Current River / Boulevard Lake Dam Water Management Report 2006

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Introduction

A water management plan was completed in March 2006 for Boulevard Lake (Current River) Dam. This report provides data and analysis on the operation of the fish ladder, dam and generating station.

The main information gaps surrounding the operation of the dam and generating station relate to water flows and levels through the fishway. This information is necessary to promote Rainbow Trout movement upstream and up through the fishway. A monitoring and reporting program for stop log configuration, reservoir water level and flow through the fishway during times of expected Rainbow Trout runs is provided in this report to evaluate these operations.

Boulevard Lake Level

A level recorder is in operation and the signal is transmitted to the Bare Point Water Treatment Plant via a SCADA System. These measurements are taken and logged every 12 seconds, along with all the other data points, then put in the archive files, so not to fill the hard drive of the computer.

The average recorded levels of Boulevard Lake from April 03, 2006 to October 22, 2006 are shown on a weekly basis in the following Table 1.0 and Figure 1.0.

DATE:	Lake Level	DATE:	Lake Level
Apr-03	210.92	Jul-17	211.70
Apr-10	211.50	Jul-24	211.76
Apr-17	212.15	Aug-03	212.10
Apr-24	212.07	Aug-10	211.94
May-03	211.88	Aug-17	211.96
May-10	211.29	Aug-24	211.86
May-17	212.15	Sep-03	211.77
May-24	212.01	Sep-10	211.60
Jun-03	212.00	Sep-17	211.61
Jun-10	211.89	Sep-24	211.52
Jun-17	211.54	Oct-03	211.69
Jun-24	211.46	Oct-10	211.58
Jul-03	211.65	Oct-17	211.19
Jul-10	211.82	Oct-22	210.38

Table 1.0 - Boulevard Lake Level

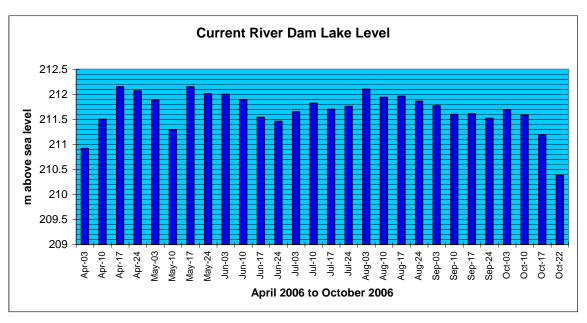


Figure 1.0 - Current River Dam / Boulevard Lake Level

Stop Log Configuration

Operation of the stop logs within the dam structure and the fishway occurred during the recording period of April 1, 2006 to October 15, 2006.

The winter level of the logs was changed on April 12, 2006, with one log added to chute number 2. On April 20, 2006, two logs were put into chutes number 2 and 3 to bring up the water level. On May 30, 2006 the summer setting was achieved with all stop logs in place.

Due to the extremely dry summer, all logs remained in place from May 30, 2006 to October 16, 2006, when the lake was drained for winter maintenance. The stop logs were set to the winter level setting on October 20, 2006. Figure 2.0 demonstrates the winter and summer stop log settings.

Figure 2: Boulevard Lake Dam Seasonal Operations Stop logs Summer Settings (Set on or near the May Long Weekend) Fishway								/	Building						
			111.5"x10"	124"x10"	124"x10"	132"x10"	124"x10"	124"x10"	124"x10"	124"x10"	124"x10"	124"x10",	124"x10"	137"x13"	
concrete	spillways	(17 total)	12 Elevation	11 211.7m	10	9	8	7.	6	5.	. 4	3	2	1. 211.64m	
			8 stop log 7 stop log 6 stop log 6 stoplog 4 stop log 3 stop log 2 stop log 1 stop log	211.1m 210.8m 210.5m 210.2m 209.9m 209.6m					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 log out	2 logs out		top of wall (concrete)
4	concrete	\rightarrow				,		Stop logs	\rightarrow		The second	ALL PROPERTY OF THE PROPERTY O	**************************************	Fishway	,

