NATIONAL STATUTORY SURVEILLANCE SCHEME FOR VETERINARY RESIDUES IN ANIMALS AND ANIMAL PRODUCTS: 2019

RESIDUES DETECTED ABOVE THE REFERENCE POINT TO DATE: 31 December 2019

Sample	Analysed for	No. of analyses	No. of Non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l (more than one substance may be found in one sample)
Calves Kidney	Antimicrobial (Screen 1)	130	2	600	5800 (chlortetracycline) 130 (sulfadiazine)
Calves Kidney	Antimicrobial (Screen 4)	105	3	1000	1700, 2600, 11000 (dihydrostreptomycin)
Calves Kidney	Florfenicol	97	2	300	480, 2300 (florfenicol)
Cattle Kidney	Florfenicol	260	1	300	820 (florfenicol)
Cattle Kidney	Metals	69	3	1000 500	1300 (cadmium) 720, 1400 (lead)
Cattle Kidney	NSAIDs	347	2	10 65	76 (diclofenac) 650 (meloxicam)
Cattle Liver	Anthelmintics	722	1	1000	1800 (closantel)
Cattle Urine	Steroid (Screen 1)	1047	12	Presence 0.7 (male) 5 (female) 12	1.6/2.7, 2.6, (alpha-boldenone) 0.53, 0.66, 0.86, 1, 1.3, 7.1, 13 (alpha-nortestosterone) 14, 43, 18 (testosterone)
Fattening Cattle Urine	Steroid (Screen 1)	1161	17 (2 substances in 3 samples)	2 Presence	0.2/3.0, 0/2.5, 2.2, 2.9, 3.0, 18 (alpha-boldenone) 0.20, 5.4, 7, 7.1, 7.1, 7.9, 8.6, 12, 12, 13, 14, 17, 18, 30 (alpha-nortestosterone)
Fattening Cattle Urine	Zeranol	355	9 (Both substances in 6 samples)	Presence	1.0, 1.2, 1.2, 1.5, 1.8, 1.8, 2,2, 9.6 13 (taleranol) 0.55, 0.70, 0.71, 0.92, 1.1, 1.1, 1.5, 4.5, 8 (zeranol)
Cattle Urine	Zeranol	382	4 (Both substances in 4 samples)	Presence	0.85, 1.1, 1.5, 15 (taleranol) 0.25, 0.7, 0.63, 3.8, (zeranol)
Cattle Milk	Florfenicol	141	1	300	0.34 (florfenicol)
Cattle Milk	NSAIDs	172	1	Presence	0.48 (diclofenac)
Cattle Plasma	NSAIDs	67	2	Presence	1.3, 2.8 (phenylbutazone)
Pig Kidney	Antimicrobial (Screen 1)	1394	1 (Both substances in 1 sample)	100 50	110 (sulphadiazine) 64 (trimethoprim)
Pig Liver	Anthelmintics	333	1	100	180 (ivermectin)
Sheep Kidney	Metals	54	1	500	700 (lead)
Sheep Liver	Anthelmintics	1532	5	1500	2300, 2400, 3800, 4400, 5300 (closantel)
Sheep Liver	Avermectins	475	2	100 100	190 (doramectin) 160 (ivermectin)
Sheep Urine	Steroid (Screen 1)	509	33 (2 substances in 1 sample)	Presence Presence Presence	0.76/4.1,1.0/2.3, 2.0, 2.0, 2.1, 2.1, 2.3, 2.3, 2.3, 2.3, 2.4, 2.5, 2.5, 2.5, 2.6/2.2, 2.7, 2.9, 2.9, 2.9, 3, 3.2, 3.2, 3.3, 3.5/2.2, 3.8, 3.8/13.2, 4.4, 5.0, 5.1, 5.3, 5.5, 6.0, 9.8 (alpha-boldenone) 0.95, 1.0, 590, (beta-nortestosterone) 2.1 (beta-boldenone)

Sample	Analysed for	No. of analyses	No. of Non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l (more than one substance may be found in one sample)
Sheep Urine	Zeranol	104	3 (Both substances in 3 samples)	Presence	0.71, 1.2, 4.2 (taleranol) 0.95, 2.2,4.2 (zeranol)
Sheep Liver	Coccidiostats	335	1	500	780 (toltrazuril sulfone)
Horse Kidney	Metals	1	1	1000	11000 (cadmium)
Horse Kidney	NSAIDs	44	1 (Both substances in 1 sample)	Presence 0.5	5.7 (phenylbutazone) 4.4 (oxyphenylbutazone)
Broiler Liver	Coccidiostats	1380	1	8	10 (monensin)
Turkey Liver	Coccidiostats	89	1	Presence	35 (maduramycin)
