### Wilkinson, Davida

From:

McConnachie, Sarah

Sent:

Wednesday, June 5, 2019 2:40 PM

To:

MacDonald, Cristopher; Manchester, Howie

Cc:

Shaw, Kerra; Paylor, Adrienne

Subject:

RE: Imvixa

Follow Up Flag:

Follow up

Flag Status:

Completed

Hello,

Yes – that would be a valuable plan to collect samples for our audit program. The sites treated with Imvixa at the hatchery included their fall entry sites in 2018: Ross Pass, Millar Channel, and Dixon Channel.

#### Dr. Sarah McConnachie MSc, PhD, DVM

Field Operations Veterinarian - Pacific Region

Fisheries and Oceans Canada | Pêches et Océans Canada

Aquaculture Environmental Operations - Fish Health

Courtenay, British Columbia

Telephone | Téléphone: 250-703-0929 Cell Phone | Cellulaire: 236-255-2153 Fax | Télécopieur: 250-703-0921 Sarah.McConnachie@dfo-mpo.gc.ca

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**From:** MacDonald, Cristopher **Sent:** June-05-19 10:22 AM

To: McConnachie, Sarah; Manchester, Howie

Cc: Shaw, Kerra Subject: Imvixa

Hi Sarah,

I am wondering if you could share with me which farms have dosed with Imvixa (or lufeneron)? We will be sampling in Clayoquot over the next two weeks, and if it would be of value to you we could take some benthic samples for analysis at some zero metre stations.

Cheers,

Cristopher MacDonald

Finfish Aquaculture Biologist | Biologiste de l'aquaculture Fisheries and Oceans Canada | Pêches et Océans Canada cristopher.macdonald@dfo-mpo.gc.ca Cellular | Cellulaire 778-585-0032 Office | Bureau 250-286-5832



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#### Wilkinson, Davida

From:

Shaw, Kerra

Sent:

Tuesday, October 1, 2019 9:47 AM

To:

Paylor, Adrienne

Subject:

Fw: Aquaculture Monitoring Program

Fyi...

Sent from my BlackBerry 10 smartphone on the Bell network.

From: Manchester, Howie < Howie. Manchester@dfo-mpo.gc.ca>

Sent: Monday, September 30, 2019 4:44 PM

To: Shaw, Kerra

Cc: Waddington, Zac; Price, Derek

**Subject:** RE: Aquaculture Monitoring Program

Interesting since there has not been any fish here since July 2018, and the fish that were here before that were not approve for Lufenuron treatment. I believe the S1 smolts destined to Saranac or Mussel Rock (close to Rant) were treated with Imvixa prior to marine entry ( these fish went to sea around February 2019).

Howie

From: Shaw, Kerra < Kerra. Shaw@dfo-mpo.gc.ca>

Sent: September-30-19 4:29 PM

To: Coyle, Theraesa <Theraesa.Coyle@dfo-mpo.gc.ca>; Manchester, Howie <Howie.Manchester@dfo-mpo.gc.ca>; Price,

Derek < Derek. Price@dfo-mpo.gc.ca>

Cc: MacDonald, Cristopher < Cristopher. Macdonald@dfo-mpo.gc.ca>; Waddington, Zac < Zac. Waddington@dfo-

mpo.gc.ca>

Subject: RE: Aquaculture Monitoring Program

Thanks so much for this, Theraesa! Good to know.

From: Coyle, Theraesa < Theraesa. Coyle@dfo-mpo.gc.ca >

Sent: Monday, September 30, 2019 4:27 PM

To: Shaw, Kerra < Kerra. Shaw@dfo-mpo.gc.ca >; Manchester, Howie < Howie. Manchester@dfo-mpo.gc.ca >; Price, Derek

<Derek.Price@dfo-mpo.gc.ca>

Cc: MacDonald, Cristopher < Cristopher. Macdonald@dfo-mpo.gc.ca >; Waddington, Zac < Zac. Waddington@dfo-

mpo.gc.ca>

Subject: RE: Aquaculture Monitoring Program

Hi Kerra (et al.),

I recently received some of our 2019 drugs/pesticides data back from the lab. This year we DID detect Lufenuron (Imvixa) at Rant Point. I've attached a quick map with the concentrations. Note that only the orange and red categories are over the LOQ. It's a little surprising considering that the farm was in fallow when we sampled, and we did not detect it at all last year (and it is not close to Ross, Dixon or Millar). Unfortunately we only tested one site this year, so we won't have data for any other farms, but we are hoping to test Rant again in January to see if it persists.

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004282

### Wilkinson, Davida

From:

MacDonald, Cristopher

Sent:

Tuesday, December 17, 2019 2:46 PM

To: Subject:

RE: DFO Science Far Field benthic study Results

Sensitivity:

Confidential

They sent their samples to MB Labs in Victoria.

