

U.S. DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY

Site No. 19050002-173 TK
4/77
Basin Index _____

WATERPOWER OF THE UNITED STATES

State ALASKA Stream Willow Creek Site Willow Creek

County _____				Owner _____			
Mer. <u>Seward</u> T. <u>20 N</u> R. <u>3 W</u> Sec. <u>36</u>				Constructed _____			
Lat. <u>61° 47'</u> " Long. <u>149° 44'</u> "				Storage <u>30,200</u> at <u>1400'</u> m ³			
Miles above mouth _____				Installable capacity <u>Q₅₀ = 3.2 at site</u> mw			
Drainage Area <u>150</u> sq. mi. _____ sq. km				Annual generation _____ mwh			
				Secondary energy _____ mwh			

WS = 1150' FLOW			ELEVATIONS				HEAD		THEORETICAL POWER mw-100% Eff.	ESTIMATED AVERAGE ANNUAL GENERATION mwh
Percent duration	cfs	m ³ /sec	Forebay		Tailrace		Gross			
			ft.	m	ft.	m	ft.	m		
95			1400		1160		240		Firm	
50										
mean	<u>487 (Est)</u>	<u>353,000 ac ft/yr</u>								

Remarks: LLB-1952
 Powersite downstream, head = 1040' (5 1/2 mi div) $Q_{50} = 487 / 3.2 = 152$
 Q_{mean} based on gage 15290000

Area Capacity

Contour	Area	Capacity
1150	0	0
1200	10	250
1300	100	5,750
1400	350	30,250