Partridge Muscle	Coccidiostats	8	3	5	120, 250, 290 (lasalocid)
Bee Honey	Metals	14	1	100	250 (lead)

RESULTS OF FOLLOW-UP INVESTIGATIONS: 31 December 2019

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle				
Calves Kidney	Florfenicol 480 µg/kg 1909988	Resflor	Great Britain	A large dairy farm of over 400 cattle and calves. On inspection, the farm was found to be clean and tidy with all animal movement on and off the farm suitably recorded. All animal treatment is recorded in the IT system (for cattle and calves respectively). The owner kept a record of all purchased veterinary medicines over the last 5 years in addition to the IDs of the animals the medicines were administered to. The animal was treated with Resflor in January and sold in February as rearing calf. The farmer informed the buyer that the animal was meant for rearing purposes. The investigation established the animal was slaughtered within a withdrawal period. The buyer was given advice on requirements for declaring all relevant medicine administrations on Food Chain Information and reminded of the requirements for record keeping and observation of withdrawal periods.
Calves Kidney	Florfenicol 2300 µg/kg 1909979		Great Britain	This is a medium sized collection centre for calves, no calves were present during the inspection. Most calves are sold to be reared on other farms. On average 300 calves arrive on Mondays, most of the calves leave the same day. No medicines are kept at the collection centre. There is an incident book present in case a calf requires care/treatment and a PVS will be called out. Two calves had tested positive for Florfenicol (Nuflor). The owner confirmed that neither of the calves were treated with any medication. The owner was advised on record keeping requirements and reminded of obligations to ensure withdrawal periods are observed. The investigation established that the likely cause of this residue was an unrecorded treatment and subsequent slaughter of the animal whilst within a withdrawal period.
Calves Kidney	Chlortetracycline 5800 µg/kg 1919730		Great Britain	This is a large dairy herd with 3,762 cattle in total and sheep, the farm rears its own replacements. Milking cows are housed all year round, male dairy calves are routinely sent to slaughter without treatment when fit to be transported. Barren cows are sent to slaughter at an early lactation age. Chlortetracycline powder was given to female calves mixed with milk at day one. The farmer stated that it was possible a male calf jumped into the neighbouring female pen without anyone realising. The owner was advised of the need to review processes and to take adequate precautions to ensure only targeted animals receive treatment, (treatments to be recorded on the medicine records and withdrawal periods adhered to). The investigation established the likely cause of this residue was unrecorded treatment and subsequent slaughter of the animal whilst within a withdrawal period.