CM

From:

**Sent:** December-17-19 2:44 PM **To:** MacDonald, Cristopher

Subject: RE: DFO Science Far Field benthic study Results

Sensitivity: Confidential

Hi Chris,

Do You know which Lab Science used? There is only one recognized lab for this test and that is in France?

**Thanks** 

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From: MacDonald, Cristopher < Cristopher. Macdonald@dfo-mpo.gc.ca>

Sent: Tuesday, December 17, 2019 2:39 PM

To: ; Blasco, Nathan <Nathan.Blasco@dfo-mpo.gc.ca>

Subject: RE: DFO Science Far Field benthic study Results

Sensitivity: Confidential

Hi

From the info we received from Science, lufeneron was detected in 51 of 53 sediment samples from June 2019 within a 1500m radius of the Rant Point facility. Most concentrations were very small (0.000001-0.22 ng/g). There were 3 samples within 500m of the former net cage array with concentrations between 0.33 and 0.44 ng/g, as well as 9 samples from within 200m of the former array with concentrations between 0.22 and 0.33 ng/g.

Cheers, Cris

From:

**Sent:** December-17-19 1:33 PM

To: Blasco, Nathan

**Cc:** MacDonald, Cristopher

Subject: RE: DFO Science Far Field benthic study Results

**Sensitivity:** Confidential

Hi Nathan,

In Tofino South the only sites that received treated fish were Mussel and Saranac. Rant has been fallow for a number of years now?

In the North direct entries were Dixon, Millar & Ross with splits going to Bawden & Binns.

**Thanks** 

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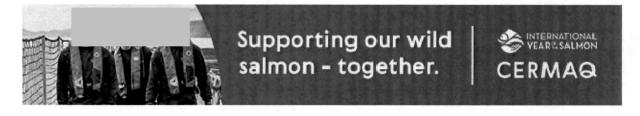
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From: Blasco, Nathan < Nathan.Blasco@dfo-mpo.gc.ca >

Sent: Tuesday, December 17, 2019 12:57 PM

To:

Cc: MacDonald, Cristopher < Cristopher. Macdonald@dfo-mpo.gc.ca>

Subject: RE: DFO Science Far Field benthic study Results

Sensitivity: Confidential

Sure I'll get Cris to send you the details. It was actually at Rant Point, where the Lufenuron was detected by DFO Science. Was it not, fish destined for Millar, Ross and Dixon, that were approved to have a Lufenuron treatment? We also have some of our own samples from Millar in process for pesticide/antibiotic analysis currently.

Nathan

From:

Sent: December-17-19 12:50 PM

**To:** Blasco, Nathan **Cc:** Shaw, Kerra

Subject: DFO Science Far Field benthic study Results

Sensitivity: Confidential

Hello Nathan,

I was talking to Kerra yesterday and she mentioned that Lufenuron had been detected in some sampling at one of our Tofino North Sites earlier this year as part of the far field benthic study being conducted by Science branch.

We will be sampling for Lufenuron at our next Peak Biomass' for the facilities that received fish that were treated at the hatchery as part of the EDR requirements. I would be very interested to know as well as share with the manufacturer the when, where and at what levels Lufenuron was detected.

If you could send me this info I would greatly appreciate it.

Many Thanks,

# CERMAQ

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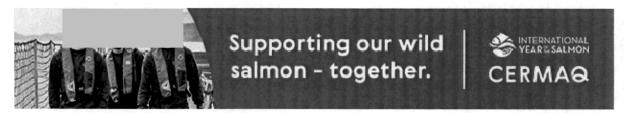
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004696

### Wilkinson, Davida

From:

MacDonald, Cristopher

Sent:

Monday, December 23, 2019 9:15 AM

To:

Gaspard, David

Subject:

RE: Lufeneron Questions from Cermag

Yeah, I didn't think so either. Apparently Kerra told him during a meeting or after a meeting. I'm not sure, I only heard about it third hand.

From: Gaspard, David

**Sent:** December-21-19 6:15 AM **To:** MacDonald, Cristopher

Subject: RE:Lufeneron Questions from Cermag

Hey Chris,

Yes, that's ok. Do you know how he got wind of the results? I didn't knew the results were public yet.

Cheers,

D.

De: MacDonald, Cristopher

Envoyé: mercredi 18 décembre 2019 12:30

À: Coyle, Theraesa; Gaspard, David

**Objet:** Lufeneron Questions from Cermag

Hi David,

from Cermaq contacted me about the presence of lufeneron in sediments sampled from Rant Point and he had some questions that I can't really answer. I told him I would put him in contact with you folks to discuss his concerns.

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I hope that is ok.

### Cristopher MacDonald

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