

CU Winter Limnology

Hydrolab Lake Profile Data

Peter

Lake Name: <i>Dolan</i>	County: <i>Boulder</i>	Site #:
Monitor:	Group Name:	Date: <i>1/25/12</i>
Instrument #:		

Basic Parameters	
Air Temperature (°C)	-4.3°
Secchi Disk Depth (cm)	<i>1.35 m 135cm</i>
Water Color	<i>Greenish Blue rather clear</i>

Ice Thickness (cm)	<i>38</i>		
Snow Depth (cm)	<i>0</i>		
Water surface temperature at 10cm depth	Digital	Sonde	Correction*
	<i>.5°</i>	<i>.07°</i>	<i>.37°</i>
*Correction=DigitalT-SondeT @0.1m (Enter correction factor on next page)			

Basin description:

Lake elevation _____

Lake size _____

Basin size _____

Basin geology _____

Basin vegetation _____

Physical Characteristics / Current Conditions

Cloud Cover 1

0 = cloudless 3 = fog/haze 6 = rain/thunderstorm
 1 = partly cloudy 4 = drizzle
 2 = overcast 5 = intermittent rain

Wind Speed 2

0 = calm 3 = strong
 1 = slight breeze 4 = gusty
 2 = breezy

Wind Direction 6

0 = no wind 3 = east 6 = northwest
 1 = north 4 = west 7 = southeast
 2 = south 5 = northeast 8 = southwest

Waves 0

0 = calm 3 = moderate waves
 1 = ripples 4 = white caps
 2 = small waves

Aquatic Macrophytes 2

0 = none 3 = substantial
 1 = minimal 4 = abundant
 2 = moderate

Previous Weeks Weather: Est. precip. during past week.

Precipitation ranges	Days before sampling	Rating
0 = none	_____	6
1 = (0 - 0.1 in.)	_____	5
2 = (0.11 - 0.5 in.)	_____	4
3 = (0.51 - 1.0 in.)	_____	3
4 = (1.1 - 2.0 in.)	_____	2
5 = (> 2.0 in.)	_____	1
	Today	<input checked="" type="checkbox"/> 0

Hydrolab Profile

Barometric Pressure [BP] (mg Hg)	DEPTH (m)	TEMPERATURE (°C)		pH	DISSOLVED O ₂ [LDO]		SPECIFIC CONDUCTIVITY [SP] (μS/cm)	TDS (mg/l) <i>light</i>	FIELD OBSERVED COLOR/BIOTA <small>(at biotic sample depths)</small>
		T _{sonde}	T _{corrected}		Correction factor = -0.4C	(mg/l)			
558	0.0	18.6		7.49	10.6	104.7	25.6	.55 × 10 ²	
558	0.5	2.6		7.3	10.4	107.2	22.6	.75 × 10 ¹	
558	1.0	3.7		7.4	9.9	106.0	22.0	.38 × 10 ¹	
558.5	1.5	3.8		7.5	10.0	108.2	21.9	.11 × 10¹	.18 × 10 ¹
558	2.0	3.8		7.45	10.15	109.0	21.8	.61	.11 × 10 ¹
558	2.5	3.95		7.5	10.45	112.8	21.8	.3	.61
557	3.0	3.9		7.5	10.2	110.0	21.9	.15	.30
557	3.5	3.93		7.4	10.1	108.5	21.7	.8 × 10⁻¹	.15
558.5	4.0	3.9		7.7	9.81	105.3	21.8	.41 × 10 ⁻¹	.8 × 10 ⁻¹
558.3	4.5	3.82		8.3	8.61	92.3	22.1	.2 × 10 ⁻¹	.41 × 10 ⁻¹
558.9	5.0	3.71		7.63	6.22	64.5	23.6	.12 × 10 ⁻¹	.02
557.6	5.5	3.68		7.22	2.26	23.8	25.4	.5 ×	.012
558.5	6.0	3.75		6.74	.21	2.0	27.1		10050
558.5	6.5	4.25		6.07	1030.3		70.7		.00079
	7.0								
	7.5								
	8.								
557.5	6.7	4.4		6.19	0.0	.0	89.5		

Observed Biota
 1.0m - (Anabaena (cyanobacteria))
 2.5m - Anabaena, Dinoflagellates

4.5 Asterionella (Diatom)
 6.0 Daphnia, Copepod
 6.7 Aulacoseira