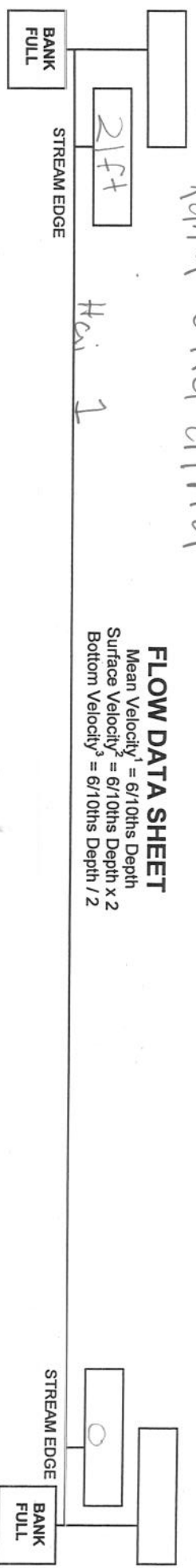


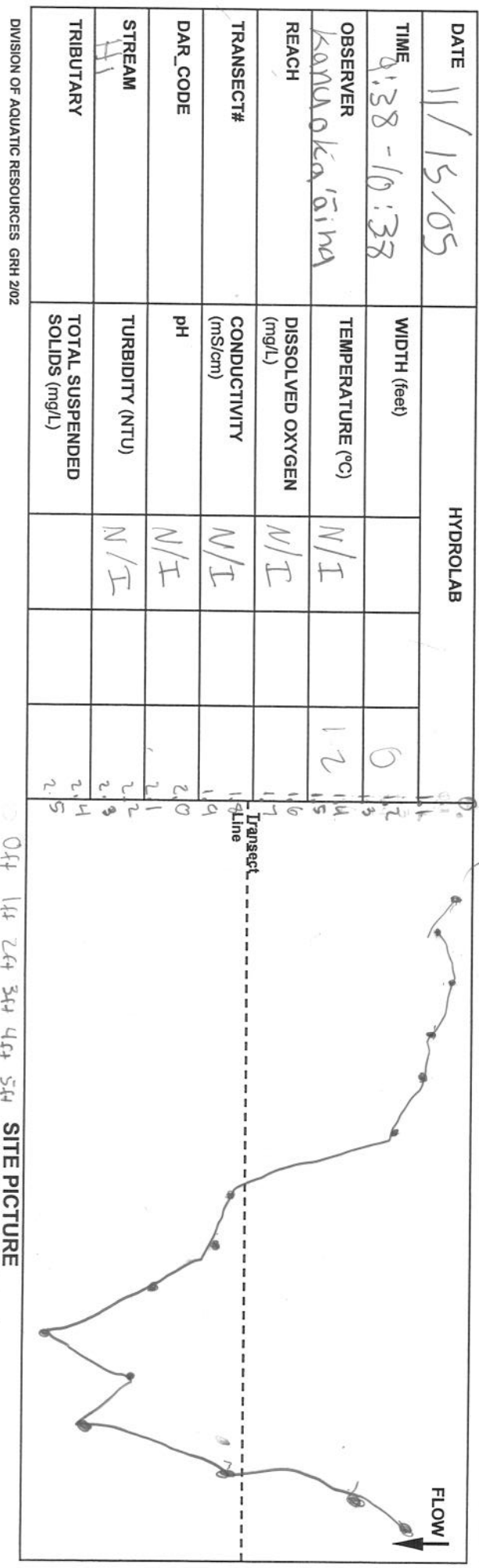
Kam Oka'ina

FLOW DATA SHEET

Mean Velocity¹ = 6/10ths Depth
 Surface Velocity² = 6/10ths Depth x 2
 Bottom Velocity³ = 6/10ths Depth / 2



