

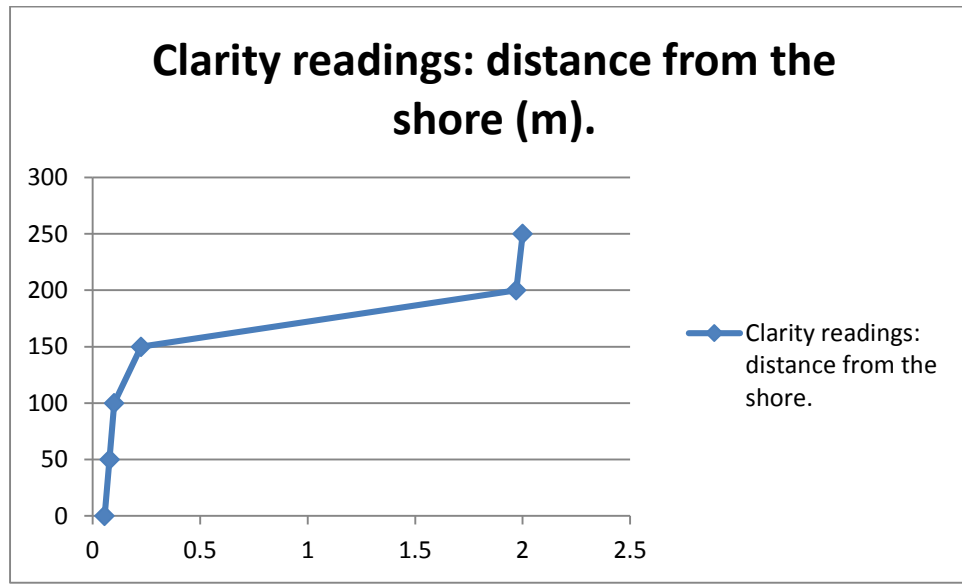
Note: This student also described a valid method, correctly identified key variables and processed raw data.

Purpose: To observe the clarity of sea water off the mouth of the Aparima River. (1)

Hypothesis: The further the river water travels into Foveaux Strait the deeper the water readings will be.

Results:

Straight line distance from the shore.	0m River mouth	50m	100m	150m	200m	250m
Secchi Reading	0.06m	0.075m	0.095m	0.20m	1.95m	>2.0m



Interpretation of the data:

The results show that where the river water met the sea water the water was dirty. As the river water mixed with the sea water there was a drop off in dirt and water clarity started to increase. There was a significant increase between 150m and 200m from shore and by 200m water was pure sea water. At 150m the water was dirty and yet by 200m the water was quite clear. Something happened between these two points to remove the dirt from the water. (2)

Earth and Space science behind the investigation:

a/ Water Mixing:

When river water and sea water meet there is no mixing between the two water bodies so the water remains dirty. When the sea water takes over the river water disappears. Dirty water becomes clean. (3)

Conclusion:

The change in water clarity was due to the waters dropping their dirty particles and the clean sea water being observed.(4)