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## Extended Abstracts

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**Mineral and thermal water**

**4.2**  
**Origin of mineral and thermal waters**

title: **Drilling for mineral water, Hepburn Australia**

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Drilling for carbonated mineral water, near Hepburn in SE Australia in the last decade has undertaken because of low level Coliform contamination of many of the existing springs.

During drilling with air rotary methods gas sparging strips the carbon dioxide and makes it difficult to identify the carbonated mineral water. In addition, in the spring zones there is mixing with shallow fresh water and the mixing dynamics vary from site to site. Monitoring techniques were adopted during drilling to enabled an assessment of mineral water intersection. Each drilling site is different due to the folded nature of the Lower Palaeozoic rocks and the existence of differential weathering fronts that propagate down labile strata.

The new installations as 30–130 m deep mineral water bores have resulted in the increased carbonation or gas levels and clean mineral water free of contaminants due to mixing such as Coliform bacteria.



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