
Nupower Resources Ltd

Standard Operating Procedure

Testing A Water Sample



Prepared By Ag Infocus Pty Ltd
20th August 2007

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AIM OF PROCEDURE

To test a water sample collected from a bore or drill hole for pH, eH, conductivity and iron.

EQUIPMENT REQUIRED

- Horiba Water Testing Kit
- Bottle of Distilled Water
- Beaker filled with water sample
- Tissues
- Iron testing kit
- Notebook & pen
- Rubbish bag

HORIBA WATER TESTING KIT

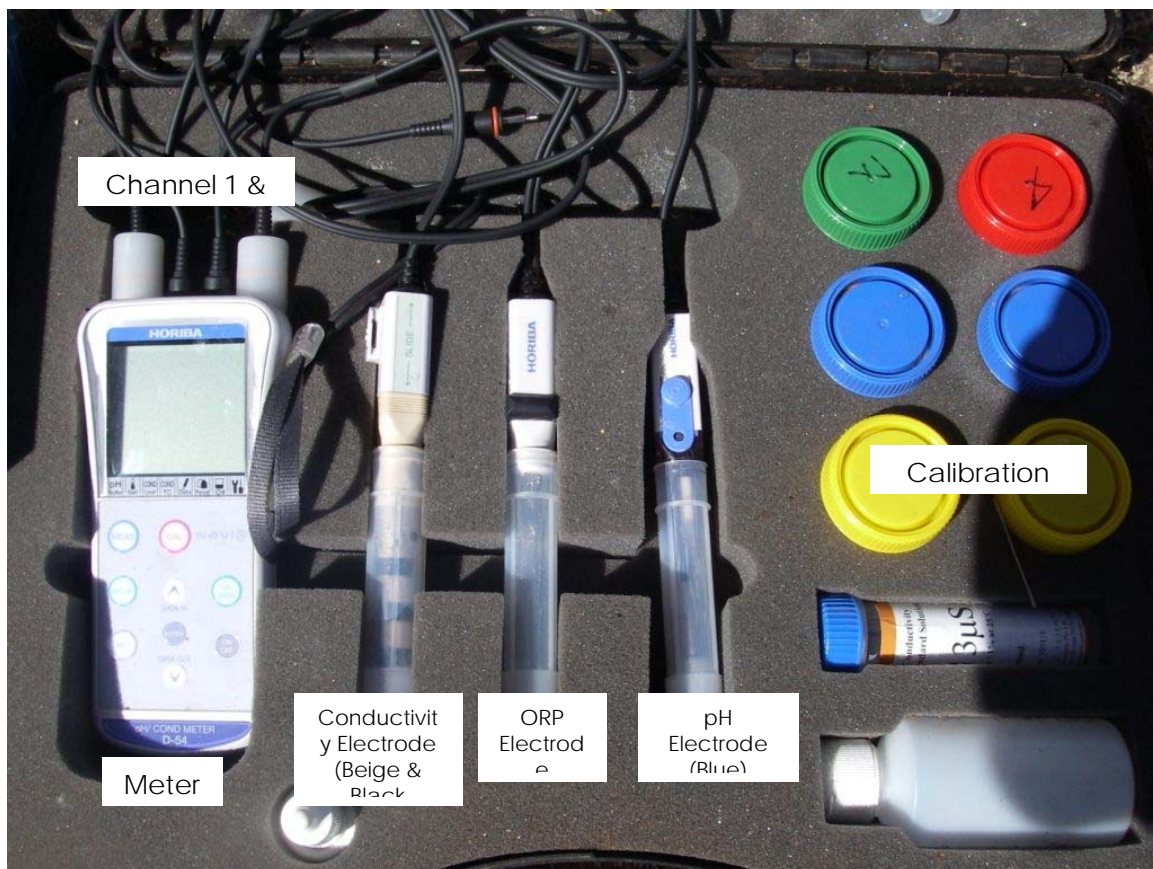
To become familiar with the Horiba Water Testing Kit term that will be used in this procedure and what is being referred to, please take some time to refer to the following picture and references.