Stream Edge Width (feet)	Stream Edge Depth (feet)	Flow Rate Width (ft/sec)	Flow Rate Depth (ft/sec)	Substrate/ % Vegetation	% Plant Coverage	Mean Velocity ¹ (ft/sec)	Surface Velocity ² (ft/sec)	Bottom Velocity ³ (ft/sec)
0ft	1ft	0.2	0.8			0.05	0.11	0.11
1ft	2ft	0.4	1.6			0.1	0.22	0.22
2ft	3ft	0.6	2.4			0.15	0.33	0.33
3ft	4ft	0.8	3.2			0.2	0.44	0.44
4ft	5ft	1.0	4.0			0.25	0.55	0.55
5ft	6ft	1.2	4.8			0.3	0.66	0.66
6ft	7ft	1.4	5.6			0.35	0.77	0.77
7ft	8ft	1.6	6.4			0.4	0.88	0.88
8ft	9ft	1.8	7.2			0.45	0.99	0.99
9ft	10ft	2.0	8.0			0.5	1.10	1.10
10ft	11ft	2.2	8.8			0.55	1.21	1.21
11ft	12ft	2.4	9.6			0.6	1.32	1.32
12ft	13ft	2.6	10.4			0.65	1.43	1.43
13ft	14ft	2.8	11.2			0.7	1.54	1.54
14ft	15ft	3.0	12.0			0.75	1.65	1.65
15ft	16ft	3.2	12.8			0.8	1.76	1.76
16ft	17ft	3.4	13.6			0.85	1.87	1.87
17ft	18ft	3.6	14.4			0.9	1.98	1.98
18ft	19ft	3.8	15.2			0.95	2.09	2.09
19ft	20ft	4.0	16.0			1.0	2.20	2.20
20ft	21ft	4.2	16.8			1.05	2.31	2.31
21ft	22ft	4.4	17.6			1.1	2.42	2.42
22ft	23ft	4.6	18.4			1.15	2.53	2.53
23ft	24ft	4.8	19.2			1.2	2.64	2.64
24ft	25ft	5.0	20.0			1.25	2.75	2.75
25ft	26ft	5.2	20.8			1.3	2.86	2.86
26ft	27ft	5.4	21.6			1.35	2.97	2.97
27ft	28ft	5.6	22.4			1.4	3.08	3.08
28ft	29ft	5.8	23.2			1.45	3.19	3.19
29ft	30ft	6.0	24.0			1.5	3.30	3.30
30ft	31ft	6.2	24.8			1.55	3.41	3.41
31ft	32ft	6.4	25.6			1.6	3.52	3.52
32ft	33ft	6.6	26.4			1.65	3.63	3.63
33ft	34ft	6.8	27.2			1.7	3.74	3.74
34ft	35ft	7.0	28.0			1.75	3.85	3.85
35ft	36ft	7.2	28.8			1.8	3.96	3.96
36ft	37ft	7.4	29.6			1.85	4.07	4.07
37ft	38ft	7.6	30.4			1.9	4.18	4.18
38ft	39ft	7.8	31.2			1.95	4.29	4.29
39ft	40ft	8.0	32.0			2.0	4.40	4.40
40ft	41ft	8.2	32.8			2.05	4.51	4.51
41ft	42ft	8.4	33.6			2.1	4.62	4.62
42ft	43ft	8.6	34.4			2.15	4.73	4.73
43ft	44ft	8.8	35.2			2.2	4.84	4.84
44ft	45ft	9.0	36.0			2.25	4.95	4.95
45ft	46ft	9.2	36.8			2.3	5.06	5.06
46ft	47ft	9.4	37.6			2.35	5.17	5.17
47ft	48ft	9.6	38.4			2.4	5.28	5.28
48ft	49ft	9.8	39.2			2.45	5.39	5.39
49ft	50ft	10.0	40.0			2.5	5.50	5.50
50ft	51ft	10.2	40.8			2.55	5.61	5.61
51ft	52ft	10.4	41.6			2.6	5.72	5.72
52ft	53ft	10.6	42.4			2.65	5.83	5.83
53ft	54ft	10.8	43.2			2.7	5.94	5.94
54ft	55ft	11.0	44.0			2.75	6.05	6.05
55ft	56ft	11.2	44.8			2.8	6.16	6.16
56ft	57ft	11.4	45.6			2.85	6.27	6.27
57ft	58ft	11.6	46.4			2.9	6.38	6.38
58ft	59ft	11.8	47.2			2.95	6.49	6.49
59ft	60ft	12.0	48.0			3.0	6.60	6.60
60ft	61ft	12.2	48.8			3.05	6.71	6.71
61ft	62ft	12.4	49.6			3.1	6.82	6.82
62ft	63ft	12.6	50.4			3.15	6.93	6.93
63ft	64ft	12.8	51.2			3.2	7.04	7.04
64ft	65ft	13.0	52.0			3.25	7.15	7.15
65ft	66ft	13.2	52.8			3.3	7.26	7.26
66ft	67ft	13.4	53.6			3.35	7.37	7.37
67ft	68ft	13.6	54.4			3.4	7.48	7.48
68ft	69ft	13.8	55.2			3.45	7.59	7.59
69ft	70ft	14.0	56.0			3.5	7.70	7.70
70ft	71ft	14.2	56.8			3.55	7.81	7.81
71ft	72ft	14.4	57.6			3.6	7.92	7.92
72ft	73ft	14.6	58.4			3.65	8.03	8.03
73ft	74ft	14.8	59.2			3.7	8.14	8.14
74ft	75ft	15.0	60.0			3.75	8.25	8.25
75ft	76ft	15.2	60.8			3.8	8.36	8.36
76ft	77ft	15.4	61.6			3.85	8.47	8.47
77ft	78ft	15.6	62.4			3.9	8.58	8.58
78ft	79ft	15.8	63.2			3.95	8.69	8.69
79ft	80ft	16.0	64.0			4.0	8.80	8.80
80ft	81ft	16.2	64.8			4.05	8.91	8.91
81ft	82ft	16.4	65.6			4.1	9.02	9.02
82ft	83ft	16.6	66.4			4.15	9.13	9.13
83ft	84ft	16.8	67.2			4.2	9.24	9.24
84ft	85ft	17.0	68.0			4.25	9.35	9.35
85ft	86ft	17.2	68.8			4.3	9.46	9.46
86ft	87ft	17.4	69.6			4.35	9.57	9.57
87ft	88ft	17.6	70.4			4.4	9.68	9.68
88ft	89ft	17.8	71.2			4.45	9.79	9.79
89ft	90ft	18.0	72.0			4.5	9.90	9.90
90ft	91ft	18.2	72.8			4.55	10.01	10.01
91ft	92ft	18.4	73.6			4.6	10.12	10.12
92ft	93ft	18.6	74.4			4.65	10.23	10.23
93ft	94ft	18.8	75.2			4.7	10.34	10.34
94ft	95ft	19.0	76.0			4.75	10.45	10.45
95ft	96ft	19.2	76.8			4.8	10.56	10.56
96ft	97ft	19.4	77.6			4.85	10.67	10.67
97ft	98ft	19.6	78.4			4.9	10.78	10.78
98ft	99ft	19.8	79.2			4.95	10.89	10.89
99ft	100ft	20.0	80.0			5.0	11.00	11.00