Calves Kidney	Dihydrostreptomycin 1700 µg/kg 1919789		Great Britain	This is a large sized farm of dairy, 950 beef cattle and 24 sheep. Livestock are kept at 3 different locations and vaccinated. Medicines are stored appropriately, records are up to date, (ear tag numbers, doses, dates, method of treatments of the drugs, withdrawal periods recorded). There is a good system to identify animals under medication, however a mistake was made. It is possible one of the workers did not understand which groups of animals were to be treated. Buscopan, Penistrept, Calciject medicines were found during the inspection. All boxes were properly labelled, only 1 box of medicine was out of date and the inspector requested disposal of this. Verbal and written advice was given to the farmer advising how to avoid such residues in future. The likely cause of residue is unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Calves Kidney	Dihydrostreptomycin 2600 µg/kg 1934210		Great Britain	Awaiting investigation report.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Calves Kidney	Dihydrostreptomycin 11000 1934191	Marbocyl Synulox Bolus	Great Britain	A medium sized farm comprised of 427 cattle and tack sheep. Replacements are reared on farm, only bulls are bought in. Dairy bull calves are sold directly to slaugher. Beef cattle are reared on farm and sold as stores or to fatten on farm. Cattle graze and in addition are fed silage and hay, housed cattle are fed wheat and barley mix. Young calves are fed with colostrum (2-3 days) and later given milk replacer. Medicine records were found to be satisfactory and medicines were appropriately stored. The positive calf had suffered with diarrhoea and treatment was recorded in the medicine book. It was treated with Synulox (bolus) and Marbocyl . These were used over three days and the calf was the only animal treated. The substance detected in the calf's kidney was Dihydrostrephtomycin, none of the recorded medicines contain this substance. The medicine record indicates that Pen & Strep was previously purchased and used on farm. Pen & Strep does contain Dihydrostreptomycin Sulfate. Taking into account this investigation was unannounced, the compliant medicine record and storage, the only plausible reason for the positive residue is potential unintended human error. The owner was advised to discuss any antimicrobial treatment with the PVS, to adhere to product labelling and instructions to avoid medicine misuse, correcly record mediciation to ensure withdrawal periods are observed/expired medicines are not retained. The likely cause of residue is possible unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Calves Kidney	Sulfadiazine 130 µg/kg 1934179	Norodine	Great Britain	This is an accredited (Red Tractor Assurance Scheme) large non-organic farm of dairy cattle, with a small-scale beef side. The dairy herd is kept at two locations., both premises are managed separately. Cattle are homebred, only exceptions are replacement bulls. Dairy bull calves are sent for slaughter at the age 1-2 weeks. The positive calf (10 days old) had not been treated at the time of slaughter. The farmer declared that calves are not administered treatment with Norodine, However, the presence of an open bottle in storage and evidence of a residue in excess or the MRL where a veterinary medicine is used in a sample collected, show that the animal had been treated with the medicine and the withdrawal period had not been observed. It is possible the medicine containing sulfadiazine was accidentally given, instead of something else, but there was no record of administration of other medicines to the calf. The correct use of medicines, dosage, application and storage was discussed during the inspection. Electronic format for medicines records are used, the importance of keeping up to date records was highlighted. There were no completed records for the ID of the animals treated, or records to show the withdrawal periods had been complied with. It is probable the cause of this is from possible unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Cattle Kidney	Meloxicam 650 µg/kg 1919545	Kelaprofen Metacam	Great Britain	A large dairy cattle farm comprised of 619 animals. The homebred animal was sent for emergency slaughter because of a ruptured left stifle. The animal was treated with Kelaprofen. There were no records showing the animal had been treated with other medicines. Three people are involved in treatment of animals, and there are periods when temporary staff are involved. Medicine records were found to be incomplete. Medicines storage consists of two plastic cabinets (one secured in a room adjacent to the milking tank room, the other in the milking parlour which is not locked for easy access). Expired medicines are discarded in the waste bin provided and collected. Metacam is present on farm and the owner is aware of withdrawal periods. Unaccounted medicine could indicate that Metacam was used in treatments, but not recorded. There is a possibility of human error mixing Kelaprofen with Metacam (similar colour). The owner was notified of deficiencies and guidance was given on procedures for record keeping requirements. The likely cause of residue was an unrecorded treatment and subsequent slaughter of the animal whilst within a withdrawal period.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Florfenicol 820 µg/kg	Resflor	Northern Ireland	An investigation was undertaken in December 2019. The animal was from a dairy herd of 644 animals. It was 44 months old and had been born on farm, it was transported to slaughter on own trailer along with 4 other animals. Movement and medicine records were kept in accordance with legislation. The animal had been treated with Resflor in September 2019 and given 52 days for withdrawal (product has 46-day withdrawal period); the product was administered correctly with 2 subcutaneous injections. The farm is a large dairy farm with regular visits from the vet, it has good husbandry and has no previous issues. A follow-up sample was compliant.
