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www.we-energies.com

February 8, 2005

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Ms. Magalie R. Salas, Secretary 888 First Street, N.E. Washington, D.C. 20426

RE: Peavy Falls Hydroelectric Project - FERC No. 11830-000 Article 407 -Year 2004 - Water Quality Monitoring Report

Wisconsin Electric (WE) doing business as We-Energies, is hereby filing one original and eight additional copies of the results of water quality monitoring for the above identified Project performed during 2004 in fulfillment of the monitoring plan approved and incorporated in the article identified above by FERC for this project.

The Commission issued a new license for the above Project on January 12, 2001 and by Order issued March 9, 2001 clarified certain Water Quality Monitoring requirements. The approved monitoring plan assures that the discharges from the above Project meet the state's water quality standards for temperature and dissolved oxygen (DO). The applicable mean temperature standards for the months during which continuous monitoring takes place are shown in the table below:

Month	June	July	August	September
٩F	80	83	81	74
°C	26.7	28.3	27.2	23.3

The applicable D.O. standard is 5.0 mg/l at all times.

The Plan as approved by FERC order dated January 12, 2001 was subsequently modified by WE, with approval of consulted state agencies. The modified plan was filed with FERC in correspondence dated May 20, 2003. The modified plan now requires continuous monitoring of temperature and dissolved oxygen for the next three years at only those projects where problems in meeting the water quality standards were encountered during the 2001-2002 period. Peavy Falls was one among three projects where problems were encountered.

In addition, the modified plan also requires the collection of vertical profile measurements in the flowage upstream of any project when continuous monitoring is being conducted in the tailrace waters.

The results of our 2004 monitoring for the Peavy Falls Project are as follows:

- I. Continuous water quality monitoring
- Appendix A contains summary tables for the continuous monitoring data. In 2004, continuous monitoring at Peavy Falls was conducted in the Plant's tailrace to ascertain the intensity and duration of low DO conditions in the near-plant area of the river segment that connects Peavy discharge with Michigamme Falls flowage.
- Temperature and DO were monitored continuously from mid-June through mid- September. As in previous years, the Peavy Falls Project tailrace area failed to meet the dissolved oxygen standard for portions of specific days when the units were offline (e.g., low DO levels were primarily detected in the leakage flow ). At no time were DO levels less than 5.0 mg/l during an entire day in 2004. In the tailrace location, approximately 8.2% of all (2381) hourly DO measurements were less than 5.0 mg/l during

the entire monitoring period, but only 0.5% (12 of 2381 )of the readings were less than 4.0 mg/l (Table A-1). None were less than 3.0 mg/l

Table A-2 contains the annual monitoring summaries as well as data recovery statistics, by location for each of the multi-function data sondes.

- II. Flowage measurements
- Appendix B contains the results of the vertical profile measurements made in 2004 for the project. Patterns observed in Peavy Falls flowage were very similar to measurements made during the two previous years.

#### **Consideration of Corrective Measures**

- The work conducted in 2004 represent WE's latest efforts to understand the extent of the low DO problem that was identified during the initial two-year monitoring period specified by the initial Water Quality Monitoring Plan for this Project. The low DO problems encountered at Peavy Falls during 2001 and 2002 were expected, due to the nature of operations and the location of the intake relative to historic flowage thermocline. Low DO in the tailrace was again encountered during the warmer months in 2003. Our analysis indicates that the Plant's intake structure opening is situated near or below the hypolimnion, which is largely devoid of oxygen during the warmest part of summer. When the plant is operating, water is pulled from a portion of the hypolimnion, which is lower in dissolved oxygen, as well as from the upper portions of the water column in the flowage, which is well oxygenated. However, when the plant is offline, leakage flow through the plant's wicket gates, which originate in the hypolimnion, dominate the flow released to the tailrace area. The monitoring data showed that more than 90 % of the low DO measurements in the tailrace occurred while the plant was off-line. However, as previously reported, based on more extensive monitoring conducted during 2003, the typical leakage flow did not cause the entire river segment to be out of compliance with the DO standard of 5.0mg/l. Most significantly, the total amount of time the discharge was below 4.0 mg/l during 2003 was less than 1.0 percent in the tailrace and at or near zero% at the more downstream stations.
- WE is proceeding with discussions involving the state regulatory agencies as to what further studies / mitigation strategies may be justified for the Peavy Fall Project. In 2004, the Company agreed to monitor the discharge at Peavy as it had in the past. In addition, the Company agreed to commence evaluation of mitigation alternatives. To this end, the Company is evaluating the use of an air bubbler system at its Way Dam Project (FERC No. 1759-036) to correct low DO conditions in the leakage flow from that unit. If air bubbling proves to be a feasible alternative for correcting low DO conditions at Way Dam following work scheduled for summer, 2005, tests involving bubbler systems will be evaluated for use at Peavy in 2006.
- In the mean time, the company will begin on evaluation of costs associated with spilling at Peavy Project during 2005. While spilling has clearly helped correct much of the low DO problem at Way Dam, the cost of such an alternative for use at Peavy is likely to be much higher than is the case at Way Dam. Work in 2005 will assess the likely cost for spilling water at Peavy as well as how effective the spillage may be for correcting low DO conditions in the immediate tailrace area.

As part of this filing, a diskette containing all the raw data and accompanying explanatory sheets are being submitted to the agencies for their use.

Enclosed is a proof of service to the agencies listed on the copy list.

Please call me at (414) 221-2413, if you have questions on this matter.

Sincerely. is eleven Raexlu RA

Enclosures

cc: Mr. Michael Donofrio, WDNR

Manager, Hydroelectric Operations

- Ms. Jessica Mistak, MDNR Mr. Larry Thompson, USFWS
- Mr. John Suppnick, MDEQ

### APPENDIX A

## Water Quality Monitoring Conducted at Peavy Falls Project During 2004

### **Monitoring Results**

Table A-1 provides a frequency of occurrence analysis of the continuous recording data base for 2004 monitoring work. By hour of the day, the number of hours during which DO was less than 5.0, 4.0, or 3.0 mg/l during the entire study period (mid-June through mid-September). As can be seen, in the immediate area of the tailrace, DO was less than 5.0 mg/l approximately 195 hours or 8.2% of the time during this study.

Our analysis of plant operating data revealed that approximately 95% of the DO measurements that were less than 5.0 mg/l were associated with the times the plant was off-line (Table A-1). Only twelve measurements out of 2381 hourly measurements were less than 4.0 mg/l.

Table A-2 provides the summary statistics for temperature and DO. No violations of the state's temperature standard were observed at any location.

# Table A-1Peavy 2004 Tailrace Monitoring Data

Data from June 16 - Sept 23, 2004

Hour of		Peavy Taliraco	9	Number of < 5 Readings When Units	We experienced a stimer problem during two time periods (715-7/29 & 8/12-/26), which can result in lower dissolved oxygen readings during low flow or no flow periods. Shown below are the readings below 5 mg/L that occurred during these two periods. See a more detailed explanation on Summary Table A-2
Reading	< 5	<4	< 3	Off-line	
0	11	1	0	12	10 of 11 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
100	14	1	0	15	12 of 14 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
200	13	1	0	14	12 of 13 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
300	14	1	0	15	12 of 14 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
400	10	1	0	11	9 of 10 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
500	15	1	0	14	12 of 15 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
600	13	0	0	13	10 of 13 < 5 occurred between 7/15-7/29 or 8/12-8/25
700	14	0	0	14	12 of 14 < 5 occurred between 7/15-7/29 or 8/12-8/25
800	14	0	0	14	12 of 14 < 5 occurred between 7/15-7/29 or 8/12-8/25
900	12	0	0	12	10 of 12 < 5 occurred between 7/15-7/29 or 8/12-8/25
1000	10	1	-0	11	8 of 11 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
1100	7	0	0	7	5 of 7 < 5 occurred between 7/15-7/29 or 8/12-8/25
1200	5	0	0	5	2 of 5 < 5 occurred between 7/15-7/29 or 8/12-8/25
1300	3	0	0	3	1 of 3 < 5 occurred between 7/15-7/29
1400	3	1	0		
1500	1	1	0	0	
1600	1	0	0	0	
1700	2	0	0	0	1 of 2 < 5 occurred between 8/12-8/25
1800	2	0	0	1 1	1 of 1 < 5 occurred between 8/12-8/25
1900	1	0	0	1	1 of 2 < 5 occurred between 8/12-8/25
2000	5	0	0	2	4 of 5 < 5 occurred between 7/15-7/29 or 8/12-8/25
2100	5	1	0	3	4 of 5 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
2200	9	1	0	8	8 of 9 < 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
2300	11	1	0	10	11 of 11< 5 and only < 4 occurred between 7/15-7/29 or 8/12-8/25
Totals>	195	12	0	186	
	% of readings	while plant off	ine	95%	157 of 195 < 5 readings occurred between 7/15-7/29 or 8/12-8/25.
Total Observa	itions			2381	
Percent of Tot	tal Obs Below !	5 mg/l		8.2%	
Percent of Tot	tal Obs Below 4	4 mg/l		0.5%	

Units Off-line: For each hourly grouping, this is the number of hours the units were off line compared to the total number of hourly readings < 5.0 mg/l... At the bottom of the Unit Off-line column is the percent of time the < 5.0 mg/l reading occurred while the units were off line.

