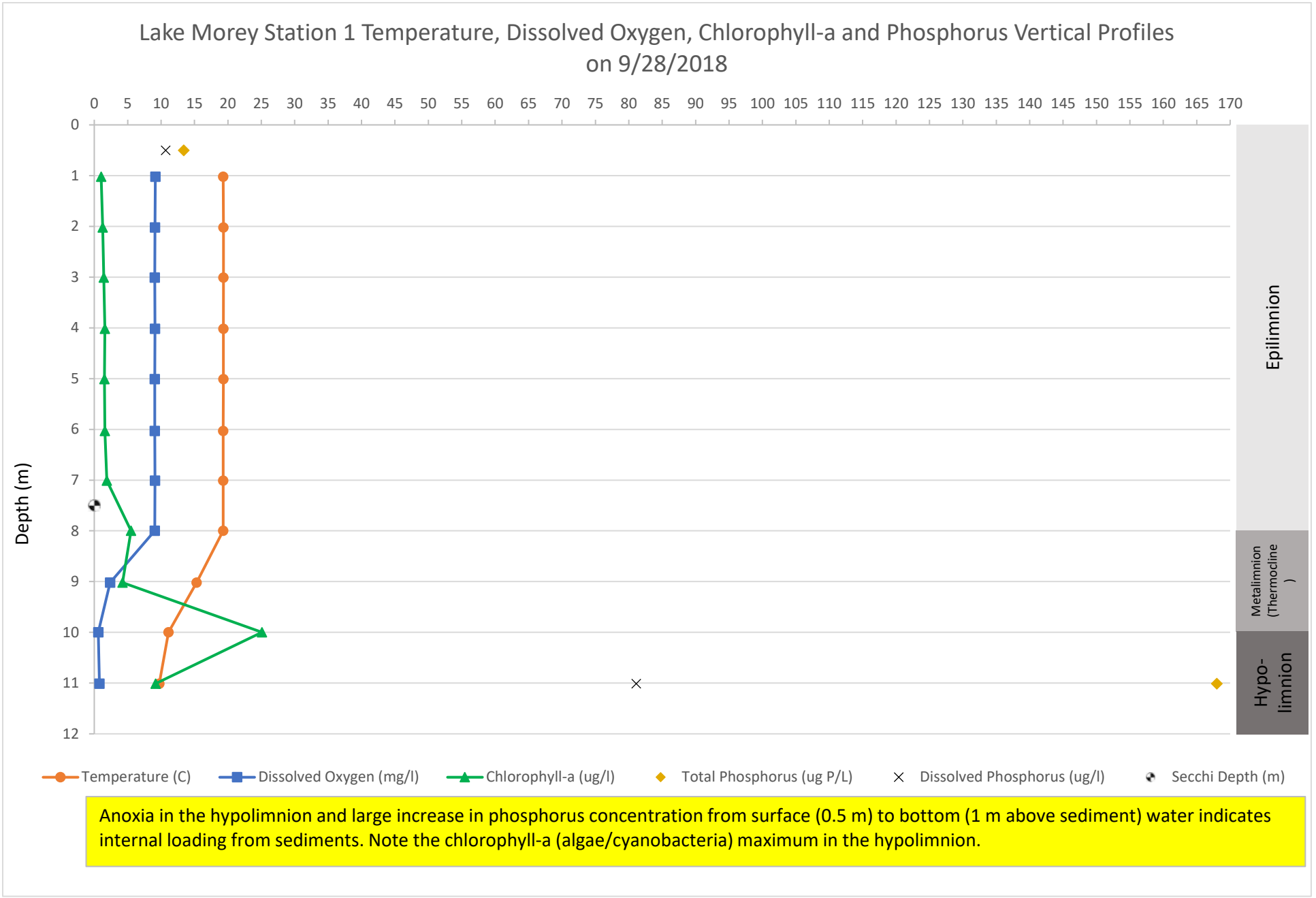
Lake Morey Station 1

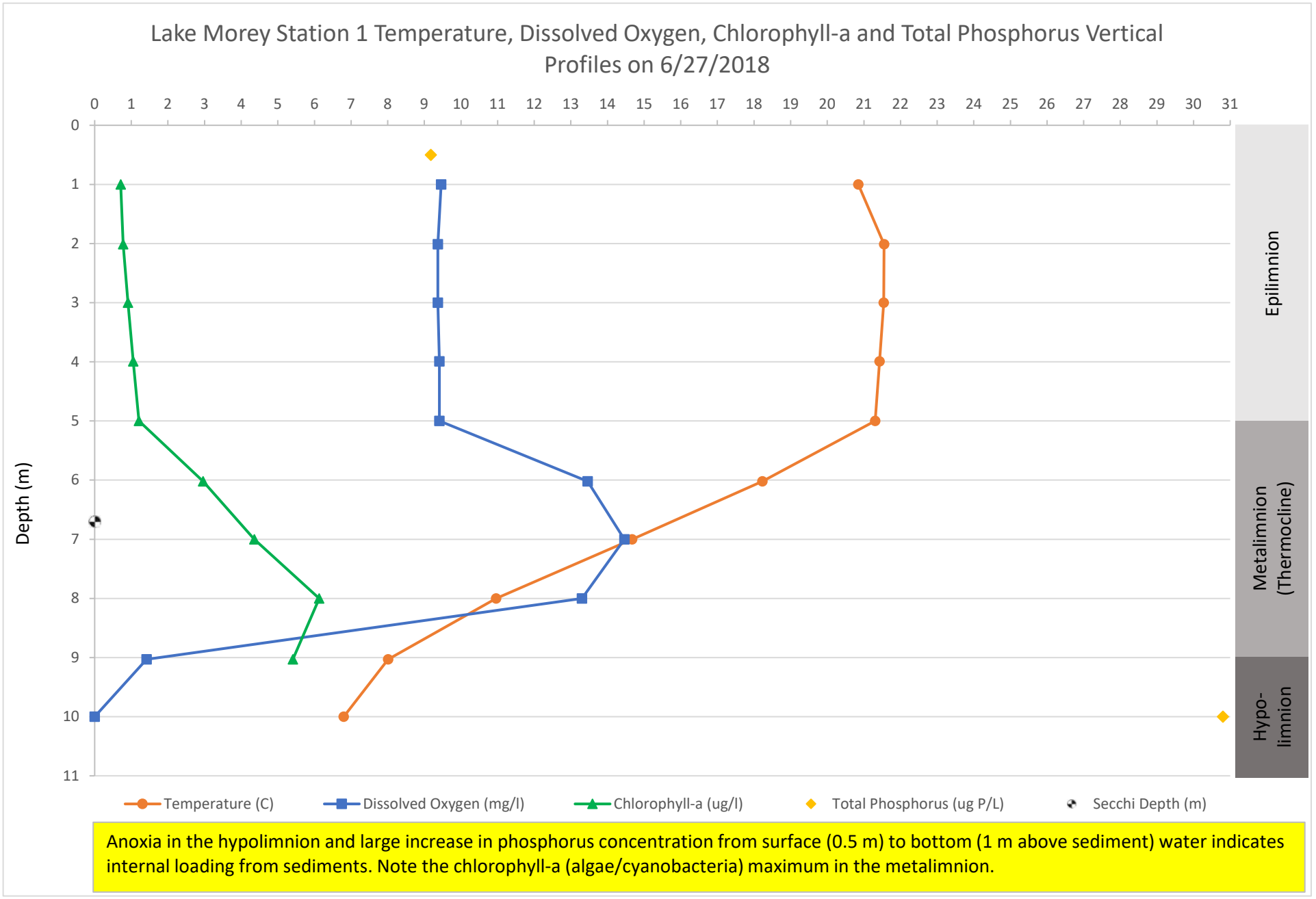
Cond=Conductivity(uS/cm) DO=Dissolved Oxygen(mg/L) Cha-a=Chlorophyll-a(ug/L) TP=Total Phosphorus(ug P/L) DP=Dissolved Phosphorus(ug P/L) TN=Total Nitrogen(mg/L) Al=Aluminum(ug/L) Ca=Calcium(mg/L) Cl=Chloride(mg/L) DIC=Dissolved Inorganic Carbon(mg/L) DOC=Dissolved Organic Carbon(mg/L) Fe=Iron(ug/L) Mg=Magnesium(mg/L) Mn=Manganese(ug/L) K=Potassium(mg/L) Na=Sodium(mg/L) SO4=Sulfate(mg/L) TCH=Total Calculated Hardness(mg CaCO3/L)

Date	Depth(m)	Temp(C)	pH	Cond	DO%	DO	Chl-a	TP*	DP*	TN*	Al	Ca	Cl	DIC	DOC	Fe*	Mg	Mn*	K	Na	SO4	TCH
9/28/18	0.5							13.4	10.7	0.2	<20	14.6	15.3			<50	3.5	10.7	0.6	7.8	10.6	50.9
9/28/18	1.0	19.3	7.7	163.9	97.1	9.1	1.0															
9/28/18	2.0	19.3	7.7	163.7	96.6	9.1	1.3															
9/28/18	3.0	19.3	7.7	163.5	96.4	9.1	1.4															