Cattle Kidney	Diclofenac 76 µg/kg 1925002	Loxicom Tetra-Delta Draxxin	Great Britain	A small cattle farm (member of the accredited Red Tractor Assurance Scheme). The farm operates a predominantly grass system with the grazing period extending to 8-9 months of the year where possible. The owner does all the milking and administers any treatment to cattle. There was no recent history of anyone taking Diclofenac or applying it topically. The residue was found in a Holstein Friesian dairy cow and it had received various treatments, the most recent in July 2019 Loxicom (meloxcam) injectable, Tetra Delta (Novobiocin, Neomycin, Penicillin, Dihydrospreptomycin, Prednisolone) intramammary, these were obtained from the PVS. This cow had not received any other treatment since then. There had been a few health problems with the herd over recent months. The use of Draxxin (Tulathromycin) was recorded, indicating pneumonia problems in livestock. Not all medicine purchases were available to view, a full set was obtained from the PVS. Only the last 3 digits of animal ID for ear tags were recorded in the medicine book. Worming treatment was denoted as having been given to all milking cattle, the owner was advised that a list of cattle in milk should be attached on medicine records. Medicines were up to date except for 1 box of Lifeaid. Advice was given regarding expired products including disposal of and on requirements for retention of records (5 years). Improvements are to be made in recording animal ID. The source of residue could not be established.
Cattle Kidney	Lead 720 µg/kg 1919697		Great Britain	The animal was born in 2013, sold on at auction in March 2019 and slaughtered in April 2019. The first holding, (a medium sized beef cattle farm) appeared to be well run. There was no evidence of any old lead mines near the farm and no signs of old paint or batteries found. The farmer mentioned that water pipes had been replaced in the field many years ago, but the old pipes were made of copper with only a lead outflow. The positive animal had spent approximately 34 days at a second holding, the inspector was of the opinion that the animal would not have accrued a lead residue in this short period of time. The medicine records for this animal, confirmed that no veterinary medicine treatments had been given. The animal was fed a vegetable and concentrate diet. There was no exposure to lead at these premises either. The source of residue could not be established.
Cattle Kidney	Lead 1400 µg/kg 1923805		Great Britain	A large cattle farm of around 800 cattle. Animals are kept inside sheds with deep bedding. Sheds are divided into pens with capacity for approximately 30 cattle and in some sheds, drinkers are situated around a middle corridor used for machinery (straw blowers and feed tractors). Animals (18 to 30 months) are purchased from markets. As a batch (25-40) they are kept on farm for 3-5 months, then sent to the abattoir. Silage and grain/barley is home grown, minerals are purchased locally and kept in storage. Rejected potatoes obtained from potato packers (a potato company is located on the farm and uses lift trucks and other machinery) are fed to animals. Barley for feeding was found on the yard during the visit. The grain was left out of the storage shed for fermentation and placed into storage after this process. The farm was found to be clean and tidy, no flaking or new painting inside cattle sheds was observed. However, machinery in use could be a potential source of lead contamination. It is possible that lead was ingested by the animal from a battery on the holding, however the farmer was aware of the dangers. The farmer was advised to contact the PVS to discuss the potential source of lead poisoning. The source of residue is likely due from accumulation of lead through environmental contamination.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Cadmium 1300 µg/kg 1919709	Dectospot Orbenin	Great Britain	A medium sized cattle farm. The positive animal was homebred and during its life was moved between two farms. Cattle were grazing on fields adjacent to barracks, where a garage for repairing aircrafts was operating. Medicine records showed that products in stock were Dectospot and Orbenin. There was no evidence of the use of illegal substances. It is likely that the location next to the military garage is the source of cadmium contamination of the soil (possible spillage from batteries used by aircrafts or other unknown products). The farmer was advised to move cattle from certain fields, ensure new products are approved for treatment in cattle and administrated under private vet coordination. The cause of residue is likely to be from accumulation of cadmium through diet over time.
Cattle Liver	Closantel 1800 µg/kg 1904568	Closamectin	Great Britain	This is a small bovine farm. The positive animal was homebred and never left the farm. It was sent directly to abattoir as a batch of a group of 5 cull cows in February and slaughtered the next day. Computer records provided by the farmer, showed the animals had been treated with Closamectin Pour on in January. No other products were administered the same day. These animals were kept separately from other animals, therefore there was no risk of cross contamination. They were slaughtered 42 days after treatment, recommended meat withdrawal periods appear to have been observed: 28 days at the time when treatment was administered. The computer records were up to date. The farmer was advised to fill out and submit an adverse event reporting form to the VMD. The Closamectin was administered prior to the extended withdrawal period of 58 days which had been announced in March. The issue leading to the withdrawal period being extended could be the primary cause of the residue. There is also a possibility that the farmer overestimated the weight of the animal, however this is unproven.