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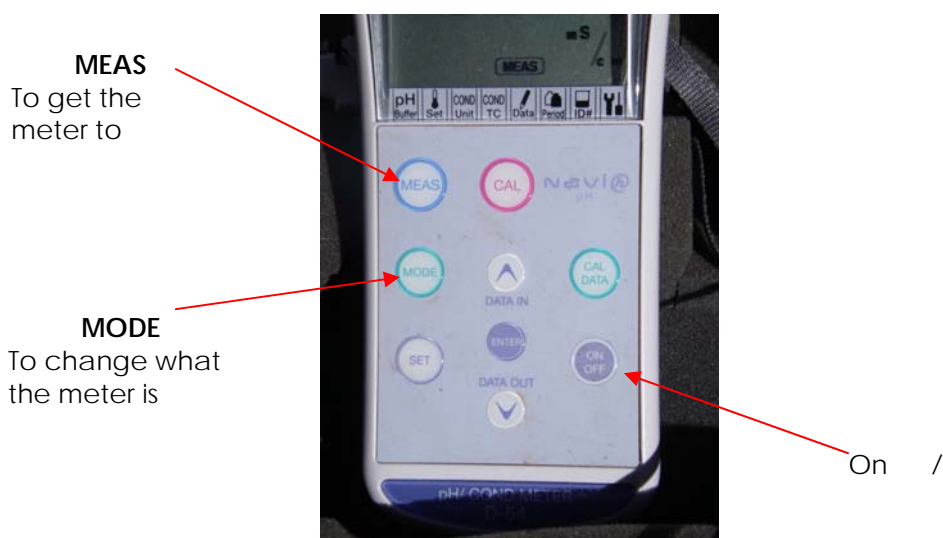
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More detailed view of the Horiba Meter.



Note: Calibrate the Horiba Water Testing Kit daily – refer to the manual for the calibration procedure.

1. After rinsing the beaker, collect a full beaker as a sample for the testing procedure.

2. Set up the required equipment, so everything is at hands reach while completing the testing procedure.



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3. Turn the Horiba Meter On, by pushing the On/Off button on the meter.

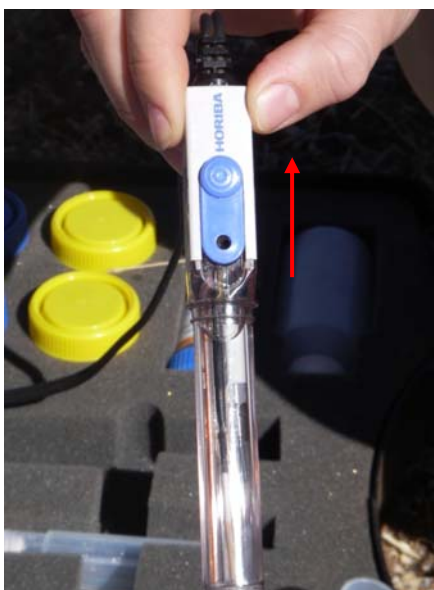
TESTING THE SAMPLES

1.1 TESTING pH (FIRST TEST)

4. Plug in the pH electrode, both plugs, into Channel 1 on the meter.



5. Ensure the Mode is on pH – this will be displayed on the screen of the meter.
6. Remove the electrode out of the cap.
7. Slide the blue cap upwards – this is the ON position



Slide the Blue Cap Upwards
to turn the pH electrode

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8. Rinse the electrode with distilled water



9. Pat the electrode dry with a tissue.



10. Place the electrode in the beaker of water sample.

11. Push the MEAS button on the meter

- A "HOLD" icon will flash on the meter – while the meter is measuring the sample.
- The "HOLD" icon will stop flashing and stay on when the meter has measured the sample.

