



# Samples for smoke taint analysis

## Frequently Asked Questions

### What analysis is available?

Research at the AWRI has demonstrated that some phenolic compounds such as guaiacol, 4-methylguaiacol, cresol and syringol are responsible for off-flavours and aromas caused by exposure to smoke.

AWRI Commercial Services is able to analyse grape, juice and wine samples for a range of volatile phenols and non-volatile smoke precursor compounds which may impact on wine quality.

For more information about the analysis of samples for smoke-related compounds please contact Randell Taylor (08 8313 6618, [randell.taylor@awri.com.au](mailto:randell.taylor@awri.com.au)).

### How much does the analysis cost?

Analysis Type	Sample type	Cost (ex GST)
Volatile phenols	Juice/wine	\$97.00
Volatile phenols	Grapes	\$115.00
Non-volatile precursors	Wine	\$150.00
Non-volatile precursors	Juice/grapes	\$180.00
Volume required – 500 g berries OR 100 mL juice/wine		

Note: For large sample numbers, please contact Randell Taylor for a quote.

Guaiacol and 4-methylguaiacol have been emphasised as important compounds contributing to ‘smoky’ off aromas and flavours in juice and wines but further research at the AWRI has shown that other volatile phenols can also play a role in the impact of bushfire smoke on grapes and wine.

AWRI Commercial Services has an inexpensive and rapid method to accurately measure a group of these volatile phenols, including guaiacol, 4-methylguaiacol, syringol, 4-methylsyringol, *p*-cresol, *o*-cresol and *m*-cresol in grapes, juice and wine, with sensitivity to levels below the sensory threshold. Analysis results will enable wineries and growers to make informed decisions about the risk of smoke effects impacting on the wine.

Analysis of important non-volatile precursor compounds is also available. This analysis provides further detailed information on the potential development of smoke effects.



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## How do I pay for my analysis?

If you are an existing client of AWRI Commercial Services, you will be invoiced as normal. If you are not an existing client, please contact our Customer Service group on 08 8313 6600 to arrange your client application and payment.

## How long will it take to get my results?

AWRI Commercial Services has a five working day turnaround time for the analysis **from receipt of samples**. Analysis of precursor forms has a turnaround time of ten working days.

## How will I receive my results?

Results are sent via fax or email; therefore, it is important that AWRI Commercial Services has your correct details.

## What should I do if I have not received my results?

If you have not received your results after the nominated turnaround time please contact the Commercial Services Customer Service group on 08 8313 6600.

## Who should I contact for results interpretation?

For general information on smoke taint and winemaking and viticultural strategies to limit the impact of smoke taint, visit the [smoke taint page](http://www.awri.com.au/information_services/current-topics/smoke-taint/) ([http://www.awri.com.au/information\\_services/current-topics/smoke-taint/](http://www.awri.com.au/information_services/current-topics/smoke-taint/)) on the AWRI website or contact the AWRI helpdesk on 08 8313 6600 or [winemakingservices@awri.com.au](mailto:winemakingservices@awri.com.au).

## How can I assess the risk of producing smoke-affected wine?

The AWRI recommends conducting laboratory-scale ferments of potentially affected grapes in an attempt to better understand the actual impact on the final wine. This will provide an indication of potential levels of volatile phenols likely to be liberated from precursor forms.

## Where can I find out more information?

More information on concentrations and sensory impacts, winemaking practices to minimise effects and other practical research outcomes can be found on the AWRI website:

[http://www.awri.com.au/information\\_services/current-topics/smoke-taint/](http://www.awri.com.au/information_services/current-topics/smoke-taint/)

For further information on sample analysis, please contact the AWRI Commercial Services Customer Service on 08 8313 6600 or email: [commercialservices@awri.com.au](mailto:commercialservices@awri.com.au)

To discuss winemaking practices with an experienced winemaker please contact the AWRI helpdesk on 08 8313 6600 or [winemakingservices@awri.com.au](mailto:winemakingservices@awri.com.au).



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