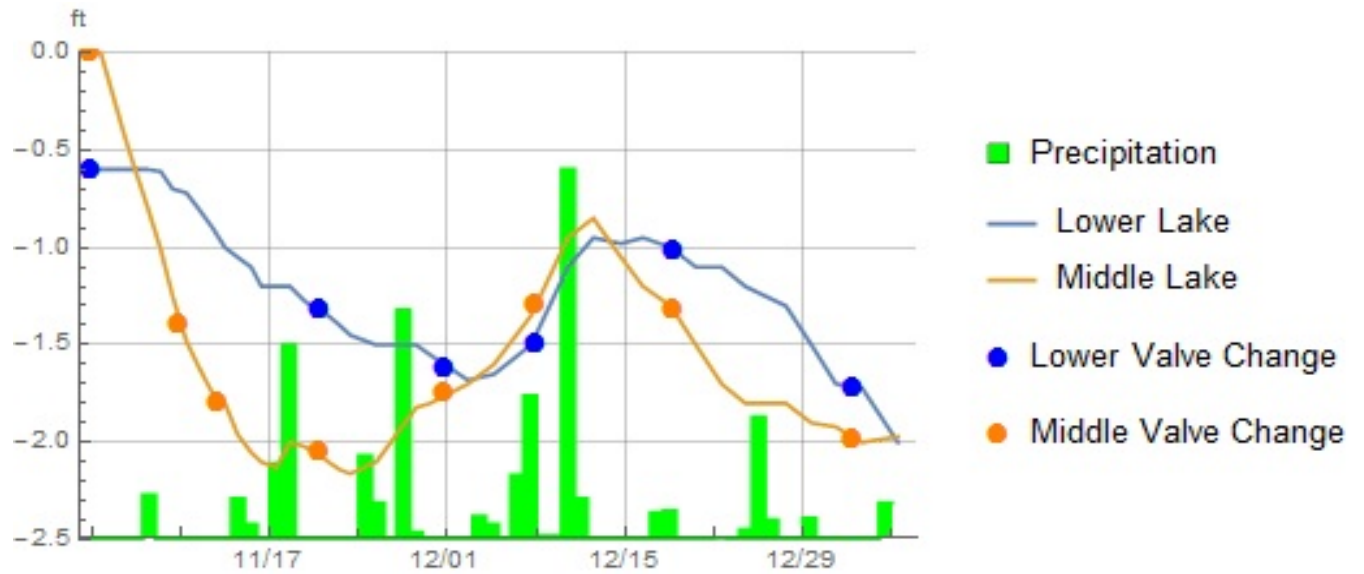


2014 Middle & Lower Bolton Lakes Drawdown



Valve Settings - in² open

Date	Lower	Middle
Nov 03	280	279
Nov 10		138
Nov 13		77
Nov 21	154	28
Dec 01	98	37
Dec 08	154	125
Dec 19	280	264
Jan 2	349	309

Significant Precipitation - in

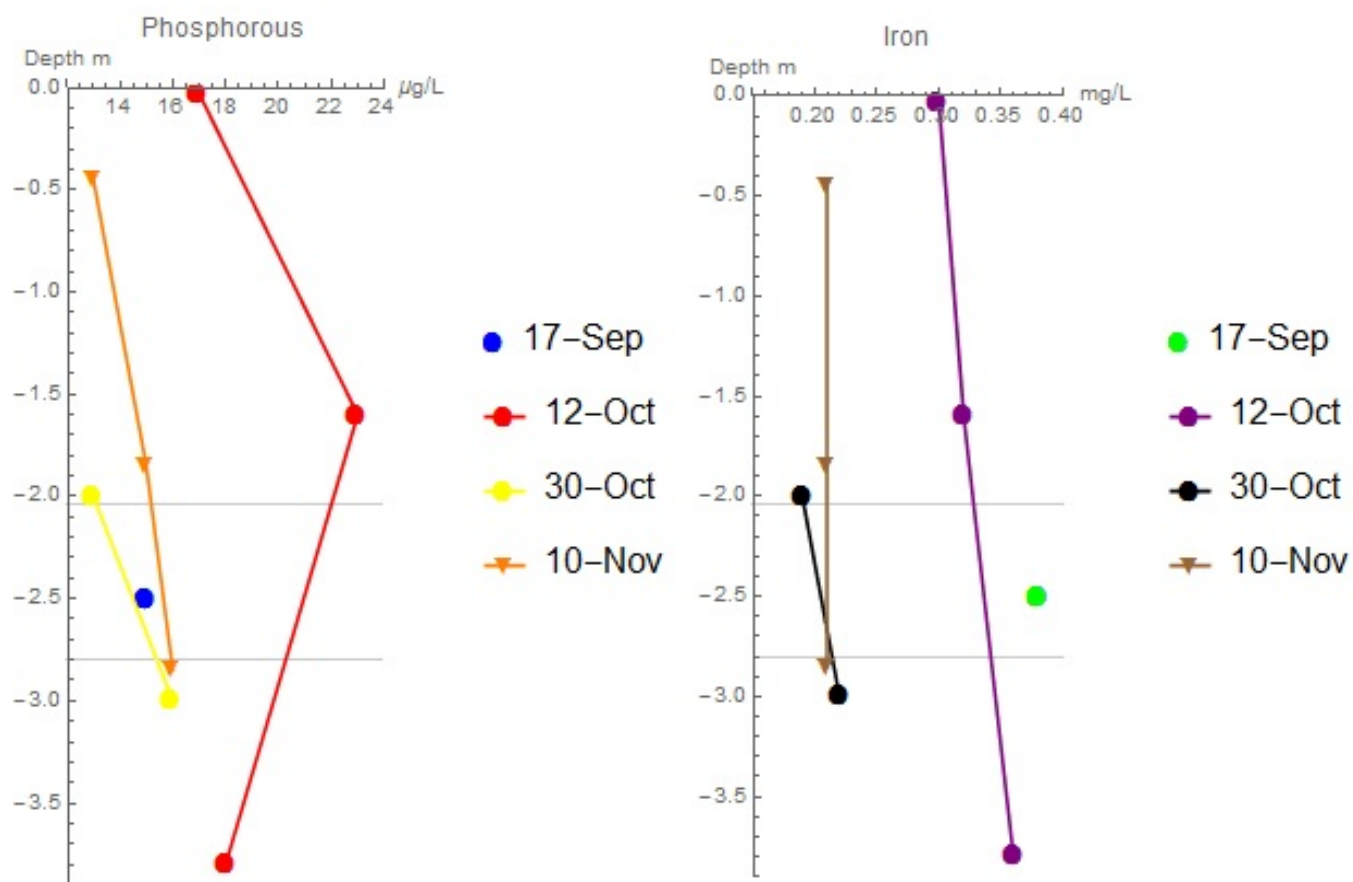
Date	> 0.10
Nov 07	0.23
Nov 14	0.21
Nov 17	0.39
Nov 18	1.00
Nov 24	0.43
Nov 25	0.19
Nov 27	1.18
Dec 03	0.12
Dec 06	0.33
Dec 07	0.74
Dec 10	1.90
Dec 11	0.21
Dec 17	0.14
Dec 18	0.15
Dec 25	0.63
Dec 29	0.11
Jan 04	0.19

Figure 1

Before Drawdown ●

After Drawdown ▼

Horizontal Lines Define Intake Depth – After Drawdown Depths Adjusted to Intake



Date	Depth	P $\mu\text{g/L}$	Fe mg/L	Fe:P
17-Sep	-2.50	15.0	0.38	25.
12-Oct	-0.03	17.0	0.30	18.
12-Oct	-1.60	23.0	0.32	14.
12-Oct	-3.80	18.0	0.36	20.
30-Oct	-2.00	13.0	0.19	15.
30-Oct	-3.00	16.0	0.22	14.
10-Nov	-0.45	13.0	0.21	16.
10-Nov	-1.85	15.0	0.21	14.
10-Nov	-2.85	16.0	0.21	13.