				<u>Winter Set</u>	ttings	(Set on or	near the Th	anksgiving	Long week	end)	Stop logs Fishway	/	Building
· · · · · · · · · · · · · · · · · · ·	111.5"x10"	124"x10"	124"x10"	132"x10"	124"x10"	124"x10"	124"x10"	124"x10"	124"x10"	124"x10"	124"x10"	137"x13"	alcone.
concrete spillways (17 total)	12	11	10	9	8 .	7	6	5	4	3	2	1. 211.64m	
	8 stop log		211.4m				1 log out	2 logs out		7			
h < 1	7 stop log		11						3 logs out			211.14m	top of wall
	6 stop log		1,4			1 T. 1			210.8m	4 logs out		or least train	(concrete)
	5 stoplog	.2()				$\Gamma(z_1, z_2)$	14.	P1		210.5m	5 logs out		,
	4 stop log	i dal					1	h.	1 T		210.2m		
	3 stop log												
	2 stop log				i la	<u> </u>							
← concrete ←	1 stop log	(i)	1				1 // //				Ji.	in-draw	
Concrete	I				•	Stop logs						Fishway	J

For April 2007, a permanent diary will be available in the gatehouse to accurately record the configuration of the stop logs; the level of water passing over the stop logs and if any fish are spotted using the ladder.

Fish Ladder Records

Ice conditions in the fish ladder prevented the logger tube from being installed before April 1, 2006, and the chance of starting any recording of data.

A galvanized steel pipe with a cap was installed on April 12, 2006 to house the level logger in the fish ladder at the Boulevard Lake dam. A sight gauge was also installed beside the logger to visually inspect the level of water passing through the fish ladder.

Recording of the water level in the fish ladder commenced on April 20, 2006 and continued through to June 15, 2006 when the level logger was removed.

The data recorded in that time period is shown in Figure 3.0. The 30 cm range shown between elevation 210.845 and 210.545 is the ideal water level through the fish ladder with the lower elevation representing the top of the wall notch in the top rung of the fish ladder.

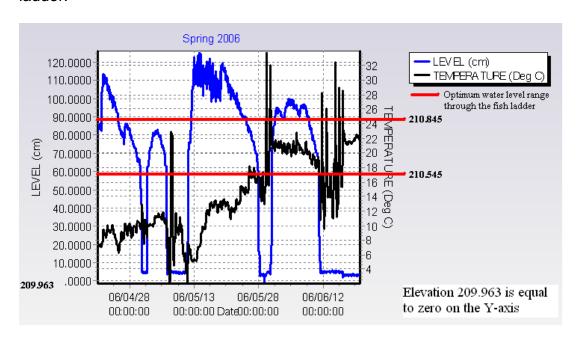


Figure 3.0 - Water Level Fish Ladder Spring 2006

See Appendix "A" for pivot table data for Spring 2006.

The level logger was put back into service on September 12, 2006 and began recording data on September 15, 2006 through to October 15, 2006 when the level logger was once again removed.

The level of the water was extremely low at this time, with little water entering the fish ladder. Without any significant amounts of rain in the period following the installation of the logger, the fish ladder remained nearly empty. The data recorded in that time period is shown in Figure 4.0.

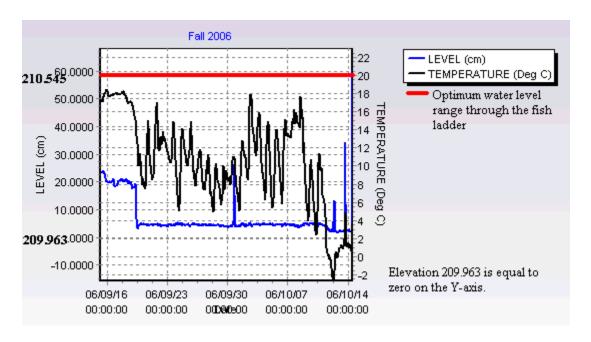


Figure 4.0 - Water Level Fish Ladder Fall 2006

See Appendix "B" for pivot table data for Fall 2006.

Generating Station Records

Run Time Records are not available for the power generating station.

The lease agreement does not require the owner of the power generating station to provide detailed run time records to the City of Thunder Bay. When the owner of the power generating station was contacted on November 7, 2006, and asked to produce any run time records for the generating station, he said, "I do not have any record of run time schedules for the generating station".

