix (S4) | | Redox Depressions (F8) | | ic (TA6) (MLRA 144A, 145, 149B) |
| | Redox (S5) d Matrix (S6) | | | | Material (F21) w Dark Surface (TF12) |
| | urface (S7) (LRR R | MLRA 149 | B) | | ain in Remarks) |
| | | , | _, | | , |
| | | | etland hydrology must be present, unless disturbed | d or problematic. | |
| Restrictive | Layer (if observed | d): | | | |
| Type: b | | | | | |
| Depth (ir | nches): 15.00 | | | Hydric Soil Pres | ent? Yes No <u>√</u> |
| Remarks: | | | | - | |
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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: GTAC City/C | County: IRON Sampling Date: 7/9/2014 11:39:14 A |
|--|---|
| | State: WI Sampling Point: WA-149-04w |
| | ion, Township, Range: S6, T44N, R1W |
| Landform (hillslope, terrace, etc.): Backslope | |
| | j: Datum: |
| Soil Map Unit Name: Gogebic silt loam, 18 to 35 percent slopes, | very stony, rocky NIMI elegation: N/A |
| • | |
| Are climatic / hydrologic conditions on the site typical for this time of year? | _ |
| | rbed? Are "Normal Circumstances" present? Yes _ ✓ No |
| Are Vegetation, Soil, or Hydrology naturally problem | atic? (If needed, explain any answers in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map showing san | mpling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes _✓ No | Is the Sampled Area |
| Hydric Soil Present? Yes ✓ No | within a Wetland? Yes _ \(\) No |
| Wetland Hydrology Present? Yes ✓ No | If yes, optional Wetland Site ID: |
| Remarks: (Explain alternative procedures here or in a separate report.) | |
| Wetter than normal. | |
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| HYDROLOGY | |
| Wetland Hydrology Indicators: | Secondary Indicators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil Cracks (B6) |
| Surface Water (A1) | es (B9) Drainage Patterns (B10) |
| High Water Table (A2) Aquatic Fauna (B13) | |
| ✓ Saturation (A3) Marl Deposits (B15) | |
| Water Marks (B1) Hydrogen Sulfide Od | |
| Sediment Deposits (B2) Oxidized Rhizospher | |
| Drift Deposits (B3) Presence of Reduce | |
| Algal Mat or Crust (B4) Recent Iron Reduction Iron Deposits (B5) Thin Muck Surface (0) | |
| Indit Deposits (DS) Thin Mask Surface (S) Other (Explain in Rei | |
| Sparsely Vegetated Concave Surface (B8) | FAC-Neutral Test (D5) |
| Field Observations: | |
| Surface Water Present? Yes No _✓ Depth (inches): | |
| Water Table Present? Yes No ✓ Depth (inches): | |
| Saturation Present? Yes Yes No Depth (inches): 0.0 | 00 Wetland Hydrology Present? Yes ✓ No |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre | l evious inspections), if available: |
| | , , , |
| | |
| Remarks: | |
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VEGETATION – Use scientific names of plants.

| | Sampling Point: WA-149-04 | | | |
|--------------------------|--|--|--|--|
| nt Indicator ? Status | Dominance Test worksheet: | | | |
| FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) | | | |
| | Total Number of Dominant | | | |
| | Species Across All Strata: 3 (B) | | | |
| | Percent of Dominant Species That Are ORL FACW or FAC: 67 | | | |
| | That Are OBL, FACW, or FAC: 67 (A/B) | | | |
| | Prevalence Index worksheet: | | | |
| | Total % Cover of: Multiply by: | | | |
| ver: | | | | |
| | FACW species 60 $x = 120$ FAC species 30 $x = 90$ | | | |
| | FAC species 30 | | | |
| | UPL species 0 x 5 = 0 | | | |
| | Column Totals: 140 (A) 365 (B) | | | |
| | Prevalence Index = B/A = 2.61 | | | |
| | - | | | |
| | Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation | | | |
| | ✓ Dominance Test is >50% | | | |
| er: | ✓ Prevalence Index is ≤3.0¹ | | | |
| E A C \ A \ | Morphological Adaptations ¹ (Provide supporting | | | |
| FACW | data in Remarks or on a separate sheet) | | | |
| <u>FAC</u> OBL | Problematic Hydrophytic Vegetation ¹ (Explain) | | | |
| FACW | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | |
| FACU | | | | |
| FACW | Definitions of Vegetation Strata: | | | |
| FAC | Tree – Woody plants 3 in. (7.6 cm) or more in diameter | | | |
| | at breast height (DBH), regardless of height. | | | |
| | Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. | | | |
| | - | | | |
| | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. | | | |
| | Woody vines – All woody vines greater than 3.28 ft in | | | |
| /er: | height. | | | |
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| | | | | |
| | - Hydrophytic | | | |
| | Vegetation - Present? Yes ✓ No | | | |
| | rieseitt: Tes No | | | |
| er: | | | | |
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Sampling Point: WA-149-04 w

| Profile Desc Depth | cription: (Describe Matrix | to the de | pth needed to docu | ment the i | | r or confir | m the absence of | indicators.) |
|-----------------------|--|-------------|--------------------------------|-------------|-----------|-----------------------|-------------------|---|
| (inches) | Color (moist) | % | Color (moist) | % | Type | Loc ² | Texture | Remarks |
| 0 - 3 | 7.5YR 2.5/1 | 100 | | | | | MMI | |
| | | | | | | | | _ |
| 3 - 10 | 7.5YR 2.5/1 | 90 | 7.5YR 2.5/3 | 10.00 | С | M | SIL | |
| | | | | | | | | |
| 40.45 | 7.57.5 | | 7.570.570 | | | | | |
| 10 - 15 | 7.5YR 4/4 | 90 | 7.5YR 5/6 | 10.00 | <u>C</u> | M | LS | |
| | | | | | | | <u> </u> | |
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| | | | | | | | | |
| | | pletion, RN | /I=Reduced Matrix, C | S=Covered | d or Coa | ited Sand G | | ion: PL=Pore Lining, M=Matrix. |
| Hydric Soil | | | | | .= | | | r Problematic Hydric Soils ³ : |
| Histosol | (A1) pipedon (A2) | | Polyvalue Belo | | (S8) (L | RR R, | | ck (A10) (LRR K, L, MLRA 149B) airie Redox (A16) (LRR K, L, R) |
| | istic (A3) | | Thin Dark Surf | , | RR R, | MLRA 149E | | cky Peat or Peat (S3) (LRR K, L, R) |
| | en Sulfide (A4) | | Loamy Mucky | | | K , L) | | face (S7) (LRR K, L) |
| | d Layers (A5) | (011) | Loamy Gleyed | |) | | | e Below Surface (S8) (LRR K, L) |
| | d Below Dark Surfa ark Surface (A12) | ce (ATT) | Depleted Matri ✓ Redox Dark St | | | | | k Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) |
| | Mucky Mineral (S1) | | Depleted Dark | | 7) | | | t Floodplain Soils (F19) (MLRA 149B) |
| | Gleyed Matrix (S4) | | Redox Depres | sions (F8) | | | | odic (TA6) (MLRA 144A, 145, 149B) |
| - | Redox (S5) I Matrix (S6) | | | | | | | ent Material (F21) illow Dark Surface (TF12) |
| | rface (S7) (LRR R, | MLRA 149 | 9B) | | | | | kplain in Remarks) |
| | | | | | | | | |
| | f hydrophytic vegeta Layer (if observed) | | vetland hydrology mu | st be prese | ent, unle | ss disturbe | d or problematic. | |
| Type: | Layer (II observed |). | | | | | | |
| | ches): | | | | | | Hvdric Soil Pi | resent? Yes <u>√</u> No |
| Remarks: | Crics). | | | | | | , , , , , , | |
| rtemanto. | | | | | | | | |
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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: GTAC | City/County: IRON | Sa | mpling Date: 7/9/2014 4:47:06 PM | | | |
|---|--|--|----------------------------------|--|--|--|
| Applicant/Owner: GTAC | . , , | State: WI Sami | pling Point: WA-155-01u | | | |
| Investigator(s): NEM NLR | | | | | | |
| Landform (hillslope, terrace, etc.): Rise | | | onvex | | | |
| Slope (%): 0 - 2% Lat: | | | | | | |
| Soil Map Unit Name: Gogebic silt loam, 18 to 35 percent sl | opes vervistony rocky | | n/A | | | |
| • | | | · | | | |
| Are climatic / hydrologic conditions on the site typical for this time of | | | _ | | | |
| Are Vegetation, Soil, or Hydrology significant | | | | | | |
| Are Vegetation, Soil, or Hydrology naturally p | roblematic? (If neede | d, explain any answers in | Remarks.) | | | |
| SUMMARY OF FINDINGS - Attach site map showing | g sampling point loca | ations, transects, in | nportant features, etc. | | | |
| Hydrophytic Vegetation Present? Yes No _✓ | Is the Sampled Are | ea | | | | |
| Hydric Soil Present? Yes No _✓ | within a Wetland? | Yes | No <u>√</u> | | | |
| Wetland Hydrology Present? Yes No _✓ | _ If yes, optional Wet | land Site ID: | | | | |
| Remarks: (Explain alternative procedures here or in a separate rep | | · | | | | |
| Wetter than normal. | | | | | | |
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| HYDROLOGY | | | | | | |
| Wetland Hydrology Indicators: | | Secondary Indicators | (minimum of two required) | | | |
| Primary Indicators (minimum of one is required; check all that apply |) | Surface Soil Crac | cks (B6) | | | |
| Surface Water (A1) Water-Staine | d Leaves (B9) | Drainage Pattern | ıs (B10) | | | |
| High Water Table (A2) Aquatic Faun | a (B13) | Moss Trim Lines (B16) | | | | |
| Saturation (A3) Marl Deposits | | Dry-Season Water Table (C2) | | | | |
| Water Marks (B1) Hydrogen Su | | Crayfish Burrows (C8) | | | | |
| | cospheres on Living Roots (C | Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) | | | | |
| | Reduced Iron (C4) Reduction in Tilled Soils (C6) | | | | | |
| Iron Deposits (B5) Thin Muck Su | | Shallow Aquitard | | | | |
| Inundation Visible on Aerial Imagery (B7) Other (Explai | | Microtopographic | | | | |
| Sparsely Vegetated Concave Surface (B8) | | FAC-Neutral Tes | | | | |
| Field Observations: | | | | | | |
| Surface Water Present? Yes No _✓ Depth (inche | , | | | | | |
| Water Table Present? Yes No _✓ Depth (inche | | | | | | |
| Saturation Present? Yes No _✓ Depth (inche (includes capillary fringe) | s): Wetlar | nd Hydrology Present? | Yes No <u>√</u> | | | |
| Describe Recorded Data (stream gauge, monitoring well, aerial pho | tos, previous inspections), if | available: | | | | |
| | | | | | | |
| Domorko | | | | | | |
| Remarks: | | | | | | |
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VEGETATION – Use scientific names of plants.

| /EGETATION – Use scientific names of plants. | | | | Sampling Point: WA-155-01 _u | | | |
|---|---------------|----------------------|------|--|--|--|--|
| Tree Stratum (Plot size: 30 | Absolute | Dominant Species? | | Dominance Test worksheet: | | | |
| 1 Fraxinus americana | 20 | Yes | FACU | Number of Dominant Species | | | |
| 2 Tilia americana | 5 | Yes | FACU | That Are OBL, FACW, or FAC: 0 (A) | | | |
| =- | | | | Total Number of Dominant Species Across All Strata: 6 (B) | | | |
| 3 | | | | (E) | | | |
| 4 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) | | | |
| 5 | | | | | | | |
| 6 | | | | Prevalence Index worksheet: | | | |
| Total Cove | | | | Total % Cover of: Multiply by: | | | |
| 50% of total cover: | 20% c | of total cover | r: | OBL species 0 $x = 0$ FACW species 0 $x = 0$ | | | |
| Sapling/Shrub Stratum (Plot size: 15) | 20 | Yes | FACU | FACW species 0 $x = 0$ FAC species 0 $x = 0$ | | | |
| 1. Ostrya virginiana | | | | FACU species 100 x 4 = 400 | | | |
| 2. Fraxinus americana | 10 | Yes | FACU | UPL species 0 $x = 0$ | | | |
| 3. Quercus rubra | 5 | No | FACU | Column Totals: 100 (A) 400 (B) | | | |
| 4 | | | | Development to the DVA 4 | | | |
| 5 | | | | Prevalence Index = B/A = 4 | | | |
| 6 | | | | Hydrophytic Vegetation Indicators: | | | |
| Total Cove | er: <u>35</u> | | | Rapid Test for Hydrophytic Vegetation | | | |
| 50% of total cover: | 20% o | f total cover | · | Dominance Test is >50% Prevalence Index is ≤3.0 ¹ | | | |
| Herb Stratum (Plot size: 5 | | | | Morphological Adaptations ¹ (Provide supporting | | | |
| 1. Carex gracillima | 15 | Yes | FACU | data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | | | |
| 2. Fraxinus americana | 10 | Yes | FACU | | | | |
| 3. Maianthemum canadense | 5 | No | FACU | | | | |
| 4. Mitchella repens | 5 | No | FACU | | | | |
| 5. Tilia americana | 5 | No | FACU | Definitions of Vegetation Strata: | | | |
| 6 | | | | | | | |
| 7 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. | | | |
| 8. | | | | Sapling/shrub – Woody plants less than 3 in. DBH | | | |
| 9. | | | | and greater than 3.28 ft (1 m) tall. | | | |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless | | | |
| 11. | | | | of size, and woody plants less than 3.28 ft tall. | | | |
| Total Cover | | | | Woody vines – All woody vines greater than 3.28 ft in | | | |
| 50% of total cover: | | of total cove | | height. | | | |
| Woody Vine Stratum (Plot size: 15) | 2070 0 | i total covci | | | | | |
| 1 | | | | | | | |
| | | | | | | | |
| 2. | | | | | | | |
| 3 | | | | Hydrophytic Vegetation | | | |
| 4 | | | | Present? Yes No _✓ | | | |
| Total Cove | | | | | | | |
| 50% of total cover: | 20% o | f total cover | : | | | | |
| Remarks: (Include photo numbers here or on a separate s | sheet.) | | | | | | |
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Sampling Point: WA-155-01 u

| Profile Desc | cription: (Describe | to the de | oth needed to docum | nent the indicato | r or confirm | n the absence of indicators.) | |
|---------------------------|-------------------------------|------------|----------------------|------------------------------|-----------------------|--|-------------|
| Depth | Matrix | | | Features | | | |
| (inches) | Color (moist) | % | Color (moist) | % Type | Loc ² | Texture Remarks | |
| 0 - 4 | 7.5YR 2.5/1 | 100 | | | | L | |
| | | | | | | | |
| | | | <u> </u> | | | · - | |
| 4 - 8 | 7.5YR 3/3 | 100 | | | | <u>L</u> | |
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| ¹ Type: C=C | oncentration, D=Dep | letion, RM | =Reduced Matrix, CS | =Covered or Coa | ted Sand Gr | rains. ² Location: PL=Pore Lining, M=M | fatrix. |
| Hydric Soil | Indicators: | | | | | Indicators for Problematic Hydric So | ils³: |
| Histosol | (A1) | | Polyvalue Below | Surface (S8) (L | RR R, | 2 cm Muck (A10) (LRR K, L, MLRA | 149B) |
| Histic E _l | pipedon (A2) | | MLRA 149B) | | | Coast Prairie Redox (A16) (LRR K, | , L, R) |
| | istic (A3) | | | ce (S9) (LRR R, I | | | R K, L, R) |
| | en Sulfide (A4) | | | lineral (F1) (LRR | K , L) | Dark Surface (S7) (LRR K, L) | |
| | d Layers (A5) | | Loamy Gleyed N | | | Polyvalue Below Surface (S8) (LRF | ₹ K, L) |
| | d Below Dark Surfac | e (A11) | Depleted Matrix | | | Thin Dark Surface (S9) (LRR K, L) | |
| | ark Surface (A12) | | Redox Dark Sur | | | Iron-Manganese Masses (F12) (LR | |
| | Mucky Mineral (S1) | | Depleted Dark S | | | Piedmont Floodplain Soils (F19) (M | |
| | Gleyed Matrix (S4) | | Redox Depressi | ons (F8) | | Mesic Spodic (TA6) (MLRA 144A, | 145, 149B) |
| | Redox (S5) d Matrix (S6) | | | | | Red Parent Material (F21)Very Shallow Dark Surface (TF12) | |
| | irface (S7) (LRR R, I | MI DA 140 | B) | | | Other (Explain in Remarks) | |
| Daik Su | inace (37) (LKK K, I | VILINA 143 | ь) | | | Other (Explain in Remarks) | |
| ³ Indicators o | of hydrophytic vegeta | tion and w | etland hydrology mus | t be present, unle | ss disturbed | d or problematic. | |
| | Layer (if observed) | | odana riyarology mao | t bo procent, and | oo alotarboa | | |
| Type: rc | | • | | | | | |
| | | | | | | Hydric Soil Present? Yes I | No. / |
| | ches): 8.00 | | | | | Hydric Soil Present? Yes 1 | No <u>√</u> |
| Remarks: | | | | | | | |
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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: GTAC C | ity/County: IRON | Sampling Date: | 1:10:31 PM |
|--|-----------------------------|--|------------|
| Applicant/Owner: GTAC | . , | State: WI Sampling Point: WA-155- | 01w |
| | Section, Township, Range | | |
| Landform (hillslope, terrace, etc.): Backslope | | | |
| Slope (%): <u>3 - 7%</u> Lat: L | | | |
| Soil Map Unit Name: Gogebic silt loam, 18 to 35 percent slop | es verv stony rocky | / NIMI place: Fraction: N/A | |
| • | | | |
| Are climatic / hydrologic conditions on the site typical for this time of year | | _ | |
| Are Vegetation, Soil, or Hydrology significantly d | | | |
| Are Vegetation, Soil, or Hydrology naturally prob | lematic? (If needs | ed, explain any answers in Remarks.) | |
| SUMMARY OF FINDINGS – Attach site map showing | sampling point loca | ations, transects, important features | s, etc. |
| Hydrophytic Vegetation Present? Yes ✓ No | Is the Sampled Are | ea | |
| Hydric Soil Present? Yes ✓ No | within a Wetland? | Yes _ ✓ No | |
| Wetland Hydrology Present? Yes ✓ No | If yes, optional Wet | and Site ID: | |
| Remarks: (Explain alternative procedures here or in a separate report. | | | |
| Wetter than normal. | | | |
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| HYDROLOGY | | | |
| Wetland Hydrology Indicators: | | Secondary Indicators (minimum of two requ | uired) |
| Primary Indicators (minimum of one is required; check all that apply) | | Surface Soil Cracks (B6) | |
| ✓ Surface Water (A1) ✓ Water-Stained Le | eaves (B9) | Drainage Patterns (B10) | |
| High Water Table (A2) Aquatic Fauna (E | 313) | Moss Trim Lines (B16) | |
| ✓ Saturation (A3) Marl Deposits (B | | Dry-Season Water Table (C2) | |
| Water Marks (B1) Hydrogen Sulfide | | Crayfish Burrows (C8) | |
| | pheres on Living Roots (C | | (9) |
| Drift Deposits (B3) Presence of Red Algal Mat or Crust (B4) Recent Iron Red | uction in Tilled Soils (C6) | Stunted or Stressed Plants (D1)Geomorphic Position (D2) | |
| Iron Deposits (B5) Thin Muck Surface | | Shallow Aquitard (D3) | |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in | | Microtopographic Relief (D4) | |
| Sparsely Vegetated Concave Surface (B8) | | ✓ FAC-Neutral Test (D5) | |
| Field Observations: | | | |
| Surface Water Present? Yes ✓ No Depth (inches): | | | |
| Water Table Present? Yes <u>✓</u> No Depth (inches): | | | |
| Saturation Present? Yes ✓ No Depth (inches): (includes capillary fringe) | 0.00 Wetlar | nd Hydrology Present? Yes <u>√</u> No _ | |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos | , previous inspections), if | available: | |
| | | | |
| Demorto | | | |
| Remarks: | | | |
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VEGETATION – Use scientific names of plants.

