WETLAND DETERMINATION DATA FORM - Alaska Region

Project/Site: Susitna-Watana Hydro	electric Project	В	orough/City:	Matanusk	xa-Susitna Borough Sampling Date:05-Aug-13		
Applicant/Owner: Alaska Energy Au	thority				Sampling Point: SW13_T113_0	1	
Investigator(s): WAD, RWM	I	_andform (hill	side, terrac	e, hummocks etc.): knoll			
Local relief (concave, convex, none):	convex		Slope: 5.2 % / 3.0 ° Elevation: 1249				
Subregion: Interior Alaska Mountain:	 S	 Lat.: 6	 32.774219394		Long.: -147.662878633 Datum: WGS8	4	
Soil Map Unit Name:		_			NWI classification: Upland		
Are climatic/hydrologic conditions on the	ne site typical for this ti	me of vear?) Yes	● No ○	(If no, explain in Remarks.)		
		•	disturbed?		Iormal Circumstances" present? Yes No		
		naturally pro			eded, explain any answers in Remarks.)		
	. , ,				s, transects, important features, etc.		
			pinig point	locations	s, transects, important reatures, etc.		
Hydrophytic Vegetation Presen	t? Yes ● No ☐ Yes ○ No €		Is the Sampled Area				
Hydric Soil Present?		within a Wetland? Yes ○ No ●					
Wetland Hydrology Present?	Yes O No 🖲	"					
Remarks: knoll on ridgeline, vegeta	ited talus deposit. no s	significant lic	chen cover.				
VEGETATION - Use scientific r	names of plants. Li	ist all sne	ries in the	nlot			
- Ose scientine i	idines of plants. L	ist an spe	cics iii tiic	piot.	Dominance Test worksheet:		
Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species		
1		0		<u> </u>	That are OBL, FACW, or FAC:3 (A)	
					Total Number of Dominant Species Across All Strata: 4 (B	`	
2						,	
4.		0			Percent of dominant Species That Are OBL, FACW, or FAC: 75.0% (A.	/B)	
5.		0			Prevalence Index worksheet:		
	Total Cover	:			Total % Cover of: Multiply by:		
Sapling/Shrub Stratum	50% of Total Cover:	0 20%	of Total Cover:	0	OBL Species 0 x 1 = 0		
Vaccinium uliginosum		35	✓	FAC	FACW Species 15 x 2 = 30		
Vaccinium vitis-idaea		10		FAC	FAC Species 71 x 3 = 213		
3. Ledum decumbens		10		FACW	FACU Species <u>19</u> x 4 = <u>76</u>		
4. Salix pulchra		5		FACW	UPL Species <u>0</u> x 5 = <u>0</u>		
5 Empotrum nigrum		15	✓	FAC	Column Totals:105 (A)319	(B)	
6. Betula nana		5		FAC			
7. Cassiope tetragona		10		FACU	Prevalence Index = B/A =3.038_		
8. Loiseleuria procumbens		5		FACU	Hydrophytic Vegetation Indicators:		
				FACU	✓ Dominance Test is > 50%		
10					Prevalence Index is ≤3.0		
Herb Stratum	Total Cover 50% of Total Cover:	: 19.2	Morphological Adaptations (Provide supporting data Remarks or on a separate sheet)	in			
Calamagrostis canadensis		1		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)		
Anthoxanthum monticola ssp.			✓	FACU	Indicators of hydric soil and wetland hydrology must		
			✓	FAC	be present, unless disturbed or problematic.		
4.					Plot size (radius, or length x width) 10m		
5.					Plot size (radius, or length x width)		
6					(Where applicable)		
7					% Bare Ground		
8					Total Cover of Bryophytes		
		0					
9		_					
9					Hydrophytic		
10		. <u>0</u> : <u>9</u>	of Total Cover	1.8	Hydrophytic Vegetation Present? Yes No		

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SOIL Sampling Point: SW13_T113_01 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators) **Redox Features** Depth <u>Loc</u> 2 (inches) Color (moist) Color (moist) % Type ¹ ¹Type: C=Concentration. D=Depletion. RM=Reduced Matrix ² Location: PL=Pore Lining. RC=Root Channel. M=Matrix Indicators for Problematic Hydric Soils:³ **Hydric Soil Indicators:** Histosol or Histel (A1) Alaska Gleyed Without Hue 5Y or Redder Alaska Color Change (TA4) **Underlying Layer** Alaska Alpine swales (TA5) Histic Epipedon (A2) Alaska Redox With 2.5Y Hue Other (Explain in Remarks) Hydrogen Sulfide (A4) Thick Dark Surface (A12) ³ One indicator of hydrophytic vegetation, one primary indicator of wetland hydrology, Alaska Gleyed (A13) and an appropriate landscape position must be present Alaska Redox (A14) ⁴ Give details of color change in Remarks Alaska Gleyed Pores (A15) Restrictive Layer (if present): Yes ○ No ● Type: none observed **Hydric Soil Present?** Depth (inches): Remarks: no pit , sustrate basically composed of talus and bedrock.

HYDROLOGY						
Wetland Hydrology Indica	ators:				Secondary Indicators (two or more are required)	
Primary Indicators (any one is sufficient)					☐ Water Stained Leaves (B9)	
Surface Water (A1)		☐ Inundation Visible on Aerial Imagery (B7)		Drainage Patterns (B10)		
High Water Table (A2)		☐ Sparsely Vegetated Concave Surface (B8)		Oxidized Rhizospheres along Living Roots (C3)		
Saturation (A3)		Marl Deposits (B15)		Presence of Reduced Iron (C4)		
☐ Water Marks (B1)	Water Marks (B1)		Hydrogen Sulfide Odor (C1)		Salt Deposits (C5)	
Sediment Deposits (B2)			Dry-Season Water Table (C2)		Stunted or Stressed Plants (D1)	
☐ Drift Deposits (B3)		Other (Explain in Remarks)			Geomorphic Position (D2)	
☐ Algal Mat or Crust (B4)					Shallow Aquitard (D3)	
Iron Deposits (B5)					☐ Microtopographic Relief (D4)	
Surface Soil Cracks (B6)				FAC-neutral Test (D5)		
Field Observations:						
Surface Water Present?	Yes 🔾	No 💿	Depth (inches):			
Vater Table Present? Yes O No •		Depth (inches):	Wetland Hydrology Present? Yes ○ No ●			
Saturation Present? Yes No •		Depth (inches):				
Describe Recorded Data (stre	am gauge, n	nonitor wel	ll, aerial photos, previous inspection) if av	ailable:		
Remarks:						
no hydrology indicators obser	rved					

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