

Subject: Southmere Farm Contamination Reports

Good afternoon Matt,

Many thanks for the additional trial hole log, and for confirming the nature of the obstruction. I note that nearby BGS trial holes have noted that the natural gravelly clays could be 'fairly hard to excavate' (by JCB), so assume from your description that the obstruction at TP04 was similar natural strata.

I had not appreciated that the remedial work had already been undertaken. The verification sampling will enable a further mean & maximum value test to be undertaken. From initial calculations, it would appear unlikely that the expanded dataset will identify the max value exceedance at WS04 to be an outlier, however it could drop the marginal US95 exceedance down below the GAC for Pb (if not, additional sampling may still be appropriate).

That would just leave the water result. I would agree that it would be beneficial to undertake an additional sample, and to consider the conceptual model with respect to both the initial- & the additional groundwater- sample results. I noted that the Chemtech method list did not specify sample pre-filtering – the values in excess of solubility limits could be an artefact of soil particles being present within the sample. It may be worth considering avoidance of this by use of low-flow (/low- stress) sampling, or scheduling the sample for filtered analysis. I am mindful that SA101 was dry on drilling, and standing water levels were attained before sampling. I am also mindful of the ash content of the shallow made soils, which may explain the elevated PAH congeners at least. I am not entirely clear on the hydrogeological model for the site, but note that (according to LIDAR) the standing water level noted within SA101 is within 0.1m of the reported invert for the watercourse, suggesting continuity is likely. Some commentary on this (as regards the conceptual risk model) would be helpful.

I am at this stage unable to discern whether the results show no significant issue with contamination at the site, or whether they are indicative of a significant contamination source being present (evidence of an active pathway). The verification report should assist with respect to the nature of Made Soils, and that should provide useful context to the additional water sample. Once those results are available, it should be a little clearer as to whether additional work is necessary at the site or not. I don't see the value in advancing any additional trial holes until the new results are incorporated into the existing conceptual model (and until the results that exercise prove not to be favourable). On that basis, would agree with your proposed approach.

Best Regards,

Jonathan Driver
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