The agreement and protocols state that that the power generator is able to draw water 0.15 m below the level set by the City as long as water is allowed to spill daily to maintain a clean lake surface" during the months that he is permitted to operate.

Based on this protocol, it is estimated that water is being used for generating electricity during certain periods as shown in Table 2.0.

DATE:	Lake Level	DATE:	Lake Level
Apr-03	210.92	Jul-17	211.70
Apr-10	211.50	Jul-24	211.76
Apr-17	212.15	Aug-03	212.10
Apr-24	212.07	Aug-10	211.94
May-03	211.88	Aug-17	211.96
May-10	211.29	Aug-24	211.86
May-17	212.15	Sep-03	211.77
May-24	212.01	Sep-10	211.60
Jun-03	212.00	Sep-17	211.61
Jun-10	211.89	Sep-24	211.52
Jun-17	211.54	Oct-03	211.69
Jun-24	211.46	Oct-10	211.58
Jul-03	211.65	Oct-17	211.19
Jul-10	211.82	Oct-22	210.38

Table 2.0 - Period of Power Generation Assumed

December 1, 2006 City of Thunder Bay Engineering Division

Appendix "A" Spring 2006 Pivot Table Data

Date	Data	Total
20/04/2006	Max of LEVEL	85.500
	Min of LEVEL	80.500
	Average of LEVEL	84.155
	Max of TEMPERATURE	7.390
	Min of TEMPERATURE	6.910
	Average of	
	TEMPERATURE	7.181
21/04/2006	Max of LEVEL	113.600
	Min of LEVEL	82.500
	Average of LEVEL	97.700
	Max of TEMPERATURE	9.400
	Min of TEMPERATURE	7.010
	Average of	
	TEMPERATURE	7.936
22/04/2006	Max of LEVEL	112.900
	Min of LEVEL	104.400
	Average of LEVEL	109.492
	Max of TEMPERATURE	10.020
	Min of TEMPERATURE	8.320
	Average of	
	TEMPERATURE	9.041
23/04/2006	Max of LEVEL	106.200
	Min of LEVEL	95.000
	Average of LEVEL	102.446
	Max of TEMPERATURE	10.050
	Min of TEMPERATURE	8.970
	Average of	
	TEMPERATURE	9.384
24/04/2006	Max of LEVEL	100.800
	Min of LEVEL	93.100
	Average of LEVEL	96.946
	Max of TEMPERATURE	9.830
	Min of TEMPERATURE	7.550
	Average of	0.040
05/04/0005	TEMPERATURE	8.646
25/04/2006	Max of LEVEL	93.200
	Min of LEVEL	80.000
	Average of LEVEL	85.554
	Max of TEMPERATURE	8.940
	Min of TEMPERATURE	6.210
	Average of	7,000
00/04/0000	TEMPERATURE	7.200
26/04/2006	Max of LEVEL	85.700
	Min of LEVEL	75.000
	Average of LEVEL	80.783
	Max of TEMPERATURE	10.260
	Min of TEMPERATURE	7.970
	Average of	0.004
	TEMPERATURE	9.024

27/04/2006	Max of LEVEL	86.400
	Min of LEVEL	80.500
	Average of LEVEL	84.342
	Max of TEMPERATURE	10.250
	Min of TEMPERATURE	8.580
	Average of	5.555
	TEMPERATURE	9.515
28/04/2006	Max of LEVEL	82.200
	Min of LEVEL	74.000
	Average of LEVEL	77.404
	Max of TEMPERATURE	10.050
	Min of TEMPERATURE	8.360
	Average of	
	TEMPERATURE	9.345
29/04/2006	Max of LEVEL	73.500
	Min of LEVEL	65.300
	Average of LEVEL	69.921
	Max of TEMPERATURE	10.560
	Min of TEMPERATURE	9.000
	Average of	
	TEMPERATURE	9.833
30/04/2006	Max of LEVEL	67.400
	Min of LEVEL	4.600
	Average of LEVEL	43.646
	Max of TEMPERATURE	12.880
	Min of TEMPERATURE	9.540
	Average of	10 105
01/05/2006	TEMPERATURE Max of LEVEL	10.495 5.100
01/05/2006	Min of LEVEL	4.500
	Average of LEVEL	4.779
	Max of TEMPERATURE	10.780
	Min of TEMPERATURE	7.520
	Average of	7.520
	TEMPERATURE	9.203
02/05/2006	Max of LEVEL	73.800
	Min of LEVEL	4.600
	Average of LEVEL	61.463
	Max of TEMPERATURE	10.180
	Min of TEMPERATURE	8.500
	Average of	0.000
	TEMPERATURE	9.933
03/05/2006	Max of LEVEL	82.000
	Min of LEVEL	74.500
	Average of LEVEL	79.108
	Max of TEMPERATURE	11.360
	Min of TEMPERATURE Average of	9.840
	TEMPERATURE	10.399
04/05/0000	Max of LEVEL	82.900
04/05/2006		