# Table A - 2 We Energies Peavy Falls 2004 Hydro Monitoring Data Summary Temperature and Dissolved Oxygen ( D.O.) Stations

Dissolved Oxygen Limit 5.0 mg/l	Monthly Average		Dearee F	Dearee C
	Temperature Limits:	June	80	26.7
		July	83	28.3
		August	81	27.2
		Sept	74	23.3

#### Peavy Tailrace - 2004 Data Summary

Month	OBS	Temperatu	re ( Degree	BEC)	DO % Sat	ration		Dissolved	Oxygen (m	g/l)
		Mean	Max	Min	Mean	Max	Min	Mean	Max	Min
Jun	350	18.1	20.9	16.9	82.2	95.0	72.0	7.6	8.4	6.8
Jul	744	19.2	22.4	17.0	73.0	92.2	39.7	6.6	8.3	3.6
Aug	744	19.2	22.4	17.6	69.6	96.3	35.9	6.3	8.6	3.4
Sep	543	18.3	20.6	17.5	73.7	93.6	52.1	6.8	8.4	4.9

0800 @ 7/7/04 Deleted one hour of data as sonde became dewatered.

#### 7/15 @ 1700 - 7/29 @ 1200 & 8/12 @ 1700 - 8/26 @ 1400.

We had two of our older Hydrolab sondes upgraded to internal stimers in May of 2004. This upgrade resulted in an unforseen and undocumented change in the programing sequence. Due to this, there were two time periods when the stimer was not enabled and idd not run during dissolved oxygen( DO ) testing. This problem was minimal when the plant units were running, as adequate flow past the sonde membrane results in reasonbly accurate readings. During periods when there was little or no flow through the units, and therefore in the tailrace, the sonde was most likely reading lower DO than was actually present. For those time periods we have a "worst case scenario".

0.5% of measurements were below 4.0 mg/l

7.7 % of measurements were below 5.0 mg/l

99.9% Data Recovery

# Appendix B

#### **Vertical Profile Results**

The attached tables provide the results of vertical profile measurement made in Peavy Flowage during 2004. For each measurement, the Table contains the corresponding tailrace measurement for temperature and DO taken by the continuous recording data sondes during the same hour on the same day when the vertical profile measurement was taken. This comparison allows one to observe how operating conditions result in the discharge being in compliance with the DO standard in spite of intense thermal and DO stratification conditions that exist in the flowage during the warmest time of the summer months.

Vertical Profile Deta - Vertical Profile Deta -
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6/17/2004	1	3				6/16/2004		i			
Florence	/erticel	5		1		Herd to get	vertical in t	nihmon, du	ie to a strong	current.	
		17.	to-un7					Ę	Jun-04		
Approxim	ate air temp:	18.3 C				Approximent	e air temp.	21.1 C			
Secchi De	ратка п	ater depth	1 64 to 67	Tem.	e: 1145	Secchi Dep	o: 6.0 f.			Time: 100	8
ENE wind	ls 8-12 mph			50%	clouds	Winds NE {	3-12 mph			cool and l	breezy
Taken in f	adeno.					Taken in Ta	wirace				
		Ö	0.0 X	, Sond				Ö	<b>D</b> .O.	Cond.	
Depth (m)	Temp. (C)		Seturation	(InSVam)	pH (S.U.)	Depth (m)	Temp. (C)	(Jom)	Seturation	(mg/gm)	pH (S.U.)
0.0	21.0	8.8	9 <b>6</b> .0	3	7.2	0.0	17.3	7.9	83.2	87	7.8
0.5	20.0	8.7	<b>96.1</b>	8	7.2	0.5	17.3	7.0	83.1	87	7.8
1.0	20.5	8.7	07.3	8	7.2	1.0	17.3	7.9	82.6	8	2.8
₩. I	8	<b>9</b> .5	<b>96</b> .3	8	7.2	1.5	17.3	7.9	82.8	8	7.8
56	83	4	88.8	33	77	50	17.3	8 C	82.6	8	2.7
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3	10.1	D.	223	8	2.7				NOT ON		ſ
								D.O.	D.O.	Cond.	
90	17.7	7.7	<b>B1.3</b>	8	7.2	Depth (m)	Temp. (C)	(Hom)	Seturation	(mo/gn)	PH (S.U.)
3	17.2	7.6	70.0	8	7.2	0.0	17.6	8.0	84.0	87	<b>0</b>
0.7	16.8	7.6	78.9	8	7.2	0.5	17.4	8.0	84.5	8	8.0
22	16.3	7.8	78.2	8	7.2	1.0	17.3	8.0	4.48	8	8.0
80	15.9	7.5	11	8	7.2	1.5	17.3	8.0	84.3	8	8.0
99	15.6	7.4	75.5	2	7.2	2.0	17.3	8.0	83.9	8	8.0
0	15.4	7.4	74.3	28	7.2	2.5	17.3	8.0	83.7	8	8.0
0	14.2	2	60.3	2	7.2	3.0	16.9	7.9	62.0	67	<b>B</b> .0
0.0	13.7	~	66.8	3	7.2	3.4	16.8 1	7.8	81.8	87	7.8
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			88	88							
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13.5	11.8	0.8	50.0	8	7.1		Temp C		DO (% Sat	Cond	
14.0	11.7	5.6	54.1	87	8.8	8	18.7	8.0	87.1	8	
14.5	11.6	5.7	52.7	87	6.0	002	18.8	0.0	87.6	8	
15.0	11.4	5.8	51.4	8	<b>8</b> .8	<u>8</u>	18.7	81	86.3	8	
15.5	11.0	5.3	<b>9</b> 9	8	6.8						
16.0	10.7	5.0	45.8	8	<b>0</b> .0						
10.5	10.4	4.8	43.7	8	6.9						
17.0	10.2	4	41.3	8	6.9	PH were not	a paramete	er collecte	d in the tailra	ŝ	
17.5	10.0	4	37.7	8	6.0						
18.0	8.0	3.8	34.0	8	7.0						
18.5	<b>8</b> . <b>4</b>	3.0	8 92 7	8	7.0						
19.0	8.2	28	24.4	8	7.0						
19.2	bottom										

Project	
ervy Falls Hydroelectric	Vertical Profile Data
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Winds nea	r caim Slight	thy south 0	13 mph	less than	5% clouds	Winds near	caim Slight	thy south 0-	3 mph	less than	5% clouds
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5 e	19.8	60 d 60 d	86.7	8	7.7	 	18.7	7.0	<b>9</b> 0.4	8	7.4
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5.6	18.2	7.8	85.1	8	7.4	Taken on T.	ainter pate	sole -	No flow	bright blue	e aky
								0 O	D.0.4	Ба В	
9	18.0	1.7	83.2	87	7.4	(E) (Jacobili (J	Temp. (C)	(Jon)	Seturation	(mgygn)	pH (3.U.)
8.8	17.8	7.5	<b>80.5</b>	8	7.4	0.0	19.4	<b>8</b> .2	90.1	26	7.5
2.0	17.4	7.3	78.2	97	7.3	0.5	19.4	8.1	<b>9</b> 0.5	97	7.4
2	17.3	7.3	77.6	8	7.3	0.1	19.3	8. <del>1</del>	89.7	97	7.4
0	17.3	7.5	8.92	8	7.2	5	18.1	8.1	0.08	87	7.4
23	0.71	21	74.2	6	72	20	19.1	<b>1</b> 0	88.9	97	7.4
	16.9	7.0	73.4	83	72	2.5	18.1	<b>0</b>	86.9	8	7.4
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12.0	12.9	4.7	46.0	5	7.0						
12.5	12.7	4.5	43.2	z	6.9						
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10.5	11.1	3.7	34.2	8	6.8						
17.0	10.8	3.2	20.3	5	<b>6</b> .8						
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Page 2 of 8

Highlighted Depth: Opening of the intake forebay (2 to 10 m)

