



WHAT IS LIKELY TO BE DRIVING THE DISEASE?	
CATTLE BROUGHT IN:	It is a mainly a closed herd. In the last 3 years 42 animals have been moved on under license (one stock bull and two consignments of heifers). I do not consider purchased cattle to be driving the disease.
TB SITUATION IN THE SURROUNDING AREA:	Most neighboring farms are TB-free with only one farm (contiguous to *****) currently under restrictions. Some local herds have had occasional breakdowns in the past. This is unlikely to be driving the disease.
INTRA-HERD MOVEMENTS AND SEPARATION:	The frequent movement and mixing of animals between locations means that the three milking herds are effectively operating as a single epidemiological unit. The sheer size of this epidemiological unit may therefore be playing a role in reducing the likelihood of controlling and eliminating infection in individual units. In particular, dry cows and cows for calving from all three herds move to **** before moving back (not necessarily to the same herd). Heifer replacements are also reared here (with some moved to ****). Any infection present in **** can therefore easily spread to all three milking herds. Adult dairy animals also move between the milking herds, which increases the likelihood of exposure of a larger number of animals to potential cattle to cattle transmission. A good example of intra-herd movement is the latest VL reactor which had recently been at ****, **** and ****, making it difficult to determine where it may have picked up infection. This is likely to be driving the disease.
EVIDENCE OF POSSIBLE UNDISCLOSED INFECTION:	Inconclusive Reactors (IRs) are at a particular risk of going on to become reactors within this herd. Data from this herd shows that: Over 55% of cattle that are classified as

	single IRs at standard interpretation go on to become reactors • 45% of cattle that are classified as single IRs at severe interpretation go on to become reactors • 42% of cattle that gamma tested clear after being classified as two-times IRs, where one of the tests is at severe interpretation, go on to become reactors. By remaining on farm these clear-testing animals pose a disease risk to the rest of the herd and possibly increasing the chance of infection. As of the latest test, all IRs are being taken as direct contacts. This could have been driving the disease.
EVIDENCE OF BADGER ACTIVITY:	***** has carried out an on farm survey and used surveillance cameras which found evidence of badger activity around *****, particularly where cattle graze, this could potentially be a source of infection and driving the disease.
DISEASE STATUS OF BADGERS IN THE SURROUNDING AREA:	Badger carcasses have been found in and around buildings at *****. These were submitted to the badger found dead survey and have been confirmed as positive, this could potentially be a source of infection and could be driving the disease.
BIOSECURITY ARRANGEMENTS:	Biosecurity standards are inconsistent. All feed is stored at ***** and efforts have been made to limit badger access. However, very little biosecurity measures have been implemented at cattle housing to prevent contact between cattle and badgers such that at some locations, badgers can directly access feed provided to the cattle. If infected, this increases the risk of reinfection from the local badger population. The woodland areas at ***** are also not fenced off from grazing pastures. This could be driving the disease.
C&D STANDARDS AND COMPLIANCE:	The herd owner is compliant, adhering to Veterinary Improvement Notice requirements when necessary and establishing separate isolation facilities for reactors and/or inconclusive reactors. The isolation of

	reactors/IRs and cleansing and disinfecting requirements are witnessed by APHA and are satisfactory. All milk fed to calves is pasteurised on farm and all manure goes to *****, where there are no cattle grazed. It is reported that all muck and slurry is spread on arable land.
--	--