	Average of LEVEL	81.071
	Max of TEMPERATURE	11.690
	Min of TEMPERATURE	11.020
	Average of	44.004
05/05/0000	TEMPERATURE	11.324
05/05/2006	Max of LEVEL	79.500
	Min of LEVEL	71.300
	Average of LEVEL Max of TEMPERATURE	75.079
	Min of TEMPERATURE	11.860 10.820
	Average of	10.620
	TEMPERATURE	11.179
06/05/2006	Max of LEVEL	70.600
	Min of LEVEL	3.600
	Average of LEVEL	41.175
	Max of TEMPERATURE	10.740
	Min of TEMPERATURE	5.940
	Average of	
07/05/0000	TEMPERATURE	9.311
07/05/2006	Max of LEVEL	5.900
	Min of LEVEL	4.100
	Average of LEVEL Max of TEMPERATURE	4.921 22.940
	Min of TEMPERATURE	2.020
	Average of	2.020
	TEMPERATURE	8.013
08/05/2006	Max of LEVEL	5.300
	Min of LEVEL	4.500
	Average of LEVEL	4.942
	Max of TEMPERATURE	11.740
	Min of TEMPERATURE	4.520
	Average of TEMPERATURE	8.501
09/05/2006	Max of LEVEL	5.100
09/03/2000	Min of LEVEL	4.000
	Average of LEVEL	4.579
	Max of TEMPERATURE	11.110
	Min of TEMPERATURE	8.760
	Average of	0.700
	TEMPERATURE	9.648
10/05/2006	Max of LEVEL	5.100
	Min of LEVEL	4.200
	Average of LEVEL	4.613
	Max of TEMPERATURE	9.520
	Min of TEMPERATURE	5.140
	Average of TEMPERATURE	6.974
11/05/2006	Max of LEVEL	77.200
, 55, 2550	Min of LEVEL	4.000
	Average of LEVEL	39.546
	Max of TEMPERATURE	7.600

	Min of TEMPERATURE	2.190
	Average of TEMPERATURE	5.580
12/05/2006	Max of LEVEL	121.900
	Min of LEVEL	78.300
	Average of LEVEL	98.042
	Max of TEMPERATURE	6.420
	Min of TEMPERATURE	5.190
	Average of	
	TEMPERATURE	5.515
13/05/2006	Max of LEVEL	123.600
	Min of LEVEL	107.000
	Average of LEVEL	115.371
	Max of TEMPERATURE	7.130
	Min of TEMPERATURE Average of	5.180
	TEMPERATURE	5.790
14/05/2006	Max of LEVEL	126.000
, ,	Min of LEVEL	101.500
	Average of LEVEL	112.092
	Max of TEMPERATURE	9.810
	Min of TEMPERATURE	7.070
	Average of	
	TEMPERATURE	8.152
15/05/2006	Max of LEVEL	120.400
	Min of LEVEL	105.400
	Average of LEVEL	111.588
	Max of TEMPERATURE	12.110
	Min of TEMPERATURE Average of	9.510
	TEMPERATURE	10.397
16/05/2006	Max of LEVEL	122.400
	Min of LEVEL	98.100
	Average of LEVEL	111.300
	Max of TEMPERATURE	13.150
	Min of TEMPERATURE	11.430
	Average of	40.400
47/05/0000	TEMPERATURE	12.189
17/05/2006	Max of LEVEL Min of LEVEL	119.700
		100.500
	Average of LEVEL Max of TEMPERATURE	107.350 13.470
	Min of TEMPERATURE	12.390
	Average of	12.000
	TEMPERATURE	12.919
18/05/2006	Max of LEVEL	115.200
	Min of LEVEL	98.000
	Average of LEVEL	105.246
	Max of TEMPERATURE	13.380
	Min of TEMPERATURE	11.820
	Average of TEMPERATURE	12.643
I	ILWIFERATURE	12.043

