From: Rhys Parry

Sent: Monday, 10 October 2022 5:14 PM

To: Laura Reece

**Subject:** Clarification wrt Section 14.5 of Review by Duncan Taylor

Hi Laura,

I have reviewed the statement provided to me, authored by Dr. Duncan Taylor. I have no disagreement with his findings but have some concerns about the wording that Dr. Taylor uses in his assessment in Section 14.5 of his review.

My main concern is that the way Section 14.5 of Dr Taylor's review is worded might suggest that the study was generally performed appropriately and that the results obtained could be due to natural variability. I suspect this is unintentional or may be a misreading on my behalf, but I would appreciate it if he could clarify. Going forward, I am concerned that based on the current wording that Project#192 will be seen by management as not requiring additional work.

I feel that in not acknowledging (or refuting) my comment in paragraph 98, it may give the false impression that the original study was acceptably performed. In my opinion, it was not and is ostensibly, a similar issue to that in the Quant Studio 5 Validation pointed out by myself in paragraph 75 of my statement and agreed with in lines 2603-2607 of Dr. Taylor's review. That is, it was effectively an n=1 study. The supplemental study did go some way to correcting this error, but to my mind was not complete enough.

I do not believe that Dr. Taylor had access to any raw data, and so might not have been able to comment and I also concede that my explanation of my concerns could have been better structured in paragraphs 91 and 92, such that he would perhaps have had more insight. As an example, the original organic extraction of Bone 1 yielded results of 0.07, 0.047, 0.055, and 0.059 ng/uL as a part of its routine casework analysis. The supplemental study organic extraction of Bone 1 gave results between ~0.0005 and ~0.013 ng/uL. Bone 4 originally yielded 0.055, 0.063, 0.084, 0.093 ng/uL as part of routine casework processing but in the supplemental study yielded between ~0.0 and ~0.02 ng/uL. As can be seen, there is a very significant disparity between the quants of the original casework analysis and the project analysis that, in my opinion, cannot be attributed to simple intra-sample variation given that they were extracted using the same method. The most logical cause for this is likely to be a methodological/technical issue.

While I agree that variation is expected in such a study, I feel that the variability observed is too great, and too ambiguous in origin for the results presented in the supplementary project to be considered reliable, especially given the vague nature of the description of the methodology used in the supplemental study.

Accordingly, it is my opinion that the QS5 Bone Project (Proposal #192) should be completely redone.

Thanks



**Rhys Parry** 

Reporting Scientist

Police Services Stream, Forensic & Scientific Services Prevention Division, Queensland Health Queensland Health acknowledges the Traditional Owners of the land, and pays respect to Elders past, present and emerging.

Disclaimer: This email and any attachments may contain legally privileged or confidential information and may be protected by copyright. You must not use or disclose them other than for the purposes for which they were supplied. The privilege or confidentiality attached to this message and attachments is not waived by reason of mistaken delivery to you. If you are not the intended recipient, you must not use, disclose, retain, forward or reproduce this message or any attachments. If you receive this message in error, please notify the sender by return email or telephone and destroy and delete all copies. Unless stated otherwise, this email represents only the views of the sender and not the views of the Queensland Government.

Queensland Health carries out monitoring, scanning and blocking of emails and attachments sent from or to addresses within Queensland Health for the purposes of operating, protecting, maintaining and ensuring appropriate use of its computer network.