Figure 2

Middle Bolton Lake

September 17, 2014, 02:15 PM

Station: MBOU7

Collectors: PV, KP

Secchi 2.2 m

Weather: Sunny, North West Wind

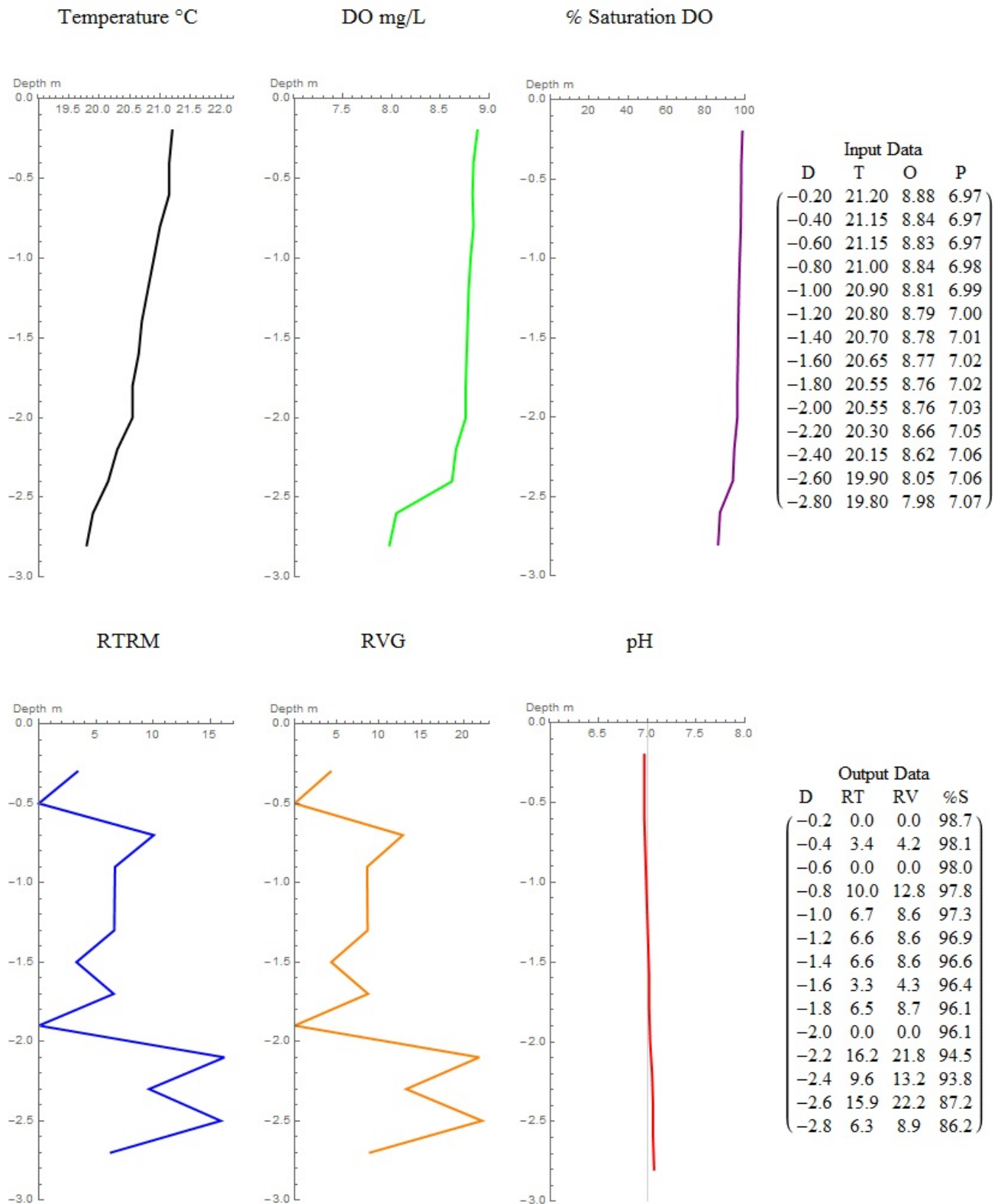
Notes: Clump of *Najas Guadelupensis* on Anchor. Water Sample at 2.5 m.

Figure 3

Middle Bolton Lake October 12, 2014, 04:01 PM Station: MBOU7 Collectors: PV, KP
 Secchi 1.8 m Weather: Clear, Sunny, Light Variable Breeze
 Notes: Water Samples at 0, 1.6 & 3.4. Water Level at 0 KP Scale.

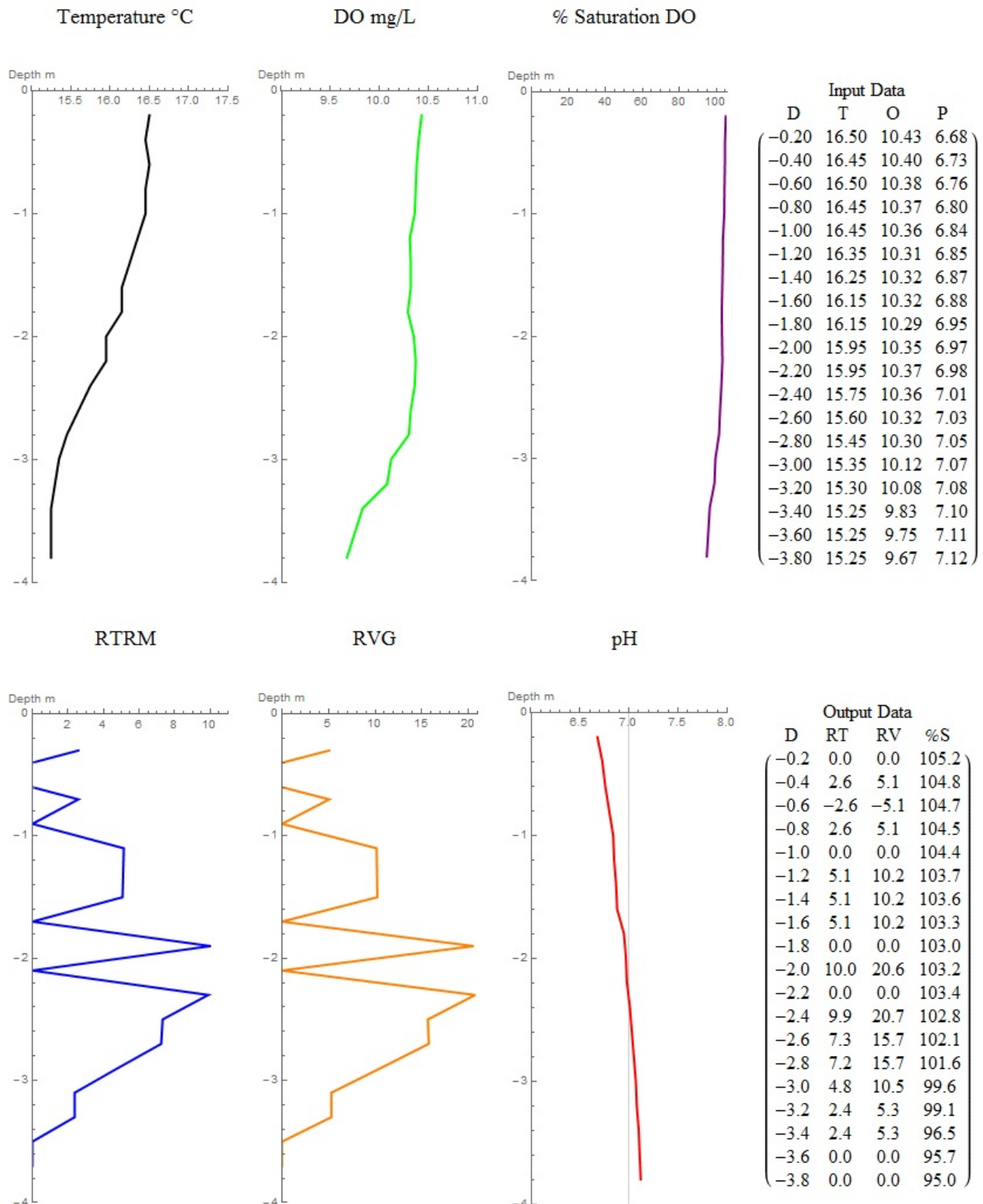


Figure 4

Middle Bolton Lake

October 30, 2014, 01:24 PM

Station: MBOU7

Collectors: PV

Secchi 1.6 m

Weather: Partially Cloudy, Variable W Breeze

Notes: No Secchi Scope. New DEEP Gauge at 0.0 ft. No Flow Over Dam. H₂O @ 2m & 3m.