10/07/0000		440.000
19/05/2006	Max of LEVEL	119.600
	Min of LEVEL	102.000
	Average of LEVEL	114.638
	Max of TEMPERATURE	13.640
	Min of TEMPERATURE Average of	12.280
	TEMPERATURE	12.948
20/05/2006	Max of LEVEL	117.400
	Min of LEVEL	103.100
	Average of LEVEL	111.904
	Max of TEMPERATURE	13.310
	Min of TEMPERATURE	12.650
	Average of	
	TEMPERATURE	13.012
21/05/2006	Max of LEVEL	108.600
	Min of LEVEL	99.400
	Average of LEVEL	104.467
	Max of TEMPERATURE	12.770
	Min of TEMPERATURE	10.920
	Average of	
	TEMPERATURE	11.946
22/05/2006	Max of LEVEL	104.200
	Min of LEVEL	96.900
	Average of LEVEL	100.433
	Max of TEMPERATURE	13.620
	Min of TEMPERATURE	11.830
	Average of TEMPERATURE	12.538
23/05/2006	Max of LEVEL	100.100
	Min of LEVEL	91.300
	Average of LEVEL	94.950
	Max of TEMPERATURE	15.440
	Min of TEMPERATURE	12.840
	Average of	
	TEMPERATURE	13.556
24/05/2006	Max of LEVEL	91.200
	Min of LEVEL	87.800
	Average of LEVEL	89.896
	Max of TEMPERATURE	15.460
	Min of TEMPERATURE	14.260
	Average of	
0=/0=/000	TEMPERATURE	14.986
25/05/2006	Max of LEVEL	89.600
	Min of LEVEL	81.100
	Average of LEVEL	84.954
	Max of TEMPERATURE	18.180
	Min of TEMPERATURE	14.500
	Average of TEMPERATURE	15.741
26/05/2006	Max of LEVEL	82.900
20/03/2000	Min of LEVEL	74.000
l	I WIII OI LEVEL	74.000

	Average of LEVEL	78.046
	Max of TEMPERATURE	17.960
	Min of TEMPERATURE	16.530
	Average of	
	TEMPERATURE	17.201
27/05/2006	Max of LEVEL	73.600
	Min of LEVEL	48.700
	Average of LEVEL	67.008
	Max of TEMPERATURE	17.230
	Min of TEMPERATURE Average of	15.930
	TEMPERATURE	16.549
28/05/2006	Max of LEVEL	28.800
	Min of LEVEL	3.000
	Average of LEVEL	6.500
	Max of TEMPERATURE	17.340
	Min of TEMPERATURE	13.280
	Average of	
	TEMPERATURE	15.210
29/05/2006	Max of LEVEL	4.600
	Min of LEVEL	-1.400
	Average of LEVEL	3.617
	Max of TEMPERATURE	33.950
	Min of TEMPERATURE	12.960
	Average of TEMPERATURE	18.314
30/05/2006	Max of LEVEL	68.800
	Min of LEVEL	3.700
	Average of LEVEL	10.471
	Max of TEMPERATURE	32.100
	Min of TEMPERATURE	15.560
	Average of	
	TEMPERATURE	21.790
31/05/2006	Max of LEVEL	93.600
	Min of LEVEL	70.700
	Average of LEVEL	82.829
	Max of TEMPERATURE	21.820
	Min of TEMPERATURE	20.120
	Average of TEMPERATURE	20.968
01/06/2006	Max of LEVEL	94.900
	Min of LEVEL	91.600
	Average of LEVEL	93.450
	Max of TEMPERATURE	21.650
	Min of TEMPERATURE	20.620
	Average of	
	TEMPERATURE	21.015
02/06/2006	Max of LEVEL	93.000
	Min of LEVEL	88.200
	Average of LEVEL	90.129
	Max of TEMPERATURE	21.700