9/28/18	4.0	19.3	7.8	163.6	96.7	9.1	1.6															
9/28/18	5.0	19.3	7.8	163.4	96.4	9.1	1.5															
9/28/18	6.0	19.3	7.8	163.5	96.1	9.1	1.6															
9/28/18	7.0	19.3	7.8	163.6	96.4	9.1	1.9															
9/28/18	8.0	19.3	7.8	163.2	96.0	9.0	5.5															
9/28/18	9.0	15.3	7.3	172.6	23.1	2.4	4.2															
9/28/18	10.0	11.1	7.2	187.0	5.3	0.6	25.1															
9/28/18	11.0	9.7	7.1	193.1	6.7	0.8	9.2	168.0	81.1	0.8	<20	17.8	16.9			93.6	3.9	2290.6	0.8	8.6	13.1	60.4
6/27/18	0.5							9.2		0.2	<20	16.7	14.7	9.4	3.3	<50	3.9	9.6	0.7	8.7		57.8
6/27/18	1.0	20.9	8.2	162.1	103.9	9.5	0.7															
6/27/18	2.0	21.6	8.0	160.0	104.5	9.4	0.8															
6/27/18	3.0	21.5	8.0	159.9	104.3	9.4	0.9															
6/27/18	4.0	21.4	8.1	159.9	104.6	9.4	1.1															
6/27/18	5.0	21.3	8.1	159.7	104.3	9.4	1.2															
