

Science Olympiad  
Water Quality Image Sheet  
**(CLASS SET)**  
MIT Invitational



**Directions:**

- **This image sheet is a class set.** Please do not write any answers on this paper.
- Do not open this image sheet until instructed to do so. Opening this or any other part of the test before being instructed to will result in a penalty.

**DO NOT WRITE ON THIS IMAGE SHEET**

Coagulant dose (g/L)	DO (mg/L)	Turbidity (NTU)	Residual Al (mg/L)
1	14	111	0.03
2	15	98	0.05
3	16	65	0.14
4	15	64	0.21

Table 1 – Jar test results

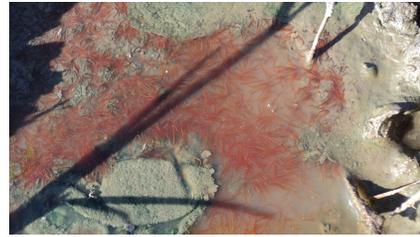


Image 2



Image 3



Image 4



Image 5



Image 6



Image 7



Image 8



Image 9



Image 10



Image 11



Image 12



Image 13



Image 14



Image 15



Image 16



Image 17



Image 18

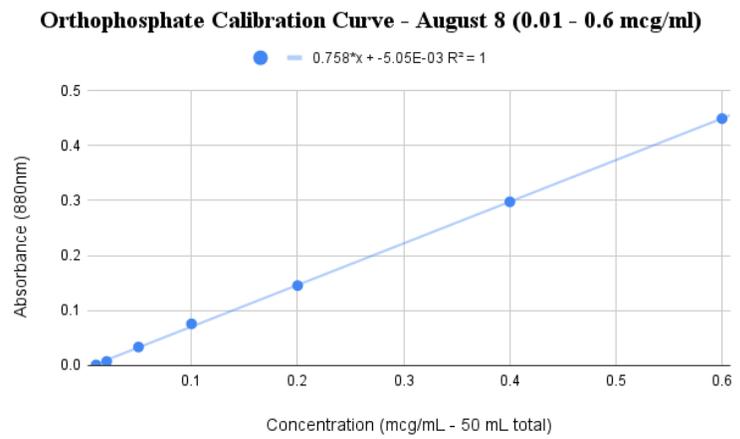


Image 19

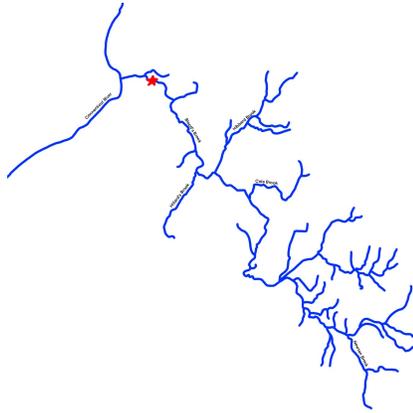


Image 20



Image 21



Image 22



Image 23



Image 24



Image 25

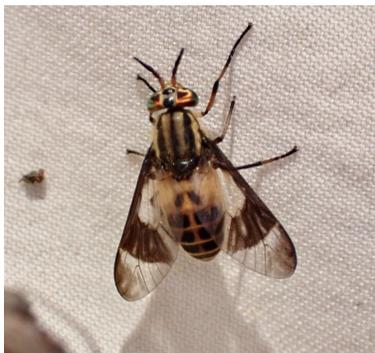


Image 26



Image 27

<b>Organism</b>	<b>Pollution Tolerance</b>				
		Damselfly	7.67	Deer/Horse Fly	6
Caddisfly	2.8	Dragonfly	4	Whirligig Beetle	4
Mayfly	3.67	Scud	5	Water Strider	6
Stonefly	1.14	Cranefly	3	Mosquito	8
Dobsonfly	0	Water Mite	6	Giant Water Bug	10
Water Penny	4	Midge	7	Back Swimmer	5
Riffle Beetle	5	Blackfly	6	Water Boatman	9
Water Scorpion	8	Flatworm	7	Predacious Diving Beetle	9
Aquatic Sowbug	7	Leeches	10	Snails	7

Image 28

<b>Biotic Index</b>	<b>Water Quality</b>
0-3.5	Excellent
3.51-5.5	Good
5.51-7.5	Fair
7.51-10	Poor

Image 29