	Min of TEMPERATURE	19.940
	Average of TEMPERATURE	20.870
03/06/2006	Max of LEVEL	99.600
00/00/2000	Min of LEVEL	89.700
	Average of LEVEL	95.663
	Max of TEMPERATURE	21.360
	Min of TEMPERATURE	19.720
	Average of	
	TEMPERATURE	20.561
04/06/2006	Max of LEVEL	99.900
	Min of LEVEL	95.900
	Average of LEVEL	98.092
	Max of TEMPERATURE	21.370
	Min of TEMPERATURE	19.540
	Average of	
0=/00/0000	TEMPERATURE	20.512
05/06/2006	Max of LEVEL	97.200
	Min of LEVEL	93.400
	Average of LEVEL	95.346
	Max of TEMPERATURE	22.740
	Min of TEMPERATURE	19.720
	Average of TEMPERATURE	20.945
06/06/2006	Max of LEVEL	95.500
	Min of LEVEL	90.300
	Average of LEVEL	92.733
	Max of TEMPERATURE	21.580
	Min of TEMPERATURE	20.270
	Average of	00.000
07/00/0000	TEMPERATURE	20.863
07/06/2006	Max of LEVEL Min of LEVEL	96.900
	Average of LEVEL	93.600 95.675
	Max of TEMPERATURE	21.520
	Min of TEMPERATURE	19.740
	Average of	13.740
	TEMPERATURE	20.248
08/06/2006	Max of LEVEL	95.000
	Min of LEVEL	83.800
	Average of LEVEL	89.733
	Max of TEMPERATURE	21.440
	Min of TEMPERATURE	19.660
	Average of TEMPERATURE	20.220
00/06/2006		20.230
09/06/2006	Max of LEVEL Min of LEVEL	84.500 75.500
	Average of LEVEL	80.021
	Max of TEMPERATURE	19.760
	Min of TEMPERATURE	18.380
	Average of	10.300
	TEMPERATURE	19.062

40/00/2000	May of LEVEL	75 400
10/06/2006	Max of LEVEL	75.400
	Min of LEVEL	61.900
	Average of LEVEL	69.808
	Max of TEMPERATURE	19.410
	Min of TEMPERATURE	17.850
	Average of TEMPERATURE	18.689
11/06/2006	Max of LEVEL	61.400
11/00/2000	Min of LEVEL	4.600
	Average of LEVEL	15.142
	Max of TEMPERATURE	28.160
	Min of TEMPERATURE	10.700
	Average of	10.700
	TEMPERATURE	17.401
12/06/2006	Max of LEVEL	5.700
	Min of LEVEL	4.600
	Average of LEVEL	5.129
	Max of TEMPERATURE	25.970
	Min of TEMPERATURE	9.500
	Average of	
	TEMPERATURE	15.290
13/06/2006	Max of LEVEL	5.500
	Min of LEVEL	4.700
	Average of LEVEL	5.117
	Max of TEMPERATURE	17.120
	Min of TEMPERATURE	13.940
	Average of	
	TEMPERATURE	15.123
14/06/2006	Max of LEVEL	6.100
	Min of LEVEL	4.600
	Average of LEVEL	5.258
	Max of TEMPERATURE	32.500
	Min of TEMPERATURE	11.060
	Average of	17 010
15/06/2006	TEMPERATURE Max of LEVEL	17.313 5.800
15/06/2006	Min of LEVEL	4.400
		5.188
	Average of LEVEL Max of TEMPERATURE	28.920
	Min of TEMPERATURE	11.160
	Average of	11.100
	TEMPERATURE	17.648
16/06/2006	Max of LEVEL	5.200
2. 2 3, 200	Min of LEVEL	5.200
	Average of LEVEL	5.200
	Max of TEMPERATURE	18.130
	Min of TEMPERATURE	18.130
	Average of	
	TEMPERATURE	18.130

Appendix "B"