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hydroelectric	Profile Data
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		15	14-04					Ŕ	1u1-04		
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0.0	8	<b>.</b>	107.6	102	7.8	0.0	20.8	7.8	<b>56</b> .3	<b>1</b> 0	7.4
0.5	ลึ	0.0	106.4	<u>5</u>	7.9	0.5	8.8	7.8	87.8	₫	7.4
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1.5	21.0	8.0	103.2	5 8	<b>8</b> .7	1.5	8.4	7.8	87.5	<b>5</b>	7.3
20	21.8	<b>8</b> .6	102.6	102 201	7.9	2.0	<b>8</b>	7.7	87.0	<b>5</b>	7.3
26	21.8	<b>B</b> .7	101.5	102	7.8	25	20.3	7.6	85.5	5 8	7.3
30	21.6	8.7	100.8	<b>1</b> 0	7.8	3.0	19.9	7.7	85.8	5	7.3
35	<u>م</u> به	<b>8</b> .6	99.5	10	7.8	3.5	19.9	7.8	85.4	101	7.3
\$	20.6	8.2	23.1	ģ	7.7	4.0	10.6	7.6	13.4	104	7.3
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1.5	17.2	5	<b>90</b> .6	ē	7.4	Secchi Dep	th:6.5 ft.			Time: 17	8
	17.1	6.3	8	102	7.4	Winds celm	_			80 % ClOI	uds
5.5	17.0	<b>6</b> .2	<b>65</b> .3	5 8	7.3	Taken on T	anner Gate 1	picte		No flow	
								0 O	0.0	Cond	
0.0	16.9	6	63.3	5 8	7.3	(m) (m)	Temp. (C)		Seturation	(mgygu)	QH (S.U.)
9.6	18.7	<b>8</b> .9	B1.3	107	7.3	0.0	21.1	7.9	<b>59.7</b>	ţ	7.4
10.0	16.4	5.7	58.7	<b>8</b>	7.2	0.5	20.7	7.7	87.0	ţ	7.4
10.5	16.1	4 10	2	10	7.2	10	20.4	7.7	<b>58.0</b>	10 10	7.4
11.0	15.8	4	1.84	11	7.2	1.5	<b>2</b> 0.4	7.7	<b>58.1</b>	<b>5</b>	7.4
11.5	15.3	4	427	<b>₿</b>	7.2	2.0	20.3	7.6	85.8	₫	7.3
12.0	14.8	3.6	4.88	8	7.1	2.6	20.3	7.6	55.5	10	7.3
12.5	14.4	3.3	823	8	7.1	3.0	8	7.6	86.7	<b>1</b> 0	7.3
13.0	13.0	3.1	29.0	8	1.7						
13.5	12.0	3.0	20.02	87	11						
14.0	12.3	2.8	29.20	8	7.0	Tailrace det	a for same t	ime period	as the flowe	toe vertical	profile on 7/
14.5	12.1	28	28.2	8	8.9						
15.0	11.6	2.8	2.2	8	6.9	Ţ	Temp C	DO (mol	DO (% Sat	t) Cond	
15.5	1.5	25	233				19.8	22	00.5	18 18	
16.0	11.3	23	20.6	8	9	9	20.02		82.4	18	
16.5	110	-	18.7	3 8			18		1	8	
17.0	10.8	1.6	14.4	5 8		}	1			:	
17.5	10.6	4	11.6	1 2							
18.0	10.3	11	9.2	3							
18.5	10.0	80	( e) ( •0	Ş	9	H man		( potrollers )	Contract of the		
10.0	2 2		) 0	ž						Ď	
2	•	1.2	1	3	2						

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Project	
Pervy Falls Hydroelectric	Vertical Profile Data

7/28/2004						7/29/2004					
John Hrober 4	and Noel Cut	Į,				John Hrober a	nd Noel Cut	<b>right</b> • <b>Feli</b> e is y			
Flowage Verti						Flow from one		e rem a k it, here et	M. Peev.		
		787	101					78	ş		
Approximate .	air temp:26.7	S S				Approximate a	ir temp:23.6	S S			
Secchi Depth	:8.0 ft. water	depth 60 (	10 66°	Time: 17.	8	No secchi				Time: 130	8
Westerly winc	1s 8-12 mph			occasion	el gusts	_				100% ove	srcast
Taken in flow	926					Teken in Tailn	206			some driz	24
		Ö	D.O. #	Cond				0	D.O. X	Cond	
								1000			
0 4		59 C	2.701	è		0 1	10.2	0	62.0		D'.
0 I 3 I		7, I 0 I	0.701	) j	р -	0 0 	2.8L	0		į	
<b>-</b> 1	9	N -	* • \$	<u></u>		0, 0	7.AL	2 Q 0 U	- LD	<u>s</u>	0.1
0. ( - (	3			è	<b>9</b> (	<b>Q</b> .	7.91	10 ( 0 (	51.7	ž	0.7
			972 1		8.7	0 1	19.2	00	61.7 2.12	ន្ត	
<b>9</b> 7	8	D D I	/0.3	₿ i	2.7	50	18.2	10 ( 10 (	61.5 515	<u>8</u>	7.0
3.0	18.0	7.0	07.0	ž	9.7	3.1	19.2	9.6	61.8	ğ	6.9
8 G 9 G 9 G	10.2	69 i 19	61.1 1 1 1	<u>8</u>	7.6						
0 I		0 ·	<b>6</b> 0.7	3	0.1						
4.0	18.5	∎ n	57.8	102	7.5			Ź	101		
5.0	18.4	5.2	59.9	<u>8</u> :	4.7	Approximate a	kr temp:23.6	с Б			
55	18.2	4.5	48.3	ğ	7.4	No secchi				Time: 130	8
<b>9</b> .0	17.8	4.3	48.3	<u>1</u> 02	7.4					100% ov	ercast
<b>8.5</b>	17.8	4.2	45.2	Ē	7.3	Taken on Tair	Her Date sid			some driz	zzie j
								D.O.	<b>b</b> .0.4	Cond	
7.0	17.7	4	44.2	102	7.3	Depth (m)	Temp. (C)	(Lon)	Saturation	(ngfam)	pH (S.U.)
7.6	17.4	3.7	31.3	ន្ត	7.3	0.0	20.4	7.3	82.0	ē	7.2
8.0	17.2	3.8	36.3	₹	7.2	0.5	19.7	6.5	72.0	ğ	7.1
ð.6	16.7	3.6	37.9	ភ្ន	7.2	1.0	19.5	8.4	8.07	ŝ	7.1
0.0	16.6	3.6	37.7	<u>10</u>	7.2	1.5	19.3	60	<b>8</b> 6.8	ā	7.0
9.6	16.5	3.6	37.0	ā	7.2	2.0	19.0	10. 12	<b>64</b> .2	ģ	7.1
10.0	16.3	3.5	36.0	<u>1</u>	7.2	2.5	18.0	4.0	53.4	103	8.0
10.5	15.5	2.6	26.3	<u>5</u>	7.2	3.0	18.0	8.4	51.9	<u>5</u>	6.9
11.0	14.8	2.1	21.1	<u>1</u>	1.7	3.5	17.0	4.8	51.8	103	6.9
11.5	14.4	1.7	16.3	8	7.1						
12.0	14.0	1.5 2	5.41	8	7.1						
12.5	13.2	1.5	14.4	9	7.1						
13.0	12.8	4.1	13.5	8	7.1						
13.5	12.7	4.1	13.3	8	7.0						
14.0	12.5	1.3	11.2	88	7.0						
14.5	12.2	1.2	11.4	8	7.0						
15.0	121	-	12.6	8	8.8	Taihace data	for same tim	e ceriod ar	the foreco	vertical or	ofia on 7/280
15.5	11.7	- 	11.7	3	9.0						
16.0	11.3	6.0	8.2	8	6.9	Time	Temo C		DO CK Sat	Cond	
16.5	10.9	0.5	3.2	58	0	1700	10.2	5.4	2 0 Z	Ę	
17.0	10.8	0.3	2.2	1 a		1800	181	5.2	57.7	ŝ	
17.5	10.7	0.2		8			181	52	24 B	15	
18.0	10.8	0.3	2.0	8	8.6				2		
18.5	10.3	60	- <del>-</del>	ŝ							
			) (* - <del>-</del>	Ş							
) U ) U			<u>,                                    </u>	<u>;</u>	5 C			ai baharda			
2.2	Ø.0	5	ن	4	R D						

]Highlighted Depth. Opening of the intake forebay (2 to 10 m)  $p_{\text{agge}}$  4 of 8

pH was not a parameter collected in the tailrace.