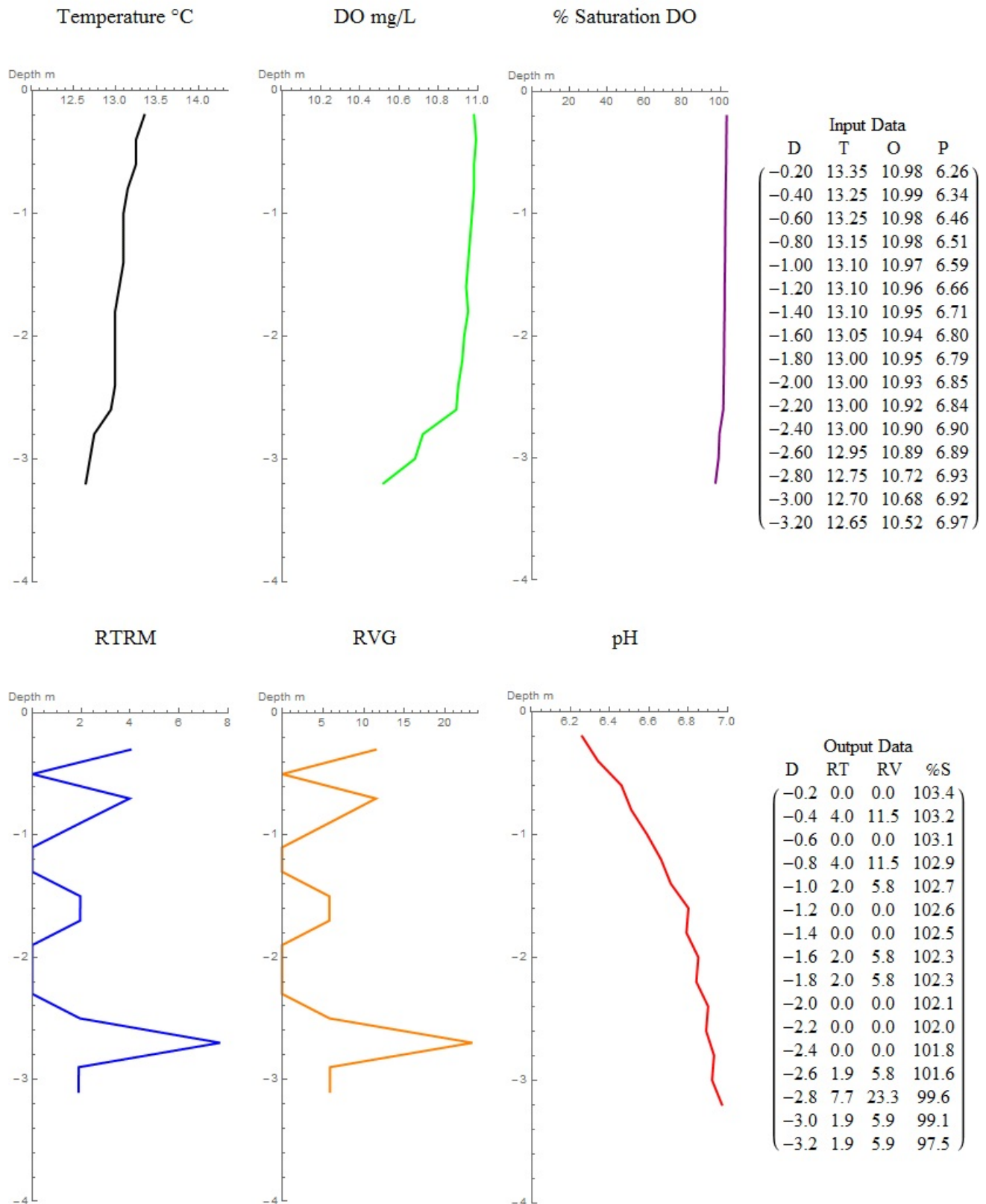


Figure 5

Middle Bolton Lake November 10, 2014, 12:56 PM

Station: MBOU

Collectors: PV, KP

Secchi 1.6 m Weather: Sunny, Light S Breeze.

Notes: Both Dams in Drawdown. DEEP Gauge @ -1.5 ft. H₂O @ 0, 1.4 & 2.4 m.

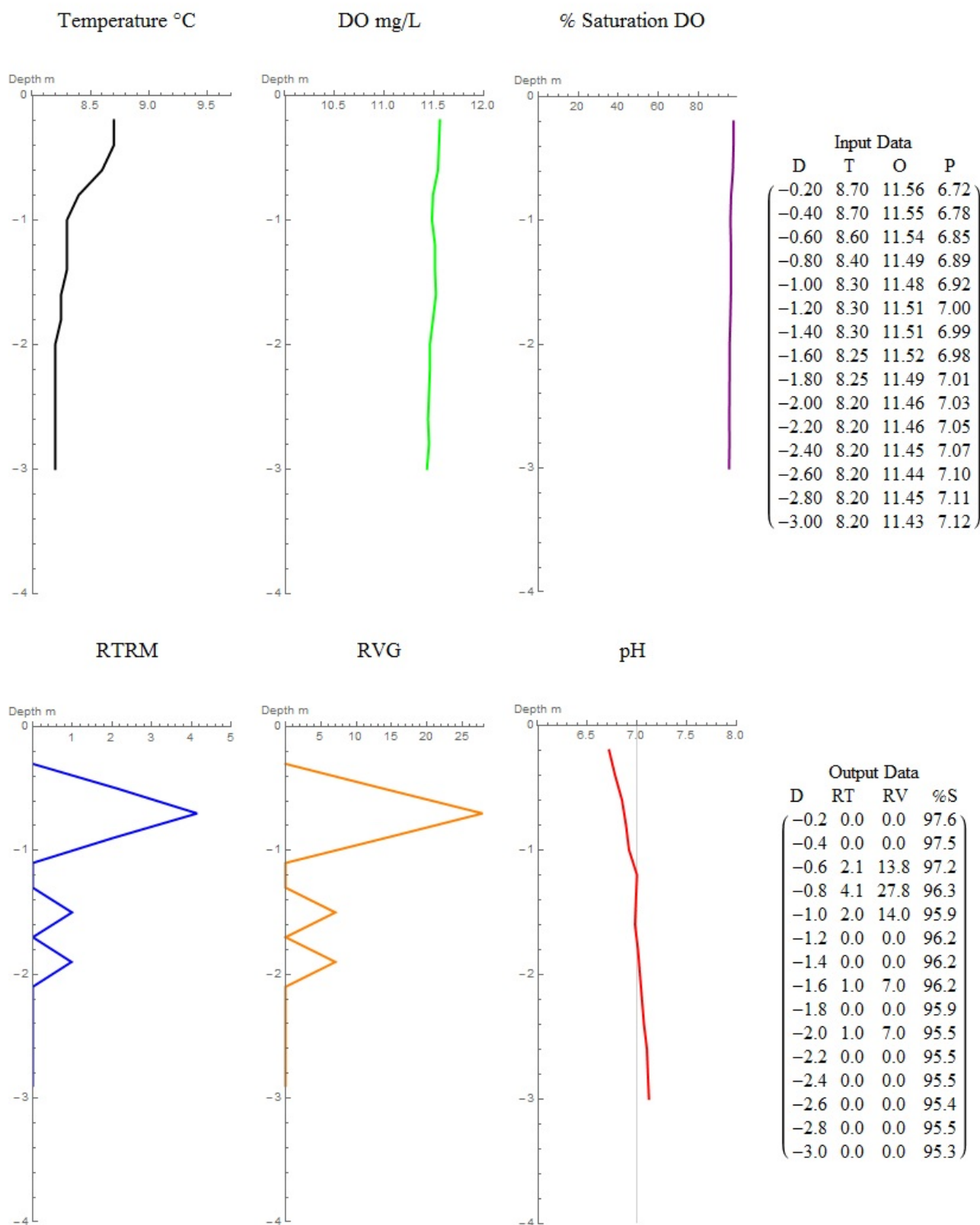
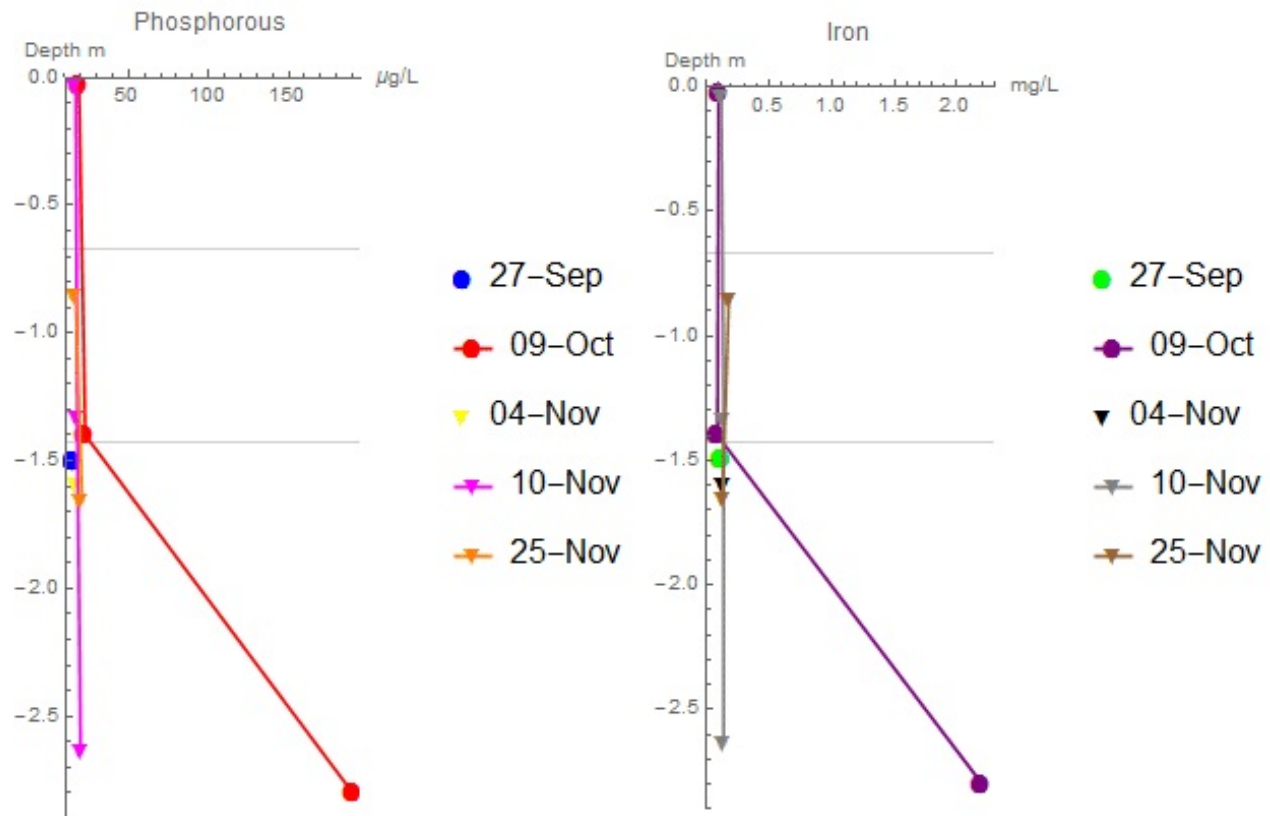