| /EGETATION - Use scientific names of plants | - | | | Sampling Point: WA-155-01 w | | | |
|--|---------------------|----------------------|----------|---|--|--|--|
| Tree Stratum (Plot size: 30) | Absolute % Cover | Dominant Species? | | Dominance Test worksheet: | | | |
| 1. Fraxinus nigra | 10 | Yes | FACW | Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A) | | | |
| 2 | | | | Total Number of Dominant | | | |
| 3 | | | | Species Across All Strata: 5 (B) | | | |
| 4 | | | | Percent of Dominant Species That Are ORL FACW or FAC: 80 | | | |
| 5 | | | | That Are OBL, FACW, or FAC: OU (A/B) | | | |
| 6 | | | | Prevalence Index worksheet: | | | |
| Total Cove | er: 10 | | | Total % Cover of: Multiply by: | | | |
| 50% of total cover: | 20% c | of total cove | r: | OBL species $\frac{25}{100}$ $\times 1 = \frac{25}{200}$ | | | |
| Sapling/Shrub Stratum (Plot size: 15) | 10 | Vaa | E A C\A/ | FACW species $\underline{100}$ $x = \underline{200}$ FAC species $\underline{0}$ $x = \underline{0}$ | | | |
| 1. Fraxinus nigra | | Yes | FACU | FACU species 10 | | | |
| _{2.} Ostrya virginiana | | Yes | FACU | UPL species 0 $x = 0$ | | | |
| 3 | | | | Column Totals: 135 (A) 265 (B) | | | |
| 4 | | | | Prevalence Index = B/A = 1.96 | | | |
| 5 | | | | | | | |
| 6 | | | | Hydrophytic Vegetation Indicators: | | | |
| Total Cove | er: <u>20</u> | | | Rapid Test for Hydrophytic Vegetation ✓ Dominance Test is >50% | | | |
| 50% of total cover: | 20% o | f total cover | | ✓ Prevalence Index is ≤3.0¹ | | | |
| Herb Stratum (Plot size: 5) | | | | Morphological Adaptations¹ (Provide supporting | | | |
| 1. Impatiens capensis | 55 | Yes | FACW | data in Remarks or on a separate sheet) | | | |
| 2. Carex scabrata | 25 | Yes | OBL | Problematic Hydrophytic Vegetation ¹ (Explain) | | | |
| 3. Fraxinus nigra | 20 | No | FACW | Indicators of hydric soil and wetland hydrology must | | | |
| _{4.} Poa palustris | 5 | No | FACW | be present, unless disturbed or problematic. | | | |
| 5 | | | | Definitions of Vegetation Strata: | | | |
| 6 | | | | Tree – Woody plants 3 in. (7.6 cm) or more in diameter | | | |
| 7 | | | | at breast height (DBH), regardless of height. | | | |
| 8 | | | | Sapling/shrub – Woody plants less than 3 in. DBH | | | |
| 9 | | | | and greater than 3.28 ft (1 m) tall. | | | |
| 10 | | | | Herb – All herbaceous (non-woody) plants, regardless | | | |
| 11 | | | | of size, and woody plants less than 3.28 ft tall. | | | |
| Total Cove | _{r:} 105 | | | Woody vines – All woody vines greater than 3.28 ft in height. | | | |
| 50% of total cover: | 20% c | of total cove | r: | neight. | | | |
| Woody Vine Stratum (Plot size: 15 | | | | | | | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | Hydrophytic | | | |
| 4 | | | | Vegetation Present? Yes ✓ No | | | |
| Total Cove | er: 0 | | | | | | |
| 50% of total cover: | 20% o | f total cove | r: | | | | |
| Remarks: (Include photo numbers here or on a separate | sheet.) | | | 1 | | | |
| Tromano. (molado prioto riamboro noro di on a doparato i | 511001.7 | | | | | | |
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Sampling Point: WA-155-01 w

| Profile Desc | ription: (Describe | to the de | pth needed to docum | nent the i | ndicator | or confirm | m the absence of | indicators.) |
|--------------|----------------------|-----------------|----------------------------|------------|-------------------|-----------------------|-------------------|---|
| Depth | Matrix | | | x Feature: | S | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0 - 4 | 7.5YR 3/1 | 100 | | | | | MMI | |
| | | | | | | | | |
| 4 - 8 | 7.5YR 4/2 | 95 | 7.5YR 4/4 | 5.00 | С | M | | |
| 4-0 | 7.51R 4/2 | _ 95 | 7.51R 4/4 | 5.00 | <u></u> | IVI | . <u>L</u> | |
| | | | | | | | | |
| 8 - 10 | 7.5YR 4/2 | 90 | 7.5YR 4/6 | 10.00 | С | M | SL | |
| 0 10 | 7.011(4/2 | | 7.011(470 | 10.00 | | - 171 | | |
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| 1- 0.0 | | | | | | | 2, 2, | |
| | | pletion, RI | M=Reduced Matrix, CS | S=Covered | d or Coat | ed Sand G | | ion: PL=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ : |
| Hydric Soil | | | Daharahaa Dalaa | | (00) (I D | D D | | • |
| Histosol | (A1) pipedon (A2) | | Polyvalue Below MLRA 149B) | | (58) (LR | KK, | | ck (A10) (LRR K, L, MLRA 149B) airie Redox (A16) (LRR K, L, R) |
| Black Hi | | | Thin Dark Surfa | | DD D M | II DA 149E | | cky Peat or Peat (S3) (LRR K, L, R) |
| | n Sulfide (A4) | | ✓ Loamy Mucky N | | | | | face (S7) (LRR K , L) |
| | Layers (A5) | | Loamy Gleyed I | | | τ , -) | | e Below Surface (S8) (LRR K, L) |
| | d Below Dark Surfa | ce (A11) | ✓ Depleted Matrix | | , | | | k Surface (S9) (LRR K, L) |
| | ark Surface (A12) | , | Redox Dark Su | | | | | ganese Masses (F12) (LRR K, L, R) |
| l —— | lucky Mineral (S1) | | Depleted Dark S | . , | 7) | | | t Floodplain Soils (F19) (MLRA 149B) |
| Sandy G | Bleyed Matrix (S4) | | Redox Depress | ions (F8) | | | Mesic Sp | oodic (TA6) (MLRA 144A, 145, 149B) |
| Sandy R | tedox (S5) | | | | | | Red Pare | ent Material (F21) |
| Stripped | Matrix (S6) | | | | | | Very Sha | illow Dark Surface (TF12) |
| Dark Su | rface (S7) (LRR R, | MLRA 149 | 9B) | | | | Other (Ex | xplain in Remarks) |
| | | | | | | | | |
| | | | vetland hydrology mus | t be prese | ent, unles | s disturbed | d or problematic. | |
| | _ayer (if observed |): | | | | | | |
| Type: ro | | | | | | | | |
| Depth (inc | ches): 10.00 | | | | | | Hydric Soil Pr | resent? Yes <u>√</u> No |
| Remarks: | | | | | | | | |
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SOIL



| Project/Site: | • | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/24/14 |
|-------------------------|--|---|--------------------|----------------------|---|---|---|---|---|--|--|
| Applicant: | • | aconite, LLC | | | | | | | | County: | Iron |
| Investigator #1: | | U. I | | Investi | gator #2: | | | N1/A | | State: | Wisconsin |
| Soil Unit: Landform: | Gogebic sil | t ioam | | Loc | al Relief: | | /I/WWI Classification: | N/A | | Wetland ID: | WD-28 WD-28-1u |
| Slope (%): | Side slope 2-6 | Latitude: | ΝΙ/Δ | | ongitude: | | | Datum: | NI/A | Sample Point: Community ID: | Mixed Upland Forest |
| . , , | | ditions on the site ty | | | | | ain in remarks) | ☐ Yes ☑ | | Section: | 33 |
| | | or Hydrology □ sig | | | | (II TIO, EXPI | Are normal circumsta | | | Township: | 45N |
| • | | or Hydrology ☐ na | - | | | | ☑ Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | у 3, | , , | | | | | | | 9 | |
| Hydrophytic Ve | getation Pres | sent? | | ✓ Yes | □ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | • | | | ☐ Yes | | | | Is This Samp | oling Point | Within A Wetlaı | |
| Remarks: | | | • | ecedant _l | orecipitati | on analy | sis. Mixed deciduous/d | conifer upland | d forest rec | ently logged in | strips. Sample point |
| | less disturb | ed than adjacent a | reas. | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| _ | • • | ators (Check here | if indicate | ors are r | ot preser | nt ☑): | | | _ | | |
| Primary: | <u>:</u> A1 - Surface | Motor | | | B9 - Wate | r Stainad | Logyog | | Secondary: | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | _ | B13 - Aqu | | | | | B10 - Drainage P | |
| | A3 - Saturation | on | | | B15 - Mar | I Deposits | | | | B16 - Moss Trim | Lines |
| | B1 - Water M B2 - Sedimer | | | | C1 - Hydr | - | de Odor spheres on Living Roots | | | C2 - Dry-Season C8 - Crayfish Bur | |
| | B3 - Drift Dep | • | | | | | educed Iron | | | - | isible on Aerial Imagery |
| | B4 - Algal Ma | at or Crust | | _ | | | duction in Tilled Soils | | | D1 - Stunted or S | tressed Plants |
| | B5 - Iron Dep | oosits on Visible on Aerial Im | agory. | _ | C7 - Thin | | | | | D2 - Geomorphic D3 - Shallow Aqu | |
| | | Vegetated Concave | 0 , | | Other (Ex | piaii iii Ne | iliaiks) | | | D4 - Microtopogra | |
| | , , | , C | | | | | | | | D5 - FAC-Neutra | |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | Present? | ☐ Yes ☑ No | Depth: | | (in.) | | | Watland Hy | drology Dr | recent? | Vos 🗔 No |
| Water Table Pr | esent? | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | urology Pi | esent: | Yes ☑ No |
| Saturation Pres | sent? | ☑ Yes □ No | Depth: | 16 | (in.) | | | | | | |
| Describe Record | led Data (stre | eam gauge, monitori | ng well, a | aerial pho | tos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | | Gogebic silt loam | | | | S | eries Drainage Class: | Moderately v | vell | | |
| Taxonomy (Sub | <u> </u> | Alfic Oxyaquic Frag | | | | | | | | | |
| | | the depth needed to document the in | dicator or confire | | | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | | | PL=Pore Lining, M=Matrix) | Texture |
| Top | Bottom | Horizon | Color | Matrix | % | | | dox Features | l | Location | (e.g. clay, sand, loam) |
| Depth 0 | Depth 6 | Horizon | 7.5YR | (Moist) 3/2 | 100 | | Color (Moist) | % | Type | Location | silt loam |
| 6 | 18 | 2 | 7.5YR | 3/3 | 99 | 5YR | 3/4 | 1 | С | M | silt loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |
| | | | | | | | | | | | |
| NRCS Hydric | Soil Field In A1- Histosol | ndicators (check he | | icators a | re not pre S8 - Polyv | esent ☑ value Belo |): w Surface (LRR R, MLRA 149B) | Indicator | s for Proble A10 - 2 cm | matic Soils ¹ Muck (LRR K, L, MLRA | 149B) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep | ndicators (check he | | icators a | re not pre S8 - Polys S9 - Thin | esent ☑ value Belo Dark Surfa |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) | Indicator | s for Proble A10 - 2 cm A16 - Coast | matic Soils ¹ Muck (LRR K, L, MLRA Prairie Redox (LRF | 149B) R K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | ndicators (check he pipedon istic | | icators a | re not pre S8 - Poly S9 - Thin F1 - Loan | esent ☑ value Belo Dark Surfa |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M | matic Soils ¹ Muck (LRR K, L, MLRA Prairie Redox (LRR | 149B) R K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | ndicators (check here) cipedon cistic en Sulfide d Layers | ere if ind | icators a | se not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple | esent ☑ value Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval | matic Soils ¹ Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface | 149B) R K, L, R) (LRR K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent value Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ox Dark Su |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix curface | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | 149B) R K, L, R) (LRR K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses | 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic En A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R | andicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mo S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses nont Floodplain So earent Material s Spodic (MLRA 144A, | 149B) R K, L, R) (LRR K, L, R) (LRR K, L) S (LRR K, L, R) ils (MLRA 149B) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic En A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses ont Floodplain So varent Material s Spodic (MLRA 144A, Shallow Dark Sur | 149B) R K, L, R) (LRR K, L, R) (LRR K, L) S (LRR K, L, R) ils (MLRA 149B) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic En A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | andicators (check here) cipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mr S7 - Dark Sr S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses nont Floodplain So earent Material s Spodic (MLRA 144A, | 149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic En A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | | ere if ind | icators a | S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator Indicators Indicators | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Explain of hydrophytic veget or problematic. | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses nont Floodplain So earent Material E Spodic (MLRA 144A, E Shallow Dark Surfain in Remarks) | 149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic En A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | andicators (check horized pipedon sistic en Sulfide ed Layers ed Below Dark Surface Muck Mineral Eleyed Matrix Redox I Matrix erface (LRR R, MLRA 149B) | ere if ind | icators a | re not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator Indicator | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Explain of hydrophytic veget or problematic. | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses nont Floodplain So earent Material E Spodic (MLRA 144A, E Shallow Dark Surfain in Remarks) | 149B) R K, L, R) (LRR K, L, R) (LRR K, L) -) S (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su | andicators (check horized pipedon sistic en Sulfide ed Layers ed Below Dark Surface Muck Mineral Eleyed Matrix Redox I Matrix erface (LRR R, MLRA 149B) | ere if ind | icators a | S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | esent esent esent eyalue Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix ex Dark Su eted Dark |): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c urface Surface | Indicator Indicators Indicators | s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Explain of hydrophytic veget or problematic. | matic Soils 1 Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses nont Floodplain So earent Material E Spodic (MLRA 144A, E Shallow Dark Surfain in Remarks) | 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) S (LRR K, L, R) ils (MLRA 149B) 145, 149B) face must be present, unless |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WD-28 Sample Point WD-28-1u |
|-----------------------------|---|------------|---------------|-------------------|---|
| V-0 | | | | | |
| VEGETATION Tree Stretum (Pl | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| Tree Stratum (Pic | ot size: 10 meter radius) | 0/ Cover | Dominant | Ind Ctatus | Dominance Test Worksheet |
| 1. | <u>Species Name</u> Abies balsamea | % Cover 20 | Dominant Y | Ind.Status FAC | Dominance rest worksneet |
| 2. | | | | | Number of Deminant Species that are ORL EACW or EAC: |
| 3. | _ | | | | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| | | | | | Total Number of Deminant Consists Assess All Ctuston (D) |
| 4. | | | | | Total Number of Dominant Species Across All Strata:3(B) |
| 5. | | | | | D |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. $0 	 x 	 1 = 0$ |
| | Total Cover = | 20 | | | FACW spp. $\underline{\qquad}$ \times 2 = $\underline{\qquad}$ |
| | | | | | FAC spp. $\frac{35}{16}$ $x 3 = \frac{105}{64}$ FACU spp. $\frac{16}{16}$ $x 4 = \frac{64}{105}$ |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. $\underline{\hspace{1cm}}$ 16 $\overline{\hspace{1cm}}$ $\overline{\hspace{1cm}}$ $\overline{\hspace{1cm}}$ 4 = $\underline{\hspace{1cm}}$ 64 |
| 1. | Abies balsamea | 10 | Υ | FAC | UPL spp. $0 	 x 	 5 = 0$ |
| 2. | Ostrya virginiana | 10 | Υ | FACU | |
| 3. | Betula alleghaniensis | 5 | N | FAC | Total 51 (A) 169 (B) |
| 4. | Tsuga canadensis | 5 | N | FACU | |
| 5. | | | | | Prevalence Index = $B/A =$ 3.314 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes ☑ No ☑ Dominance Test is > 50% |
| 10. | Total Cover = | 30 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | Total Cover = | 30 | | | |
| Llank Ctratura (Dia | 4 0 to div) | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| 1 | ot size: 2 meter radius) Acer saccharum | 1 | N | FACU | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. 2 | | <u> </u> | | | * Indicators of hydric soil and wetland hydrology must be |
| 2. | | | | | present, unless disturbed or problematic. |
| 3. | | | | | Definitions of Venetation Strate: |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | Tues |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 7. | | | | | Height (DDH), regardless of fleight. |
| 8. | | | | | • Westerland to DDU and another 0.00 ft |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 1 | | | |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | , |
| 5. | | | | | |
| <u> </u> | Total Cover = | 0 | | | |
| Remarks: | Total Gover = | | | | |
| rtomanto. | | | | | |
| | | | | | |
| A delition of Dog | | | | | |
| Additional Rei | marks: | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/24/14 |
|---|---|--|--|--|--|---|--|--|--|---|---|
| Applicant: | • | aconite, LLC | | | | | , | | | County: | Iron |
| Investigator #1: | • | , | | Investi | gator #2: | H. Stoffs | S | | | State: | Wisconsin |
| Soil Unit: | | oic complex | | | <u> </u> | | /I/WWI Classification: | T3/8K | | Wetland ID: | WD-28 |
| Landform: | Toeslope | or complex | | Loc | al Relief: | | | 10/010 | | Sample Point: | WD-28-1w |
| Slope (%): | 0-2 | Latitude: | Ν/Δ | | ongitude: | | | Datum: | ΝΙ/Δ | Community ID: | Mixed Hardwood/Conifer Swamp |
| • • • | | ditions on the site ty | | | | | oin in romarka) | ☐ Yes ☑ | | Section: | 33 |
| | | | • | | | (ii no, expir | Are normal circumsta | | | | |
| • | | or Hydrology □ sig | - | | | | ✓ Yes | ances presen ⊟No | ι: | Township: | 45N |
| | | or Hydrology □ na | turally pr | obiemati | IC? | | <u> </u> | | | Range: | 1 Dir: W |
| SUMMARY OF | | | | | | | | | | | |
| Hydrophytic Ve | _ | | | | | | | Hydric Soils | | | |
| Wetland Hydrol | | | | | | | | | | Within A Wetlar | |
| Remarks: | Conditions | wetter than normal | per ante | cedant p | orecipitati | on analy | sis. Area recently logg | ed in strips. S | Sample poi | nt is less disturb | ed than adjacent |
| | areas. | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indic: | ators (Check here | if indicate | ors are n | not nreser | ot □)• | | | | | |
| Primary: | • | ators (Oneck here | ii iiidicat | JIS ale II | iot preser | п <u></u> | | | Secondary: | | |
| <u>- 1 1111ary</u> . | A1 - Surface | Water | | [J | B9 - Wate | er-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | _ | B13 - Aqu | | | | i i | B10 - Drainage P | |
| | A3 - Saturation | | | | B15 - Mar | | | | | B16 - Moss Trim | |
| | B1 - Water M | larks | | | C1 - Hydr | ogen Sulfi | de Odor | | | C2 - Dry-Season | Water Table |
| | B2 - Sedimer | • | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift Dep | | | | | | educed Iron | | | | isible on Aerial Imagery |
| | B4 - Algal Ma | | | _ | | | eduction in Tilled Soils | | _ | D1 - Stunted or S | |
| l H | B5 - Iron Dep | | | _ | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima Vegetated Concave S | • | Ш | Other (Ex | piain in Re | emarks) | | | D3 - Shallow Aqu D4 - Microtopogra | |
| | bo - oparsery | vegetated Concave t | Juliace | | | | | | | D5 - FAC-Neutral | |
| Fig. 101 | • | | | | | | | | | | 1000 |
| Field Observat | | | | | | | | | | | |
| Surface Water | Present? | ☑ Yes □ No | Depth: | 2 | (in.) | | | Wetland Hy | drology Pr | esent? | Yes □ No |
| Water Table Pr | esent? | ☑ Yes □ No | Depth: | 4 | (in.) | | | Wettana my | arology i i | | 165 🖺 146 |
| Saturation Pres | ent? | ☑ Yes □ No | Depth: | 0 | (in.) | | | | | | |
| Describe Record | led Data (str | eam gauge, monitori | na well a | erial pho | ntos previo | ous inspe | Lections) if available: | | N/A | | |
| | • | oam gaago, momon | , | | ,, p | | | | , | | |
| I Pamarke: | Surface wa | ter in adjacent den | roccione | Saturat | | · · · · · · · · · · · · · · · · · · · | <u> </u> | | | | |
| Remarks: | Surface wa | ter in adjacent dep | ressions. | Saturat | | · · · · · · · · · · · · · · · · · · · | ace at sample point. | | | | |
| | Surface wa | ter in adjacent dep | ressions. | Saturat | | · · · · · · · · · · · · · · · · · · · | <u> </u> | | | | |
| SOILS | | · | | Saturat | | und surf | ace at sample point. | | | | |
| SOILS Map Unit Name |): | Tula-Gogebic com | plex | | | und surf | <u> </u> | Somewhat p | oorly to mo | derately well | |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): | Tula-Gogebic com Alfic Oxyaquic Fraç | plex giorthods | | ion at gro | und surf | ace at sample point. eries Drainage Class: | • | · | • | |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): | Tula-Gogebic com Alfic Oxyaquic Fraç | plex giorthods | | ion at gro | und surf | ace at sample point. eries Drainage Class: | • | · | • | |
| SOILS Map Unit Name Taxonomy (Sub | e: ogroup): | Tula-Gogebic com Alfic Oxyaquic Fraç | plex giorthods | | ion at gro | und surf | ace at sample point. eries Drainage Class: | • | d Grains; Location: F | • | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | e: ogroup): otion (Describe to Bottom | Tula-Gogebic com Alfic Oxyaquic Fraç | plex giorthods dicator or confin | n the absence o | ion at gro | und surf | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | d Grains; Location: F | PL=Pore Lining, M=Matrix) | - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | e: ogroup): otion (Describe to Bottom Depth | Tula-Gogebic com Alfic Oxyaquic Fraç the depth needed to document the in | plex giorthods dicator or confirm Color | m the absence of Matrix (Moist) | ion at gro | und surfa | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | CS=Covered/Coated Sand | d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth 10 | Tula-Gogebic compalities Oxyaquic Frag Alfic Oxyaquic Frag the depth needed to document the in Horizon | plex giorthods dicator or confirm Color 10YR | m the absence of Matrix (Moist) | of indicators.) (Ty | und surfa | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | cs=Covered/Coated Sand dox Features % 5 | d Grains; Location: F | Location M | (e.g. clay, sand, loam) mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 | e: ogroup): otion (Describe to Bottom Depth 10 14 | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | plex giorthods dicator or confirm Color 10YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 | of indicators.) (Ty | se: C=Concentra 7.5YR 7.5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) | dox Features % 5 20 | Type C C | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | e: ogroup): otion (Describe to Bottom Depth 10 | Tula-Gogebic compalities Oxyaquic Frag Alfic Oxyaquic Frag the depth needed to document the in Horizon | plex giorthods dicator or confirm Color 10YR | m the absence of Matrix (Moist) | of indicators.) (Ty | und surfa | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | cs=Covered/Coated Sand dox Features % 5 | d Grains; Location: F | Location M | (e.g. clay, sand, loam) mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 | e: ogroup): otion (Describe to Bottom Depth 10 14 | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | plex giorthods dicator or confirm Color 10YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 | of indicators.) (Ty | se: C=Concentra 7.5YR 7.5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | dox Features % 5 20 | Type C C | Location M | (e.g. clay, sand, loam) mucky silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 | e: Degroup): Depth Depth 10 14 16 | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | color 10YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 | of indicators.) (Ty | se: C=Concentra 7.5YR 7.5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | cs=Covered/Coated Sand dox Features % 5 20 | Type C C | Location M | (e.g. clay, sand, loam) mucky silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 | e: Degroup): Depth Depth 10 14 16 | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | color 10YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 | of indicators.) (Ty | ve: C=Concentra 7.5YR 7.5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 4/6 | cs=Covered/Coated Sand dox Features % 5 20 | Type C C | Location M | (e.g. clay, sand, loam) mucky silt loam silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 | Bottom Depth 10 14 16 | Tula-Gogebic com Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 2 3 | color Color 10YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 | % 95 80 100 | vind surface: C=Concentrace: T.5YR 7.5YR 7.5YR | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 4/6 3/4 | cs=Covered/Coated Sand dox Features % 5 20 | Type C C | LePore Lining, M=Matrix) Location M M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 | e: ogroup): otion (Describe to Bottom Depth 10 14 16 | Tula-Gogebic com Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 2 3 | color Color 10YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 3/4 | % 95 80 100 | 7.5YR 7.5YR | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Oracle Re Color (Moist) 4/6 3/4 | cs=Covered/Coated Sand dox Features % 5 20 | Type C C | LePore Lining, M=Matrix) Location M M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
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| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | e: pgroup): ption (Describe to Bottom Depth 10 14 16 Soil Field In | Tula-Gogebic com Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 2 3 | color Color 10YR 7.5YR 7.5YR | Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Type | 7.5YR 7.5YR esent | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grant Re Color (Moist) 4/6 3/4): | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble | Location M M matic Soils 1 | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 | Bottom Depth 10 14 16 Soil Field In | Tula-Gogebic com Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 2 3 ndicators (check he | color Color 10YR 7.5YR 7.5YR | Matrix (Moist) 2/2 4/2 3/4 icators a | % 95 80 100 are not presser | 7.5YR 7.5YR esent value Belov | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Record (Moist) 4/6 3/4 | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble | Location M M matic Soils ¹ N=Matrix) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | e: pgroup): ption (Describe to Bottom Depth 10 14 16 Soil Field In | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 adicators (check here) | color Color 10YR 7.5YR 7.5YR | Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Type | Spe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Redu | CS=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble A10 - 2 cm | Location M M matic Soils Muck (LRR K, L, MLRA 1) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic | color Color 10YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Type | 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, ORe Color (Moist) 4/6 3/4 | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble A16 - Coast S3 - 5cm Mi | Location M M matic Soils ¹ N=Matrix) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check here) pipedon stic en Sulfide | color Color 10YR 7.5YR 7.5YR | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | ion at grown | 7.5YR 7.5YR 7.5YR esent value Below Dark Surfa | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Record (Moist) 4/6 3/4): w Surface (LRR R, MLRA 149B) Acce (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S | Location M M matic Soils Prairie Redox (LRR Lucky Peat of Peat | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) R.K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check he oipedon stic en Sulfide d Layers ed Below Dark Surface | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | ion at grown | 7.5YR 7.5YR 7.5YR esent value Belov Dark Surfa ny Mucky N ny Gleyed eted Matrix ox Dark Su | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grade (Moist) 4/6 3/4 | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval | Location M M matic Soils Prairie Redox (LRR ucky Peat of Peat surface (LRR K, L, M) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) R K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check here) Dipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | CS=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C | Location M M matic Soils Prairie Redox (LRR K, L, MLRA 1) Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | ion at grown | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | CS=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm | Location M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ont Floodplain Soi | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | CS=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-Me F19 - Piedme F21 - Red P | Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses sont Floodplain Soil arent Material | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral sleyed Matrix Ledox | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic | Location M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR Lucky Peat of Peat Lurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses sont Floodplain Soil arent Material Spodic (MLRA 144A, 1 | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix Ledox Matrix | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C C s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very | Location M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ant Floodplain Soilarent Material Spodic (MLRA 144A, 1) Shallow Dark Surface | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) IS (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral sleyed Matrix Ledox | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C C | Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface ain in Remarks) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) (145, 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 ndicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Bleyed Matrix Ledox Matrix | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C C | Location M M matic Soils Muck (LRR K, L, MLRA A Prairie Redox (LRR Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L langanese Masses ant Floodplain Soilarent Material Spodic (MLRA 144A, 1) Shallow Dark Surface | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) (145, 149B) face |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 14 NRCS Hydric | Bottom Depth 10 14 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Tula-Gogebic com Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 3 adicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Oark Surface fluck Mineral Bleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | color Color 10YR 7.5YR 7.5YR ere if ind | m the absence of Matrix (Moist) 2/2 4/2 3/4 icators a | of indicators.) (Ty % 95 80 100 see not pre S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | oe: C=Concentra 7.5YR 7.5YR 7.5YR esent □ value Belov Dark Surfa by Mucky N by Gleyed eted Matrix by Dark Sur eted Dark | ace at sample point. eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Green Reduced Matrix Reduced Red | cs=Covered/Coated Sand dox Features % 5 20 Indicator | Type C C C | Location M M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses ont Floodplain Soil arent Material Spodic (MLRA 144A, 1 Shallow Dark Surface ain in Remarks) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) 8 K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) (145, 149B) face |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WD-28 Sample Point WD-28-1w |
|--------------------|---|--------------|------------------------|-------------------|--|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| Tree Stratum (Plo | t size: 10 meter radius) | 2/ 0 | · · · | 1 10: 1 | Dominance Test Werkshoot |
| 4 | Species Name Abies balsamea | % Cover 5 | _ <u>Dominant</u> Y | Ind.Status FAC | Dominance Test Worksheet |
| 1. 2. | | 5 | Y | FACU | Number of Deminent Species that are ORL EACW or EAC: 5 (A) |
| 3. | Acer saccharum | | | | Number of Dominant Species that are OBL, FACW, or FAC:5(A) |
| | | | | | Total Number of Deminant Species Agrees All Strate: 7 (P) |
| 4. | | | | | Total Number of Dominant Species Across All Strata:(B) |
| 5. | _ | | | | Derecht of Deminent Species That Are ODL FACIAL or FAC: 74.40/ (A/D) |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: |
| 7. | _ | | | | Drovolonge Index Worksheet |
| 8. | | | | | Prevalence Index Worksheet Total % Cover of: Multiply by: |
| 9. 10. | | | | | Total % Cover of: Multiply by: |
| 10. | Total Cover = | 10 | | | OBL spp. 20 $x = 20$ |
| | Total Cover = | 10 | | | FACW spp. 50 $x 2 = 100$ $x 3 = 90$ |
| Conling/Chrub Ctro | tum (Plot size: E motor radius) | | | | |
| 1. | tum (Plot size: 5 meter radius) Fraxinus nigra | 25 | Υ | FACW | FACU spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| 2. | Betula alleghaniensis | 10 | Y | FAC | OFL Spp |
| 3. | Acer rubrum | 5 | N | FAC | Total 142 (A) 378 (B) |
| 4. | Acer saccharum | 2 | N | FACU | Total 142 (A) 378 (B) |
| 5. | | | | | Prevalence Index = $B/A =$ 2.662 |
| 6. | | | | | Prevalence index = B/A = 2.002 |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | |
| 10. | | | | | ☐ Yes☑ No☐ Rapid Test for Hydrophytic Vegetation☑ Yes☑ No☑ Dominance Test is > 50% |
| 10. | Total Cover = | 42 | | | ✓ Yes ✓ No ✓ Prevalence Index is ≤ 3.0 * |
| | Total Cover = | 42 | | | |
| Horb Stratum (Plot | : size: 2 meter radius) | | | | |
| 1. | Carex gracillima | 30 | Υ | FACU | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 2. | Carex crinita | 20 | <u>.</u> Ү | OBL | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Rubus pubescens | 20 | Ү | FACW | present, unless disturbed or problematic. |
| 4. | Acer rubrum | 10 | N | FAC | Definitions of Vegetation Strata: |
| 5. | Acer saccharum | 5 | N | FACU | |
| 6 | Solidago gigantea | 5 | N | FACW | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 90 | | | |
| | rotal Gover | | | | |
| Woody Vine Stratu | ım (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Ren | narks: | | | | |
| | | | | | |
| | | | | | |



| Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Veg Wetland Hydrol | Gogebic Ta T. King Gogebic sil Side slope 2-4 drologic cond , Soil , G , Soil , G FINDINGS getation Presogy Present | ? | N/A pical for pificantly turally pi | this time y disturbe roblemat Yes | eal Relief: ongitude: of year? ed? ic? No | NW Convex N/A (If no, expla | Are normal circumsta | Datum: ☐ Yes ☑ ances present ☐No Hydric Soils | N/A No t? Present? | Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: | Iron Wisconsin WD-29 WD-29-2u Northern Mesic Forest 33 45N 1 Dir: W ☐ Yes ☑ No |
|---|--|---|-------------------------------------|---|--|---|---|--|---|--|--|
| Remarks: | Wetter than | n normal conditions | per ante | ecedant _l | orecipitati | on analy | sis. | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | | otoro (Chaok hara | if indicat | oro oro n | ot proces | ot \• | | | | | |
| Primary: | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio | ater Table on larks ot Deposits posits at or Crust | agery | | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxid C4 - Pres | er-Stained latic Fauna I Deposits ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Surf | de Odor espheres on Living Roots educed Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Burn C9 - Saturation Vi D1 - Stunted or S D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral | atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position itard aphic Relief |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water Water Table Pr Saturation Pres | esent? ent? | ☐ Yes ☑ No ☐ Yes ☑ No ☑ Yes ☐ No | Depth: Depth: Depth: | 16 | (in.) (in.) (in.) | | | Wetland Hy | | resent? | Yes ☑ No |
| | ed Data (stre | eam gauge, monitori | ng well, a | aerial pho | tos, previ | ous inspe | ections), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | - | Oppolition oilt lange | 0 4- 40 - | | | | aniaa Duainaana Olaasa | no o al a no to le co | المدا | | |
| Map Unit Name Taxonomy (Sub | | Alfic Oxyaquic Frag | | | iopes, ve | ry Storiyo | eries Drainage Class: | moderately v | veii | | |
| | <u> </u> | AIIIC CAVAGGIC I I A | aioi ii ioa. | | | | | | | | |
| i Profile Describ | | | | | of indicators.) (Tv | ne: C=Concentra | ation D=Depletion RM=Reduced Matrix (| CS=Covered/Coated Sand | d Grains: Location: F | I =Pore Lining M=Matrix) | |
| | | | | m the absence o | | pe: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | | | L=Pore Lining, M=Matrix) | Texture |
| Тор | Bottom | the depth needed to document the in | ndicator or confir | m the absence o | _ | pe: C=Concentra | Re | dox Features | 1 | | Texture (e.g. clay, sand, loam) |
| | | | ndicator or confir | Matrix (Moist) | | pe: C=Concentra | | | | Location | → . |
| Top Depth | Bottom Depth | the depth needed to document the in | Color | m the absence o | % | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam |
| Top Depth 0 | Bottom Depth 12 | the depth needed to document the in Horizon 1 | Color 5YR | Matrix (Moist) 2.5/2 | % 100 | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) |
| Top Depth 0 12 | Bottom Depth 12 20 | the depth needed to document the in Horizon 1 | Color 5YR 5YR | Matrix (Moist) 2.5/2 3/3 | % 100 100 | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Top Depth 0 12 | Bottom Depth 12 20 | the depth needed to document the in Horizon 1 2 | Color 5YR 5YR | Matrix (Moist) 2.5/2 3/3 | % 100 100 | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Top Depth 0 12 | Bottom Depth 12 20 | the depth needed to document the in Horizon 1 2 | Color 5YR 5YR | Matrix (Moist) 2.5/2 3/3 | % 100 100 | | Re Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Top Depth 0 12 | Bottom Depth 12 20 | Horizon 1 2 | Color 5YR 5YR | Matrix (Moist) 2.5/2 3/3 | % 100 100 | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Top Depth 0 12 | Bottom Depth 12 20 | the depth needed to document the in Horizon 1 2 | Color 5YR 5YR | Matrix (Moist) 2.5/2 3/3 | % 100 100 | | Re Color (Moist) | dox Features | Type | Location | (e.g. clay, sand, loam) silt loam sandy loam |
| Top | Bottom Depth 12 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Horizon 1 2 | Color 5YR 5YR ere if ind | Matrix (Moist) 2.5/2 3/3 licators a | % 100 100 | | Re Color (Moist)): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | dox Features % Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic. | Location | (e.g. clay, sand, loam) silt loam sandy loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) 45, 149B) face must be present, unless |
| Top | Bottom Depth 12 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Horizon 1 2 | Color 5YR 5YR ere if ind | Matrix (Moist) 2.5/2 3/3 licators a | % 100 100 | | Re Color (Moist)): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | dox Features % Indicator | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic. | Location | (e.g. clay, sand, loam) silt loam sandy loam 49B) k, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) Is (MLRA 149B) 45, 149B) face |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WD-29 Sample Point wd-29-2u |
|---------------------|---|------------|-----------------|-------------|--|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-na | ative spec | cies.) | | |
| Tree Stratum (Plo | ot size: 10 meter radius) | | | | |
| | <u>Species Name</u> | % Cover | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 5 | Υ | FACU | |
| 2. | Betula alleghaniensis | 5 | Υ | FAC | Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) |
| 3. | Ostrya virginiana | 5 | Υ | FACU | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:6(B) |
| | | | | | Total Number of Borninant Species Across All Strata. |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>16.7%</u> (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | - | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. $0 	 x 	 1 = 0$ |
| | Total Cover = | 15 | | | FACW spp. ${2}$ \times $2 = {4}$ |
| | rotal Sovo. | | | | FAC spp. $\frac{2}{15}$ $\frac{2}{15}$ $\frac{2}{15}$ $\frac{45}{15}$ |
| Conling/Chruib Ctro | atum (Plat aiza: E matar radius) | | | | |
| | atum (Plot size: 5 meter radius) | 40 | | EACH. | FACU spp. 90 $x 4 = 360$ |
| 1. | Acer saccharum | 40 | Y | FACU | UPL spp. $\underline{\qquad}$ $x = \underline{\qquad}$ |
| 2. | Ostrya virginiana | 20 | Υ | FACU | |
| 3. | Betula alleghaniensis | 10 | N | FAC | Total <u>107</u> (A) <u>409</u> (B) |
| 4. | Fraxinus nigra | 2 | N | FACW | |
| 5. | | | | | Prevalence Index = $B/A = 3.822$ |
| 6. | | | | | |
| 7. | | | | | |
| | | | | | Hydrophytic Vogototica Indicators |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 72 | | | ☐ Yes ☐ No ☐ Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 20 | Υ | FACU | |
| 2. | | | <u> </u> | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| | | | | | Definitions of Venetation Strate: |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | <u>_</u> |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 20 | | | |
| | | | | | |
| Woody Vine Strati | um (Plot size: 10 meter radius) | | | | |
| 1 | | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | - | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Additional Rer | narks: | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Gogebic La | conite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/25/14 |
|---|--|--|-------------------------------------|--|--|---|---|--|--|--|---|
| Applicant: | • | conite, LLC | | | | | , | | | County: | Iron |
| Investigator #1: | • | , | | Investi | gator #2: | C. Rodo | iers | | | State: | Wisconsin |
| Soil Unit: | | t loam, 6 to 18 perc | ent slop | | _ | | /I/WWI Classification: | N/A | | Wetland ID: | WD-29 |
| Landform: | Side slope/ | • | on or | _ | al Relief: | | | | | Sample Point: | WD-29-2w |
| Slope (%): | 0-2 | Latitude: | N/A | | ongitude: | | | Datum: | N/A | Community ID: | Hardwood Swamp |
| · · · · · · · | | ditions on the site ty | | | | | ain in ramarke) | ☐ Yes ☑ | | Section: | 33 |
| · · | | or Hydrology □ sig | | | | (II IIO, expir | Are normal circumsta | | | Township: | 45N |
| _ | | | - | | | | ☐ Yes | ances presen ☑No | | ' | |
| | | or Hydrology □ na | lurally pr | obiemau | iC? | | □ 163 | ⊡INO | | Range: | 1 Dir: W |
| SUMMARY OF | | 10 | | V/ | N.L. | | | | D | | |
| Hydrophytic Ve | • | | | | | | | Hydric Soils | | | ☑ Yes □ No |
| Wetland Hydrol | | | | | | | | | | Within A Wetlar | |
| Remarks: | | | • | | | - | sis. Area recently logg | • | • | | e point is significantly |
| | disturbed b | y logging (Veg clea | ring, deb | ris cove | ring grou | nd, soil r | utting/mixing). Difficult | t situation - pr | oblematic v | vegetation. | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here | if indicate | ors are n | ot preser | nt □): | | | | | |
| Primary | | aroro (orroom rioro | a.cat | 515 at 5 11 | .о. р. ооо. | 🗀 /- | | | Secondary: | | |
| <u></u> | | Water | | | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| V | A2 - High Wa | iter Table | | | B13 - Aqu | | | | | B10 - Drainage P | |
| ✓ | A3 - Saturation | | | | B15 - Mar | • | | | | B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydr | - | | | | C2 - Dry-Season | |
| l H | B2 - Sedimer | • | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| 남 | B3 - Drift Dep | | | | | | educed Iron | | 님 | D1 - Stunted or S | isible on Aerial Imagery |
| l H | B4 - Algal Ma B5 - Iron Dep | | | _ | Co - Rece C7 - Thin | | eduction in Tilled Soils | | □ ☑ | | |
| l H | • | on Visible on Aerial Im | agery | _ | Other (Ex | | | | | D3 - Shallow Aqu | |
| l | | Vegetated Concave S | • | | Othor (EX | piani iii i te | markey | | | D4 - Microtopogra | |
| | , , | · · | | | | | | | | D5 - FAC-Neutral | |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | | □ Vee □ Ne | Donath | 2 | (in) | | | | | | |
| | | ☑ Yes ☐ No | Depth: | | (in.) | | | Wetland Hy | drology Pi | resent? | Yes □ No |
| Water Table Pr | | ☑ Yes ☐ No | Depth: | _ | (in.) | | | | | | |
| Saturation Pres | sent? | ☑ Yes ☐ No | Depth: | 0 | (in.) | | | | | | |
| Describe Record | led Data (stre | eam gauge, monitori | ng well, a | aerial pho | tos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | Hydrology a | at sample pt. is rela | tively un | disturbed | d, except | for adiac | ent debris covered ar | ound that ma | y impeded | drainage. | |
| | | | | | | . o. aajat | 9 | | | ar an lagor | |
| | | | • | | , , | .o. aajac | | | , | aramage. | |
| SOILS | | | • | | , , | ror aajac | | | , , | aramage. | |
| SOILS Man Unit Name | . | Gogehic silt loam | 6 to 18 n | | | | | | • | aramage. | |
| Map Unit Name | | | | ercent sl | | | eries Drainage Class: | | • | | |
| Map Unit Name Taxonomy (Sub | ogroup): | Alfic Oxyaquic Fra | giorthods | ercent sl | lopes, ve | ry stony\$ | eries Drainage Class: | moderately v | vell | | |
| Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to | Alfic Oxyaquic Fra | giorthods | ercent s | lopes, ve | ry stony\$ | eries Drainage Class: | moderately v | VEII d Grains; Location: F | | Toyturo |
| Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | Alfic Oxyaquic Fractine depth needed to document the in | giorthods dicator or confin | ercent slope on the absence of Matrix | lopes, ve | ry stony\$ | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | moderately v | Well d Grains; Location: F | PL=Pore Lining, M=Matrix) | Texture |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | Alfic Oxyaquic Fra | dicator or confin | ercent so on the absence of Matrix (Moist) | lopes, ve | ry stony\$ | eries Drainage Class: | moderately v | VEII d Grains; Location: F | | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 8 | Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 | dicator or confirmal Color 10YR | ercent some the absence of Matrix (Moist) | lopes, vel | ry stony\$ | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | moderately v | well d Grains; Location: F | PL=Pore Lining, M=Matrix) | (e.g. clay, sand, loam) mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | Alfic Oxyaquic Fractine depth needed to document the in | dicator or confin | ercent so on the absence of Matrix (Moist) | lopes, ve | ry stony\$ | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C | moderately vectors and control of the control of th | well d Grains; Location: F | PL=Pore Lining, M=Matrix) | (e.g. clay, sand, loam) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 8 | Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 | dicator or confirmal Color 10YR | ercent some the absence of Matrix (Moist) | lopes, vel | ry stony\$ | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | moderately v | well d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | ogroup): otion (Describe to 1) Bottom Depth 8 16 | Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | color 10YR 5YR | m the absence of Matrix (Moist) 2/1 3/3 | lopes, velul findicators.) (Type 100 95 | ry stonys De: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | moderately vecsored/Coated Sanderdox Features % 5 | well d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 16 20 | Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | color 10YR 5YR 5YR | m the absence of Matrix (Moist) 2/1 3/3 | lopes, velul findicators.) (Type 100 95 | ry stonys De: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) | moderately vecsored/Coated Sanda dox Features % 5 | d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky silt loam silt loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 16 20 | Alfic Oxyaquic Fragethe depth needed to document the interest the depth needed to document the | color 10YR 5YR 5YR | m the absence of Matrix (Moist) 2/1 3/3 | % 100 95 100 | ry stonys De: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4 | moderately vectors of the control of | Well d Grains; Location: F | PL=Pore Lining, M=Matrix) Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 | Bottom Depth 8 16 20 | Alfic Oxyaquic Fragethe depth needed to document the interest the depth needed to document the depth needed to | color Color 10YR 5YR 5YR | m the absence of Matrix (Moist) 2/1 3/3 | lopes, velul findicators.) (Type 100 95 | ry stonys De: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4 | moderately vectors of the control of | Vell d Grains; Location: F | Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 16 20 | Alfic Oxyaquic Fragethe depth needed to document the interest the depth needed to document the | color Color 10YR 5YR 5YR | m the absence of Matrix (Moist) 2/1 3/3 | % 100 95 100 | ry stonys De: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4 | moderately vecsored Sanda Sand | vell d Grains; Location: F | PL=Pore Lining, M=Matrix) Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 | bgroup): Dtion (Describe to the post of th | Alfic Oxyaquic Fraç the depth needed to document the in Horizon 1 2 3 | color Color 10YR 5YR 5YR | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 | % 100 95 100 | ry stonys De: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4 | moderately vectors of the control of | Vell d Grains; Location: F | Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 | Bottom Depth 8 16 20 Soil Field In | Alfic Oxyaquic Fragethe depth needed to document the interest the depth needed to document the depth needed to | color Color 10YR 5YR 5YR | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre | ry stonys De: C=Concentra 5YR esent | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, OR Re Color (Moist) 3/4 | moderately vecsored/Coated Sanderdox Features % 5 Indicator | Vell d Grains; Location: F | Location M ematic Soils ¹ | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 | Bottom Depth 8 16 20 Soil Field In | Horizon 1 2 3 adicators (check head | color Color 10YR 5YR 5YR | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre | e: C=Concentra 5YR esent □ value Belo | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Re Color (Moist) 3/4 | moderately vectors of the control of | Vell d Grains; Location: F Type C s for Proble A10 - 2 cm | Location Location M matic Soils ¹ Muck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep | Alfic Oxyaquic Fractive depth needed to document the interest the document | color Color 10YR 5YR 5YR | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin | ry stonyS De: C=Concentra 5YR esent □ value Belo Dark Surfa | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4 | moderately vectors of the control of | Type C | Location Location M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | Horizon 1 2 3 adicators (check head | color Color 10YR 5YR 5YR | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam | ry stonys De: C=Concentra 5YR esent □ value Belov Dark Surfa by Mucky I | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4 | moderately vectors of the control of | Type C | Location Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge | Alfic Oxyaquic Fragethe depth needed to document the interest the depth needed to document the interest the depth needed to document the interest the document the interest th | color Color 10YR 5YR 5YR | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyv S9 - Thin F1 - Loam F2 - Loam | esent cy stonys 5YR cyalue Belo Dark Surfa by Mucky I by Gleyed | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Record (Moist) 3/4): w Surface (LRR R, MLRA 149B) Acce (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | moderately vectors of the control of | Vell d Grains; Location: F Type C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S | Location Location M matic Soils Muck (LRR K, L, MLRA 1) Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) R K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | Alfic Oxyaquic Frage the depth needed to document the integration the depth needed to document the integration to document the integration of the depth needed to document the integration of the document the integration of the depth needed to document the integration of | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple | ry stonys De: C=Concentra 5YR esent value Beloo Dark Surfa by Mucky I by Gleyed eted Matrix | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, G Re Color (Moist) 3/4): w Surface (LRR R, MLRA 149B) Acce (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | moderately vectors of the control of | Type C | Location Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Horizon Horizon 1 2 3 adicators (check horizon (check horizon)) Stic n Sulfide Hayers Ed Below Dark Surface | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | e: C=Concentra 5YR esent value Belo Dark Surfa by Mucky I by Gleyed eted Matrix x Dark Su | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type Type C | Location Location M matic Soils Muck (LRR K, L, MLRA 1 Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LRR K, L, R) (LRR K, L) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Alfic Oxyaquic Frage the depth needed to document the interest the depth needed to document the interest the document the interest to document the | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type Type C | Location Location M Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Horizon Horizon 1 2 3 Indicators (check horizon stic n Sulfide d Layers ed Below Dark Surface Dark Surface luck Mineral | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type Type C | Location Location M matic Soils Muck (LRR K, L, MLRA 1 Lucky Peat of Peat aurface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M | Alfic Oxyaquic Frage the depth needed to document the interest to docu | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type Type C C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P | Location Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) (S (LRR K, L, R) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G | Alfic Oxyaquic Frage the depth needed to document the interpretation Horizon 1 2 3 adicators (check horizon) stic n Sulfide I Layers ad Below Dark Surface Park Surface luck Mineral Eleyed Matrix edox | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type C | Location Location M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (IS (MLRA 149B) |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Alfic Oxyaquic Frage the depth needed to document the interpretation Horizon 1 2 3 adicators (check horizon) stic n Sulfide I Layers ad Below Dark Surface Park Surface luck Mineral Eleyed Matrix edox | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately values of the control of | Type C | Location Location M M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Alfic Oxyaquic Fragethe depth needed to document the interest of the depth needed to document the interest of t | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type C | Location Location M Imatic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) Use Below Surface ark Surface (LRR K, L) Manganese Masses nont Floodplain Soil Parent Material Spodic (MLRA 144A, 1) Shallow Dark Surface | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped | Alfic Oxyaquic Fragethe depth needed to document the interest of the depth needed to document the interest of t | color Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately vectors of the control of | Type Type Type C Type C Type C Type C Type C Type Typ | Location Location M M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam (LAPB) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) (face |
| Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 16 NRCS Hydric | Bottom Depth 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Sur | Alfic Oxyaquic Fragethe depth needed to document the interest of the depth needed to document the interest of t | Color 10YR 5YR 5YR ere if ind | ercent sign the absence of Matrix (Moist) 2/1 3/3 3/3 icators a | % 100 95 100 re not pre S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | e: C=Concentra 5YR | eries Drainage Class: ation, D=Depletion, RM=Reduced Matrix, Grain Records (Moist) 3/4 | moderately values CS=Covered/Coated Sand cdox Features % Indicator | Type Type Type C Type C Type C Type C Type C Type Typ | Location Location M M | (e.g. clay, sand, loam) mucky silt loam silt loam sandy loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless |

Sample Point WD-29-2W



Gogebic Taconite Mine

Project/Site:

WETLAND DETERMINATION DATA FORM

Wetland ID:

WD-29

Northeast and Northcentral Region

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 1. Acer saccharum 2 Ν **FACU** 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. --OBL spp. x 1 =Total Cover = FACW spp. x 2 =20 FAC spp. x 3 =33 Sapling/Shrub Stratum (Plot size: 5 meter radius) x 4 =FACU spp. 24 96 **FACU** Acer saccharum 10 x = 51. UPL spp. 0 2. Betula alleghaniensis 10 Υ FAC 3. 5 Ν **FACW** Fraxinus nigra Total 149 (B) 4. Tilia americana 1 Ν **FACU** 5. Ostrya virginiana 1 Ν **FACU** Prevalence Index = B/A = 3.311 6. ---7. ----8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% 27 Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ No Yes Problem Hydrophytic Vegetation (Explain) * Acer saccharum 10 Υ **FACU** 1. * Indicators of hydric soil and wetland hydrology must be 5 Υ **FACW** 2. Fraxinus nigra present, unless disturbed or problematic. 3. Abies balsamea 1 Ν FAC 4. **Definitions of Vegetation Strata:** 5. --Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. ---tall. 10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ----14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 16 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present ☑** Yes **☐** No --4. --5. --Total Cover = 0 Vegetation is significantly disturbed due to logging and considered problematic. Indicators of hydric soil and wetland hydrology are present. Local Remarks: relief (concave surface) is conducive to wetlands. Wetland determination is based on those factors and determinations at nearby sample pts.

Additional Remarks:

It is assumed that the same wetland plant community would exist on the managed (logged) sample site in the absence of human alteration based on examination of the vegetation on nearby wetland sample points having similar soils, hydrology and topography. Therefore, hydrophytic vegetation is considered present.



| Project/Site: | • | aconite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/03/14 |
|--|--|--|--|---|---|--|---|---|--|--|--|
| Applicant: | • | aconite, LLC | | | | | | | | County: | Iron |
| Investigator #1 | | It leaves O to 40 mans | ant alama | | gator #2: | | ///////// Ologoification | NIA | | State: | Wisconsin |
| Soil Unit: Landform: | • | It loam, 6 to 18 perc | ent slope | | al Relief: | | /I/WWI Classification: | NA | | Wetland ID: | WE-01 WE-01-1u |
| Slope (%): | Side slope 6-12 | Latitude: | Ν/Δ | | ongitude: | | | Datum: | | Sample Point: Community ID: | N. Mesic Forest |
| | | ditions on the site ty | | | | | n in romarka) | | No | Section: | 32 |
| | | or Hydrology □ sig | | | | | Are normal circumsta | | | Township: | 45N |
| _ | | or Hydrology ☐ sig | • | | | | ✓ Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | or riyarology 🗆 Ha | turally pro | bicinatic | <i>,</i> : | | | <u>.</u> . 10 | | range. | I DII. VV |
| Hydrophytic Ve | | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydro | _ | | | ☐ Yes | | | | | | Within A Wetlar | |
| Remarks: | | t precipitation analy | sis shows | | | | than normal. | | J. J | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | rology Indica | ators (Check here | if indicato | rs are no | ot present | į į | | | | | |
| <u>Primary</u> | | ` | | | · | • | | | Secondary: | | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil | |
| l H | A2 - High Wa A3 - Saturation | | | H | B13 - Aqu B15 - Mar | | | | | B10 - Drainage Pa B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydr | | | | | C2 - Dry-Season | |
| | B2 - Sedimer | • | | | | | spheres on Living Roots | | | C8 - Crayfish Burn | |
| | B3 - Drift Der | | | | | | educed Iron eduction in Tilled Soils | | | C9 - Saturation Vi D1 - Stunted or S | sible on Aerial Imagery |
| l | B4 - Algal Ma B5 - Iron Dep | | | _ | Co - Rece | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | agery | _ | Other (Ex | | | | | D3 - Shallow Aqui | |
| | B8 - Sparsely | y Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observa | | | | | <i>(</i> ,) | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pr | resent? | Yes ☑ No |
| Water Table P | | ☐ Yes ☑ No | Depth: | | (in.) | | | - | | | |
| Saturation Pres | | ☑ Yes □ No | Depth: | | (in.) | | | | | | |
| Deceribe Decer | -ll D-+- /-+- | | | | | | | | | | |
| | • | eam gauge, monitori | ng well, a | erial phot | os, previo | us inspec | tions), if available: | | N/A | | |
| Remarks: | • | eam gauge, monitori he past 2 days. | ng well, ae | erial photo | os, previo | us inspec | tions), if available: | | N/A | | |
| Remarks: | • | | ng well, ae | erial phot | os, previo | us inspec | tions), if available: | | N/A | | |
| Remarks: | Rain over t | he past 2 days. | | | · | | | | | | |
| Remarks: SOILS Map Unit Name | Rain over t | he past 2 days. Gogebic silt loam, | 6 to 18 pe | | · | | eries Drainage Class: | moderately v | | | |
| Remarks: SOILS Map Unit Name Taxonomy (Sul | Rain over t e: bgroup): | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag | 6 to 18 pe | ercent slo | opes, very | y stony,S | eries Drainage Class: | | well drained | | |
| Remarks: SOILS Map Unit Name Taxonomy (Sul | Rain over t e: bgroup): ption (Describe to | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag | 6 to 18 pe | ercent slo | opes, very | y stony,S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand (| well drained | | Teyture |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip | Rain over t e: bgroup): ption (Describe to | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in | 6 to 18 pe | ercent slo the absence of i | opes, ver) | y stony,S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Re | S=Covered/Coated Sand G | well drained | =Pore Lining, M=Matrix) | Texture |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth | e: bgroup): ption (Describe to Depth | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag | 6 to 18 pegiorthods dicator or confirm Color (| ercent slo the absence of i Matrix (Moist) | opes, very | y stony,S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % | well drained Grains; Location: PL | =Pore Lining, M=Matrix) | (e.g. clay, sand, loam) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 | e: bgroup): ption (Describe to | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 | 6 to 18 per giorthods dicator or confirm Color (| the absence of in Matrix (Moist) | opes, very | y stony, S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % | well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | e: bgroup): ption (Describe to Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of in Matrix (Moist) 2/1 2.5/2 | opes, very | y stony, S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % | well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | Rain over t e: bgroup): ption (Describe to | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of in Matrix (Moist) 2/1 2.5/2 | opes, very | y stony, S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) | S=Covered/Coated Sand of dox Features % | well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 8 | Rain over t e: bgroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of in Matrix (Moist) 2/1 2.5/2 | % 100 100 | y stony,S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % | well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | Rain over t e: bgroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per prior thought of the second seco | the absence of in Matrix (Moist) 2/1 2.5/2 | % 100 100 | y stony, S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand 0 dox Features % | Well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | e: bgroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of in Matrix (Moist) 2/1 2.5/2 | % 100 100 | y stony, S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand (dox Features | Well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | Rain over t e: bgroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per prior thought of the second seco | the absence of in Matrix (Moist) 2/1 2.5/2 | % 100 100 | y stony,S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand 0 dox Features % | Well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | e: bgroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per prior thought of the second seco | the absence of in Matrix (Moist) 2/1 2.5/2 | % 100 100 | y stony,S | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % | Well drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | e: bgroup): ption (Describe to Bottom Depth 8 16 Soil Field In | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per prior thought of the second seco | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | modicators.) (Type % 100 100 e not pres | stony, stony, services concentration of the services concentration | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Type | =Pore Lining, M=Matrix) Location matic Soils ¹ | (e.g. clay, sand, loam) Silt loam Silt loam |
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| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over t e: bgroup): ption (Describe to Bottom Depth 8 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he | 6 to 18 per prior thought of the second seco | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | modicators.) (Types) % 100 100 e not press S8 - Polyw S9 - Thin F1 - Loam | stony, Service: C=Concentration sent /alue Belo Dark Surfany Mucky I | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Well drained Grains; Location: PL Type | EPore Lining, M=Matrix) Location matic Soils Prairie Redox (LRR ucky Peat of Peat (| (e.g. clay, sand, loam) Silt loam Silt loam |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | e: bgroup): ption (Describe to Bottom Depth 8 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide | 6 to 18 per prior thought of the second seco | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | modicators.) (Types) % 100 100 e not press S8 - Polyw S9 - Thin F1 - Loam F2 - Loam | s: C=Concentrati | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Well drained Grains; Location: PL Type | EPore Lining, M=Matrix) Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | e: bgroup): ption (Describe to Bottom Depth 8 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check here) pipedon istic en Sulfide d Layers | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | ndicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple | stony, Service: C=Concentration sent sent yalue Belo Dark Surfany Mucky I | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Type Type | EPore Lining, M=Matrix) Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface | (e.g. clay, sand, loam) Silt loam Silt loam (LRR K, L, R) (LRR K, L) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | e: bgroup): ption (Describe to Bottom Depth 8 16 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | modicators.) (Types) % 100 100 e not press S8 - Polyw S9 - Thin F1 - Loam F2 - Loam | s: C=Concentrati | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Type Type | EPore Lining, M=Matrix) Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) | (e.g. clay, sand, loam) Silt loam Silt loam (49B) K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over to Bottom Depth 8 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | modicators.) (Types) % 100 100 e not press S8 - Polyw S9 - Thin F1 - Loam F2 - Loam F3 - Deplet F6 - Redo | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Type | EPore Lining, M=Matrix) Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M)) ue Below Surface ark Surface (LRR K, L) langanese Masses and Floodplain Soi | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over to the second property of the secon | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | mdicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Well drained Grains; Location: PL Type | Location Loc | (e.g. clay, sand, loam) Silt loam Silt loam (LRR K, L, R) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over to Borroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | mdicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Type Type | Location Locati | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) IS (MLRA 149B) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over to the set of the set o | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox d Matrix | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | mdicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator | Type Type | Location Loc | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) IS (MLRA 149B) |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over to the set of the set o | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Gleyed Matrix Redox | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | mdicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator Indicator | Type Type | Location Locati | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (MLRA 149B) 45, 149B) face |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Rain over to Boroup): ption (Describe to Bottom Depth 8 16 | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 hdicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Eleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B) | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | modicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator Indicator | Well drained Grains; Location: PL Type | Location Locati | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) Is (MLRA 149B) 45, 149B) face must be present, unless |
| Remarks: SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | Rain over to the set of the set o | he past 2 days. Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 hdicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Eleyed Matrix Redox d Matrix Irface (LRR R, MLRA 149B) | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of in Matrix (Moist) 2/1 2.5/2 cators are | mdicators.) (Type % 100 100 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | stony, Some concentration of the stony of th | eries Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) | S=Covered/Coated Sand of dox Features % Indicator Indicator | Well drained Grains; Location: PL Type | Location Locati | (e.g. clay, sand, loam) Silt loam Silt loam 49B) K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) IS (MLRA 149B) 45, 149B) face |