Peary 2004 Verticats Peary July 28 04

Peery Falls H Vertical

droelectric Project	hoffe Data -	

8/12/2004 John Hrober	t and Annia S	Salmone				8/12/2004 John Hrober	and Annie !	Selmone			
Flowage Ver	rtical										
		12-4	10-01					12-4	10-01		
Approximent	e air temp:18	1.3 C				Approximate	air temp: 16	9.3 C			
Secchi Dept	th:0.5 ft. wah	ar dapth 61	0 to 66°	ШШ	e: 1430	No seechi du	e to strong	current		Time: 104	65
NNE Winds	12-18 mph			Sur	ny day	NNE Winds	12-18 mph			Summy da	Y
Taken in flo	agen			Nen	r windy	Taken in Tail	race			1 or 2 unit	ts in
		0 O	<b>2</b> .0.0	Cond.				D.O.	D.O. 🕷	Cond	
Depth (m)	Temb. (C)	(John)	Seturation	(mgygn)	pH (S.U.)	Depth (m)	Temp. (C)	(Jom)	Seturation	(mgygn)	pH (S.U.)
0	19.7	<b>6</b> -	<b>9</b> 0.5	5	7.5	0.0	19.6	7.8	87.1	107	1.4
0.5	19.7	8.1	<b>8</b> 0.3	<b>5</b>	7.5	0.5	19.0	7.8	<b>60</b> .8	107	7.4
1.0	19.6	6	<b>80.</b> 8	5	7.5	1. 0	19.6	<b>8</b> .2	99:90	107	7.4
5	10.5	6	<b>6</b> 0.4	ŝ	7.5	1.5	19.0	7.8	<b>90</b> .0	107	7.3
2	19.5	<b>9</b> .0	8	ĝ	2.5	50	19.0	7.8	8.89	107	7.3
<b>R</b> :	19.5	0.0	<b>60</b> .0	<u>8</u>	9.2	Could only g	14112 14111 14112 141111 141111 141111 14111111 141111111		trong current		
20	0.91	0		80	0.						
9 9 9	19.5	00	6.99	Ş (	10 1 1- 1						
	+ A			<u>8</u>	0.1						
\$	19.3	7.9	67.7	<u>5</u>	7.5			124	199		
80	19.2	<b>9</b> .2	<b>1</b> .8	<b>₽</b>	7.5	Approxim	iete air terriç	p:18.3 C C			-
5.6	10.2	7.8	86.5 2	5	7.5	Seech Dept	1: 6,0 ft.			Time: 164	<b>2</b>
9	19.1	7.7	<b>8</b> 5.3	₽ 28	7.5	NNE Winds	12-18 mph			Summy de	*
80	19.1	7.7	<b>8</b> 5.2	5 8	7.7	Taken on Ta	inter Gete s	909		•	
								00	D.O. X	ğ	
7.0	19.1	7.7	<b>8</b> 5.0	107	7.4	Depth (m)	Temp. (C)	(hom)	Sahindion	(InSVCm)	pH (S.U.)
7.5	19.1	7.7	8.48 9.12	107	7.4	0.0	19.8	8.3	91.7	107	7.5
8.0	19.0	7.8	83.0	107	7.4	0.5	10.6	8.2	90.3	107	7.5
8.6	19.0	7.5	82.8	<b>1</b> 08	7.4	1.0	19.6	6.1	90.3	107	7.5
60	19.0	7.8	<b>83.2</b>	<b>1</b> 08	7.4	1.5	10.6	6.1	90.2	107	7.5
9.6	18.0	7.5	<b>81.9</b>	107	7.4	2.0	19.6	<b>8.1</b>	90.2	107	7.5
10.0	18.9	4.7	81.1	107	7.3	2.5	19.5	6.1	<b>50.7</b>	107	7.5
10.5	18.9	7.3	<b>8</b> 0.1	107	7.3	3.1	10.2	8.2	89.2	106	7.5
11.0	18.6	7.3	4.62	5 8	7.3						
11.5	18.5	6.8	002	107	7.3						
12.0	17.4		18.5	103						:	
12.5	15.4	-	0.9	8	7.1	<u>Tainace data</u>	for same t	ime period	as the flowing	on verticel c	orofile on 6/15
13.0	14.3	0.7	5.0	8	7.0						
13.5	13.6	4	3.5	8	9.0	Time	Temo C		00 (% 54		
14.0	12.8	0.3	2.8	9	<b>8</b> .9	130	19.3	7.8	86.7	<b>10</b>	
14.5	12.0	4	3.4	8	6.7	140 140	19.3	8	88.4	<b>106</b>	
15.0	11.8	0.3	3.1	2	8.8	1500	19.6	7.8	83.3	107	
15.5	12	0.5	3.1	đ	6.8						
18.0	1.1	0.2	1.7	5	6.7						
16.5	11.0	-	0.0	8	6.9 9						
17.0	10.6	0	0.0	101	8.8	pH was not a	) parameter	r collected i	n the tailrace	ند	
17.5	10.5	0	12	<b>5</b>	6.9						
18.0	10.2	0	1.3 5	\$	6.9	•					
18.5	10.1	0.2	1.3	5 8	6.9						
19.0	6.9	0	1.5	112	6.9						
19.3	9.9	0.2	1.7	117	<b>6</b> .8						