Figure 6

Before Drawdown ●

After Drawdown ▼

Horizontal Lines Define Discharge Depth – After Drawdown Depths Adjusted to Discharge



Date	Depth	P $\mu\text{g/L}$	Fe mg/L	Fe:P
27-Sep	-1.50	16.0	0.12	8.
09-Oct	-0.03	19.0	0.10	5.
09-Oct	-1.40	23.0	0.09	4.
09-Oct	-2.80	190.	2.20	12.
04-Nov	-1.60	18.0	0.14	8.
10-Nov	-0.04	17.0	0.12	7.
10-Nov	-1.34	18.0	0.14	8.
10-Nov	-2.64	20.0	0.14	7.
25-Nov	-0.86	17.0	0.18	11.
25-Nov	-1.66	21.0	0.13	8.

Figure 7

Lower Bolton Lake September 27, 2014, 08:33 AM Station: LBIN Collectors: PV, MC
 Secchi 1.8 m Weather: Clear, Light NW Breeze
 Notes: DEEP Level Gauge at -1.6 ft. Strand of *Najas Guadelupensis* on Anchor. Water Sample at 1.5 m.

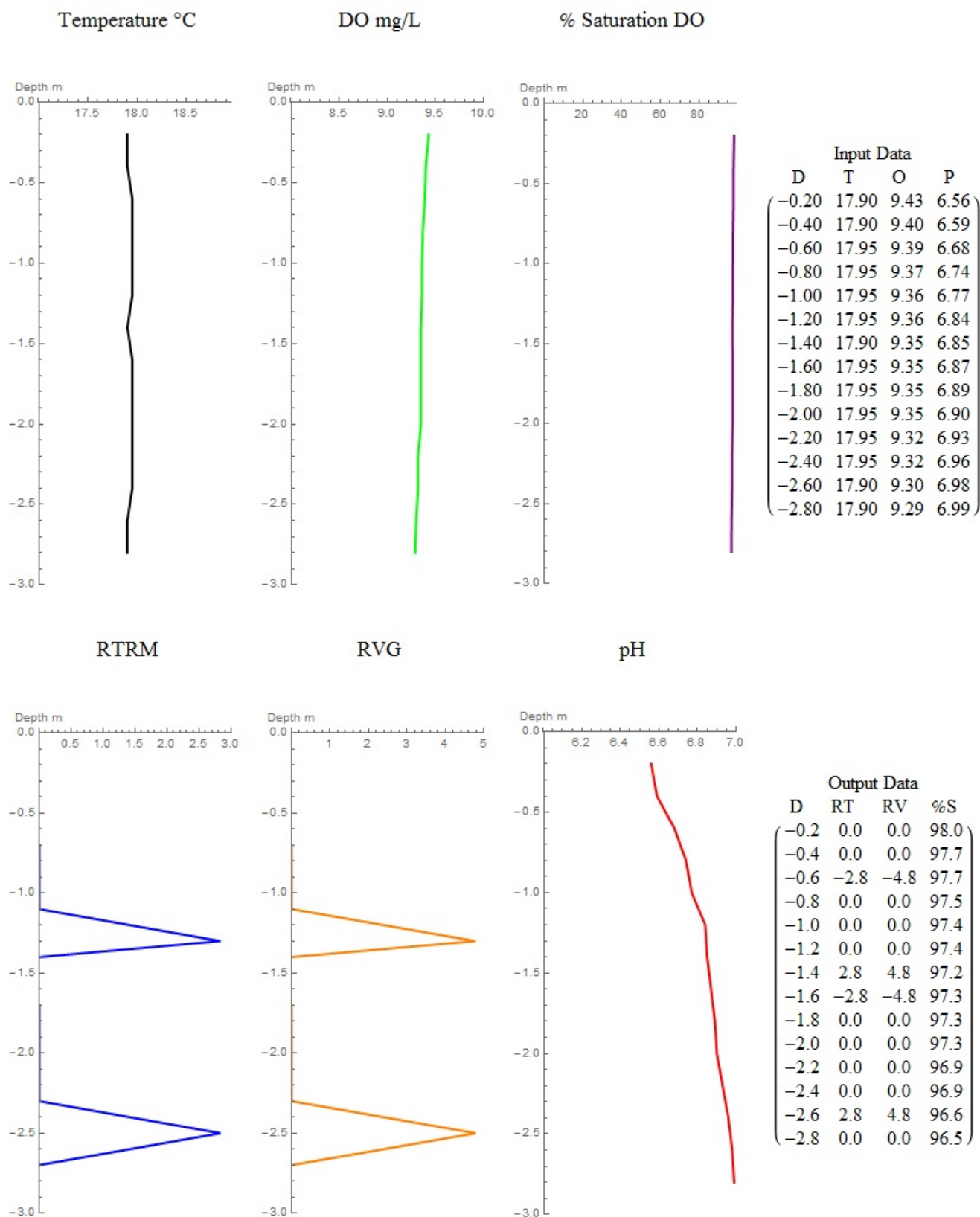


Figure 8

Lower Bolton Lake October 09, 2014, 04:20 PM Station: LBIN Collectors: PV
 Secchi 1.9 m Weather: Scattered Clouds, Fresh SW Wind
 Notes: DEEP Level Gauge at -0.6 ft. 3 Water Samples Taken. *Najas Guadelupensis* on Anchor.