6/27/18	6.0	18.2	8.5	156.1	140.4	13.5	3.0															
6/27/18	7.0	14.7	8.3	156.1	140.0	14.5	4.4															
6/27/18	8.0	11.0	7.8	162.5	118.4	13.3	6.1															
6/27/18	9.0	8.0	7.3	175.9	11.8	1.4	5.4															
6/27/18	10.0	6.8	7.2	181.6	0.0	0.0		30.8		0.5	<20	17.5	16.4	12.5	5.6	<50	4.0	263.0	0.7	9.2		60.1
3/5/18	1.0	3.0	6.6	167.9	105.7	13.4		13.1			<20	16.1	13.0			<50	3.8	109.5	0.7	7.7	11.0	55.8
3/5/18	2.0	3.8	6.9	176.4	102.1	12.6																
3/5/18	3.0	3.8	7.1	176.5	101.5	12.6		11.2														
3/5/18	4.0	3.9	7.3	176.3	103.0	12.7																
3/5/18	5.0	3.9	7.3	176.5	102.4	12.7		23.6														
3/5/18	6.0	3.9	7.4	176.3	101.3	12.5																
3/5/18	7.0	3.9	7.3	178.9	85.8	10.6		10.3														
3/5/18	8.0	4.1	7.3	181.1	76.5	9.4																
3/5/18	9.0	4.1	7.2	183.3	63.8	7.8		13.9														