Fall 2006 Pivot Table Data

Date	Data	Total
15/09/2006	Max of LEVEL	24.000
	Min of LEVEL	20.100
	Average of LEVEL	22.513
	Max of TEMPERATURE	18.430
	Min of TEMPERATURE	17.100
	Average of	
	TEMPERATURE	17.660
16/09/2006	Max of LEVEL	21.100
	Min of LEVEL	18.400
	Average of LEVEL	19.954
	Max of TEMPERATURE	18.150
	Min of TEMPERATURE	17.670
	Average of	
	TEMPERATURE	17.842
17/09/2006	Max of LEVEL	21.100
	Min of LEVEL	18.500
	Average of LEVEL	20.175
	Max of TEMPERATURE	18.180
	Min of TEMPERATURE	17.880
	Average of TEMPERATURE	18.001
18/09/2006	Max of LEVEL	21.300
10/09/2000	Min of LEVEL	17.600
	Average of LEVEL	19.838
	Max of TEMPERATURE	17.920
	Min of TEMPERATURE	16.550
	Average of	10.000
	TEMPERATURE	17.164
19/09/2006	Max of LEVEL	19.400
	Min of LEVEL	3.100
	Average of LEVEL	9.129
	Max of TEMPERATURE	16.380
	Min of TEMPERATURE	8.900
	Average of	40 -00
00/00/0000	TEMPERATURE	12.700
20/09/2006	Max of LEVEL	4.900
	Min of LEVEL	4.300
	Average of LEVEL	4.713
	Max of TEMPERATURE	14.960
	Min of TEMPERATURE Average of	7.470
	TEMPERATURE	10.385
21/09/2006	Max of LEVEL	5.000
	Min of LEVEL	4.200
	Average of LEVEL	4.642
	Max of TEMPERATURE	16.940
	Min of TEMPERATURE	8.470
	Average of	
1	TEMPERATURE	11.974

22/09/2006	Max of LEVEL	4.600
	Min of LEVEL	3.900
	Average of LEVEL	4.313
	Max of TEMPERATURE	13.820
	Min of TEMPERATURE	11.680
	Average of	10.706
22/00/2000	TEMPERATURE	12.706
23/09/2006	Max of LEVEL Min of LEVEL	4.800
		4.000
	Average of LEVEL Max of TEMPERATURE	4.442 14.850
	Min of TEMPERATURE	10.270
	Average of	10.270
	TEMPERATURE	11.854
24/09/2006	Max of LEVEL	5.200
	Min of LEVEL	4.300
	Average of LEVEL	4.821
	Max of TEMPERATURE	14.090
	Min of TEMPERATURE	5.110
	Average of	
	TEMPERATURE	9.735
25/09/2006	Max of LEVEL	4.900
	Min of LEVEL	4.000
	Average of LEVEL	4.508
	Max of TEMPERATURE	14.870
	Min of TEMPERATURE	10.020
	Average of TEMPERATURE	11.679
26/09/2006	Max of LEVEL	5.200
	Min of LEVEL	4.100
	Average of LEVEL	4.567
	Max of TEMPERATURE	11.780
	Min of TEMPERATURE	7.840
	Average of	
	TEMPERATURE	9.874
27/09/2006	Max of LEVEL	4.800
	Min of LEVEL	4.100
	Average of LEVEL	4.475
	Max of TEMPERATURE	11.240
	Min of TEMPERATURE	7.000
	Average of TEMPERATURE	8.935
28/09/2006		
=5. 55. 2555	Max of LEVEL	4.800
1	Max of LEVEL Min of LEVEL	4.800 4.200
	Min of LEVEL	4.200
	Min of LEVEL Average of LEVEL	
	Min of LEVEL	4.200 4.471
	Min of LEVEL Average of LEVEL Max of TEMPERATURE	4.200 4.471 10.280
	Min of LEVEL Average of LEVEL Max of TEMPERATURE Min of TEMPERATURE	4.200 4.471 10.280
29/09/2006	Min of LEVEL Average of LEVEL Max of TEMPERATURE Min of TEMPERATURE Average of	4.200 4.471 10.280 5.000