Highlightighted Depth: Opening of the intake forebay (2 to 19-89)e 5 of 8

any Falts Hydroelectric Project	Vertical Profile Data -
Page	

Consider of firms 2.8 G         Suburg 2.4         Approximation of firms (146)           Approximation of firms (17)         Suburg 2.4         Approximation of firms (146)         Approximation of firms (146)           Approximation of firms (17)         Suburg 2.6         Time (145)         Suburg 2.6         Time (145)           Section of firms (17)         Suburg 2.6         Time (146)         Suburg 2.6         Time (145)           Section of firms (17)         Suburg 2.6         Time (146)         Suburg 2.6         Suburg 2.6         Time (145)           Section of firms (17)         Suburg 2.6         Time (12)         D/D         Suburg 2.6         Suburg 2.6         Suburg 2.6           District (12)         1916         1913         74         70         24         74         24         25           District (12)         1916         113         Time (12)         D/D         Suburg 2.6         74         26         26           District (12)         1913         74         74         74         74         74         74         74         74         74           District (12)         District (12)         District (12)         District (12)         26         26         74         74         74           Distr	6/26/200- John Hrobar a	4 Ind Bill Brau	nschweig				8/26/2004 John Hrobart	t end Bill Bra	nschweig			
Approximate at leng 28 6         Approximate at leng 28 6         Time 1445           Sech Doph/ 51 may rank         Time 7300         No sech day or strong cummer         Time 1445           Sech Doph/ 51 may rank         Time 700         D.0.%         Cond         Time 1445           Team rank         Team rank         Time 700         D.0.%         Cond         Time 7445           Team rank         Team rank         Team rank         Time 7445         Time 7445           Team rank         Team rank         Team rank         Time 7445         Time 7445           Team rank         Team rank         Team rank         Team rank         Time 7445           Team rank         Team rank         Team rank         Team rank         Team rank         Team rank           District         190         N         Cond         Tank         Team rank         Team rank           District         190         N         Cond         Tank         Team rank         Team rank           District         190         N         Team rank         Team rank         Team rank         Team rank           District         190         N         100         Tank         Team rank         Team rank         Team rank			26.41	10						100		
Sacchi Daperi 7.5 At welker dependent of other 3100         Timer 1300         Note selection of the strong current         Timer 1445           Sacchi Daperi 7.5 At welker dependent of the strong current         Timer 1300         SSE words 8.12 mpty pusty         40% clouds         35% words 8.12 mpty pusty         40% clouds           Twen in forward         Biol         Biol         Biol         200         188.3         7.4         70%         7.4           Doi         100         100         100         168.3         7.4         7.8         100         7.4           Doi         100         100         7.8         100         7.4         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.6         7.4	Approximate 4	air femp.23.8	C				Approximate	air temp. 26.	6C			
SSE words P.12.mb/ pusty         SSE words A.12.mb/ pusty         SSE words A.12.mb/ pusty         A0% clouds           Twen in forener         Terms (C) (mg)         SSE words         Price (n)         Terms (C)         A0% clouds           Twen in forener         Terms (C)         D.0.%         Cond         A0% clouds         Price (n)         Price (n) <td>Secchi Depth.</td> <td>.7.5 ft. water</td> <td>depth 60 t</td> <td>o 66°</td> <td>Time 130</td> <td>8</td> <td>No seechi du</td> <td>e to strong (</td> <td>nent</td> <td></td> <td>Time: 144</td> <td>c,</td>	Secchi Depth.	.7.5 ft. water	depth 60 t	o 66°	Time 130	8	No seechi du	e to strong (	nent		Time: 144	c,
Taten in Tanges         Taten in Tanges         Taten in Tanges         Taten in Tanges           000         100         000	SSE winds 8-	12 mph guat	~		60-70 % c	spinots	SSE winds 8	-12 mph gus	ty		40 % clou	ds
	Taken in Row	9 <b>0</b> 9					Taken in Tail	race				
Deter f(m)         Terms (C)         Rest (C)			0.0	D.O. %	Cond					D.O. W	ġ	
0         13         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8	(E) <b>(B</b> )	Temp. (C)		Saturation	(Ingram)	0H (3.U.)	Depth (m)	Temp. (C)	D.O. (mp/	Saturation	(mS/cm)	pH (8.U.)
103         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.4         7.8         103         7.3         7.8         103         7.3         7.8         103         7.3         7.8         103         7.3         7.8         103         7.3         7.8         103         7.3         7.4         7.8         103         7.3         7.4         7.8         103         7.3         7.4         7.8         103         7.3         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.8         7.8 <td></td> <td>19.8</td> <td><b>D</b>, i</td> <td><b>96</b>.2</td> <td>8</td> <td>7.6</td> <td>0.0</td> <td>18.3</td> <td>7.4</td> <td>79.7</td> <td><b>8</b></td> <td><b>*</b> `</td>		19.8	<b>D</b> , i	<b>96</b> .2	8	7.6	0.0	18.3	7.4	79.7	<b>8</b>	<b>*</b> `
10         10         10         13         74         10         73         74         10         73           20         105         21         105         75         20         175         73         73         105         73         73         105         73         74         75         73         74         75         75         74         75 <td< td=""><td>0.0</td><td>19.0</td><td></td><td>94.2</td><td><u>8</u></td><td>7.6 </td><td>0.2</td><td>16.3</td><td>4.7</td><td>6. 2</td><td>ĝ</td><td>4.7</td></td<>	0.0	19.0		94.2	<u>8</u>	7.6 	0.2	16.3	4.7	6. 2	ĝ	4.7
10         10		15.6	47 ( 12)	82.1 200	<u>8</u>	7.6	0.0	16.3	7.4	₹.8 <u>7</u>	9 <u>0</u>	4.7
Z0         100         76         20         17.5         76         607         110         73         110         73           30         105         51         103         75         100         75         20         17.5         607         100         73           40         102         75         605         100         75         7         70         170         73           40         102         73         100         75         7         70         170         73           101         74         72         100         75         7         70         170         40%         70         73           101         74         74         72         73         100         75 </td <td>0.L</td> <td>18.5</td> <td>5, 1 80 i</td> <td>880.0</td> <td><u>8</u></td> <td>7.6</td> <td>1.5</td> <td>18.3</td> <td>7.3</td> <td>2</td> <td><b>9</b></td> <td>7.3</td>	0.L	18.5	5, 1 80 i	880.0	<u>8</u>	7.6	1.5	18.3	7.3	2	<b>9</b>	7.3
25         165         51         000         75         Could only get to 2 meters due to strong current           36         18.5         8.1         8.65         100         75         Approximate air term; 26.6 C         Time: 14.0           4.0         18.3         7.3         100         75         Approximate air term; 26.6 C         Time: 14.0           8.0         100         7.1         700         106         7.4         26.4 Jug 4.4           8.0         100         7.1         700         106         7.4         26.4 Jug 4.4           7.10         100         7.1         700         106         7.4         26.4 Jug 4.4           7.10         18.0         7.1         700         106         7.4         26.6 Jug 4.6           7.10         18.0         7.7         66.0         100         7.5         56.6 Jug 7.6           7.10         18.0         7.7         8.0         100         7.4         26.6 Jug 7.6           7.10         18.0         7.7         8.0         100         7.7         8.0         100         7.4           7.10         18.1         7.7         8.0         100         7.4         100         7.	2.0	16.5	8.2	86.9	108	7.8	2.0	17.5	7.8	80.7	110	7.3
30         165         87         100         75           40         103         70         100         75           40         102         76         100         75           40         102         76         100         75           40         102         76         100         75           60         103         74         766         100         75           61         103         74         766         77         80           70         100         74         77         70         70           70         100         74         76         77         70         70           70         100         74         76         77         70         70         70           70         77         65         70         70         70         70         75           70         77         65         70         77         70         75         70           70         77         70         77         70         77         70         77         70           70         70         100         77         77         <	2.5	18.5	8	839	<b>1</b> 00	7.6	Could only ge	<u>)t to 2 meter</u>	s due to etr	ang current		
3.6         18.4         8.0         66.7         108         7.5         8.0         7.5         7.6         7.6         7.6         7.7         8.7         7.6         7.7         8.6         7.6         7.6         7.7         8.6         7.6         7.6         7.7         8.6         7.6         7.7         8.6         7.6         7.7         8.6         7.6         7.7         8.6         7.6         7.7         8.6         7.6         7.7         8.6         7.6         7.7         8.6         7.6         7.7         8.6 </td <td>30</td> <td>18.5</td> <td>8.1</td> <td>87.4</td> <td><u>6</u></td> <td>7.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	30	18.5	8.1	87.4	<u>6</u>	7.5						
4.0         183         7.8         8.45         106         7.5 <b>ZeAuge fa</b> 5.6         182         7.3         006         106         7.5 <b>Zeauge fa</b> 5.6         182         7.3         006         106         7.4 <b>Zeauge fa</b> 5.6         181         7.4         728         106         7.4 <b>Zeauge fa</b> 5.6         181         7.4         728         106         7.4 <b>Zeauge fa</b> 7.6         170         180         7.4         108         7.4 <b>Constanting art intrip.26.6 Zeauge fa</b> 7.7         170         180         7.4 <b>Constanting art intrip.26.6 Zeauge fa</b> 7.7         170         180         7.4 <b>Constanting art intrip.26.6 Zeauge fa</b> 7.7         177         8.6         100         7.5 <b>Constanting art intrip.26.7 Time.1440</b> 7.7         8.1         7.7         8.1         7.7         8.1         7.6 <b>Constanting art intrip.26.7</b> 10.5         177         8.3         107         7.2         2.5         108         7.7	3.5	18.4	8.0	80.7	<b>6</b>	7.5						
4.6         18.2         7.8         8.2.5         100         7.5         Approximate a/ femp. 26.6 C         Time: 14.0           6.0         18.1         7.4         7.8         10.6         7.5         7.8         10.6         7.4           6.0         18.1         7.4         7.8         10.6         7.4         7.8         10.6         7.4           6.0         18.0         7.1         7.8.9         10.6         7.4         20.6         10.6         7.5           7.0         18.0         7.1         7.8.9         10.6         7.4         20.6         10.6         7.5           7.0         18.0         7.1         7.8.9         10.6         7.4         20.6         10.7         7.5           7.0         17.7         6.5         6.6         10.7         7.3         10.7         7.7         8.9         10.6         7.5           8.5         17.5         6.1         6.1         10.7         7.7         8.9         10.6         7.5           8.6         17.5         6.1         18.7         7.7         8.9         10.6         7.5           10.0         17.7         8.9         10.7	4	18.3	7.8	54.5	<b>1</b> 00	7.5						