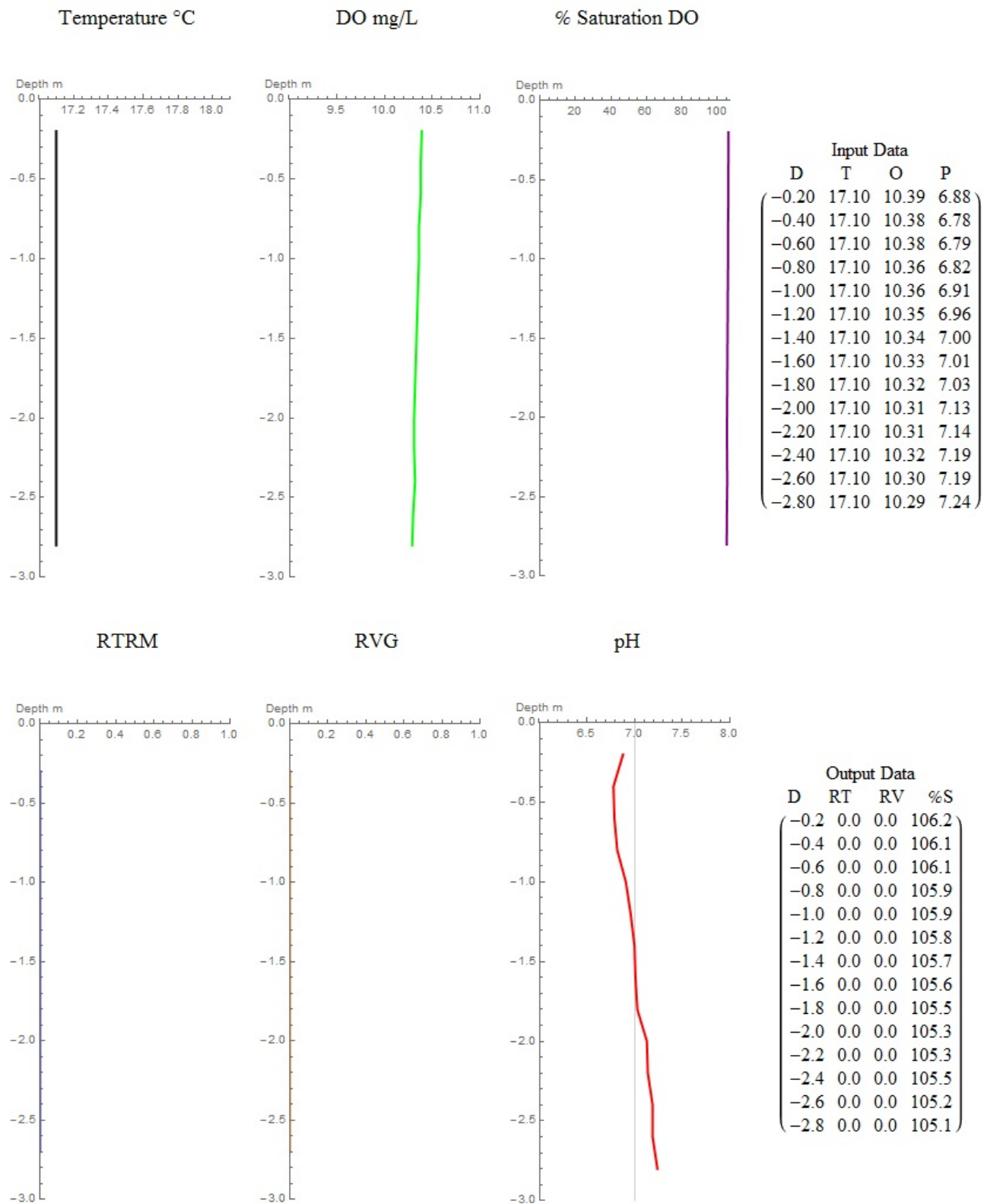


Figure 9

Lower Bolton Lake

November 10, 2014, 03:22 PM

Station: LBIN

Collectors: PV

Secchi 1.9 m

Weather: Sunny, Light SE Breeze.

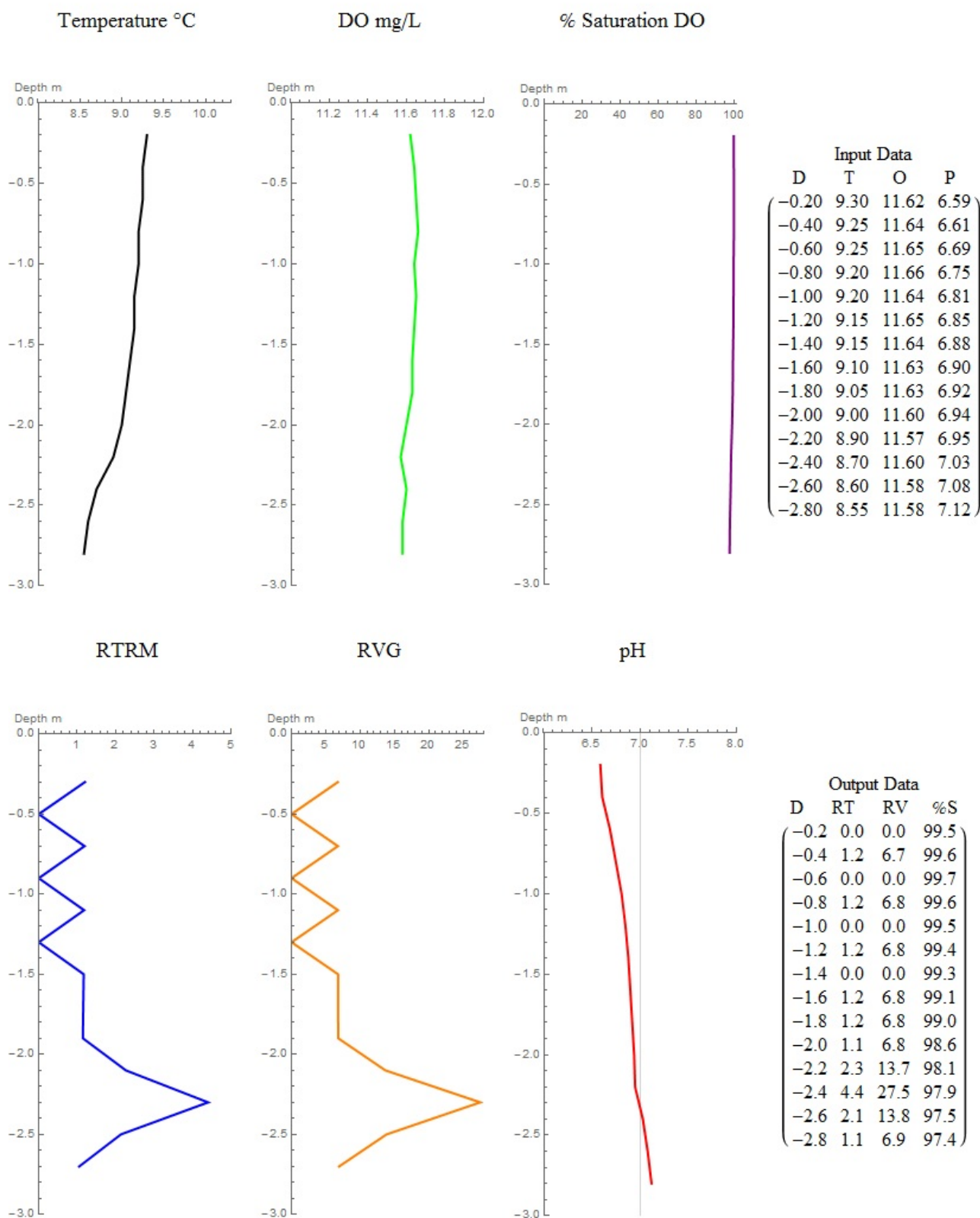
Notes: Both Dams in Drawdown. DEEP Gauge @ -0.8 ft. H₂O @ 0, 1.3 & 2.6 m.

Figure 10

Lower Bolton Lake November 25, 2014, 01:41 PM Station: LBIN Collectors: PV
 Secchi 2.0 m Weather: Overcast, Fresh SSW Wind.
 Notes: Drawdown @ -1.5 ft. H₂O Taken @ 0.4 & 1.2 m. Green *Najas Guadelupensis* on anchor.