i	A	1 4405
	Average of LEVEL	4.125
	Max of TEMPERATURE	10.100
	Min of TEMPERATURE	5.720
	Average of TEMPERATURE	7.897
30/09/2006	Max of LEVEL	26.300
	Min of LEVEL	3.600
	Average of LEVEL	5.733
	Max of TEMPERATURE	11.080
	Min of TEMPERATURE	7.960
	Average of	
	TEMPERATURE	9.328
01/10/2006	Max of LEVEL	5.400
	Min of LEVEL	3.700
	Average of LEVEL	4.354
	Max of TEMPERATURE	12.800
	Min of TEMPERATURE	5.140
	Average of	
	TEMPERATURE	9.089
02/10/2006	Max of LEVEL	5.300
	Min of LEVEL	3.800
	Average of LEVEL	4.479
	Max of TEMPERATURE	17.900
	Min of TEMPERATURE	8.560
	Average of	
	TEMPERATURE	13.236
03/10/2006	Max of LEVEL	5.000
	Min of LEVEL	4.300
	Average of LEVEL	4.679
	Max of TEMPERATURE	15.900
	Min of TEMPERATURE	10.340
	Average of	40.440
0.4/4.0/0000	TEMPERATURE	13.148
04/10/2006	Max of LEVEL	5.300
	Min of LEVEL	4.400
	Average of LEVEL	4.779
	Max of TEMPERATURE	14.860
	Min of TEMPERATURE	6.340
	Average of TEMPERATURE	10.547
05/10/2006	Max of LEVEL	5.000
03/10/2000		
		5.400
		9.881
06/10/2006	Max of LEVEL	
	Min of LEVEL	4.000
		4.679
	Max of TEMPERATURE	15.090
06/10/2006	Min of LEVEL Average of LEVEL	4.679

	Min of TEMPERATURE	5.820
	Average of TEMPERATURE	10.931
07/10/2006	Max of LEVEL	4.900
	Min of LEVEL	3.700
	Average of LEVEL	4.492
	Max of TEMPERATURE	16.220
	Min of TEMPERATURE	13.180
	Average of	
	TEMPERATURE	14.275
08/10/2006	Max of LEVEL	5.100
	Min of LEVEL	3.600
	Average of LEVEL	4.275
	Max of TEMPERATURE	17.630
	Min of TEMPERATURE	10.380
	Average of	
	TEMPERATURE	14.589
09/10/2006	Max of LEVEL	5.200
	Min of LEVEL	4.200
	Average of LEVEL	4.850
	Max of TEMPERATURE	10.740
	Min of TEMPERATURE	3.970
	Average of TEMPERATURE	7.515
10/10/2006	Max of LEVEL	5.400
	Min of LEVEL	3.500
	Average of LEVEL	4.525
	Max of TEMPERATURE	11.350
	Min of TEMPERATURE	2.420
	Average of TEMPERATURE	7.001
11/10/2006	Max of LEVEL	4.700
11/10/2006	Min of LEVEL	2.200
	Average of LEVEL	3.696
	Max of TEMPERATURE	9.080
	Min of TEMPERATURE	-0.280
	Average of	-0.200
	TEMPERATURE	3.148
12/10/2006	Max of LEVEL	13.200
	Min of LEVEL	1.500
	Average of LEVEL	3.854
	Max of TEMPERATURE	0.650
	Min of TEMPERATURE	-2.620
	Average of TEMPERATURE	-0.742
13/10/2006	Max of LEVEL	34.200
. 5, 15, 2000	Min of LEVEL	2.000
	Average of LEVEL	4.146
	Max of TEMPERATURE	4.860
	Min of TEMPERATURE	0.870
	Average of	3.575
	TEMPERATURE	1.630

14/10/2006	Max of LEVEL	68.200
	Min of LEVEL	2.100
	Average of LEVEL	18.058
	Max of TEMPERATURE	4.640
	Min of TEMPERATURE	0.700
	Average of	
	TEMPERATURE	2.358
15/10/2006	Max of LEVEL	24.900
	Min of LEVEL	1.900
	Average of LEVEL	4.833
	Max of TEMPERATURE	5.220
	Min of TEMPERATURE	-0.010
	Average of	
	TEMPERATURE	2.540