Cattle Urine	Alpha-boldenone 0/2.5 µg/l		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone. Animal in calf at the time of sampling.
Cattle Urine	Alpha-boldenone 0.2/3.0 µg/l		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone. This animal also contained α-Nortestosterone (30 µg/l). Animal in calf at the time of sampling.
Cattle Urine	Alpha-boldenone 1.6/2.7 µg/l		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.
Cattle Urine	Alpha-boldenone 2.6 µg/kg 1908519		Great Britain	This is a large size dairy enterprise with 170 milking cows and 40 followers. Cattle are kept in two distinct groups; milking cows are housed in new sheds with four milking robots. Young stock, dry cows and beef cattle are housed in old cattle buildings near the farmhouse. Cows are fed concentrate containing wheat and hay/maize silage. Lactating cows are also given soya powder mixed in the feed. Medicine records were found to be in good order and all medicines were stored in a lockable cabinet. Medicines requiring refrigeration were all adequately kept at good temperature in a fridge. The farm is accredited for the Red Tractor Assurance Scheme. There was no evidence of the use of banned substances on the farm, therefore the presence of the hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Cattle Urine	Alpha-boldenone 2.6/2.2 µg/kg		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Urine	Alpha-nortestosterone 0.53 µg/kg 1912950		Great Britain	A large sized farm of cattle (beef fattening unit) only, where the feeding system is based on a mixed diet done at farm. The animals usually stayed at farm for 100 days, were kept in good clean condition and showed normal calm behaviour. The positive sample originated from a steer which was at farm for a month and had not received any treatment, or wormer. Medicines records were checked and appeared to be satisfactory The animal was kept in a pen with other males which were sent to the slaughtherhouse. There was no evidence of the use of anabolic steroids, nor abnormal muscling in other animals kept at the farm. The animal did undergo a 5-hour journey prior to slaughter, which could have contributed to stress related raised hormone levels. Advice was given to try to avoid stressful situations where possible and to contact the private vet for advice when required. The likely cause of residue was due to natural occurrence caused by stress levels during transit.
Cattle Urine	Alpha-nortestosterone 0.66 µg/kg 1912965		Great Britain	A large farm livestock farming business (500 cattle and 500 sheep), organic and non-organic livestock. Cattle are purchased when they are 12-18 months old, and fattened on farm for 6-12 months more, then sent to slaughter. There are 50 organic ewes for breeding and young lambs are bought for fattening. The farm grows cereals and produces its own silage, hay and straw which is fed to the livestock. All medicines are supplied by the veterinary practice. Practices observed during the inspection were correct. There was no evidence of the use of banned substances on the farm, therefore the cause of residue is considered to be a natural level.
Cattle Urine	Alpha-nortestosterone 0.86 µg/kg 1924243		Great Britain	A medium sized far of 193 animals, beef and dairy cattle. The animals showed normal conformation/ behaviour. They were fed hay and silage produced on farm (not mixed with any medicated product). There was no evidence of the use of banned substances on farm. The possible stress of a long journey might explain the positive result (duration of transport approx. 6 hours to the abattoir). The farmer could not present the medicine records for inspection, including disposal of medicines, or proof of purchase of veterinary products which are all a breach of the medicine regulations. Two expired products were found, however there was no evidence that products had been opened or used. Medicines were stored in a fridge located in a locked shed. The fridge was not appropriately cleaned and maintained. All medicines stored were the usual products found in a dairy farm, but their use had not been recorded. The farmer was advised to discuss the possible source of residue with the PVS. Guidance was provided on record keeping requirements and medicine storage. The farmer was advised to carry out correct castration procedures of males (homebred or purchased) at early stages and to seek veterinary advice when required. The presence of this hormone is considered to be a natural level.