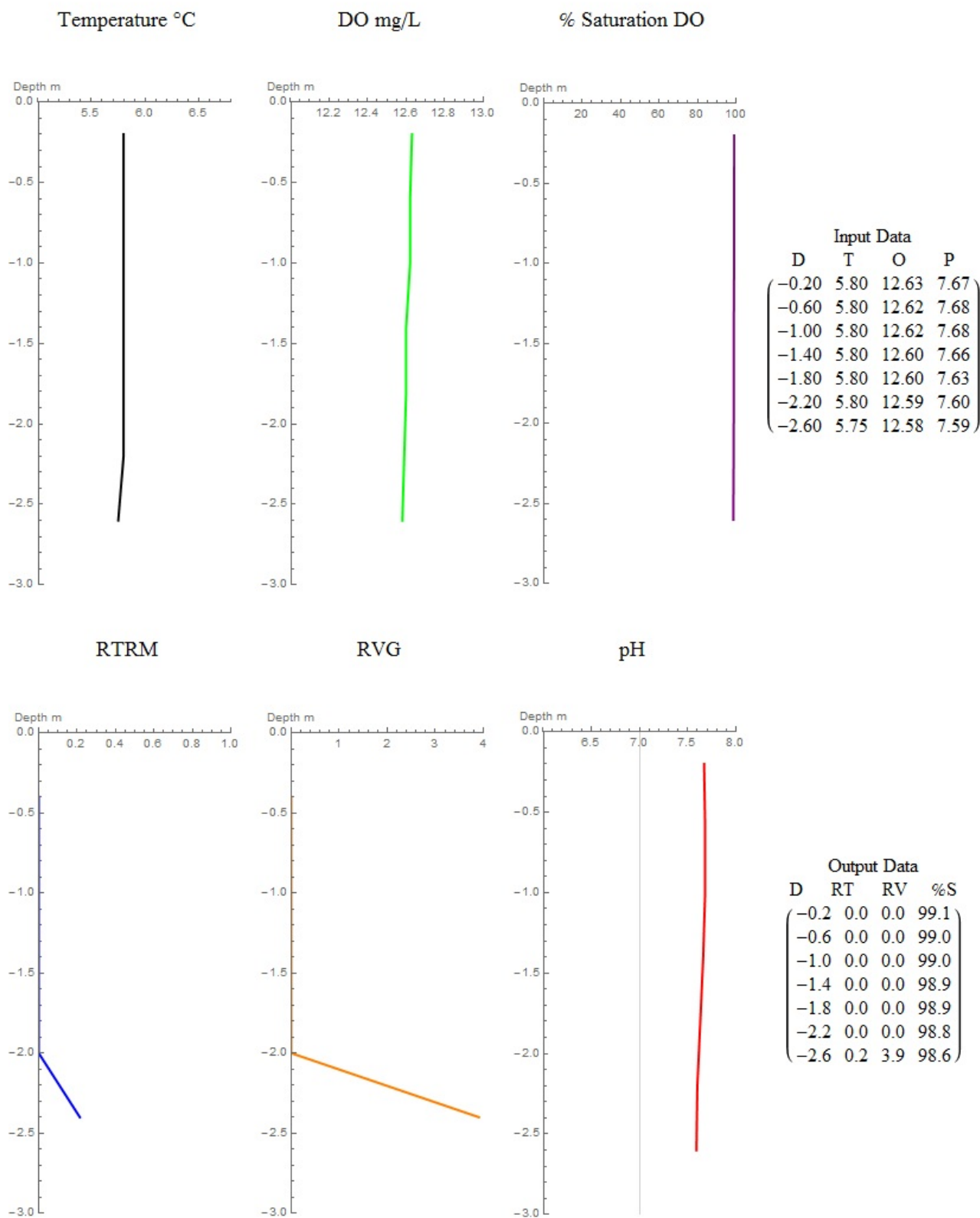
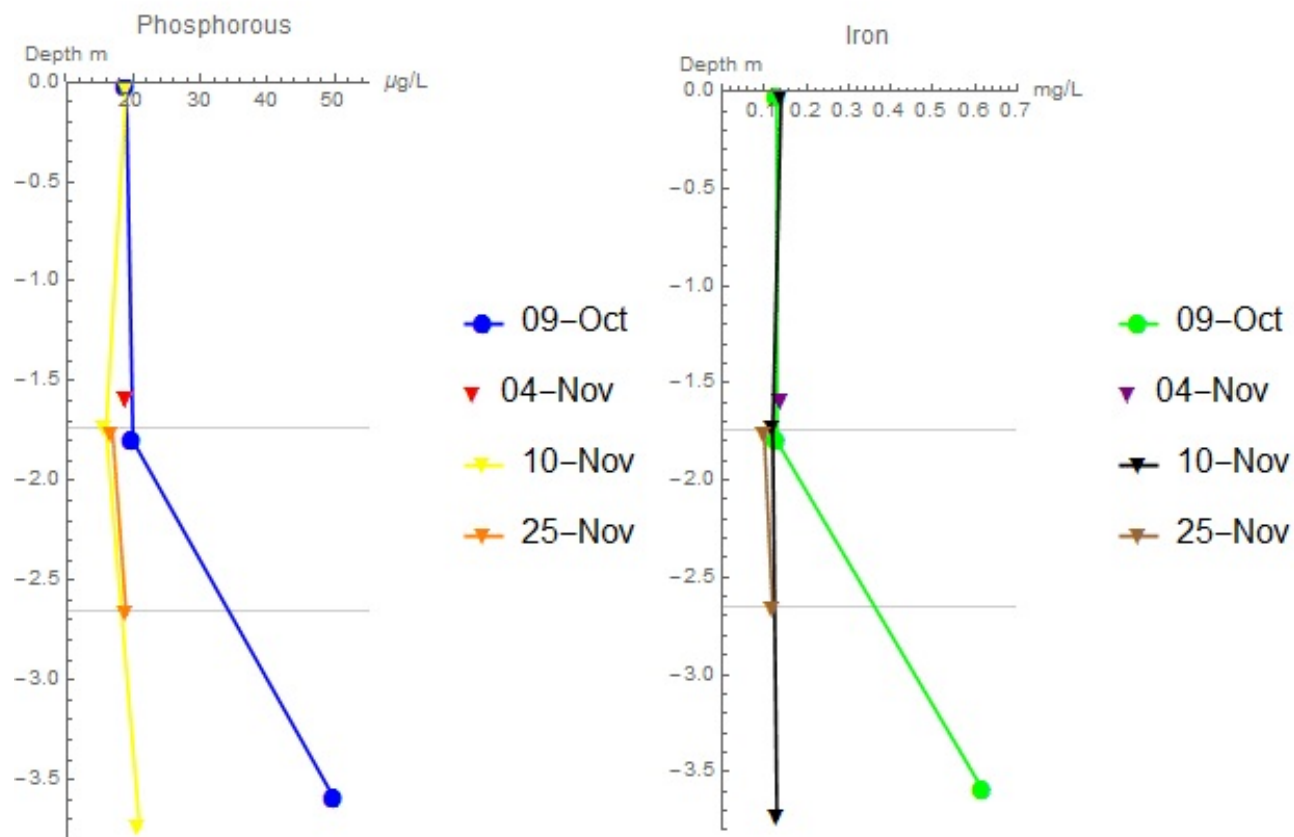


Figure 11

Before Drawdown ●

After Drawdown ▼

Horizontal Lines Define Intake Depth – After Drawdown Depths Adjusted to Intake



Date	Depth	P µg/L	Fe mg/L	Fe:P
09-Oct	-0.03	19.0	0.13	7.
09-Oct	-1.80	20.0	0.13	7.
09-Oct	-3.60	50.0	0.62	33.
04-Nov	-1.60	19.0	0.14	7.
10-Nov	-0.04	19.0	0.14	7.
10-Nov	-1.74	16.0	0.12	8.
10-Nov	-3.74	21.0	0.13	6.
25-Nov	-1.77	17.0	0.10	6.
25-Nov	-2.67	19.0	0.12	6.