3/5/18	10.0	4.3	7.0	194.3	41.0	5.0																
3/5/18	11.0	4.3	7.0	204.6	46.6	5.7		45.1		0.5	<20	18.4	17.3			55.5	4.2	400.6	0.7	9.8	14.5	63.2
8/24/17	1.0	23.9	7.9	173.0	95.9	7.7																
8/24/17	2.0	23.8	7.9	173.0	95.1	7.6																
8/24/17	3.0	23.7	7.8	172.8	95.4	7.7																
8/24/17	4.0	23.6	7.8	173.1	95.6	7.7																
8/24/17	5.0	23.6	7.8	173.0	95.3	7.7																
8/24/17	6.0	22.7	7.7	172.7	96.0	7.9																
8/24/17	7.0	19.2	7.7	172.7	105.2	9.2																
8/24/17	8.0	14.5	7.2	176.7	45.1	4.4																
8/24/17	9.1	11.8	6.7	182.9	7.9	0.8																
8/24/17	10.1	10.4	6.6	190.6	4.4	0.5																

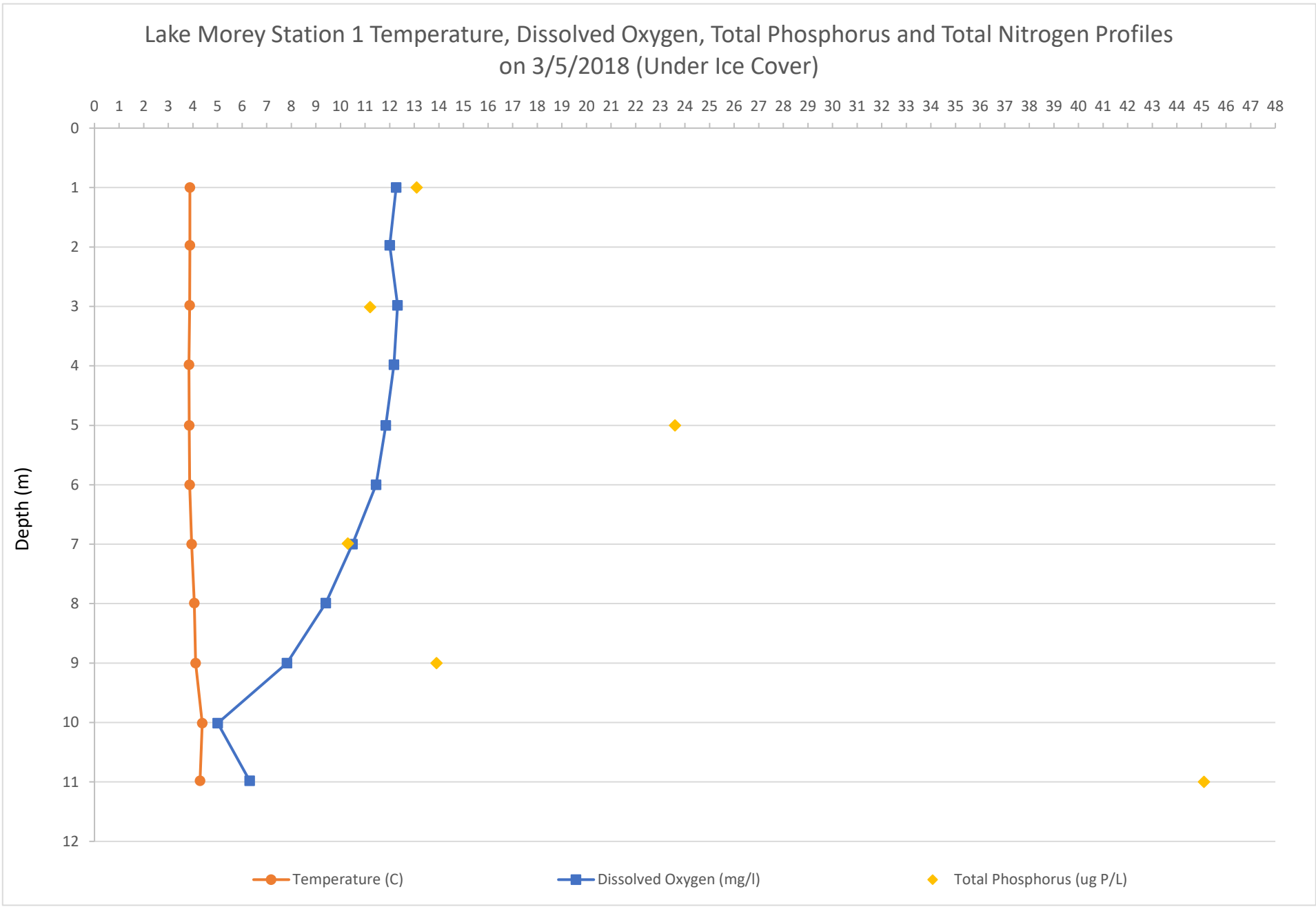
*Large increase in concentration from surface (0.5 m) to bottom (1 m above sediment) water indicates internal loading from sediments under anoxic conditions.