Northeast and Northcentral Region

Project/Site: Sample Point WE-01-1u WE-01 Gogebic Taconite Mine Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Acer saccharum 70 Υ **FACU** 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: **25.0%** (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 =Total Cover = 70 x 2 =FACW spp. FAC spp. ___ x 3 =60 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 185 740 40 **FACU** x = 51. Acer saccharum UPL spp. 0 2. 3. 800 (B) ------Total 4. 5. --Prevalence Index = B/A = 3.902 --6. 7. --8. **Hydrophytic Vegetation Indicators:** 9. ☑ No ☐ Yes Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = 40 ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes □ No Problem Hydrophytic Vegetation (Explain) * **FACU** Acer saccharum 60 1. * Indicators of hydric soil and wetland hydrology must be Υ 2. 20 FAC Dryopteris intermedia present, unless disturbed or problematic. 3. 10 Ν **FACU** Allium tricoccum 5 **Definitions of Vegetation Strata:** 4. Maianthemum racemosum Ν **FACU** 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. --10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. --Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 95 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 4. 5. Total Cover = 0 Remarks: **Additional Remarks:**



| Project/Site: Applicant: | Gogebic Ta | aconite Mine aconite, LLC | | | | | Stantec Project #: | 193701133 | 3 | Date: County: | 06/03/14 Iron |
|--------------------------------------|--|--|-------------|---------------------|--|--|---|-----------------------|---|---|---|
| Investigator #1 Soil Unit: Landform: | Gogebic sil Footslope/[| • | · | es, very s Loc | cal Relief: | NV Concav | VI/WWI Classification: | | | State: Wetland ID: Sample Point: | Wisconsin WE-01 WE-01-1w |
| Slope (%): | 1-6 | Latitude | | | ongitude: | | | Datum: | | Community ID: | Wet Meadow |
| | | ditions on the site ty | | | | (If no, expla | nin in remarks) Are normal circumsta | ☐ Yes ☑ | | Section: | 32 45N |
| • | | or Hydrology | | | | | ✓ Yes | ances presen ⊟No | it : | Township: Range: | 45N 1 Dir: W |
| SUMMARY OF | | or riyurology 🗀 na | turally pro | bieman | U : | | □ 100 | | | Range. | I DII. VV |
| Hydrophytic Ve | | sent? | | ☑ Yes | s □ No | ı | | Hydric Soils | Present? | | |
| Wetland Hydro | _ | | | ☑ Yes | _ | | | | | Within A Wetla | |
| Remarks: | Antecedent | precipitation analy | sis shows | s that co | nditions a | re wette | r than normal. | | | | |
| HYDROLOGY | | etere (Chaolahara | if indicate | NO 010 10 | ot proces | <u> </u> | | | | | |
| Primary | | ators (Check here | ir indicato | ors are n | ot presen | t 🗀 | | | Secondary: | | |
| | A1 - Surface A2 - High Wa A3 - Saturation B1 - Water W | ater Table on larks ot Deposits posits at or Crust | • | | B13 - Aqu B15 - Mai C1 - Hydr C3 - Oxid C4 - Pres C6 - Rece | uatic Faun rl Deposits rogen Sulf ized Rhize ence of R ent Iron R Muck Sul | na s s s side Odor cospheres on Living Roots deduced Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage F B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur | Patterns Lines Water Table Frows Sisible on Aerial Imagery Stressed Plants Position Sitard Sphic Relief |
| Field Observa | tions: | | | | | | | | | | |
| Surface Water | | ☑ Yes □ No | Depth: | | (in.) | | | Wetland Hy | drology P | resent? ☑ | Yes □ No |
| Water Table P | | ☑ Yes □ No | Depth: | _ | (in.) | | | , | | _ | |
| Saturation Pres | | ☑ Yes □ No | Depth: | | (in.) | | | | | | |
| | | eam gauge, monitor | | | | | <u> </u> | | N/A | | |
| Remarks: | Sample poi | int located adjacent | to strean | n SE-19. | . Surface | water in | stream channel and de | epressions. S | Soil saturate | ed at sample po | int |
| SOILS | | Operation oils leave | C to 10 pe | | | | anian Duningga Classe | model a wet also | ومانوساء المسا | 1 | |
| Map Unit Name Taxonomy (Su | | Alfic Oxyaquic Fra | | | opes, ver | y Storry, | Beries Drainage Class: | moderately | well drained | u . | |
| , | <u> </u> | | | | indicators.) (Type | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand | Grains; Location: PL | _=Pore Lining, M=Matrix) | |
| Тор | Bottom | · | | Matrix | | | | dox Features | | , , , , , , , , , , , , , , , , , , , | Texture |
| Depth | Depth | Horizon | Color | (Moist) | % | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) |
| 0 | 12 | 1 | 10YR | 2/1 | 100 | | | | | | Mucky Silt Loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | ndicators (check h | | | | | <u> </u> | | | ematic Soils ¹ | <u> </u> |
| _ | A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Stripped | pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral Bleyed Matrix | | | S8 - Poly S9 - Thin | value Belo Dark Suri ny Mucky ny Gleyed eted Matr ox Dark S eted Dark | ix urface Surface | Indicators | A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red F TA6 - Mesic TF12 - Very Other (Expla | Muck (LRR K, L, MLRA to Prairie Redox (LRI ucky Peat of Peat surface (LRR K, L, M) lue Below Surface ark Surface (LRR K, I) Manganese Massement Floodplain So Parent Material Control Spodic (MLRA 144A, or Shallow Dark Surfain in Remarks) tation and wetland hydrology | R K, L, R) (LRR K, L, R) (LRR K, L) L) S (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| Restrictive Layer | Type: | Rock | | Depth: | 12in | | | Hydric Soil | | V | Yes □ No |
| (If Observed) | ı ype: | NUCK | | ט פ טוו: | ıZIII | | | nyunc 3011 | riesent? | Ā | 169 INO |
| Remarks: | | | | | | | | | | | |



Northeast and Northcentral Region

Project/Site: Sample Point WE-01-1w WE-01 Gogebic Taconite Mine Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Acer saccharum 10 Υ **FACU** 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) 6. 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 =Total Cover = 10 x 2 =FACW spp. FAC spp. x 3 =120 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) 12 FACU spp. 2 **FACU** x = 51. Acer saccharum UPL spp. 0 2. 3. 223 ------Total 107 (B) 4. 5. Prevalence Index = B/A = 2.084 ----6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ☑ No 10. Yes □ No Dominance Test is > 50% Total Cover = Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes □ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes □ No Problem Hydrophytic Vegetation (Explain) * MYOSOTIS SCORPIOIDES Υ 50 OBL 1. * Indicators of hydric soil and wetland hydrology must be Υ 2. RUMEX OBTUSIFOLIUS 40 FAC present, unless disturbed or problematic. 3. 5 Ν **OBL** Carex crinita **Definitions of Vegetation Strata:** 4. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. --10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 95 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No --4. 5. Total Cover = 0 Remarks:

Additional Remarks

Full extent of wetland was not delineated because it extends to the east along stream SE-19, beyond the Access Road 1/priority area 1 study limits.



| Project/Site: Applicant: Investigator #1: Soil Unit: Landform: Slope (%): | Gogebic Ta T. King Gogebic si Side slope 6-12 | aconite Mine aconite, LLC It loam, 6 to 18 perc Latitude: ditions on the site type | N/A | s, very st Loo L | cal Relief: .ongitude: | NV Convex N/A | | 193701133 : NA | | Date: County: State: Wetland ID: Sample Point: Community ID: Section: | 06/03/14 Iron Wisconsin WE-02 WE-02-1u N. Mesic Forest 32 |
|---|--|---|----------------------------|------------------------|---------------------------|---|---|--------------------|--|--|--|
| Are Vegetation | □, Soil □, | or Hydrology □ sig or Hydrology □ nat | nificantly o | disturbed | l? | no, explain | Are normal circumsta | | | Township: Range: | 45N 1 Dir: W |
| SUMMARY OF Hydrophytic Ve | | sent? | | □ Yes | s 🔽 No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydro | • | | | ☐ Yes | _ | | | | | Within A Wetlan | |
| Remarks: | Anteceden | t precipitation analys | sis shows | that con | ditions are | e wetter t | han normal. | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here if | indicators | are not | present |):☑ | | | | | |
| Primary | A1 - Surface A2 - High Wa A3 - Saturation B1 - Water Mater | ater Table on Marks nt Deposits posits at or Crust | | | C4 - Prese | latic Fauna I Deposits ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Surf | de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace | | | B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim I C2 - Dry-Season V C8 - Crayfish Burr C9 - Saturation Vi D1 - Stunted or St D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral | atterns Lines Water Table rows sible on Aerial Imagery cressed Plants Position tard uphic Relief |
| Field Observation Surface Water Water Table Pr Saturation Pres | Present? esent? sent? | ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorin | Depth: Depth: Depth: | | (in.) (in.) (in.) | s inspecti | ons) if available: | Wetland Hy | drology Pr | esent? □ | Yes ☑ No |
| Remarks: | aca Data (Sti | carri gauge, monitorii | ig well, act | iai prioto | s, provious | порсси | oris), ii avaliabic. | | 14// (| | |
| | | | | | | | | | | | |
| SOILS Map Unit Name | 7. | Gogebic silt loam (| S to 18 nei | cent slo | nes verv | stony re | Series Drainage Class: | moderately v | vell drained | | |
| Taxonomy (Sub | | Alfic Oxyaquic Frag | • | | p = 0, 1 = 1, j | 0.0, | Jones Dramage Glace. | | | | |
| | | the depth needed to document the indi | cator or confirm the | | licators.) (Type: C | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C | | | re Lining, M=Matrix) | Taydura |
| Top Depth | Bottom Depth | Horizon | Color (| Matrix Moist) | % | | Color (Moist) | edox Features % | Туре | Location | Texture (e.g. clay, sand, loam) |
| 0 | 6 | 1 | 10YR | 2/2 | 100 | | | | | Location | Silt loam |
| 6 | 18 | 2 | 7.5YR | 3/4 | 100 | | | | | | loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| NDCC Hydria | Cail Field In | l Idicators (check he | ro if indica | | | nt):[| <u></u> | | | matic Soils ¹ | <u></u> |
| | A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick Ep S1 - Sandy N S4 - Sandy N S5 - Sandy F S6 - Stripped | pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | | | S8 - Polyv S9 - Thin | value Belo Dark Surfa ny Mucky M ny Gleyed eted Matrix ox Dark Su eted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c rface Surface | Indicators of | A10 - 2 cm M A16 - Coast S3 - 5cm Mu S7 - Dark Su S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla | Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LICKY Peat of Peat (LICKY Peat of P | K, L, R) LRR K, L, R) (LRR K, L) (LRR K, L, R) (S (MLRA 149B) 45, 149B) ace |
| Restrictive Layer (If Observed) | Туре: | Rock | | Depth: | 18in | | | Hydric Soil | Present? | | Yes ☑ No |
| Remarks: | | | | | | | | | | | |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WE-02 Sample Point WE-02-1u |
|-------------------|---|---------------|---------------|--------------------|--|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-native | ve specie | s.) | | |
| Tree Stratum (Plo | ot size: 10 meter radius) | 0/ 0 | . | 1 10: : | Deminance Test Workshoot |
| 1. | Species Name Acer saccharum | % Cover 80 | Dominant Y | Ind.Status FACU | Dominance Test Worksheet |
| 2. | | | | | Number of Deminent Species that are ORL EACW or EAC: |
| | _ | | | | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | Total Number of Deminent Charins Assess All Charter (D) |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 4 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 |
| | Total Cover = | 80 | | | FACW spp. 0 |
| | | | | | FAC spp. $\underline{\hspace{1cm}}$ $X 3 = \underline{\hspace{1cm}}$ 30 |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp. $x 4 = 680$ |
| 1. | Acer saccharum | 20 | Υ | FACU | UPL spp 15 |
| 2. | | | | | |
| 3. | | | | | Total(A)(B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 4.026 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 20 | | | |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 50 | Υ | FACU | |
| 2. | Allium tricoccum | 20 | Υ | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Caulophyllum thalictroides | 15 | N | UPL | present, unless disturbed or problematic. |
| 4. | Dryopteris intermedia | 10 | N | FAC | Definitions of Vegetation Strata: |
| 5. | | | | | Dominione of Fogotation Guatar |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | _ | | | | |
| | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | | | | | Woody Vines - All woody vines greater than 3.20 it. in neight. |
| | Total Cover = | 95 | | | |
| 144 | (D) | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Rei | marks: | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Gogebic Ta | aconite Mine | | | | | Stantec Project #: | 193701133 | 3 | Date: | 06/03/14 |
|--|---|--|-------------------------------------|---|--|-------------------|--|--|--|--|---|
| Applicant: | Gogebic Ta | aconite, LLC | | | | | | | | County: | Iron |
| Investigator #1 | T. King | | | Invest | igator #2: | | | | | State: | Wisconsin |
| Soil Unit: | | t loam, 6 to 18 perc | ent slopes | | | | VI/WWI Classification: | NA | | Wetland ID: | WE-02 |
| Landform: | Depression | · · | | • | cal Relief: | | | | | Sample Point: | WE-02-1w |
| Slope (%): | 0-2 | Latitude: | NI/A | | ongitude: | | | Datum: | | Community ID: | Small Excavated Pit |
| | | ditions on the site ty | | | | | : | ☐ Yes ☑ | | Section: | 32 |
| | | 7 | | | · | no, explain | · | | | | |
| | | or Hydrology ☐ sig | • | | | | Are normal circumsta | • | ι? | Township: | 45N |
| | | or Hydrology 🛚 nat | turally prob | olematic' | ? | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pre | sent? | | ✓ Yes | □ No | | | Hydric Soils | Present? | | |
| Wetland Hydro | logy Present | ? | | _ ✓ Yes | . □ No | | | Is This Same | pling Point \ | Within A Wetlan | nd? ☑ Yes ■ No |
| Remarks: | | | sis shows | | | | han normal. This pote | _ | | | |
| | | access rd. The hole | | | | | рет | | | | processor pro |
| LIVEROLOGY | adjacont to | access ra. The new | o lo approx | t. 0 d00 ₁ | O X TO WIC | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | ology Indica | ators (Check here if | indicators | are not | present |):□ | | | | | |
| Primary | <u>/:</u> | , | | | • | , | | | Secondary: | | |
| | A1 - Surface | Water | | V | B9 - Wate | er-Stained | Leaves | | | B6 - Surface Soil | Cracks |
| ✓ | | | | | B13 - Aqu | | | | | B10 - Drainage P | |
| <u> </u> | | | | | B15 - Mar | • | | | _ | B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydro | | | | | C2 - Dry-Season | |
| | B2 - Sedimer | • | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift Dep | | | | | | educed Iron | | | D1 - Stunted or S | isible on Aerial Imagery |
| | B4 - Algal Ma B5 - Iron Dep | | | | a: | | duction in Tilled Soils | | | D1 - Stunted of S D2 - Geomorphic | |
| l H | | on Visible on Aerial Ima | agery | H | Other (Ex | | | | | D3 - Shallow Aqu | |
| | | / Vegetated Concave S | • . | Ц | Other (EA) | piairi iri ixc | markoj | | | D4 - Microtopogra | |
| | | , regulated compare c | , and a | | | | | | | D5 - FAC-Neutral | |
| Field Observa | tional | | | | | | | | | | |
| | | | | N1/A | <i>(</i> : \ | | | | | | |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology Pro | esent? □ | Yes □ No |
| Water Table Pr | | | Depth: | 3 | (in.) | | | | | _ | |
| Saturation Pres | sent? | | Depth: | 0 | (in.) | | | | | | |
| Describe Record | ded Data (str | eam gauge, monitorir | ng well aer | ial nhotos | s nrevious | inspection | ns) if available: | | N/A | | |
| | | gg., | .5, | | -, p | | , , | | | | |
| Domorko: | | | | - | - | | | | | | |
| Remarks: | | | | - | | | | | | | |
| | | | | | · | · | | | | | |
| Remarks: SOILS | | | | | | | | | | | |
| | 9 : | Gogebic silt loam, (| 6 to 18 per | cent slo | pes, very | stony, r 6 | Series Drainage Class: | : moderately v | well drained | | |
| SOILS | | Gogebic silt loam, (| | cent slo | pes, very | stony, r 6 | Series Drainage Class: | : moderately v | well drained | | |
| SOILS Map Unit Name Taxonomy (Sub | ogroup): | Alfic Oxyaquic Frag | giorthods | | | | | | | | |
| SOILS Map Unit Name Taxonomy (Sub | ogroup): otion (Describe to t | Alfic Oxyaquic Frag | giorthods | e absence of ind | | | D=Depletion, RM=Reduced Matrix, CS=C | Covered/Coated Sand Grai | nins; Location: PL=Pol | | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | ogroup): otion (Describe to the Bottom) | Alfic Oxyaquic Frag | giorthods dicator or confirm the | e absence of ind Matrix | icators.) (Type: C- | | D=Depletion, RM=Reduced Matrix, CS=C | Covered/Coated Sand Grained | nins; Location: PL=Pol | re Lining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to | Alfic Oxyaquic Frag | giorthods dicator or confirm the | e absence of ind Matrix Moist) | icators.) (Type: C= | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C | Covered/Coated Sand Grai | nins; Location: PL=Pol | | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to the Bottom Depth 8 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon | color (| e absence of ind Matrix Moist) 2/1 | icators.) (Type: C= | | D=Depletion, RM=Reduced Matrix, CS=C | Covered/Coated Sand Grained | nins; Location: PL=Pol | re Lining, M=Matrix) | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to | Alfic Oxyaquic Frag | giorthods dicator or confirm the | e absence of ind Matrix Moist) | icators.) (Type: C= | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C | Covered/Coated Sand Grained | nins; Location: PL=Pol | re Lining, M=Matrix) | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | ogroup): otion (Describe to the Bottom Depth 8 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon | color (| e absence of ind Matrix Moist) 2/1 | icators.) (Type: C= | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained | Type | re Lining, M=Matrix) | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Depth 8 20 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 | color (10YR 10YR | e absence of ind Matrix Moist) 2/1 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grai | Type | Location | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 8 20 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 | Color (10YR 10YR | Matrix Moist) 2/1 2/2 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grai | Type | Location | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 8 20 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 | Color (10YR 10YR | Matrix Moist) 2/1 2/2 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Covered/Coated Sand Grained Covered Covered Covered Sand Grained Covered Sand Grained Covered Co | Type | Location | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 8 20 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 | Color (10YR 10YR | Matrix Moist) 2/1 2/2 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Covered/Coated Sand Grained Covered Covered Covered Sand Grained Covered Sand Grained Covered Co | Type | Location | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Bottom Depth 8 20 | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 | Color (10YR 10YR | Matrix Moist) 2/1 2/2 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Covered/Coated Sand Grained Covered Covered Covered Sand Grained Covered Sand Grained Covered Co | Type | Location | (e.g. clay, sand, loam) Mucky silt loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | Depth 8 20 | Alfic Oxyaquic Frag | Color (10YR 10YR | Matrix Moist) 2/1 2/2 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grai | Type | Location | (e.g. clay, sand, loam) Mucky silt loam Silt Loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | bgroup): ption (Describe to the second point of the second point | Alfic Oxyaquic Frag | Color (10YR 10YR | e absence of ind Matrix Moist) 2/1 2/2 | % 100 100 | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grai | Type | Location | (e.g. clay, sand, loam) Mucky silt loam Silt Loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | bgroup): ption (Describe to the second point of the second point | Alfic Oxyaquic Frag | Color (10YR 10YR | Matrix Moist) 2/1 2/2 tors are | % 100 100 not prese | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Covered/Coated Sand Grained Covered Covered Sand Grained Covered Sand Grained Covered Sand Grained Covered Covered Sand Grained Covered Covere | Type | Location | (e.g. clay, sand, loam) Mucky silt loam Silt Loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 dicators (check he | Color (10YR 10YR | e absence of ind Matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location matic Soils ¹ | (e.g. clay, sand, loam) Mucky silt loam Silt Loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In | Horizon 1 2 adicators (check he | Color (10YR 10YR | e absence of ind Matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Muck (LRR K, L, MLRA 1 | (e.g. clay, sand, loam) Mucky silt loam Silt Loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 adicators (check he pipedon stic en Sulfide | Color (10YR 10YR | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyy S9 - Thin F1 - Loam F2 - Loam | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (RK, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 adicators (check he pipedon stic en Sulfide d Layers | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam 49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 adicators (check he cipedon estic en Sulfide d Layers ed Below Dark Surface | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | =Concentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix Crface | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (LRR K, L, R) (LRR K, L)) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 dicators (check he oipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 dicators (check he pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 adicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy R S4 - Sandy R S5 - Sandy R | Alfic Oxyaquic Frage the depth needed to document the ind Horizon 1 2 Idicators (check he Dipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grained Cookered/Coated Sand Grained Cookered C | Type Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam 49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S1 - Sandy E S5 - Sandy E S6 - Stripped | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 adicators (check he bipedon estic en Sulfide d Layers ed Below Dark Surface Oark Surface Oark Surface Muck Mineral Gleyed Matrix Redox I Matrix | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Covered/Coated Sand Grain Redox Features % Indicator | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam 49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S1 - Sandy E S5 - Sandy E S6 - Stripped | Alfic Oxyaquic Frage the depth needed to document the ind Horizon 1 2 Idicators (check he Dipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Gleyed Matrix Redox | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Sovered/Coated Sand Grain Redox Features % | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S1 - Sandy E S5 - Sandy E S6 - Stripped | Alfic Oxyaquic Frag the depth needed to document the ind Horizon 1 2 adicators (check he bipedon estic en Sulfide d Layers ed Below Dark Surface Oark Surface Oark Surface Muck Mineral Gleyed Matrix Redox I Matrix | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Sovered/Coated Sand Grain Redox Features % | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped S7 - Dark Su | Alfic Oxyaquic Frage the depth needed to document the ind Horizon 1 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Bleyed Matrix Redox Matrix Redox Matrix M | Color (10YR 10YR re if indica | e absence of ind Matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Sovered/Coated Sand Grain Redox Features 9% | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam 49B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy E S1 - Sandy E S5 - Sandy E S6 - Stripped | Alfic Oxyaquic Frage the depth needed to document the ind Horizon 1 2 adicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Bleyed Matrix Redox Matrix Redox Matrix M | Color (10YR 10YR re if indica | matrix Moist) 2/1 2/2 tors are | % 100 100 not prese S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | eConcentration, | D=Depletion, RM=Reduced Matrix, CS=C Re Color (Moist) | Sovered/Coated Sand Grain Redox Features % | Type | Location Locati | (e.g. clay, sand, loam) Mucky silt loam Silt Loam (LRR K, L, R) (LRR K, L, R) |