Figure 12

Lower Bolton Lake

October 09, 2014, 04:54 PM

Station: LBOUT

Collectors: PV

Secchi 1.9 m

Weather: Scattered Clouds, Fresh SW Wind

Notes: DEEP Level Gauge at -0.6 ft. 3 Water Samples Taken.

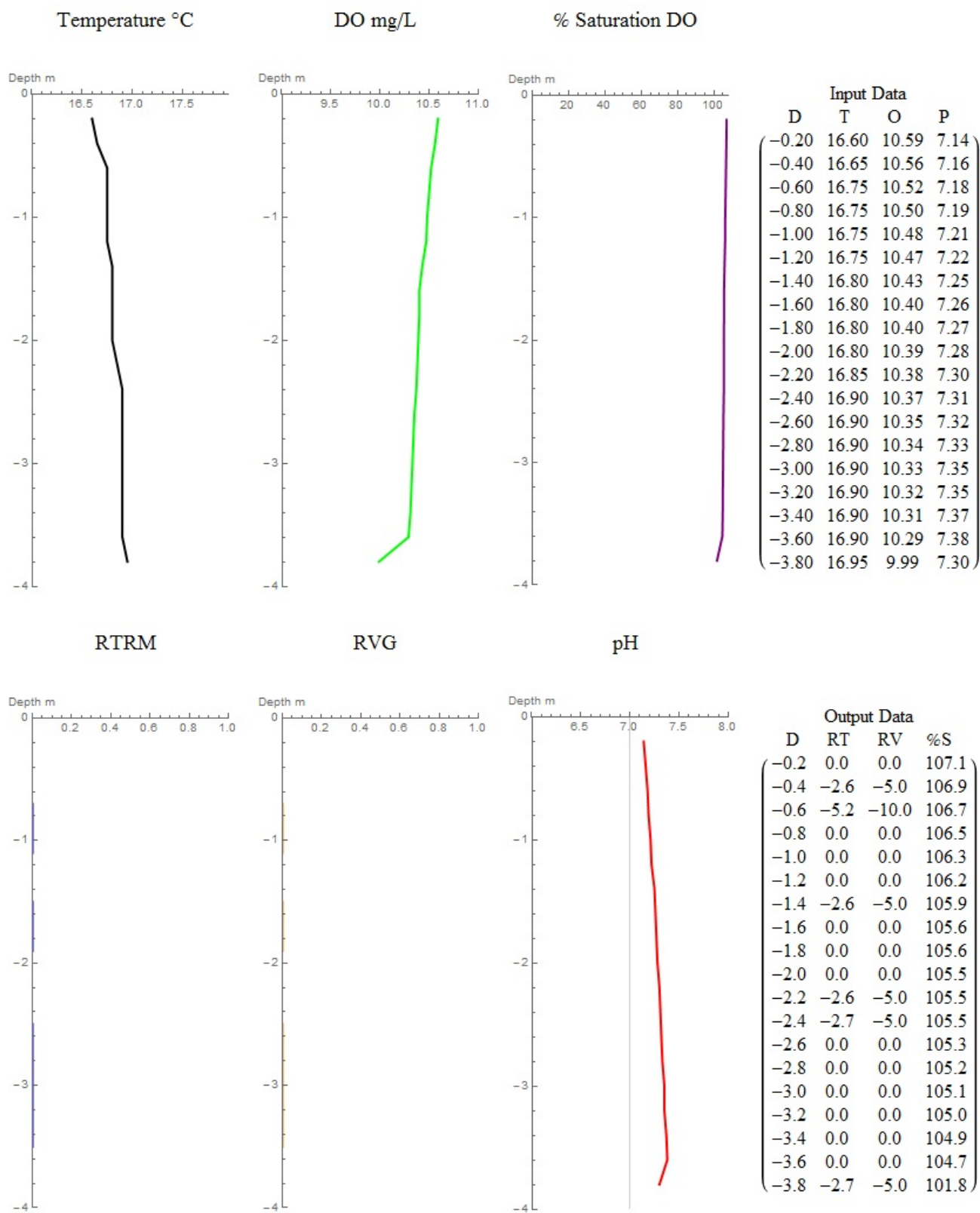


Figure 13

Lower Bolton Lake October 25, 2014, 04:32 PM
 Secchi 1.6 m Weather: Sunny, Light SW Breeze
 Notes: No Secchi Scope. DEEP Gauge -0.5 ft.

Station: LBOUT

Collectors: PV

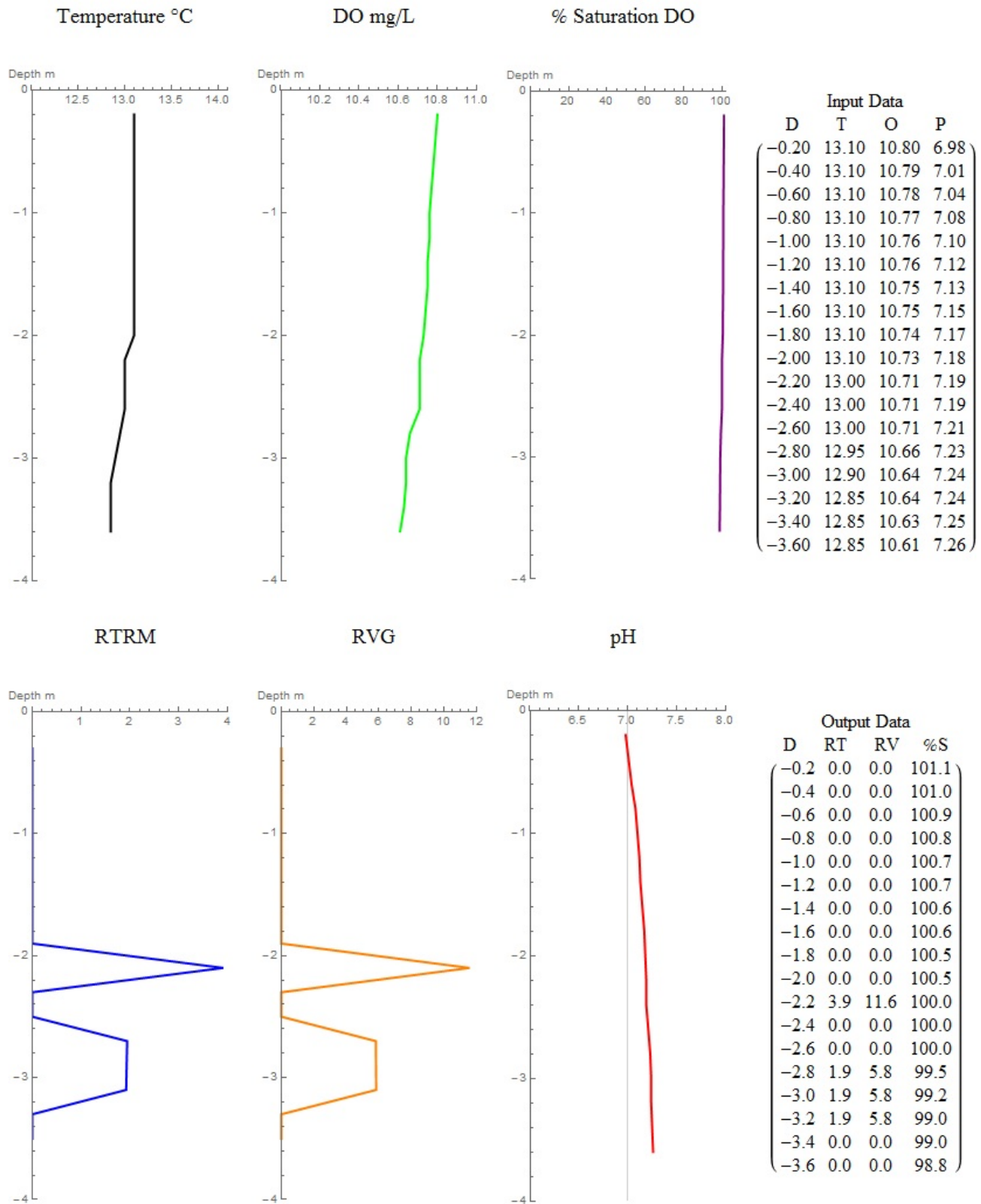


Figure 14

Lower Bolton Lake November 04, 2014, 03:52 PM Station: LBOUT Collectors: PV
 Secchi 1.7 m Weather: Clear, Light SSW Breeze.
 Notes: Both Dams in Drawdown. DEEP Gauge @ -0.6 ft. H₂O @ 1.6 m.