50         182         75         808         108         75         40proximate at femp. 26.6 C         Time. 1440           6.0         18.1         7.4         700         108         7.4         700         106         7.4           7.0         18.0         7.1         7.8         108         7.4         700         106         7.4           7.0         18.0         7.1         788         108         7.4         500         9.0         7.40         500         9.0         7.40         50         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         10.6         7.5         50.6         7.5         50.6         7.5         50.6         7.5         50.6         7.5         50.6         7.6         7.6         50.6         7.6         7.6         50.6         7.6         50.6         7.6         50.6         7.6         50.6         7.6         50.6         7.6         50.6	4.6	18.2	7.6	82.5	<b>6</b>	7.5			74	10-01		
65         181         7.4         7.8         106         7.4         7.8         106         7.4         7.8         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.8         7.4         7.6         7.4         7.6         7.4         7.6         7.4         7.6         7.4         7.6         7.4         7.6         7.4         7.6         7.4         7.6         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.4         7.7         8.5         7.6         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4         7.4	5.0	18.2	7.5	80.8	90 100	7.5	Approximate	air terno. 26.	6 C			
6.0         19.1         7.4         78.0         106         7.4         SSE winds 6.12 mpn gasty         40 % clouds           7.0         18.0         7.1         78.9         106         7.4         75.0         40 % clouds           7.0         18.0         7.1         78.9         106         7.4         0.0         19.4         60         60.4         106         7.5         60041           7.0         17.7         65         61.9         106         7.4         0.0         19.4         100         7.5         60.4         106         7.5         60041         10         7.5         60041         100         7.5         60041         100         7.5         60041         100         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60041         7.5         60011         7.6<	5.5	18.1	4.2	9.02	00	7.4					Time: 144	0
65         160         72         77.3         103         7.4         Team of Teams         Const         Const <thconst< th="">         Const         Const</thconst<>	00	18.1	7.4	0.62	108	7.4	SSE winds 8.	-12 moh ous	4		40 % clour	dis
7.0         13.0         7.1         7.8         100         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.4         0.0.5         7.5         0.0.	<b>8</b> .5	18.0	7.2	E. 17	60	7.4	Taken on Tai	inter Gate si	-8			I I
70         180         71         789         108         74         Deeph (m)         Termo. (C)         D.0         (19.4         8.0         8.4         106         75           75         173         65         643         103         73         10         17         843         106         75           86         175         61         643         107         73         10         183         77         844         106         75           86         175         61         633         107         73         15         183         77         842         106         75           105         175         61         163         77         842         106         75           110         163         27         73         853         102         73         106         74         106         75           110         163         27         23         106         77         843         106         75           1110         163         27         77         843         106         75           1115         152         03         106         77         843         106										00 10	ğ	
7.6         17.9         6.9         7.40         109         7.4         0.0         19.4         6.0         66.4         106         7.5           6.0         17.7         6.5         66.9         109         7.3         1.6         19.2         7.8         60.6         7.5           6.0         17.5         6.0         65.3         107         7.3         1.6         18.8         7.7         84.9         106         7.5           8.0         17.5         6.0         65.3         107         7.2         2.5         18.7         7.7         84.9         106         7.5           10.0         17.3         5.5         560         106         7.7         83.9         108         7.5           11.5         15.2         0.3         2.6         102         7.1         83.9         106         7.4           11.5         15.2         0.3         2.6         102         7.1         83.9         108         7.4           12.6         14.7         0.3         2.6         102         7.1         83.9         108         7.4           12.6         14.7         0.3         16.6         7.7	7.0	18.0	7.1	78.9	108	7.4	Death (m)	Temp. (C)	D.O. (mail	Seturation	(inStam)	CUS) Ha
6.0         177         6.5         68.9         109         7.3         0.5         16.2         7.9         66.9         109         7.5           8.6         175         6.1         64.9         107         7.3         1.5         16.8         7.7         8.6         106         7.5           8.0         175         6.0         63.8         107         7.2         2.5         18.7         7.7         8.6         106         7.5           10.0         17.3         5.5         58.0         106         7.7         8.9         106         7.7         8.9         106         7.6           11.0         16.3         7.7         8.9         106         7.7         8.9         106         7.4           11.10         16.3         2.7         4.4         102         2.5         2.6         106         7.4           11.10         16.3         2.6         106         7.1         8.3.2         108         7.7         8.3.5         108         7.4           12.00         16.4         102         2.6         102         2.6         102         2.6         106         7.4           13.3         <	7.6	17.9	6.9	74.0	<u>8</u>	7.4	0.0	10	80	88.4	8	7.5
6.6         17.0         6.3         67.3         1.0         18.9         7.8         86.0         100         7.5           0.0         17.5         6.1         6.4.8         107         7.3         1.5         1.8         7.7         84.2         109         7.5           0.5         17.7         5.5         5.60         107         7.2         2.0         18.7         7.7         84.2         109         7.5           11.0         15.2         2.5         16.6         7.7         84.3         109         7.7         84.2         109         7.5           11.0         16.3         2.7         2.56         106         7.7         84.3         109         7.7         84.2         109         7.5           11.10         16.3         2.7         2.56         102         7.1         83.9         109         7.5           11.20         14.7         0.3         2.6         102         7.1         83.9         109         7.4         7.7         83.9         109         7.4           13.0         13.1         12.2         16.8         7.4         7.3         7.4         7.8         10.6         7.4 </td <td>8.0</td> <td>17.7</td> <td>0.5</td> <td><b>6</b>8.9</td> <td>1 0 0</td> <td>7.3</td> <td>0.5</td> <td>19.2</td> <td>7.9</td> <td>6.90</td> <td>₽ 20</td> <td>7.5</td>	8.0	17.7	0.5	<b>6</b> 8.9	1 0 0	7.3	0.5	19.2	7.9	6.90	₽ 20	7.5
0.0 $17.5$ $6.1$ $64.9$ $107$ $7.3$ $1.5$ $18.8$ $7.7$ $84.2$ $109$ $7.5$ $0.0$ $17.3$ $5.5$ $580$ $107$ $7.2$ $2.0$ $18.7$ $7.7$ $83.9$ $109$ $7.5$ $110$ $17.3$ $5.5$ $580$ $106$ $7.7$ $83.9$ $100$ $7.5$ $115$ $152$ $2.5$ $106$ $7.1$ $83.9$ $100$ $7.5$ $115$ $152$ $0.3$ $2.5$ $102$ $2.6$ $106$ $7.7$ $83.9$ $100$ $7.4$ $1220$ $14.7$ $0.3$ $2.6$ $102$ $6.9$ $102$ $6.9$ $102$ $6.9$ $7.4$ $7.8$ $7.6$	<b>6.</b> 6	17.6	6.3	67.3	108	7.3	1.0	18.9	7.8	85.0	90	7.5
0.5         17.5         6.0         65.8         107         7.2         2.0         18.7         7.7         8.39         109         7.5           10.0         17.3         5.5         560         106         7.1         8.39         109         7.5           11.0         16.3         2.7         2.5         18.7         7.7         8.36         109         7.5           11.1         16.3         2.7         25.6         102         7.1         8.36         109         7.5           11.5         16.7         7.7         8.30         1006         7.1         3.30         18.0         7.7         8.36         109         7.5           11.5         14.7         0.3         2.6         102         7.1         3.3         100         7.4           12.0         14.2         0.3         2.6         102         7.6         8.32         100         7.4           13.0         13.1         0.2         14.0         17.7         3.5         100         7.4           13.0         13.1         0.2         14.0         13.0         13.0         13.6         7.4         7.8           13.0	0.0	17.5	6.1	64.9	107	5.7	1.5	18.8	7.7	8	5	75
100       17.3       5.5       56.0       106       7.7       83.6       109       7.6         110       16.3       7.7       5.6       106       7.7       83.6       109       7.6         1115       16.3       7.7       5.6       106       7.7       83.6       109       7.4         1115       16.3       2.7       2.6       102       7.1       3.5       106       7.4         115       16.3       2.7       2.6       102       7.1       3.5       106       7.4         120       14.7       0.3       2.6       102       6.9       103       7.0       13.5       100       7.4         13.5       13.6       12.0       16.6       7.6       63.2       100       7.4         13.5       13.6       12.0       16.6       7.6       63.2       100       7.4         14.0       13.1       0.2       14.0       16.6       7.4       7.3       106       7.4         14.5       12.7       0.2       14.0       16.6       7.6       63.2       106       7.4         15.5       12.1       12.0       16.3       7.4	<b>9</b> .5	17.5	<b>8</b> .0	63.8	107	7.2	2.0	18.7	7.7	83.9	<b>6</b>	7.5
105       170       42       449       106       7.1       3.5       106       7.1       6.3.5       106       7.4         110       16.3       2.7       25.6       106       7.1       3.5       106       7.4         115       15.2       0.3       2.5       102       7.0       3.5       106       7.4         120       14.7       0.3       2.6       102       7.0       3.5       108       7.4         125       14.2       0.3       2.6       102       7.0       13.5       13.0       7.3       109       7.4         130       133       131       0.2       1.6       102       6.9       100       18.3       7.4       78.9       109       7.4         14.0       131       0.2       1.6       1.200       18.3       7.4       78.9       106       7.4         14.0       13.1       102       18.3       7.4       78.9       106       7.4         15.5       12.1       0.2       13.00       18.3       7.4       78.9       106         15.5       12.1       0.2       13.00       18.3       7.4       78.9	10.0	6.71	5.5	58.0	<u>6</u>	7.2	2.5	18.7	7.7	83.0	100 100	7.5