Northeast and Northcentral Region

Project/Site: Wetland ID: WE-02 Sample Point WE-02-1w Gogebic Taconite Mine **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. Total Cover = 0 Sapling/Shrub Stratum (Plot size: 5 meter radius) Acer saccharum **FACU** 1. 2. 3. Total 12 (A) 36 (B) 4. 5. Prevalence Index = B/A = 3.000 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. Yes □ No Dominance Test is > 50% Total Cover = ✓ Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes □ No Morphological Adaptations (Explain) * ☐ No Herb Stratum (Plot size: 2 meter radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * Dryopteris carthusiana 5 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2. Dryopteris intermedia **FAC** present, unless disturbed or problematic. **FACU** Υ 3. Acer saccharum 4. **Definitions of Vegetation Strata:** 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. 9 Total Cover = Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. --3. Hydrophytic Vegetation Present ☑ Yes □ No 4. 5. Total Cover = 0 Sparsely vegetated concave surface. Remarks:

Additional Remarks:

This wetland is a small, isolated depression that appears to be artificial. Physical alteration is a historic disturbance, of minor extent, relatively permanent & considered new normal circumstance. Indicators of all 3 parameters are present to support decision that normal circumstances present.



| Project/Site: Applicant: | Gogebic Ta | aconite Mine aconite, LLC | | | | | Stantec Project #: | 193701133 | · | Date: County: | 06/03/14 Iron |
|--------------------------------------|---|-------------------------------------|---------------------|------------|---------------------------------|----------------|--|--------------|-----------------|---|---------------------------------|
| Investigator #1 Soil Unit: Landform: | Gogebic si | It loam, 6 to 18 perc | cent slope | s, very s | igator #2: st cal Relief: | NV | VI/WWI Classification: | NA | | State: Wetland ID: | Wisconsin WE-03 WE-03-1u |
| Slope (%): | Side slope 2-6 | Latitude | · N/A | | ongitude: | | • | Datum: | | Sample Point: Community ID: | N. Mesic Forest |
| <u> </u> | | ditions on the site ty | | | | | in in remarks) | ☐ Yes ☑ | | Section: | 32 |
| | | or Hydrology □ sig | | | | | Are normal circumsta | | t? | Township: | 45N |
| • | | or Hydrology □ na | | | | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | egetation Pre | sent? | | ☐ Yes | | | | Hydric Soils | | | ☐ Yes ☑ No |
| Wetland Hydro | | | | ☐ Yes | | | | Is This Sam | pling Point | Within A Wetla | nd? ■ Yes ■ No |
| Remarks: | Anteceden | t precipitation analy | sis shows | that co | nditions a | re wette | r than normal. | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydi Primary | | ators (Check here | if indicato | rs are no | ot present | | | | Secondary: | | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil | |
| |] A2 - High Wa] A3 - Saturation | | | | B13 - Aqu | | | | | B10 - Drainage F B16 - Moss Trim | |
| | A3 - Saturation | | | | B15 - Mar C1 - Hydr | | | | | C2 - Dry-Season | |
| | B2 - Sedime | | | | C3 - Oxid | ized Rhizo | ospheres on Living Roots | | | C8 - Crayfish Bu | rows |
| | B3 - Drift De | | | | | | educed Iron | | | | isible on Aerial Imagery |
| |] B4 - Algal Ma] B5 - Iron Der | | | | C6 - Rece C7 - Thin | | eduction in Tilled Soils face | | _ | D1 - Stunted or S D2 - Geomorphic | |
| | | on Visible on Aerial Im | agery | | Other (Ex | | | | _ | D3 - Shallow Aqu | |
| | B8 - Sparsely | y Vegetated Concave | Surface | | | | | | | D4 - Microtopogr D5 - FAC-Neutra | |
| Field Observa | tions: | | | | | | | | | DO - 1 AO-INCUITA | 1 1 631 |
| Surface Water | | ☐ Yes ☑ No | Depth: | | (in.) | | | Watten al He | | | Var Na |
| Water Table P | resent? | ☐ Yes ☑ No | Depth: | | (in.) | | | Wetland Hy | drology P | resent? | Yes ☑ No |
| Saturation Pres | sent? | ☐ Yes ☑ No | Depth: | | (in.) | | | | | | |
| Describe Record | ded Data (str | eam gauge, monitor | ing well, a | erial phot | os, previo | us insped | ctions), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | | | | ercent slo | opes, very | / stony,§ | eries Drainage Class: | moderately | well drained | b | |
| Taxonomy (Su | <u> </u> | Alfic Oxyaquic Fra | | | | | | | | | |
| | | the depth needed to document the ir | ndicator or confirm | | indicators.) (Type | : C=Concentrat | ion, D=Depletion, RM=Reduced Matrix, CS | | | =Pore Lining, M=Matrix) | Taydyna |
| Top | Bottom | l laviman | Color | Matrix | T 0/ | | | dox Features | | Lasation | Texture (e.g. clay, sand, loam) |
| Depth | Depth | Horizon | | (Moist) | % | | Color (Moist) | % | Туре | Location | - |
| 6 | 6 | 2 | 10YR | 2/2 | 100 | | | | | | Silt loam |
| | 14 | | 7.5YR | 2.5/3 | 100 | | | | | | Silt loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| NRCS Hydric | Soil Field In | ndicators (check h | ere if indic | cators ar | e not pres | sent [| <u>. </u> | Indicator | s for Proble | ematic Soils ¹ | |
| | A1- Histosol | ` | | | S8 - Poly | /alue Belo | Surface (LRR R, MLRA 149B) | | | Muck (LRR K, L, MLRA | * |
| | A2 - Histic E | · - | | | | | ACC (LRR R, MLRA 149B) | | | t Prairie Redox (LRI | • |
| | A3 - Black H A4 - Hydroge | | | H | F1 - Loan F2 - Loan | , | Mineral (LRR K, L) Matrix | H | | ucky Peat of Peat urface (LRR K, L, M) | (LRR K, L, R) |
| | A5 - Stratified | | | | F3 - Deple | - | | | | lue Below Surface | (LRR K, L) |
| | • | ed Below Dark Surface | Э | | F6 - Redo | | | | S9 - Thin Da | ark Surface (LRR K, | _) |
| | A12 - Thick [| | | | F7 - Deple | | | | | Manganese Masse | |
| | S1 - Sandy N S4 - Sandy G | | | Ц | F8 - Redo | x Depres | 91 IOI | | | nont Floodplain So Parent Material | IIO (MLKA 149B) |
| | S5 - Sandy F | • | | | | | | | | Spodic (MLRA 144A, | 145, 149B) |
| | S6 - Stripped | | | | | | | | | Shallow Dark Sur | face |
| | S7 - Dark Su | rface (LRR R, MLRA 149B) | | | | | | 1 Indicators | | ain in Remarks) etation and wetland hydrolog | v must be present, unless |
| Bearing : | | | | | | | | | or problematic. | sina ironana nyarolog | , |
| Restrictive Layer | | | | | | | | | | | |
| (If Observed) | Туре: | Rock | | Depth: | 14 in | | | Hydric Soil | Present? | | Yes ☑ No |



Project/Site: Gogebic Taconite Mine Wetland ID: WE-03 Sample Point WE-03-1u

| VEGETATION | (Species identified in all uppercase are non-nati | ve specie | es.) | | |
|-------------------|---|-----------|-----------------|------------|--|
| Tree Stratum (Plo | ot size: 10 meter radius) | | | | |
| | Species Name | | <u>Dominant</u> | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 25 | Υ | FACU | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:1(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:5(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B) |
| 7. | | | | | Dravelance Index Markshoot |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | Total Cover = | 25 | | | OBL spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| | Total Cover = | 20 | | | FACW spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| Sanling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp. $\frac{30}{115}$ $\times 4 = \frac{90}{460}$ |
| 1. | Acer saccharum | 20 | Υ | FACU | UPL spp. $\frac{175}{5}$ $\frac{1}{25}$ $\frac{1}{25}$ |
| 2. | Ribes cynosbati | 10 | <u>·</u> Y | FACU | 01 2 opp |
| 3. | | | <u> </u> | | Total 150 (A) 575 (B) |
| 4. | | | | | (2) |
| 5. | | | | | Prevalence Index = B/A = 3.833 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 30 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Acer saccharum | 50 | Υ | FACU | * In directors of building a Novelland building a successful |
| 2. | Dryopteris intermedia | 20 | Υ | FAC | * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | Osmunda claytoniana | 10 | N | FAC | present, unless distarbed of problematic. |
| 4. | Allium tricoccum | 5 | N | FACU | Definitions of Vegetation Strata: |
| 5. | Erythronium americanum | 5 | Ν | UPL | |
| 6 | Cardamine concatenata | 5 | N | FACU | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | · · · · · · · · · · · · · · · · · · · |
| 14. | | | | | Managha Managha All woody vines greater then 2.29 ft, in height |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 95 | | | |
| | | | | | |
| Woody Vine Strate | um (Plot size: 10 meter radius) | | | | |
| 2. | | | | | |
| | _ | | | | Hydrophytic Vogotation Present - Vog - No |
| 3. 4. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 5. | _ | | | | |
| J. | Total Cover = | 0 | | | |
| Remarks: | 10tal 00vel – | | | | |
| | | | | | |
| | | | | | |
| Additional Rer | marks: | | | | |
| - 1.0.0.1.0.1.0.1 | | | | | |
| | | | | | |



| Project/Site: Applicant: | Gogebic Ta | aconite Mine aconite, LLC | | | | | Stantec Project #: | 193701133 | 3 | Date: County: | 06/03/14 Iron |
|--------------------------------------|--|--|-------------|---------------------------------------|--|---|--|-----------------------|--|---|---|
| Investigator #1 Soil Unit: Landform: | Gogebic si | It loam, 6 to 18 perd Depression | cent slope | s, very s | igator #2: st cal Relief: | NW | /I/WWI Classification: | NA | | State: Wetland ID: Sample Point: | Wisconsin WE-03 WE-03-1w |
| Slope (%): | 1-2 | Latitude: | | | ongitude: | | | Datum | : | Community ID: | Wet Meadow |
| | | ditions on the site ty | | | | (If no, explai | | | No | Section: | 32 |
| • | | or Hydrology ☐ sig | - | | | | Are normal circumsta | • | nt? | Township: | 45N |
| | | or Hydrology | turally pro | blematic | C? | | ☑ Yes | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | cont? | | □ Voc | No | | | Hydric Soile | Procent? | | □ Voc □ No |
| Hydrophytic Ve Wetland Hydro | | | | ✓ Yes✓ Yes | | | | Hydric Soils | | Within A Wetla | ✓ Yes □ Nond? ✓ Yes □ No |
| Remarks: | | t precipitation analy | sis shows | | | | | is This Sam | | vvitilii A vvetta | na: Lites Lino |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydi Primary | | ators (Check here | if indicato | rs are no | ot present | t 🗀 | | | Secondary | | |
| | A1 - Surface A2 - High Wa A3 - Saturation B1 - Water Mater | ater Table on Marks ont Deposits posits at or Crust | 0 , | _ | C4 - Pres | uatic Fauna I Deposits ogen Sulfi ized Rhizo ence of Ro ent Iron Re Muck Surf | de Odor ospheres on Living Roots educed Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage F B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bu | Patterns Lines Water Table rrows Visible on Aerial Imagery Stressed Plants Position Litard Patterns |
| Field Observa | ations: | | | | | | | | | | |
| Surface Water | | ☑ Yes □ No | Depth: | | (in.) | | | Wetland Hy | /drology P | resent? ▽ | l Yes □ No |
| Water Table P | | ☑ Yes □ No | Depth: | _ | (in.) | | | | , a 0.0 gy . | | |
| Saturation Pres | sent? | ☑ Yes □ No | Depth: | 0 | (in.) | | | | | | |
| Describe Recor | ded Data (str | eam gauge, monitori | ng well, a | erial phot | os, previo | us inspec | ctions), if available: | | N/A | | |
| Remarks: | Saturation | observed at sample | point. S | urface w | ater pres | ent in ad | jacent depressions. | | | | |
| SOIL S | | | | | | | | | | | |
| SOILS Map Unit Name | 0: | Gogebic silt loam | 6 to 18 no | arcent el | ones ver | v etony 9 | eries Drainage Class: | moderately | well draine | 4 | |
| Taxonomy (Su | | Alfic Oxyaquic Frag | | | opes, very | y Storry, o | eries Dialilage Class. | moderately | well draine | <u> </u> | |
| | <u> </u> | | | | indicators.) (Type | e: C=Concentrati | on, D=Depletion, RM=Reduced Matrix, CS | S=Covered/Coated Sand | I Grains; Location: Pl | _=Pore Lining, M=Matrix) | |
| Тор | Bottom | | | Matrix | | | | dox Features | | | Texture |
| Depth | Depth | Horizon | Color | (Moist) | % | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) |
| 0 | 10 | 1 | 10YR | 2/1 | 100 | | | | | | Mucky silt loam |
| 10 | 20 | 2 | 7.5YR | 3/2 | 80 | 7.5YR | 3/4 | 20 | С | M | Silt Loam |
| 20 | 24 | 3 | 5YR | 3/3 | 100 | | | | | | Silt Loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | ndicators (check h | | | | | <u> </u> | | | ematic Soils ¹ | <u></u> |
| • | A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick Ep S1 - Sandy N S4 - Sandy N S5 - Sandy R S6 - Stripped | pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix | | | S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | value Belo Dark Surfany Mucky I ny Gleyed eted Matri ox Dark Su eted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | Indicators | A10 - 2 cm A16 - Coas S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin D F12 - Iron-M F19 - Piedn F21 - Red F TA6 - Mesic TF12 - Very Other (Expl | Muck (LRR K, L, MLRA t Prairie Redox (LR lucky Peat of Peat Surface (LRR K, L, M) lue Below Surface ark Surface (LRR K, Manganese Masse nont Floodplain So Parent Material c Spodic (MLRA 144A, / Shallow Dark Sur ain in Remarks) etation and wetland hydrolog | R K, L, R) (LRR K, L, R) E (LRR K, L) L) ES (LRR K, L, R) DIS (MLRA 149B) 145, 149B) rface |
| | | | | | | | | alsturbed | or problematic. | | |
| Restrictive Layer | Tyne | | | Denth: | | | | | · | | Yes □ No |
| (If Observed) Remarks: | Туре: | | | Depth: | | | | Hydric Soil | · | 7 | Yes □ No |