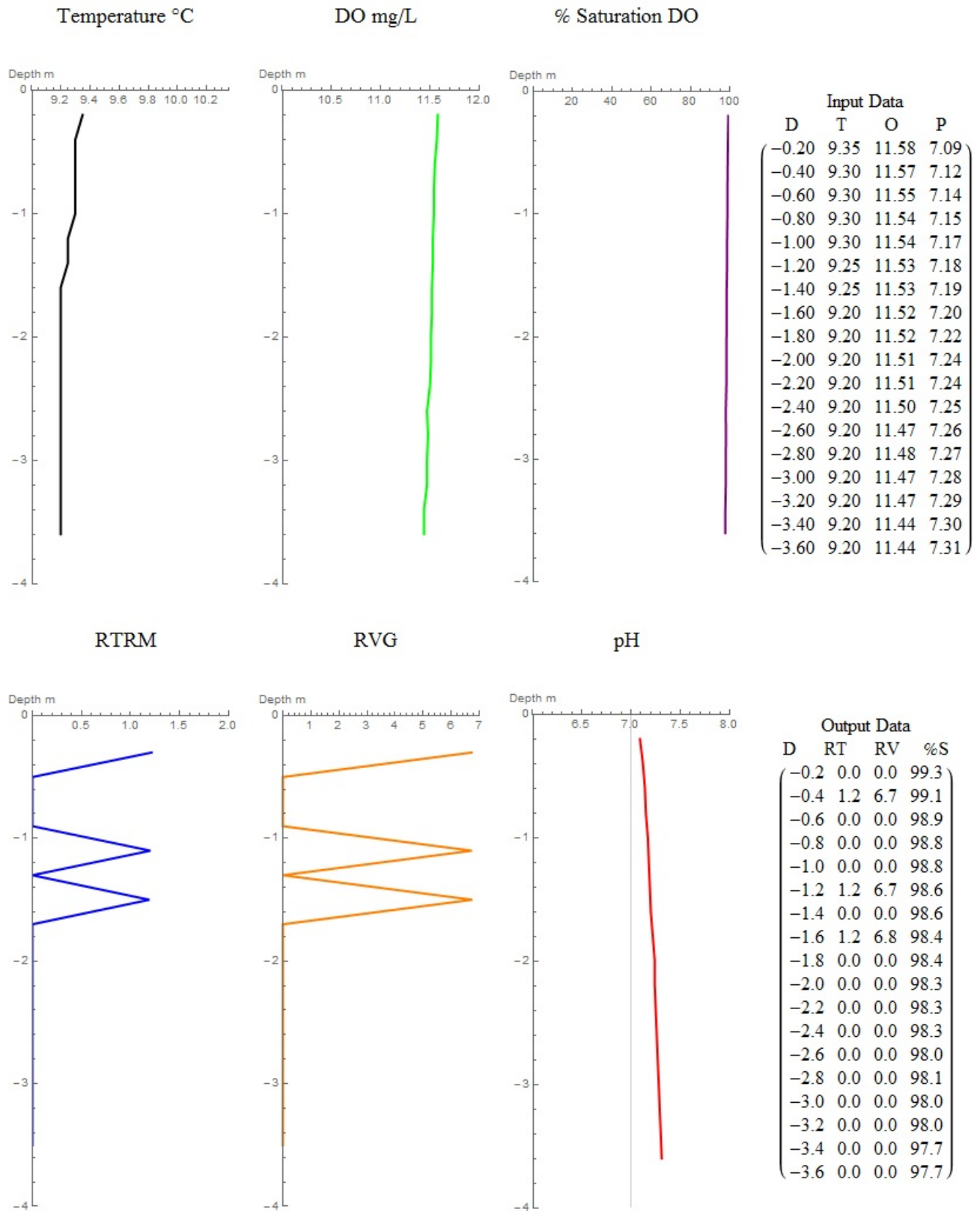


Figure 15

Lower Bolton Lake November 10, 2014, 03:56 PM Station: LBOUT Collectors: PV
 Secchi 1.9 m Weather: Sunny, Light SE Breeze.
 Notes: Both Dams in Drawdown. DEEP Gauge @ -0.8 ft. H₂O @ 0, 1.7 & 3.4 m.

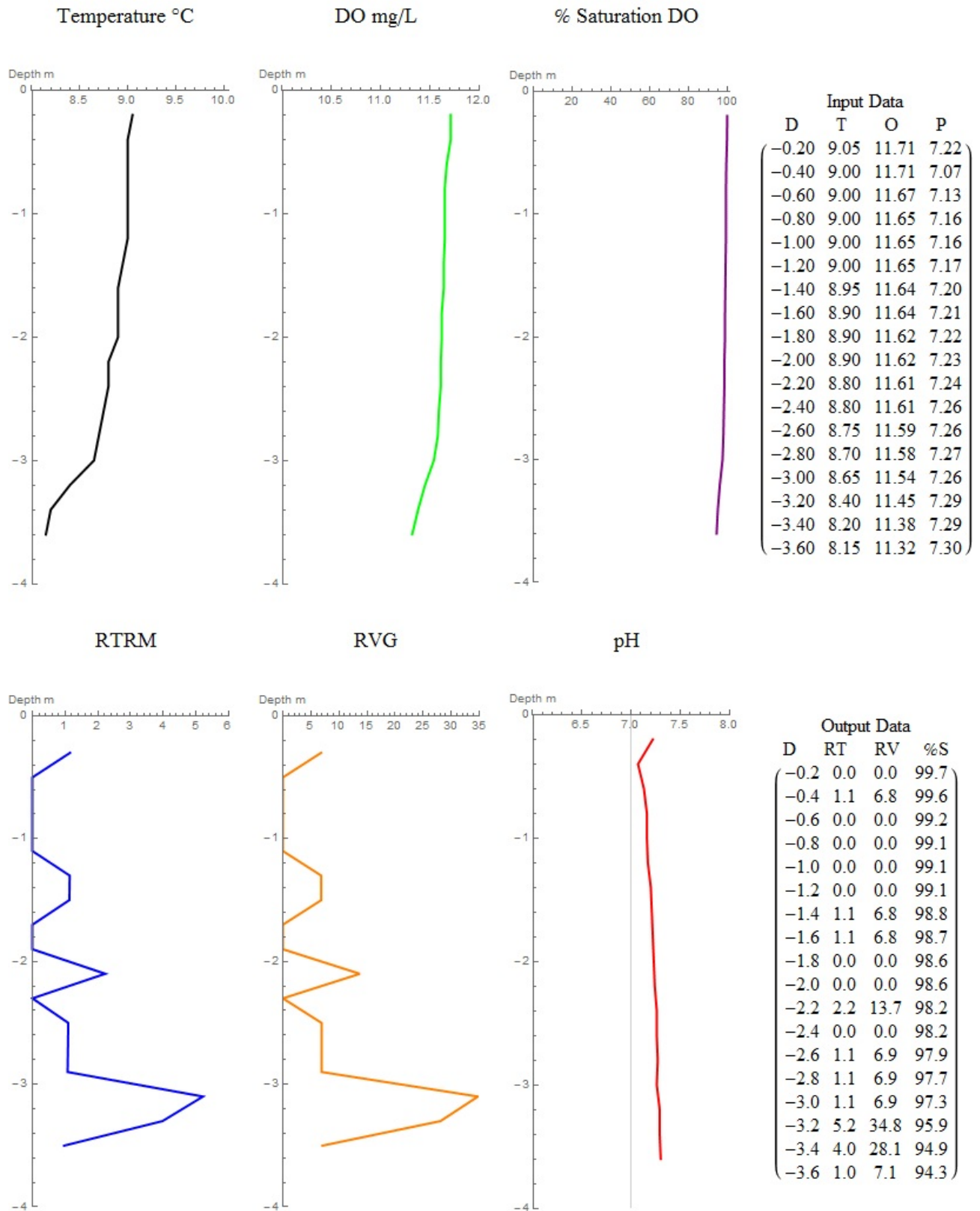


Figure 16



Location of MBOU & LBIN Stations
 MBDIS is Location of Middle Lake Discharge



Location of LBOU Station
 LBDIS is Location of Lower Lake Discharge