

From: [Sarah Lopez](#)
To: [Meertens, Peter@Waterboards](mailto:Meertens.Peter@Waterboards)
Subject: RE: Pyrethroids analysis in water
Date: Wednesday, May 25, 2016 12:06:45 PM
Attachments: [image001.png](#)

Ok, thank you!

From: Meertens, Peter@Waterboards [mailto:Peter.Meertens@waterboards.ca.gov]
Sent: Tuesday, May 24, 2016 4:16 PM
To: Sarah Lopez (sarah@ccwqp.org)
Cc: Epp, Jennifer@Waterboards
Subject: FW: Pyrethroids analysis in water

Hi Sarah,

I received this from Caltest. I had a conference call with their technical team and they were very helpful. I am sure they would be very interested in talking to you.

Peter

From: Melinda Kelley (Melinda_Kelley@CaltestLabs.com) [mailto:Melinda_Kelley@caltestlabs.com]
Sent: Tuesday, April 19, 2016 1:13 PM
To: Meertens, Peter@Waterboards
Cc: Todd Albertson (Todd_Albertson@CaltestLabs.com); Shawna Rees
Subject: RE: Pyrethroids analysis in water

Hello Peter,

Thank you again for your call to discuss pyrethroids analysis. Caltest has been running low level pyrethroids analysis for over 10 years. We continue to refine our process and achieve lower detection limits. Our current method reference is SW 846 8270 MOD (GCMS-NCI-SIM). This method has been considered 'peer-reviewed' and has been approved by the Central Valley RWQCB for SWAMP related projects. We work with clients on pyrethroids analysis all around the SF bay area, Central Valley, Southern California as well as projects outside of California.

Because of pyrethroid's hydrophobic nature, filtration can potentially filter out the compounds of interest. Thus this method provides results as a total, not freely dissolved fraction. However, there have been calculations developed that can calculate a free dissolved fraction when additional analyses are run (e.g., TOC, DOC, POC). Given that the total result would be worse case scenario, the need for a freely dissolved fraction would only be necessary when total results exceeded the targets. We are researching the calculation and hope to be able to include those results in instances where it is requested and where the client provides the needed aliquots for the additional analyses. Our current RLs and MDLs are reflected in the attached document and the three compounds in the TMDL are noted below. With the exception of cyfluthrin, our current method meets all the targets proposed in the TMDL.

Compound Name	Units	Chronic Target (TMDL) Table 4-2	MDL	RDL
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Bifenthrin	ng/L	0.6	0.10	0.50
Cyfluthrin	ng/L	0.05	0.20	0.50
Lambda-Cyhalothrin	ng/L	0.5	0.20	0.50

We are wrapping up the development of a method that will allow us to confidently report levels significantly lower than current limits. We can achieve this by using our GCMS/MS. We are near completing this and are confident that we will be able to report the limits noted in the table below.

Caltest Proposed targets Tripe Quad method			
Compound Name	Units	Chronic Target (TMDL) Table 4-2	RDL
Bifenthrin	ng/L	0.6	0.02
Cyfluthrin	ng/L	0.05	0.04
Lambda-Cyhalothrin	ng/L	0.5	0.01

Please feel free to contact us if you have any additional questions or if we can be of further assistance. Contact information is below for your reference.

Todd Albertson, Vice President (email: Todd_Albertson@caltestlabs.com)

Shawna Rees, Lab Director (Shawna_Rees@caltestlabs.com)

Melinda Kelley, Project Manager (Melinda_Kelley@caltestlabs.com)

Thank you!

Best,

-Melinda

Melinda Kelley, Project Manager
 Caltest Analytical Laboratory
 1885 North Kelly Road
 Napa, CA 94558
 Phone: (707) 258-4000 x 32
 Fax: (707) 226-1001

Web: <http://www.caltestlabs.com>