Northeast and Northcentral Region

Project/Site: Sample Point WE-03-1w WE-03 Gogebic Taconite Mine Wetland ID: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 10 meter radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant 1. Betula alleghaniensis 20 Υ FAC Ulmus americana 2. 2 Ν **FACW** Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) 3. 4. Total Number of Dominant Species Across All Strata: 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. x 1 =--OBL spp. 10 Total Cover = 22 x 2 =FACW spp. x 3 = FAC spp. 102 306 x 4 =Sapling/Shrub Stratum (Plot size: 5 meter radius) FACU spp. 12 48 **FACU** UPL spp. x = 5 =Acer saccharum Ν 1. 2. Betula alleghaniensis Ν **FAC** 3. 368 (B) --Total 4. --5. --Prevalence Index = B/A = ----2.921 6. --7. ----8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. Yes ☐ No Dominance Test is > 50% Total Cover = Yes □ No Prevalence Index is ≤ 3.0 * ☐ Yes ☐ No Morphological Adaptations (Explain) * Herb Stratum (Plot size: 2 meter radius) ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * 25 Υ Matteuccia struthiopteris FAC 1. * Indicators of hydric soil and wetland hydrology must be Υ 2. 25 FAC Osmunda claytoniana present, unless disturbed or problematic. Υ 3. RUMEX OBTUSIFOLIUS 15 FAC Dryopteris intermedia 10 Ν **Definitions of Vegetation Strata:** 4. FAC 5. Carex crinita 10 Ν **OBL** Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast 6 Equisetum arvense Ν FAC height (DBH), regardless of height. **FACU** 7. Acer saccharum 5 Ν 8. **FACU** Cardamine concatenata Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. 9. 10. 11. --Herb - All herbaceous (non-woody) plants, regardless of size, and 12. woody plants less than 3.28 ft. tall. 13. ------14. --**Woody Vines -** All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 100 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. --4. 5. Total Cover = 0 Remarks:

Additional Remarks:

Full extent of wetland was not delineated because it extends to the southwest and southeast along stream SE-19, beyond the Access Road 1/priority area 1 study limits.



| Are Vegetation | Gogebic Ta : T. King Gogebic sil Side slope 1-6 drologic cond , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil , Soil | | N/A Dical for the continuous problem. | is time of the color of the col | cal Relief: congitude: of year? (if if i | NV Convex N/A no, explain | in remarks) Are normal circumsta ☑ Yes | Datum: ☐ Yes ☑ ances presen ☐No Hydric Soils | No t? Present? | Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: | 06/03/14 Iron Wisconsin WE-04 WE-04-1u N. Mesic Forest 32 45N 1 Dir: W ☐ Yes ☑ No |
|--|---|--|--|--|---|---|--|---|--|--|--|
| Primary | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio | ater Table on Iarks nt Deposits posits at or Crust | ngery | are not | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxidi C4 - Presc C6 - Rece | atic Fauna I Deposits ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Surf | de Odor espheres on Living Roots educed Iron eduction in Tilled Soils | | | B6 - Surface Soil B10 - Drainage P B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur | ratterns Lines Water Table rows Tisible on Aerial Imagery stressed Plants Position uitard aphic Relief |
| Field Observation Surface Water Water Table Preservation Preserved Describe Record | Present? resent? sent? | ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorin | Depth: Depth: Depth: | | (in.) (in.) (in.) s. previous | inspectio | ons), if available: | Wetland Hy | drology Pr | esent? □ | l Yes ☑ No |
| Remarks: SOILS Map Unit Name Taxonomy (Sub | ogroup): | Alfic Oxyaquic Frag | iorthods | | | • | Series Drainage Class: | | | | |
| Тор | Bottom | | | Matrix | | | | edox Features | | | Texture |
| Depth | Depth | Horizon | Color (| Moist) | % | | Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) |
| 0 | 6 | 1 | 10YR | 2/1 | 100 | | | | | | Silt loam |
| 6 | 14 | 2 | 5YR | 3/3 | 100 | | | | | | Silt loam |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| NRCS Hydric | A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy R S5 - Sandy R S6 - Stripped | istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Bleyed Matrix Redox | re if indica | | S8 - Polyv S9 - Thin | value Belo Dark Surfa ny Mucky I ny Gleyed eted Matrix nx Dark Su eted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x Irface Surface | Indicators of | A10 - 2 cm I A16 - Coast S3 - 5cm Mo S7 - Dark So S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesio TF12 - Very Other (Expla | ematic Soils 1 Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) Iue Below Surface ark Surface (LRR K, L Manganese Masses nont Floodplain Soil Parent Material Spodic (MLRA 144A, 1 Shallow Dark Surfain in Remarks) tation and wetland hydrology | R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (S) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| Restrictive Layer (If Observed) | Туре: | Rock | | Depth: | 14 in | | | Hydric Soil | Present? | | Yes ☑ No |
| Remarks: | | | | | | | | | | | |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WE-04 Sample Point WE-04-10 |
|--|---|-----------|----------|-------------|---|
| VECETATION | (O | • | 1 | | |
| VEGETATION Tree Stratum (Pl | (Species identified in all uppercase are non-nativot size: 10 meter radius) | e species | .) | | |
| Tree Stratum (Pi | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer saccharum | 75 | Y | FACU | Dominance rest worksheet |
| 2. | | | <u> </u> | | Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) |
| 3. | | | | | (A) |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 3 (B) |
| 5. | | | | | Total Number of Borninant Opedies Across All Strata(B) |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) |
| 7. | | | | | Tercent of Dominant Species That Are OBE, I ACW, of I AC(A/B) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 $\times 1 = 0$ |
| 10. | Total Cover = | 75 | | | FACW spp. $0 \times 1 = 0$ |
| | Total Covel = | 73 | | | FACW spp. $\frac{1}{5}$ $\frac{15}{5}$ |
| Sanling/Shrub St | ratum (Plot sizo: 5 motor radius) | | | | |
| 1. | ratum (Plot size: 5 meter radius) Acer saccharum | 10 | Υ | FACU | |
| 2. | | | I | | UPL spp. $0 	 X 	 5 = 0$ |
| 3. | | | | | Total 180 (A) 715 (B) |
| 4. | | | | | Total 180 (A) 715 (B) |
| <u> </u> | | | | | Prevalence Index = B/A = 3.972 |
| 6. | | | | | Prevalence Index = B/A = 3.972 |
| 7. | | | | | |
| | | | | | Hydronhytic Vogetation Indicators: |
| 8. | _ | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | Total Cover | 10 | | | ☐ Yes ☑ No Dominance Test is > 50% |
| | Total Cover = | 10 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| , | ot size: 2 meter radius) Acer saccharum | 70 | Υ | FACU | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. 2. | Allium tricoccum | 10 | N | FACU | * Indicators of hydric soil and wetland hydrology must be |
| | | | | FAC | present, unless disturbed or problematic. |
| 3. | Dryopteris intermedia | 5 | N | | Definitions of Vagatation Strata. |
| 4. | Maianthemum racemosum | 5 | N | FACU | Definitions of Vegetation Strata: |
| 5. 6 | Cardamine concatenata | 5 | N | FACU | Troo |
| | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 7. | | | | | 11.0.1g.1.1 (2.2.1.1), 1.0.1g.1.1. |
| 8. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 9. | | | | | tall. |
| 10. | | | | | |
| 11. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | Total Cover | 05 | | | vvoory villes = / iii woody villes greater than 3.20 it. iii neight. |
| | Total Cover = | 95 | | | |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | turn (Diet eines 40 matter en l' | | | | |
| | tum (Plot size: 10 meter radius) | | | | |
| 1. | _ | | | | |
| 2. | | | | | Undreabytic Verstetion Present Ne |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | Total Cover | | | | |
| Domonico | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Re | marks: | | | | |
| | | | | | |
| | | | | | |
| 1 | | | | | |



| Project/Site: | Gogebic Ta | conite Mine | | | | | Stantec Project #: | 193701133 | | Date: | 06/03/14 |
|---|--|---|---|---|---|--|---|--|--|---|---|
| Applicant: | • | conite, LLC | | | | | | | | County: | Iron |
| Investigator #1 | | t la a ma C ta 10 mana | مصمام عصم | | gator #2: | | //////// Classification | NΙΛ | | State: | Wisconsin |
| Soil Unit: Landform: | Footslope/D | t loam, 6 to 18 perd | ent siope | • | al Relief: | | /I/WWI Classification: | NA | | Wetland ID: Sample Point: | WE-04 WE-04-1w |
| Slope (%): | 0-2 | Latitude: | N/A | | ongitude: | | | Datum: | | Community ID: | Wet Meadow |
| • | | ditions on the site ty | | | | | n in remarks) | ☐ Yes ☑ | No | Section: | 32 |
| Are Vegetation | □, Soil □, | or Hydrology □ sig | nificantly | disturbe | d? | | Are normal circumsta | ances present | t? | Township: | 45N |
| | | or Hydrology 🛚 na | turally pro | blemation | ? | | | □No | | Range: | 1 Dir: W |
| SUMMARY OF | | | | | | | | _ | | | |
| Hydrophytic Ve | _ | | | Yes ✓ | | | | Hydric Soils | | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | ✓ Yes □ No |
| Wetland Hydro Remarks: | | ? precipitation analy | eie ehowe | ✓ Yes | | re wetter | than normal | is This Samp | oling Point | Within A Wetlar | nd? ☑ Yes ■ No |
| Remarks. | Antecedent | precipitation analy | SIS SHOWS | s triat coi | iuitions a | re weller | man normal. | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | ology Indic: | ators (Check here | if indicato | rs are no | nt nresent | t 🗀 | | | | | |
| Primary | | diois (Check here | ii iiidicato | is are in | or presem | , Џ | | | Secondary: | | |
| | A1 - Surface | | | <u> </u> | B9 - Wate | | | | _ | B6 - Surface Soil | |
| | | | | | B13 - Aqu B15 - Mar | | | | | B10 - Drainage P B16 - Moss Trim | |
| | B1 - Water M | | | | C1 - Hydr | | | | | C2 - Dry-Season | |
| | B2 - Sedimer | • | | | | | spheres on Living Roots | | | C8 - Crayfish Bur | |
| | B3 - Drift Dep B4 - Algal Ma | | | | | | educed Iron eduction in Tilled Soils | | | D1 - Saturation V | isible on Aerial Imagery |
| | B5 - Iron Dep | | | _ | C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | 0 , | | Other (Ex | plain in Re | emarks) | | | D3 - Shallow Aqu | |
| | во - орагоету | Vegetated Concave S | Surface | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| Field Observa | tions: | | | | | | | | | | |
| Surface Water | | ☑ Yes ☐ No | Depth: | 3 | (in.) | | | M | lada B | | V N. |
| Water Table Pi | resent? | ☑ Yes ☐ No | Depth: | | (in.) | | | Wetland Hy | arology Pi | resent? | Yes □ No |
| Saturation Pres | sent? | ☑ Yes 🔲 No | Depth: | 0 | (in.) | | | | | | |
| Describe Record | ded Data (stre | eam gauge, monitori | ng well ag | arial nhot | os previo | us inspec | tions) if available: | | N/A | | |
| | | 3-1-3-7 | g, a. | snai priot | os, previo | us mspec | ilolis), ii avallable. | | IN/ <i>F</i> A | | |
| Remarks: | Saturated a | it sample point. Ce | | | | | dions), ii avaliable. | | IN/A | | |
| | Saturated a | | | | | | nions), ii avaliable. | | N/A | | |
| SOILS | | nt sample point. Ce | entral dep | ression i | s inundat | ed. | · | | | | |
| SOILS Map Unit Name | ə: | at sample point. Ce Gogebic silt loam, | entral depo | ression i | s inundat | ed. | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sul | e: ogroup): | it sample point. Ce Gogebic silt loam, Alfic Oxyaquic Frag | entral depo 6 to 18 pe | ression i | s inundat | ed. y stony, S | eries Drainage Class: | moderately v | vell drained | | |
| SOILS Map Unit Name Taxonomy (Sul | e: ogroup): otion (Describe to | it sample point. Ce Gogebic silt loam, Alfic Oxyaquic Frag | entral depo 6 to 18 pe | ercent slo | s inundat | ed. y stony, S | eries Drainage Class: | moderately v | vell drained | | Texture |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip | e: ogroup): ption (Describe to a Bottom | it sample point. Ce Gogebic silt loam, Alfic Oxyaquic Frag | entral deposition of to 18 per giorthods | ercent slot the absence of Matrix | s inundat | ed. y stony, S | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Re | moderately v | vell drained | | Texture (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sul | e: ogroup): otion (Describe to | Gogebic silt loam, Alfic Oxyaquic Frag | entral deposition of to 18 per giorthods | ercent slo | opes, very | ed. y stony, S | eries Drainage Class: | moderately v S=Covered/Coated Sand of dox Features | vell drained | =Pore Lining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth | e: ogroup): otion (Describe to the Bottom Depth | Gogebic silt loam, Alfic Oxyaquic Frag | 6 to 18 pegiorthods dicator or confirm | ercent slot the absence of Matrix | opes, very | ed. y stony,3 e: C=Concentrati | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | moderately v S=Covered/Coated Sand of dox Features % | vell drained Grains; Location: PL Type | =Pore Lining, M=Matrix) | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 | e: ogroup): ption (Describe to least to | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon | 6 to 18 per giorthods dicator or confirm Color (| the absence of Matrix (Moist) | opes, very indicators.) (Type | ed. y stony,3 c: C=Concentrati | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Re Color (Moist) | moderately v S=Covered/Coated Sand of dox Features % | vell drained Grains; Location: PL Type | =Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) Mucky silt Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | e: ogroup): otion (Describe to the second point) Bottom Depth 8 20 | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 perior thods dicator or confirm Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 | opes, very indicators.) (Type | ed. y stony,3 e: C=Concentrati | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Re- Color (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 | vell drained Grains; Location: PL Type C | Location M | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 8 | Bottom Depth 8 20 | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 | opes, very indicators.) (Type % 100 95 | ed. y stony,3 c: C=Concentrati 7.5YR | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 | vell drained Grains; Location: PL Type C | =Pore Lining, M=Matrix) Location M | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | e: ogroup): ption (Describe to lead to | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 | opes, very indicators.) (Type % 100 95 | ed. y stony,S c: C=Concentrati | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 | rell drained Grains; Location: PL Type C | =Pore Lining, M=Matrix) Location M | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 | s inundate opes, very indicators.) (Type % 100 95 | ed. y stony,S c: C=Concentrati 7.5YR | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v | rell drained Grains; Location: PL Type C | =Pore Lining, M=Matrix) Location M | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | e: ogroup): otion (Describe to the second point of the second poin | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 | s inundate opes, very indicators.) (Type % 100 95 | ed. y stony,3 c: C=Concentrati 7.5YR | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 | Type C | =Pore Lining, M=Matrix) Location M | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres | stony,S c: C=Concentrati 7.5YR sent | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C | EPore Lining, M=Matrix) Location M matic Soils ¹ | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check he | Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv | stony,S s: C=Concentrati 7.5YR sent [| eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of the control o | Type Type C s for Proble A10 - 2 cm A16 - Coast | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA Prairie Redox (LRF | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Histore | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic | Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam | stony,S c: C=Concentrati 7.5YR sent value Belov Dark Surfa | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 - | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA C) Prairie Redox (LRR LUCKY Peat of Peat | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check horizon stic n Sulfide | Color (10YR 7.5YR | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam | stony,S s: C=Concentrati 7.5YR sent value Belov Dark Surfany Mucky May Gleyed | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA Redox (LRR ky Peat of Peat urface (LRR K, L, M) | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam (149B) R K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check horizon stic n Sulfide | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam | ed. y stony,3 :: C=Concentrati 7.5YR sent yalue Belov yalue Belov Dark Surfa ny Mucky N | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA C) Prairie Redox (LRR LUCKY Peat of Peat | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam (LRR K, L, R) (LRR K, L) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check he bipedon stic n Sulfide I Layers ed Below Dark Surface Dark Surface | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA AL) Prairie Redox (LRR L) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) Janganese Masses | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic n Sulfide I Layers ed Below Dark Surface Dark Surface luck Mineral | 6 to 18 per giorthods dicator or confirm Color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA CHART REDOX (LRR LUCKY Peat of Peat Lurface (LRR K, L, M) ue Below Surface LUCKY Surface (LRR K, L) ark Surface (LRR K, L) danganese Masses and Floodplain Soil | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check horizon (check horizon) stic n Sulfide Layers ed Below Dark Surface Dark Surface luck Mineral eleyed Matrix | color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C Type C S for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P | EPore Lining, M=Matrix) Location M matic Soils ¹ Muck (LRR K, L, MLRA AL) Prairie Redox (LRR L) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) Janganese Masses | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check he bipedon stic n Sulfide d Layers ed Below Dark Surface ark Surface luck Mineral eleyed Matrix edox Matrix | color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C | EPore Lining, M=Matrix) Location M matic Soils Muck (LRR K, L, MLRA C) Prairie Redox (LRR K) Ucky Peat of Peat urface (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface Anganese Masses nont Floodplain Soil Parent Material Spodic (MLRA 144A, A) Shallow Dark Sur | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam (LRR K, L, R) (LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check here) bipedon stic n Sulfide I Layers ed Below Dark Surface Park Surface luck Mineral eleyed Matrix edox | color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C Type Typ | Location Location M M matic Soils ¹ Muck (LRR K, L, MLRA AL Prairie Redox (LRR LL, M) ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L danganese Masses nont Floodplain Soil earent Material Spodic (MLRA 144A, Al | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check he bipedon stic n Sulfide d Layers ed Below Dark Surface ark Surface luck Mineral eleyed Matrix edox Matrix | color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C Type Typ | Location Location M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) Anganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks) | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |
| SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 8 NRCS Hydric | Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick D S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | Gogebic silt loam, Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 adicators (check he bipedon stic n Sulfide I Layers ed Below Dark Surface Oark Surface luck Mineral eleyed Matrix edox Matrix rface (LRR R, MLRA 149B) | color (10YR 7.5YR ere if indic | the absence of Matrix (Moist) 2/1 3/2 cators ar | s inundate opes, very indicators.) (Type % 100 95 e not pres S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | ed. y stony,S :: C=Concentrati 7.5YR sent yalue Below | eries Drainage Class: on, D=Depletion, RM=Reduced Matrix, CS Recolor (Moist) 3/3 | moderately v S=Covered/Coated Sand of dox Features % 5 Indicator | Type Type C Type Typ | Location Location M M matic Soils Muck (LRR K, L, MLRA A) Prairie Redox (LRR K, L, M) ue Below Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) Anganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, A) Shallow Dark Surfain in Remarks) | (e.g. clay, sand, loam) Mucky silt Loam Sandy Clay Loam 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |



