

U S DEPARTMENT OF INTERIOR  
GEOLOGICAL SURVEY

Site No. 19060000-C-  
Basin Index \_\_\_\_\_

WATERPOWER OF THE UNITED STATES

State Alaska Stream KARTA River - Prince of Wales Island Site KARTA LAKE

County <u>FIRST JUDICIAL DIVISION</u>	Owner _____
Mer. <u>Copper</u> T. <u>73.5</u> R. <u>84 E</u> Sec. <u>1 &amp; 2</u>	Constructed _____
Lat. <u>55° 33' 30"</u> Long. <u>132° 34' 18"</u>	Storage <u>179,000</u> of _____ m <sup>3</sup>
Miles above mouth _____	Installable capacity _____ mw
Drainage Area <u>48</u> sq. mi. <u>124.32</u> sq. km	Annual generation _____ mwh
	Secondary energy _____ mwh

FLOW			ELEVATIONS				HEAD		THEORETICAL POWER mw-100% Eff.	ESTIMATED AVERAGE ANNUAL GENERATION mwh
Percent duration	cfs	m <sup>3</sup> /sec	Forebay		Tailrace		Gross			
			ft.	m	ft.	m	ft.	m		
95	79	2.2	193		114		79		0.530	Firm
50	393	11.1							2.638	
mean	459*	13.1							3.082	

Remarks: \*Gaged from July 1915 to Oct 1922, see Dost Report  
If powerhouse were located at KARTA BAY, head = 193 feet, TP = 7.53 megawatts, Conduit = 1.5 miles.  
Dost <sup>1</sup> called for a 79 foot dam at elev. 104, with the powerhouse at KARTA BAY, TP = 7.140 mwh, conduit 1.5 miles.  
SEE FPP 243  
See "Water powers of Southeast Alaska, Joseph Cummings Dost, USFS, 1924.

(over)

See PSC 192 ALASKA Approved Nov. 14, 1927  
See FPP 896 ALASKA Filed May 12, 1928  
See PSCancellation 67 No 7 ALASKA Approved  
See Draft Review Report, 11-5-72, APA,

Form 9-1503  
(Feb. 1962)

*Power 7 miles 92*

U.S. DEPARTMENT OF INTERIOR  
GEOLOGICAL SURVEY

Basin Index 13 CD ~~5~~ 78

WATERPOWER OF THE UNITED STATES

State Alaska Stream Karta River Site Karta Lake

County First Judicial Division Owner \_\_\_\_\_  
 Mer. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_ Sec. \_\_\_\_\_  
 Lat. 55 ° 33.5 ' N " Long. 132 ° 34.3 ' W " Constructed 104 846 650  
 Storage 85,000 af 19,846.65 m<sup>3</sup>  
 Miles above mouth \_\_\_\_\_ Installed capacity \_\_\_\_\_ mw  
 Drainage Area 48 sq. mi. 124.32 sq. km Installable capacity \_\_\_\_\_ mw

FLOW			ELEVATIONS				HEAD		THEORETICAL POWER mw-100% Eff.	ESTIMATED AVERAGE ANNUAL GENERATION mwh
Percent duration	cfs	m <sup>3</sup> /sec	Forebay		Tailrace		Gross			
			ft.	m	ft.	m	ft.	m		
95	79	2.2	150	45.7	60	18.3	90	27.4	604	
50	393	11.1	200		0		200		3006	.01
mean	459	13.1	183 (Dartload)						3511	7803

Remarks:

*193 Dart + Qued*

*39.015*

*183 = 7140  
193 = 7530  
7808 x 8760 = 68,354,280  
x .037 =*

*82,529,108*

Prepared by \_\_\_\_\_ Date \_\_\_\_\_

Black Bear Lake

DA = 2 sq miles (rough)

9.5625/sq mile x 2 19cfs

18/1459 Kanta

Pool 1600

Tail  $\frac{100}{1500} = 2400 \text{ cfs}$

Tail 2500 cfs

Craig C-2

Max

Min

8-

11,000