110     163     27     256     105     7.1     3.5     18.6     7.6     63.2     108     7.4       115     15.2     0.3     2.5     102     7.0     13.5     13.5     13.5     13.5     13.5     108     7.4     108     7.4       125     14.7     0.3     2.6     102     7.0     13.6     102     7.0     13.6     102     7.0       135     132     0.2     1.6     102     6.9     1200     16.4     6.7     73.1     106       135     131     0.2     1.6     9.9     6.9     1200     18.3     7.4     78.9     106       14.5     12.7     0.2     1.4     97     6.9     1400     18.3     7.4     78.9     106       15.5     12.1     0.2     1.4     97     6.9     1400     18.3     7.3     73.9     106       16.0     11.8     0.1     1.4     97     6.9     1400     18.3     7.4     78.9     106       15.5     12.1     0.2     1.3     7.3     7.3     7.3     106       15.5     12.1     0.2     1.3     9.7     7.3     7.3     106	10.5	17.0	4.2	44.9	<u>6</u>	7.1	3.0	18.6	7.7	83.5	<u>5</u>	7.4
115       152       0.3       2.5       102       7.0         120       14.7       0.3       2.6       102       7.0         125       14.7       0.3       2.6       102       7.0         125       14.7       0.3       2.6       102       7.0         130       130       130       120       16.4       0.7       73.1       106         13.5       13.1       0.2       1.6       9.6       6.9       1200       16.4       0.7       73.1       106         13.5       13.7       0.2       1.6       9.6       6.9       1300       16.4       0.7       73.1       106         14.0       13.1       0.2       1.4       9.7       7.3       7.8       108       106         15.5       12.7       0.2       1.4       9.7       7.3       7.8       7.8       7.8       106         16.0       11.8       0.1       1.400       18.3       7.4       7.89       108         15.5       12.1       0.2       1.300       18.3       7.4       7.89       108         16.0       11.8       1.1       9.7       7.8 <td>11.0</td> <td>16.3</td> <td>2.7</td> <td>26.6</td> <td>105 201</td> <td>7.1</td> <td>3.5</td> <td>18.6</td> <td>7.6</td> <td><u>8</u>3.2</td> <td>108</td> <td>7.4</td>	11.0	16.3	2.7	26.6	105 201	7.1	3.5	18.6	7.6	<u>8</u> 3.2	108	7.4
120       147       0.3       2.6       103       7.0       Tainso data for tains period as the flower vertical profile on 6/2000         12.5       14.2       0.2       18       102       6.9       103       7.0         13.0       13.8       13.2       0.2       1.6       0.0       1.6       0.0       1.6         13.5       13.2       0.2       1.6       0.0       1.6       0.0       1.6       0.0         14.0       13.1       0.2       1.6       0.0       1.6       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.1       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       0.0       1.6.       1.00       1.6.       1.00       1.0.       1.00       1.0.       1.00       1.0.       1.00       1.0.       1.00       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0.       1.0. <t< td=""><td>11.5</td><td>15.2</td><td>0.3</td><td>2.5</td><td>102</td><td>7.0</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	11.5	15.2	0.3	2.5	102	7.0						
12.5       14.2       0.2       1.9       102       6.9       Time       Termp.C       DO (molf)       DO (5.5 Set)       Cond         13.0       13.8       13.2       0.2       1.6       0.02       1.6       0.0       16.4       0.7       7.31       106         13.5       13.2       0.2       1.5       9.9       6.9       1.200       16.4       0.7       7.31       106         14.0       13.1       0.2       1.5       9.9       6.9       1.300       16.3       7.4       7.89       106         15.0       12.7       0.2       1.3       9.9       6.9       1400       18.3       7.4       7.89       106         16.0       11.8       0.1       1.4       9.7       6.8       14400       18.3       7.4       7.89       106         16.0       11.8       0.1       1.4       9.7       7.8       7.8       7.06       106         17.5       11.8       0.1       1.4       9.7       7.8       7.8       7.06         16.0       11.8       0.1       1.4       9.7       7.8       7.8       7.06       106         17.6	12.0	14.7	0.3	2.6	1 20 1	7.0	Taimon data	for same tin	ne period as	Little flowed of	e verticel or	office on 6/26/
13.0     13.0     13.0     13.0     13.0     13.0     13.0     13.0     13.0     13.0     13.0     13.1     100     13.1	12.5	<b>14</b> .2	0.2	1.9	102	6.0						
13.5       13.2       0.2       1.5       99       6.0       1200       16.4       6.7       73.1       106         14.0       131       0.2       1.5       99       6.9       1300       18.3       7.4       73.9       106         14.5       12.7       0.2       1.5       96       6.9       1300       18.3       7.4       78.9       108         15.5       12.4       0.2       1.4       97       6.9       1400       18.3       7.3       73.9       108         15.5       12.1       0.2       1.4       97       6.9       1400       18.3       7.4       78.9       108         16.5       11.8       0.1       1.4       97       6.8       PH was not a parameter collected in the talineos.       106         17.5       11.0       0.1       1.2       102       0.8       PH was not a parameter collected in the talineos.         17.6       11.0       0.1       1.2       102       0.8       PH was not a parameter collected in the talineos.         17.6       10.2       0.1       1.2       102       0.8       PH was not a parameter collected in the talineos.         17.6       10.2 <t< td=""><td>13.0</td><td>13.0</td><td>0.2</td><td>1.6</td><td>102</td><td>8.9</td><td>i 1 1</td><td>Temo C</td><td>DO (mol)</td><td>DO CK Set</td><td>Cond</td><td></td></t<>	13.0	13.0	0.2	1.6	102	8.9	i 1 1	Temo C	DO (mol)	DO CK Set	Cond	
14.0       13.1       0.2       1.5       96       6.9       1300       18.3       7.4       78.9       108         14.5       12.7       0.2       1.3       99       6.9       1400       18.3       7.4       78.9       108         15.5       12.1       0.2       1.4       97       6.9       1400       18.3       7.3       78.9       108         15.5       12.1       0.2       1.4       97       6.9       1400       18.3       7.3       78.9       108         16.0       11.8       0.1       1.4       97       6.8       pH waa not a parameter collected in the talinges.       106         17.0       11.0       0.1       1.2       102       0.8       pH waa not a parameter collected in the talinges.         16.0       10.1       0.1       1.2       102       0.1       1.2       108         17.0       11.0       0.1       1.2       102       0.8       6.8       pH waa not a parameter collected in the talinges.         16.0       10.1       1.2       102       0.1       1.2       103       8.8         16.1       10.1       1.2       11.1       6.8       pH waa	13.5	13.2	0.2	1.5	8	6.0	1200	16.4	6.7	15	ğ	
14.5       12.7       0.2       1.3       90       6.9       14.00       18.3       7.3       78.9       105         15.5       12.4       0.2       1.4       97       6.9       1400       18.3       7.3       78.9       105         15.5       12.1       0.2       1.4       97       6.9       1400       18.3       7.3       78.9       106         16.0       11.8       0.1       1.4       97       6.8       94       97       6.8       94       97       6.8       11.3       0.1       12       10.3       13       0.1       12       10.2       13       96       6.8       94       96       6.8       11.0       11.1       12       10.2       6.8       10.4       11.1       10.2       10.3       6.8       10.4       10.4       11.1       12       10.2       10.3       10.5       10.2       10.3       10.5       10.6       <	14.0	13.1	0.2	1.5	8	8.0	1300	18.3	7.4	8.87	108 1	
15.0     12.4     0.2     1.4     87     6.9       15.5     12.1     0.2     1.3     97     6.8       16.0     11.8     0.1     1.4     97     6.8       16.5     11.3     0.1     1.4     97     6.8       17.0     11.3     0.1     1.3     98     9.8       17.0     11.0     0.1     1.2     102     6.8       17.5     10.8     0.1     1.2     102     6.8       17.6     10.4     0.1     1.2     102     6.8       18.6     10.2     0.1     1.2     103     6.8       18.6     10.2     0.1     1.2     11.8     6.8       18.6     10.2     0.1     1.2     11.8     6.8	14.5	12.7	0.2	1.3	8	6.9	1400	18.3	7.3	78.9	108 1	
15.5         12.1         0.2         1.3         97         6.8           16.0         11.8         0.1         1.4         97         6.8           16.5         11.3         0.1         1.4         97         6.8           16.5         11.3         0.1         1.4         97         6.8           17.0         11.3         0.1         1.2         102         6.8           17.6         11.0         0.1         1.2         102         6.8           17.5         10.8         0.1         1.2         102         6.8           18.6         10.4         0.1         1.2         107         6.8           18.5         10.2         0.1         1.2         113         6.8           18.6         10.2         0.1         1.2         118         6.8	15.0	12.4	0.2	<b>*</b> .+	87	<b>8</b> .9						
16.0         11.8         0.1         1.4         97         6.8           16.5         11.3         0.1         1.4         97         6.8           17.0         11.3         0.1         1.2         102         6.8           17.0         11.0         0.1         1.2         102         6.8           17.5         10.4         0.1         1.2         102         6.8           17.5         10.4         0.1         1.2         103         6.8           18.0         10.4         0.1         1.2         113         6.8           18.5         10.2         0.1         1.2         113         6.8           18.6         10.2         0.1         1.2         113         6.8	15.5	121	0.2	1.3	97	<b>0</b> .0						
16.5         11.3         0.1         13         09         6.8         pH was not a parameter collected in the tallrace.           17.0         11.0         0.1         1.2         102         6.8         17.5         10.2         6.8           17.5         10.8         0.1         1.2         102         6.8         17.5         10.4         6.8           17.5         10.4         0.1         1.2         103         6.8         16.6         10.4         1.3         107         6.8           18.6         10.4         0.1         1.2         111         6.8         10.2         0.1         1.2         113         6.8           18.6         10.0         0.1         1.2         111         6.8	16.0	11.8	0.1	<b>4</b> . <del>1</del>	87	6.8						
17.0         11.0         0.1         1.2         102         0.8         17.5         10.8         0.1         1.2         102         0.8         16.0         10.4         0.1         1.2         103         0.8         16.0         10.4         0.1         1.2         107         0.8         16.0         10.4         0.1         1.2         107         0.8         16.0         10.1         1.2         107         0.8         16.0         10.0         1.2         111         0.8         16.0         10.0         0.1         1.2         111         0.8         111         12.0         113         107         0.8         111         111         111	16.5	11.3	0.1	- -	8	8.8	PH was not a	parameter	collected in 1	the tailrace.		
17.5 10.8 0.1 1.2 103 8.8 18.18.0 10.4 0.1 1.2 107 8.8 18.5 10.2 0.1 1.2 111 6.8 18.0 10.0 0.1 1.2 111 6.8 19.0 10.0 0.1 1.2 118 8.9 19.0 0.1 1.2 1.1 1.2 118 8.9 19.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.1 10.0 0.1 1.2 1.1 10.0 0.1 1.2 1.1 10.0 0.0 0.1 1.2 1.1 10.0 0.0 0.1 1.2 1.1 10.0 0.0 0.1 1.2 1.1 10.0 0.0 0.0 0.0 0.1 1.2 1.1 10.0 0.0 0.0 0.1 1.2 1.1 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	17.0	11.0	0.1	12	102	<b>8</b> .8						
18.0 10.4 0.1 1.3 107 8.8 18.5 10.2 0.1 1.2 111 6.8 18.0 100 0.1 1.2 118 6.8	17.5	10.8	0.1	12	ŝ	8.8						
18.5 10.2 0.1 1.2 111 6.8 18.0 100 0.1 1.2 118 6.8	18.0	10.4	0.1	1.3	107	8.8						
19.0 100 01 1.2 118 8.9	18.5	10.2	0	1.2	=	6.8						
	19.0	10.01	0	1.2	118	6.9						