Project/Site: Gogebic Taconite Mine Wetland ID: WE-04 Sample Point WE-04-1w

| Teach Process Teach Process Teach Process Teach Teach | VEGETATION | (Species identified in all uppercase are non-nat | tive speci | es.) | | |
|--|-------------------|--|-------------|----------|---------------|--|
| Acer saccharum | Tree Stratum (Pl | , | | | | |
| Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) | 4 | | | | | Dominance Test Worksheet |
| 3. | | | 5 | Y | | N |
| A | | | | | | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| S. | | | | | | |
| Percent of Dominant Species That Arro OBL FACW, or FAC: 50.0% A/B | | | | | | Total Number of Dominant Species Across All Strata:4 (B) |
| Total Cover Saping Shrub Stratum (Plot size: 5 meter radius) | | | | | | |
| Revalence Index Worksheet Total Cover S | | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: |
| 10 10 10 10 10 10 10 10 | | | | | | |
| 10. | | | | | | |
| Total Cover S Supplies Stratum (Plot size: 5 meter radius) Supplies Supp | | | | | | |
| Saping/Shrub Stratum (Plot size: 5 meter radius) | 10. | | | | | · · · · · · · · · · · · · · · · · · · |
| Sapling/Shrub Stratum (Plot size: 5 meter radius) | | Total Cover = | 5 | | | · · · <u> </u> |
| 1. Acer saccharum 5 | | | | | | |
| Total 100 (A) 185 (B) | | | | | 5 4011 | |
| Total 100 (A) 185 (B) | | Acer saccharum | 5 | Y | FACU | UPL spp. |
| 4, | | | | | | |
| Prevalence Index = B/A 1.850 | | | | | | Total 100 (A) 185 (B) |
| 6. | | | | | | |
| T. | | | | | | Prevalence Index = B/A = 1.850 |
| Note | | | | | | |
| 9 | | | | | | |
| 10. | | | | | | |
| Total Cover | | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| Herb Stratum (Plot size: 2 meter radius) | 10. | | | | | |
| Herb Stratum (Plot size: 2 meter radius) | | Total Cover = | 5 | | | |
| 1. Carex scabrata | | | | | | |
| 2. MYOSOTIS SCORPIOIDES 25 | Herb Stratum (Plo | , | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| A. Dryopteris intermedia 10 N FAC | 1. | | | <u> </u> | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | <u> </u> | | · · · · · · · · · · · · · · · · · · · |
| S. Acer saccharum S N FACU | | | | | | |
| Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Record | | | | | | Definitions of Vegetation Strata: |
| 7. | | Acer saccharum | 5 | N | FACU | |
| 8 | | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 9 | | | | | | height (DBH), regardless of height. |
| 10 | | | | | | |
| 10 | | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 12 | | | | | | |
| 13 15 | | | | | | |
| 13 14 15 | | | | | | |
| 15 Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 90 Woody Vine Stratum (Plot size: 10 meter radius) 1 | | | | | | noos, pane 1000 man oleo man |
| Total Cover = 90 Woody Vine Stratum (Plot size: 10 meter radius) 1 2 | | | | | | |
| Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. | 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 1 2 | | Total Cover = | 90 | | | |
| 1 2 | Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| | 1. | | | | | |
| | 2. | | | | | |
| | 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4 | | | | | | |
| 5 | | | | | | |
| Total Cover = 0 | <u> </u> | | | | | |
| | Remarks: | . 3(4) 33701 - | | | | |

Additional Remarks:

Full extent of wetland was not delineated because it extends to the northwest and southeast, beyond the Access road 1/ priority area 1 study limits.



| Applicant: Investigator #1: Soil Unit: | Gogebic Ta T. King Gogebic sil | aconite Mine aconite, LLC t loam | | | gator #2: | NW | Stantec Project #: S /I/WWI Classification: | 193701133 N/A | | Date: County: State: Wetland ID: | 06/05/14 Iron Wisconsin WE-10 |
|---|--|--|---------------------------------------|--|-----------------------------|---|---|---------------------------|---|---|--|
| Landform: | Side slope | l atituda. | NI/A | | al Relief: | | | Deture | NI/A | Sample Point: | WE-10-1u |
| Slope (%): | 2-6 | Latitude: ditions on the site ty | | | ongitude: | | ain in romarka) | Datum: ☐ Yes ☑ | | Community ID: Section: | Northern Mesic Forest 32 |
| | | or Hydrology □ sig | | | | (II flo, expi | Are normal circumsta | | | Township: | 45N |
| • | | or Hydrology ⊟ na or Hydrology ⊟ na | • | • | | | ✓ Yes | □No | • | Range: | 1 Dir: W |
| SUMMARY OF | | or riyarology 🗀 na | tarany pr | obioinat | | | | | | rtango. | , Dii. , , |
| Hydrophytic Ve | | sent? | | □ Yes | ☑ No | | | Hydric Soils | Present? | | ☐ Yes ☑ No |
| Wetland Hydrol | • | | | ☐ Yes | | | | | | Within A Wetlar | |
| Remarks: | Wetter than | n normal conditions | per ante | ecedant _l | orecipitati | on analy | sis. | | | | |
| HYDROLOGY | | | | | | | | | | | |
| _ | | ators (Check here | if indicat | ors are r | ot preser | nt 🕡): | | | | | |
| Primary: | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep | ater Table on larks ot Deposits posits at or Crust | 0 , | | C4 - Pres | latic Fauna I Deposits ogen Sulfi ized Rhizo ence of Re ent Iron Re Muck Surf | de Odor espheres on Living Roots educed Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur C9 - Saturation Vi D1 - Stunted or S D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral | atterns Lines Water Table rows isible on Aerial Imagery tressed Plants Position itard aphic Relief |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water I Water Table Pro Saturation Pres | esent? | ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No | Depth: Depth: Depth: | | (in.) (in.) (in.) | | | Wetland Hy | drology Pr | resent? | Yes 🗵 No |
| Describe Record | led Data (stre | eam gauge, monitori | ng well, a | aerial pho | tos, previ | ous inspe | ctions), if available: | | N/A | | |
| Remarks: | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Map Unit Name | \• | Gogebic silt loam | | | | S | eries Drainage Class: | Moderately | voll | | |
| Taxonomy (Sub | | Cogebic siit loam | | | | | eries Diamage Class. | Woderatery v | VCII | | |
| | <u> </u> | the depth proded to decument the in | edicator or confir | m the absence o | of indicators) (Tv | 0 . 0 | | CS_Covered/Costed Sans | d Grains; Location: F | I =Pore Lining M=Matrix) | |
| Тор | | the depth needed to document the ir | idicator or cornii | ili tile absence t | n indicators.) (r y | be: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coaled Sand | · · · · · · · · · · · · · · · · · · · | | |
| | Bottom | the depth needed to document the in | lateator or comm | Matrix | | be: C=Concentra | ation, D=Depletion, RM=Reduced Matrix, C | edox Features | | z=r oro zmmig, m=mamzy | Texture |
| Depth | Depth | Horizon | | | | be: C=Concentra | | | | Location | Texture (e.g. clay, sand, loam) |
| Depth 0 | | | | Matrix | _ | De: C=Concentra | Re | dox Features | 1 | | - ∤ |
| · | Depth | | Color | Matrix (Moist) | % | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) |
| 0 | Depth 2 | Horizon 1 | Color 7.5YR | Matrix (Moist) 2.5/2 | % 100 | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam |
| 0 2 | Depth 2 24 | Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/2 3/4 | % 100 100 | | Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam loamy sand |
| 2 | Depth 2 24 | Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/2 3/4 | % 100 100 | | Re Color (Moist) | % | Type | Location | (e.g. clay, sand, loam) sandy loam loamy sand |
| 0 2 | Depth 2 24 | Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/2 3/4 | % 100 100 | | Re Color (Moist) | dox Features % | Type | Location | (e.g. clay, sand, loam) sandy loam loamy sand |
| 0 2 | Depth 2 24 | Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/2 3/4 | % 100 100 | | Re Color (Moist) | | Type | Location | (e.g. clay, sand, loam) sandy loam loamy sand |
| 0 2 | Depth 2 24 | Horizon 1 2 | Color 7.5YR 5YR | Matrix (Moist) 2.5/2 3/4 | % 100 100 | | Re Color (Moist) | dox Features | Type | Location | (e.g. clay, sand, loam) sandy loam loamy sand |
| 0 2 NRCS Hydric | Depth 2 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Horizon 1 2 adicators (check here) bipedon stic | Color 7.5YR 5YR ere if ind | Matrix (Moist) 2.5/2 3/4 icators a | % 100 100 | esent | Color (Moist)): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix curface Surface Surface | edox Features % Indicator | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Explain | Location | (e.g. clay, sand, loam) sandy loam loamy sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face |
| 0 2 NRCS Hydric | Depth 2 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | Horizon 1 2 adicators (check here) bipedon stic on Sulfide d Layers ed Below Dark Surface bark Surface luck Mineral sleyed Matrix edox Matrix | Color 7.5YR 5YR ere if ind | Matrix (Moist) 2.5/2 3/4 icators a | % 100 100 | esent | Color (Moist)): w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix curface Surface Surface | edox Features % Indicator | Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Me S7 - Dark Se S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F21 - Red P TA6 - Mesic TF12 - Very Other (Expla of hydrophytic veget or problematic. | Location | (e.g. clay, sand, loam) sandy loam loamy sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MLRA 149B) (145, 149B) face |



Northeast and Northcentral Region

| Project/Site: | Gogebic Taconite Mine | | | | Wetland ID: WE-10 Sample Point WE-10-1u |
|------------------------------|--|-----------|---------------|-------------|---|
| VEGETATION | | | . \ | | |
| VEGETATION Tree Stratum (Ple | (Species identified in all uppercase are non-nat ot size: 10 meter radius) | tive spec | ies.) | | |
| Tree Stratum (Th | , | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Betula alleghaniensis | 60 | Υ | FAC | |
| 2. | Acer saccharum | 10 | N | FACU | Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) |
| 3. | Tilia americana | 5 | N | FACU | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:5(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. $0 	 x 	 1 = 0$ |
| | Total Cover = | 75 | | | FACW spp. $0 	 x 	 2 = 0$ |
| 0 11 (01 1 01 | (5) | | | | FAC spp. 85 $X 3 = 255$ |
| | atum (Plot size: 5 meter radius) | 25 | Υ | EAC | FACU spp. 60 $x 4 = 240$ |
| 1. 2. | Betula alleghaniensis Acer saccharum | 15 | <u>т</u> Ү | FAC FACU | UPL spp. $\underline{\qquad}$ $x = \underline{\qquad}$ |
| 3. | | | I | | Total 145 (A) 495 (B) |
| 4. | | | | | Total 145 (A) 495 (B) |
| 5. | | | | | Prevalence Index = $B/A = 3.414$ |
| 6. | | | | | Trevalence index = B/A = |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☐ Yes ☑ No Dominance Test is > 50% |
| 1 0.1 | Total Cover = | 40 | | | ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Maianthemum canadense | 20 | Υ | FACU | |
| 2. | Acer saccharum | 10 | Υ | FACU | * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 7. | | | | | neight (DBH), regardless of height. |
| 8. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 9. 10. | _ | | | | tall. |
| 11. | | | <u></u> | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 30 | | | |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☐ Yes ☑ No |
| 4. | | | | | |
| 5. | | | | | |
| Domorko | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| Additional Re | marke | | | | |
| Additional INC | iidi NOi | | | | |
| | | | | | |



| Are Vegetation Are Vegetation SUMMARY OF | Gogebic Ta T. King Tula-Gogek Footslope/E 0-2 drologic cond , Soil , Soil , Soil , Soil , Soil , Soil | Latitude: ditions on the site ty or Hydrology □ sig or Hydrology □ na | pical for | Loc L this time y disturb oblemat | ed? ic? | NW Concave N/A (If no, expla | I/WWI Classification: | Datum: □ Yes ☑ ances presen □No | N/A No t? | Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range: | 06/05/14 Iron Wisconsin WE-10 WE-10-1w Excavated pit 32 45N 1 Dir: W |
|--|---|--|---------------------------------------|---|--|--|--|--|-----------------------|--|---|
| Hydrophytic Veg Wetland Hydrol | • | | | ✓ Yes✓ Yes | | | | Hydric Soils | | Within A Wetlar | ✓ Yes □ No |
| Remarks: | | | per ante | | | | sis. Historical excavate | | | vviliiii A vveliai | id! M res I NO |
| | | | • | · | • | • | | • | | | |
| HYDROLOGY | | | | | | | | | | | |
| Primary: | A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep | ater Table on larks ot Deposits posits at or Crust | agery | | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydr C3 - Oxid C4 - Pres | er-Stained latic Fauna I Deposits ogen Sulficited Rhizo ence of Re ent Iron Re Muck Surf | de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace | | | B6 - Surface Soil B10 - Drainage P B16 - Moss Trim C2 - Dry-Season C8 - Crayfish Bur | atterns Lines Water Table rows isible on Aerial Imagery stressed Plants Position itard aphic Relief |
| Field Observat Surface Water | | ☑ Yes □ No | Depth: | 24 | (in.) | | | Wetland Hy | drology Pi | resent? | Yes □ No |
| Water Table Pr Saturation Pres | | ☑ Yes ☐ No | Depth: | | (in.) | | | welland ny | diology Fi | esent: | res 🗆 No |
| | | ☑ Yes □ No eam gauge, monitori | Depth: | | (in.) | oue inene | ctions) if available: | | N/A | | |
| Remarks: | · · · · · · · · · · · · · · · · · · · | at fringe of pond at | | • | · · | • | ctions), ii available. | | 14/71 | | |
| | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| Man Linit Name | `' | Tula Cagabia com | ploy | | | S | orios Drainago Class: | comowhat n | oorly to mo | dorotoly wall | |
| Map Unit Name Taxonomy (Sub | | Tula-Gogebic com Alfic Oxyaquic Frac | • | 6 | | S | eries Drainage Class: | somewhat po | oorly to mo | derately well | |
| Taxonomy (Sub | ogroup): | Alfic Oxyaquic Frag | giorthods | | of indicators.) (Ty | | eries Drainage Class: tion, D=Depletion, RM=Reduced Matrix, C | · | | | |
| Taxonomy (Sub | ogroup): | Alfic Oxyaquic Frag | giorthods | | _ | | tion, D=Depletion, RM=Reduced Matrix, C | CS=Covered/Coated Sand | d Grains; Location: F | | Texture |
| Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | Alfic Oxyaquic Frag | giorthods ndicator or confirm Color | m the absence of Matrix (Moist) | % | | tion, D=Depletion, RM=Reduced Matrix, 0 | CS=Covered/Coated Sand | d Grains; Location: F | | (e.g. clay, sand, loam) |
| Taxonomy (Sub Profile Descrip Top Depth | ogroup): otion (Describe to 1) Bottom Depth 4 | Alfic Oxyaquic Fraction Horizon | color 10YR | Matrix (Moist) 2/2 | % 100 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, (Re Color (Moist) | CS=Covered/Coated Sand dox Features % | d Grains; Location: F | PL=Pore Lining, M=Matrix) Location | (e.g. clay, sand, loam) mucky sandy loam |
| Taxonomy (Sub Profile Descrip Top Depth 0 4 | Bottom Depth 4 20 | Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 | Color 10YR 7.5YR | Matrix (Moist) 2/2 3/3 | % 100 90 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 3/4 | dox Features % 10 | d Grains; Location: F | Location M | (e.g. clay, sand, loam) |
| Taxonomy (Sub Profile Descripe Top Depth 0 4 | Bottom Depth 4 20 | Alfic Oxyaquic Fraction Horizon 1 2 | Color 10YR 7.5YR | Matrix (Moist) 2/2 3/3 | % 100 90 | pe: C=Concentra 5YR | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 3/4 | dox Features % 10 | d Grains; Location: F | Location M | (e.g. clay, sand, loam) mucky sandy loam loamy sand |
| Taxonomy (Sub Profile Descrip Top Depth 0 4 | Bottom Depth 4 20 | Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 | Color 10YR 7.5YR | Matrix (Moist) 2/2 3/3 | % 100 90 | pe: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 3/4 | dox Features % 10 | d Grains; Location: F | Location M | (e.g. clay, sand, loam) mucky sandy loam |
| Taxonomy (Sub Profile Descripe Top Depth 0 4 | Bottom Depth 4 20 | Alfic Oxyaquic Fraction Horizon 1 2 | Color 10YR 7.5YR | Matrix (Moist) 2/2 3/3 | % 100 90 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 3/4 | dox Features % 10 | Type C | Location M | (e.g. clay, sand, loam) mucky sandy loam loamy sand |
| Taxonomy (Subprofile Descriped Top Depth O 4 | Bottom Depth 4 20 | Alfic Oxyaquic Frag the depth needed to document the in Horizon 1 2 | Color 10YR 7.5YR | Matrix (Moist) 2/2 3/3 | % 100 90 | e: C=Concentra | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 3/4 | dox Features % 10 | Type C | Location M | (e.g. clay, sand, loam) mucky sandy loam loamy sand |
| Taxonomy (Subprofile Descriped Top Depth O A A | bgroup): Describe to the state of the state | Alfic Oxyaquic Fragethe depth needed to document the instance Horizon 1 2 | Color 10YR 7.5YR | Matrix (Moist) 2/2 3/3 | % 100 90 | 5YR | tion, D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 3/4 | dox Features % 10 | Type C | Location M | (e.g. clay, sand, loam) mucky sandy loam loamy sand |
| Taxonomy (Subsection of the Description of the Description of the Description of the Depth of th | Bottom Depth 4 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | Alfic Oxyaquic Fragethe depth needed to document the instance of the | Color 10YR 7.5YR ere if ind | Matrix (Moist) 2/2 3/3 icators a | % 100 90 S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo | e: C=Concentra 5YR | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 3/4): w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix crface Surface | dox Features % 10 Indicator | Type C | Location M | (e.g. clay, sand, loam) mucky sandy loam loamy sand 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) face must be present, unless |
| Taxonomy (Subsection of the Description of the Desc | Bottom Depth 4 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1- Deplete A12 - Thick E S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | Alfic Oxyaquic Fragethe depth needed to document the instance of the doc | Color 10YR 7.5YR ere if ind | Matrix (Moist) 2/2 3/3 icators a | % 100 90 | e: C=Concentra 5YR | tion, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 3/4): w Surface (LRR R, MLRA 149B) Ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix crface Surface | dox Features % 10 Indicator | Type C | Location Location M M matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) ark Surface (LRR K, L) fanganese Masses nont Floodplain Soil arent Material Spodic (MLRA 144A, Shallow Dark Surfain in Remarks) | (e.g. clay, sand, loam) mucky sandy loam loamy sand 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B) face |



Project/Site: Gogebic Taconite Mine Wetland ID: WE-10 Sample Point we-10-1w

| VEGETATION | (Species identified in all uppercase are non-na | ative speci | es.) | | |
|-----------------------|---|-------------|------|------------|--|
| Tree Stratum (Plo | ot size: 10 meter radius) | | | | |
| | <u>Species Name</u> | % Cover | | Ind.Status | Dominance Test Worksheet |
| 1. | Betula alleghaniensis | 10 | Υ | FAC | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:4(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:4 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp 0 |
| | Total Cover = | 10 | | | FACW spp. $\underline{\qquad}$ $X 2 = \underline{\qquad}$ $\underline{\qquad}$ 10 |
| | | | | | FAC spp. $\frac{30}{0}$ $x = \frac{90}{0}$ FACU spp. $\frac{0}{0}$ $x = \frac{4}{0}$ |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. $0 	 x 	 4 = 0$ |
| 1. | Betula alleghaniensis | 10 | Υ | FAC | UPL spp. $0 	 x 	 5 = 0$ |
| 2. | | | | | |
| 3. | | | | | Total(A)(B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.857 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes ☐ No Dominance Test is > 50% |
| | Total Cover = | 10 | | | |
| | | | | | ☐ Yes ☐ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Osmunda claytoniana | 10 | Υ | FAC | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Dryopteris carthusiana | 5 | Υ | FACW | present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | noos, pane 1000 man oleo man |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 15 | | | |
| | | | | | |
| Woody Vine Stratu | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present ☑ Yes ☐ No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |
| Additional Ren | marks: | | | | |
| | | | | | |
| | | | | | |