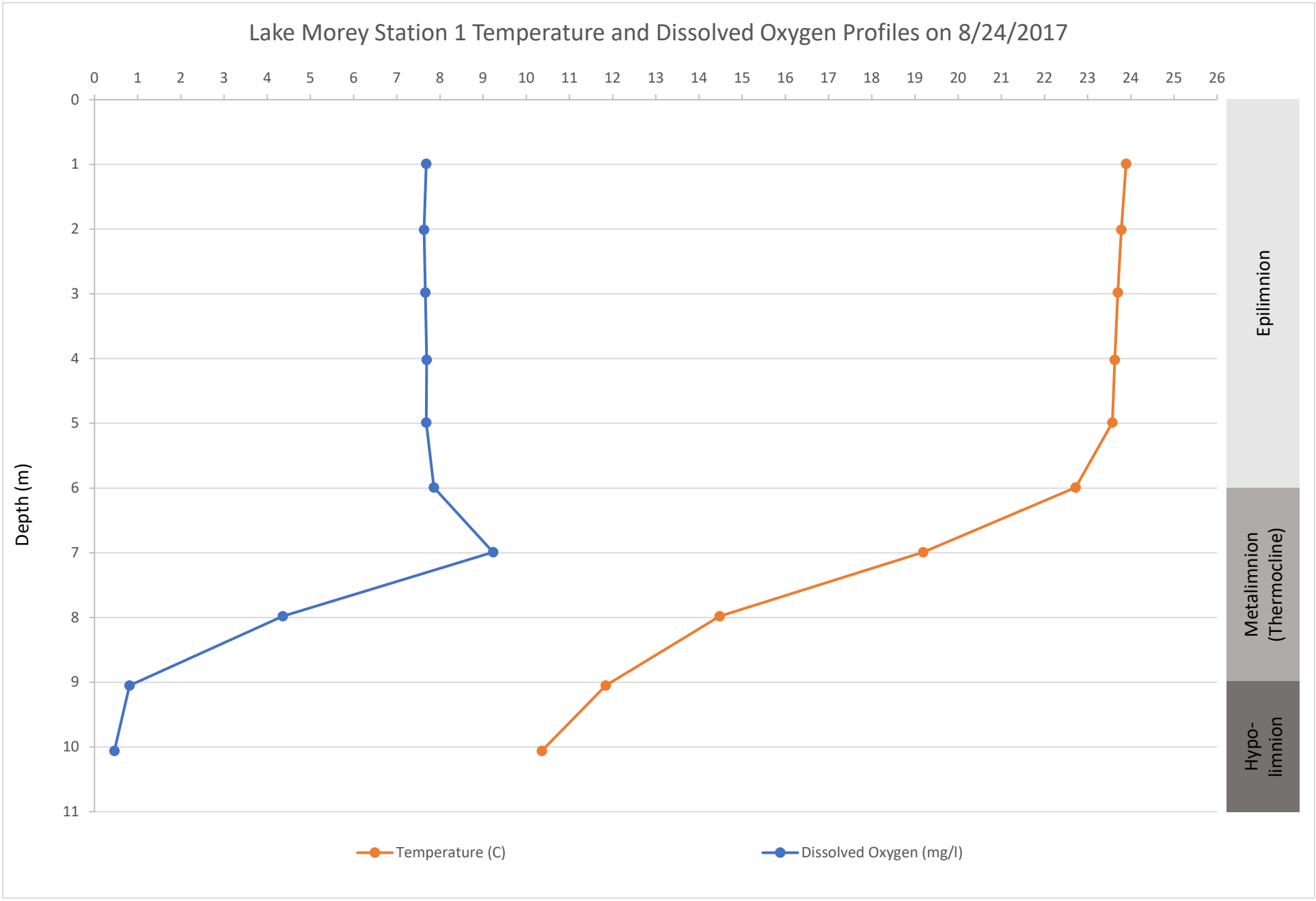


Anoxia in the hypolimnion and large increase in phosphorus concentration from surface (0.5 m) to bottom (1 m above sediment) water indicates internal loading from sediments. Note the chlorophyll-a (algae/cyanobacteria) maximum in the hypolimnion.



Anoxia in the hypolimnion and large increase in phosphorus concentration from surface (0.5 m) to bottom (1 m above sediment) water indicates internal loading from sediments. Note the chlorophyll-a (algae/cyanobacteria) maximum in the metalimnion.


Lake Morey Station 1 Temperature, Dissolved Oxygen, Total Phosphorus and Total Nitrogen Profiles on 3/5/2018 (Under Ice Cover)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
Depth (m)
0 1 2 3 4 5 6 7 8 9 10 11 12
Temperature (C)
Dissolved Oxygen (mg/l)
Total Phosphorus (ug P/L)


Lake Morey Station 1 Temperature and Dissolved Oxygen Profiles on 8/24/2017
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
0 1 2 3 4 5 6 7 8 9 10 11
Depth (m)
Epilimnion
Metalimnion (Thermocline)
Hypo-limnion
Temperature (C)
Dissolved Oxygen (mg/l)