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Highlighted Depth: Opening of the inteke forebey (2 to 10 m)

1/27/2005

Pajad	•
oelectric	
Peerry Fa	\$

9/8/2004	I	İ				8/8/2004					
John Hrab Floweds V	Br and Ruel Intice:	XCX 1				John Hrober	and Ruse F	Ď			
		đ	10.00					54	10-de		
Approxima	te air temp.	21.1 C				Approximate	air temp:21	11 C			
Secchi Del	pth:8.0 A. w	ater depth	60 to 65	Time: 130	8	No secchi di	ue to stong (	cument		Time: 153	0
Light vania	ble winds al	imost caim		Clear slói		Light variabl	le winds elm	ost celm		Clear skie	•
Taken in A	owage					Tekten in Te	itace			Strong cur	rent
		Ö	D.O. 🛠	<b>Seri</b>				Ō.O	<b>D</b> .0.	Sond	
(iii) (iii) (iii) (iii)	Temp. (C)	(jau)	Seturation 5	(Leven)	pH (B.U.)	Depth (m)	Temp. (C)	(Jon)	Seturation	(mgygm)	PH (S.U.)
0.0	212	7.0	80.5	<u>8</u>	7.7	0.0	18.0	7.6	<b>53.4</b>	<u>8</u>	7.7
0.5	19.9	<b>8</b> .8	8 <b>.</b> 8	₽	7.8	0.5	16.9	7.7	83.8	<u>8</u>	7.5
<b>P</b>	10.2	<b>e</b>	68.2 	<b>8</b>	<b>9</b> .2	<b>D</b>	18.0	7.0	53	<u>8</u>	7.5
0.0			979 8	8		- - -	18.0		83.3	<u>8</u>	9.2
		5 G 7 F		3 5	2 4	3	8.0		01. I	3	0.
ន	<b>16.7</b>	0	88 29 29 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	2 2 2	12						
9	16.0	7.7	<b>83.5</b>	107	4.7						
7	18.8	7.7	<b>8</b> 3.3	107	7.4						
9	18.8	7.7	83.0	107	7.4			2	10-di		
3	18.5	7.8	82.2	107	7.3	Approximent	eir temp:21	11 C			
3	18.6	7.6	82.0	107	7.3	Secch/Dept	h:8.0 ft.			Time: 153	0
3	16.0	7.8	82.2	107	7.3	Lipht variabl	le winds eim	ost calm		Clear akie	-
3	18.5	7.5	<b>60.3</b>	107	7.2	Taken on Ta	wher Gate a	eide Bige			
i		1						0. O	0.0	B	
21	13.9	7.2	1.1	107	72	(E) 40 40	Ú Ú	(Jan	Seturation	(Lingen)	pH (3.U.)
23	16.4	7.2	7.3	<u>5</u>	7.2	0	10.5	0.0	87.6	8	7.5
	18.4	2	29:2	<b>2</b>	7.2	9 0	18.8 1	8.4	84.7	8	7.5
3	16.4	21	2	8	72	0.1	18.7	2.8 2.2	5.15	<u>8</u>	7.5
	5.0 5.0 5.0		2	<u>8</u> 5	51	Q (		<b>P</b> -	57.95 5.95	<u>8</u> 5	4.1
0 ( 7	7.91		2		51	5	10.1		83.8	<u>8</u>	<b>4</b> - 1
	L.0L		0.2	<u>B</u> §	5	0 0 N 0		0.0	0. <b>4</b> 0	<u>B</u> (	4.1
2	174			<u>8</u> 5		D:0	•	6	0.0	5	e,
11.5	16.9	3.5	8	5	87						
12.0	15.0	1.7	17.3	ā	9.9	Tailrace dat	a for same 1	ime period	es the flowe	de vertical (	ondie on 9/9/
12.5	15.2	0.8	<b>8</b> .1	₫	<b>8</b> .5						
13.0	14.6	80	<b>6</b> .3	ā	<b>6</b> .5	<u>Line</u>	Temp C		DO CK Set	Cond	
13.5	14.1	<b>9</b> .0	<b>6.4</b>	₿	<b>8</b> .8	1300	18.4	7.9	86.3	<b>8</b>	
14.0	13.7	0.5	5.2	<u>5</u>	9.9	<del>1</del>	18.5	5.1	<b>58</b> .2	<u>8</u>	
14.5	13.4	0.0	4.0	<b>1</b> 02	0.0	1500	18.8	7.8	84.8	<b>8</b>	
15.0	12.7	0.5	<b>4</b> .4	ē	0.0						
15.5	12.2	•	4.2	ē	6.5						
<b>1</b>	11.0	4.0	4.1	8	0.2 2						
18.5	8.11.8	4.0	4	Ę	<b>6</b> .5	PH WER POT	a parameter	collected	in the tailrack	Ġ	
17.0	11.3	4	3.8	107	0.0						
17.5	10.8	<b>+</b> 0	3.5	₹	8.8						
18.0	10.5	<b>*</b> :	3.5	14	9.0						
18.5	10.3	4.0	3.4	118	<b>8</b> .8						
10.0	10.1	4	3.2	<del>2</del>	7.5						

Highlighted Depth: Opening of the Intake forebay (2 to 10 m) Page 7 of 8

#### Peevy Falls Hydroelectric Project Vertical Profile Data -

9/23/2004	L .					9/23/200	4				
John Hrobar a	nd Russ Rici	k				John Hrober	and Russ Ri	ck.			
Flowage Vertic	<del></del>										
	-	23-54	p-04			I		23-54	p-04		
Approximate a	ir temp:21.1	С				Approximate	air temp.21.	1 Ċ			
Secchi Depth:	11.0R water	depth 60	to 66'	Tim	e: 1315	No secchi ta	ken			Time: 150	xo [
SSW 8-12 mp	h			50%	clouds	Southerty wi	nds 8-12 mpl	1		80% clou	ds
Taken in Flow	age					Taken in Tai	Irace			No flow, r	no units in
		D.O.	D.O. %	Cond.		1		D.O.	D.O. %	Cond.	
Depth (m)	Temp. (C)	(mg/l)	Saturation	(uS/cm)	pH (S.U.)	Depth (m)	Temp. (C)	(mg/l)	Seturation	(uS/cm)	pH (S.U.)
0.0	19.2	8.1	88.4	115	7.8	0.0	20.3	8.0	89.4	115	7.7
0.5	18.0	8.1	87.9	114	7.8	0.5	20.0	7.8	86.5	115	7.7
1.0	18.5	8.1	88.1	115	7.8	1.0	18.9	7.5	81.4	115	7.7
1.6	18.5	7.9	85.1	115	7.8	1.5	18.4	7.5	80.9	115	7.7
20	18.4	7.8	84.4	114	7.8	2.0	18,4	7.4	79.6	115	7.6
26	18.4	7.8	84.0	114	7.8	2.5	18,1	7.4	79.5	115	7.7
3.0	18.3	7.8	84.0	114	7.8	3.0	18,1	7.4	79.0	115	7.7
3.5	18.3	7.8	83.5	114	7.8	3.5	18,1	7.4	78.9	115	7.6
4.0	18.3	7.6	82.2	114	7.7	4.0	18.0	7.4	78.9	115	7.6
4.5	18.3	7.6	81.4	114	7.7				-		
5.0	18.2	7.4	79.8	114	7.6				-		
5.5	18.2	7.4	79.8	114	7.6	ł					
6.0	18.1	7.2	77.6	114	7.8						
8.5	18.1	7.2	76.7	114	7.6	Approximate	air temp.21.	1 C			
7.0	18.0	7.1	76.0	114	7.6	No seechi ta	ken			Time, 151	0
7.5	18.0	7.0	74.9	114	7.6	Southerly wi	nds 8-12 mpł	)		50% clou	ds i
8.0	18.0	7.0	74.3	114	7.6	Taken on Ta	<u>inter Gate sic</u>	ie 🛛			
	1					1		D.O.	D.O. %	Cond.	
8.5	17.9	7.0	74.9	114	7.8	Depth (m)	Temp. (C)	(mo/l)	Seturation	(uS/cm)	pH (S.U.)
9.0	17.9	7.1	78.1	113	7.6	0.0	20.0	7.9	87.1	115	7.8
9.5	17.8	6.8	72.3	113	7.6	0.5	19.8	7.7	85.4	115	7.6
10.0	17.8	6.7	71.7	113	75	1.0	19.1	7.7	84.6	116	7.7
10.5	17.6	6.5	68.9	112	7.5	1.5	18,1	7.9	84.7	118	7.7
11.0	17.5	8.3	66.9	111	7.5	2.0	17,7	8.2	87.0	115	7.7
11.5	17.2	5.8	60.7	111	7.4	2.5	17.4	8.1	85.4	116	7.7
12.0	16.8	3.8	41.2	110	7.3						
12.5	15.9	1.6	15.0	108	7.1						
13.0	15.5	0.8	9.0	108	7.0						
13.5	14.8	0.8	8.1	110	7.0	L.					
14.0	14.2	0.7	6.8	110	7.0	Tairace data	<u>s for same tim</u>	ie period ar	the flow ape	vertical p	rofila on 9/23/04
14.5	13.7	0.6	5.9	110	7.0	_					
15.0	13.2	0.6	56	108	7.0	Time	<u>Temp C</u>	DO (mo/i)	DO (% Set)	Cond	
15.5	12.6	0.5	5.0	106	7.0	1200	18,2	7.3	78.6	115	
16.0	12.0	0.5	4.7	111	7.0	1300	10.1	7.5	82.0	115	
18.5	11.5	0.4	3.9	113	7.0	1400	19.0	7.6	82.9	114	
17.0	11.3	0.5	4.3	114	7.0	1					
17.5	11.1	D.4	4.2	115	7.0	1					
18.0	10.7	0.4	4.0	120	7.0	l					
16.5	10.4	0.4	3.9	120	7.0	IpH was not a	a parameter c	ollected in 1	the teilnace.		
0.61	10.3	0.5	3.9	140	7.4						

Highlighted Depth: Opening of the intake forebay (2 to 10 m)

# **Certificate of Service**

I hereby certify that I have this day served the foregoing document upon all entities specified in the order to issue license to be consulted on matters related to the Commission filing. Service was done pursuant to Rule 2010 of FERC's Rules of Practice and Procedure 18 CFR, Section 385.2010

Dated this day Tuesday, February 08, 2005

Salung

Annie Salmona We Energies

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