12. Record the pH result and the temperature in the notebook.

13. Remove the electrode from the beaker.

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14. Slide the blue cap downwards – this is the OFF position



Slide the Blue Cap Downwards to turn the pH electrode OFF

15. Rinse the electrode with distilled water.
16. Pat the electrode dry with a tissue.
17. Replace the cap on the electrode.
18. Replace the electrode back into the kit.
19. Remove the plugs from Channel 1 in the meter.

1.2 TESTING ORP (SECOND TEST)

20. Plug in the ORP electrode, both plugs, into Channel 1 on the meter.



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21. Press MODE on the meter and ensure mV is displayed on the screen of the meter..
22. Remove the electrode out of the cap.
23. Open the black cap.



24. Rinse the electrode with distilled water.



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25. Pat the electrode dry with a tissue.



26. Place the electrode in the beaker of water sample.

27. Push MEAS button on the meter.

- A "HOLD" icon will flash on the meter – while the meter is measuring the sample.
- The "HOLD" icon will stop flashing and stay on when meter has measured the sample.

28. Record the mV result in the notebook.

29. Remove the electrode from the beaker.

30. Push the black cap closed.

31. Rinse the electrode with distilled water.

32. Pat the electrode dry with a tissue.

33. Replace the cap on the electrode.

34. Replace the electrode back into the kit.

35. Remove the plugs from Channel 1 on the meter.

1.3 TESTING CONDUCTIVITY (THIRD TEST)

Note: The Conductivity Electrode should ALWAYS be stored in distilled water. SO ensure there is a small amount of distilled water in the cap

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36. Plug in the Conductivity electrode, both plugs, into Channel 2 on the meter.



37. Press MODE on the meter and ensure COND is displayed on the screen of the meter.

38. Remove the electrode out of the cap.

39. Rinse the electrode with distilled water.



40. Place the electrode in the beaker of water sample.

41. Pus MEAS button on the meter.

- A "HOLD" icon will flash on the meter – while the meter is measuring the sample.
- The "HOLD" icon will stop flashing and stay on when the meter has measured the sample.

42. Record the COD result in the notebook.

43. Remove the electrode from the beaker.

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- 44. Rinse the electrode with distilled water.
- 45. Replace the electrode back into the kit.
- 46. Remove the plugs from Channel 2 in the meter.

1.4 TESTING IRON (FOURTH TEST)

Note: The kit contains reagent A & B, a sample bottle and an iron estimate chart.

- 47. Rinse the sample bottle with the sample water.
- 48. Dispose of the rinse.
- 49. Fill the sample bottle with sample water to the 5ml mark.
- 50. Add 3 drops of Reagent A.
- 51. Add 3 drips of Reagent B.



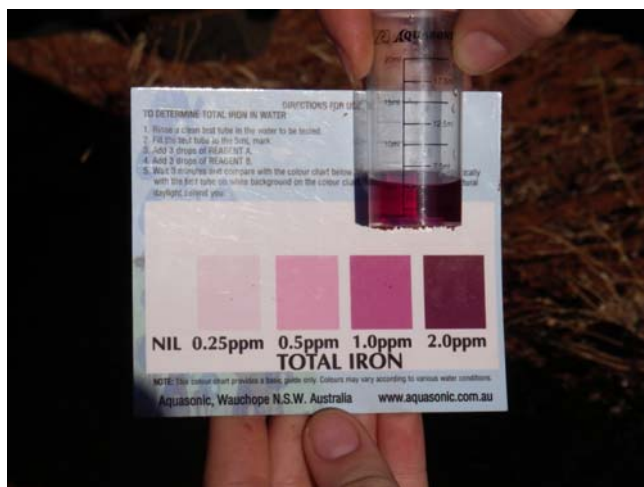
- 52. Shake the sample bottle, to ensure both reagents can react with the sample water.
- 53. Leave the sample for approximately 3-5 minutes.
- 54. Assess the sample using the "Iron Estimate Chart".

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55. Estimate the amount of iron in the sample water and record in the notebook.

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