

Hydrology Investigation

Data Sheet

School name: _____

Class or group name: _____

Name(s) of Student(s) collecting data: _____

Measurement Time:

Year: _____ Month: _____ Day: _____ Time: ____:____ (UT) Time: ____:____ (Local)

Name of Site : _____

Water State: (check one)

Normal Flooded Dry Frozen Unreachable

Transparency

Cloud Cover (check one):

- | | |
|--|---|
| <input type="checkbox"/> no clouds | <input type="checkbox"/> broken (50%-90%) |
| <input type="checkbox"/> clear (<10%) | <input type="checkbox"/> overcast (>90%) |
| <input type="checkbox"/> isolated clouds (10%-24%) | <input type="checkbox"/> obscured |
| <input type="checkbox"/> scattered (25%-49%) | |

Enter data below, depending on whether you are using the Secchi Disk or the Transparency Tube method.

Secchi Disk

First Secchi Disk Test:

Distance from observer to where disk disappears _____ (m)

Distance from observer to where disk reappears _____ (m)

Distance from observer to water surface _____(m)

- Secchi Disk reaches the bottom and does not disappear.
If checked enter depth to the bottom of the water site _____ (m)

Second Secchi Disk Test:

Distance from observer to where disk disappears _____ (m)

Distance from observer to where disk reappears _____ (m)

Distance from observer to water surface _____(m)

- Secchi Disk reaches the bottom and does not disappear.
If checked enter depth to the bottom of the water site _____ (m)

Third Secchi Disk Test:

Distance from observer to where disk disappears _____ (m)

Distance from observer to where disk reappears _____ (m)

Distance from observer to water surface _____(m)

- Secchi Disk reaches the bottom and does not disappear.
If checked enter depth to the bottom of the water site _____ (m)

Transparency Tube

Note: If the image is still visible when the tube is full, input the length of the tube and check the “Greater than the depth of the turbidity tube”.

Test 1(cm): Greater than depth of transparency tube?

Test 2(cm): Greater than depth of transparency tube?

Test 3(cm): Greater than depth of transparency tube?

Water Temperature: Measured with (check one) alcohol-filled thermometer probe

Average: ____ °C	Observer Name	Temperature °C
	1.	
	2.	
	3.	

Dissolved Oxygen Kits:

Average: ____ mg/L	Observer Name	Dissolved Oxygen (mg/L)
	1.	
	2.	
	3.	

Salinity: _____ppt

Dissolved Oxygen Probe:

Average: ____ mg/L	Observer Name	Probe Measure	X	Salinity Correction Factor	Dissolved Oxygen (mg/L)
	1.				
	2.				
	3.				

Note: Salinity correction factor is taken from the manufacturer’s instructions for the probe.

Conductivity: Temperature of water sample being tested: ____°C

Average: ____ μS/cm	Observer Name	Conductivity (μS/cm)
	1.	
	2.	
	3.	

Value of Conductivity Standard: ____ MicroSiemens/cm (μS/cm)

Water pH: Measured with: (check one) paper meter

Average: ____	Observer Name	If salt added, conductivity (μS/cm)	pH
	1.		
	2.		
	3.		

Value of buffers used: pH 4 pH 7 pH 10 (Check all used.)

Salinity

Tide Information

Time of tide before measurement: _____ hours and minutes

Check one: High Tide: Low Tide Check one: UT Local time

Time of tide after measurement: _____ hours and minutes

Check one: High Tide: Low Tide Check one: UT Local time

Place where these tides occur: _____

Salinity (Hydrometer Method)

	Test 1	Test 2	Test 3
Temperature of water in 500 mL cylinder	_____ °C	_____ °C	_____ °C
Specific Gravity:	_____	_____	_____
Salinity of Sample:	_____ ppt	_____ ppt	_____ ppt
Average Salinity:	_____ ppt		

Optional Salinity Titration

Salinity of Sample:	Test 1: _____ ppt	Test 2: _____ ppt	Test 3: _____ ppt
Average Salinity:	_____ ppt		

Alkalinity: (For kits that read alkalinity directly)

Average:	Observer Name	Alkalinity (mg/L as CaCO ₃)
_____ mg/L as CaCO ₃	1.	
	2.	
	3.	

Alkalinity: (Hach kits or other kits in which drops are counted)

Observer Name	Number of Drops	x	Conversion constant for your kit	=	Total Alkalinity (mg/L as CaCO ₃)
1.		x		=	
2.		x		=	
3.		x		=	

Average: _____ mg/L as CaCO₃

Total Nitrate + Nitrite ($\text{NO}_3^- \text{-N} + \text{NO}_2^- \text{-N}$)

Average: Nitrate+Nitrite _____ mg/L	Observer Name	Nitrate and Nitrite (mg/L $\text{NO}_3^- \text{-N} + \text{NO}_2^- \text{-N}$)
	1.	
	2.	
	3.	

Nitrite-Nitrogen ($\text{NO}_2^- \text{-N}$) (optional)

Average: $\text{NO}_2^- \text{-N}$ _____ mg/L	Observer Name	Nitrite (mg/L $\text{NO}_2^- \text{-N}$)
	1.	
	2.	
	3.	