Hui 2

Kanun 'o ka ia ino

FLOW DATA SHEET

Mean Velocity¹ = 6/10ths Depth
 Surface Velocity² = 6/10ths Depth x 2
 Bottom Velocity³ = 6/10ths Depth / 2

BANK FULL

STREAM EDGE

BANK FULL

STREAM EDGE

Stream Edge Width (feet)	0.4ft	2ft	3ft	4ft	5ft	6ft	7ft	8ft	9ft	10ft	11ft	12ft	13ft	14ft	15ft	16ft	17ft	18ft	19ft	20ft	21ft	22ft	23ft	24ft
Stream Edge Depth (feet)	0	0.5	0.8	0.95	0.95	1.15	0.07	0.08	1.1	2ft	2.3	2ft	2ft	2ft	2.1	1.4	1.1							
Flow Rate Width (ft/sec)																								
Flow Rate Depth (ft/sec)																								
Substrate/ % Vegetation																								
% Plant Coverage																								
Mean Velocity ¹ (ft/sec)	0.08	-0.08	-0.02	0	-0.06	0.07	0.09	0.13	-0.04	-0.01	0.85	1.12	0.72	75.14	0.04									
Surface Velocity ² (ft/sec)	0	0.17	-0.08	-0.10	0.00	0.14	0.06	0.19	0.36	0.66	0.16	0.01	0.63	0.02	0.13									
Bottom Velocity ³ (ft/sec)	0	-0.01	-0.10	-0.06	-0.07	-0.04	0.03	0.02	0.07	0.08	-0.05	0.64	0.36	-0.10	-0.06									

DATE	11/15/2005	HYDROLAB	Y	0
TIME	10:38-11:38	WIDTH (feet)		0.5
OBSERVER	Kanunoka'ina	TEMPERATURE (°C)	N/I	0.8
REACH		DISSOLVED OXYGEN (mg/L)	N/I	0.9
TRANSECT#		CONDUCTIVITY (mS/cm)	N/I	1.0
DAR_CODE		pH	N/E	1.1
STREAM	Hui lause	TURBIDITY (NTU)	N/I	1.2
TRIBUTARY		TOTAL SUSPENDED SOLIDS (mg/L)		1.3
				1.4
				1.5
				1.6
				1.7
				1.8
				1.9
				2.0
				2.1
				2.2

0ft 1ft 2ft 3ft 4ft 5ft 6ft 7ft 8ft 9ft 10ft 11ft 12ft 13ft 14ft 15ft 16ft 17ft 18ft 19ft 20ft 21ft 22ft

SITE PICTURE