Cattle Urine	Alpha-nortestosterone 1.0 µg/kg 1930909		Great Britain	The positive animal was a 19-month old steer. According to the movement records, the animal was transported directly to slaughter from the farm of origin. No markets or dealers were involved in the transport. The owners confirmed they had never used steroids or banned substances on cattle, and this was confirmed by the PVS. Movement records were checked, passports of the animals and other paperwork found. The farmer was unable to provide the medicine book when requested during the inspection as he had never bought medicines or kept any on farm. The PVS took medicines directly to the farm and administered these to animals as required. During the visit, no animals were inspected as there were no animals present. The farm appeared to be of a high standard. The farmer is now retired and no longer keeps animals. It is probable that the stress of a short journey to slaughter, may account for the residue, therefore it is concluded that the source is from natural levels.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Urine	Alpha-nortestosterone 1.3 µg/kg 1908412		Great Britain	This is a medium sized farm mainly comprised of dairy cattle (fattening cattle and calves). The positive animal (a 16-month old bull) was homebred. It left the farm in January for market, then went to abattoir in the same month. Inspection showed very good management on the farm and the animals appeared in very good condition. There was no indication of steroid use; the remainder of the cattle looked healthy, with normal conformation. No steroid products were found in the medicine cabinet and all medicines were stored appropriately. The animal had travelled over 110 miles to the abattoir, and this is likely to have caused a stress response in the body. The farmer has been advised to continue with the current practice of recording any medicines used. The likely cause of residue is from natural levels.
Cattle Urine	Alpha-nortestosterone 7.1 µg/kg 1931386		Great Britain	This large farm is part of the accredited Red Tractor Scheme and is comprised of cattle and sheep (store lambs). The animal was purchased in September 2019 and was mixed with 110 other cattle. The cow fell, possibly as a result of bullying by an unfamiliar peer group. The animal was shackled to try to raise off the ground, but with no success, the PVS issued a slaughter certificate. Routine samples were taken and high levels of alpha nortestosterone were identified. No non-compliances or banned substances were found during the inspection. Medicine records were good, and vaccines were stored in the fridge (expired medicines taken for disposal by private vet). Care and advice were given regarding withdrawal periods. Mixing the animal with a peer group may have caused undue stress and elevations of the hormone, together with the stress of travel and pain from injury. Therefore, the cause of residue is considered to be a natural level.
Cattle Urine	Alpha-nortestosterone 13 µg/kg 1908375		Great Britain	This is a grass based dairy farm of approximately 300 milking cows. Calves are born on farm but moved off to be reared elsewhere once they reach 80kg. Calves are fed medicated feed (coccidiosis preventative) which is mixed off site under a veterinary prescription. Detailed medicine records were available for inspection and no deficiencies were noted in the supply or use of medicines. Veterinary medicines were stored appropriately in a lockable cabinet. There were two expired vaccines and two expired antibiotic bottles. The farmer was advised to mark and dispose of these accordingly. The animal had calved in February and had received treatment with antibiotics. It was sent to the collection centre in March for onward transport to slaughter post calving and had been under significant stress from a previous infection and prolonged transit time. There was no evidence of the use of banned substances on the farm. As the animal had recently calved, the presence of this hormone is considered to be a natural level.
Cattle Urine	Testosterone 14 µg/kg		Northern Ireland	No investigating visit was undertaken as the animal concerned was a bull and bull animals can produce high physiological levels of this hormone.
Cattle Urine	Testosterone 18 µg/kg		Northern Ireland	No investigating visit was undertaken as the animal concerned was a bull and bull animals can produce high physiological levels of this hormone.
Cattle Urine	Testosterone 43 µg/kg		Northern Ireland	No investigating visit was undertaken as the animal concerned was a bull and bull animals can produce high physiological levels of this hormone.
Cattle Urine	Taleranol & Zeranol 0.71/0.95 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 1.0/0.71 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 1.1/0.70 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 0.85/0.25 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 2.2/1.5 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Urine	Taleranol & Zeranol 1.2/2.2 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 1.5/0.63 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 13/8 µg/kg &		Northern Ireland	No investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Cattle Urine	Taleranol & Zeranol 15/3.8 µg/kg		Northern Ireland	No Investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Fattening Cattle Urine	Taleranol 1.2 µg/kg & Zeranol 0.70 µg/kg 1920236		Great Britain	Low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus. At this level of residue, a statistical model based on research has confirmed this to be the case. No further investigation was required.
Fattening Cattle Urine	Taleranol 1.2 µg/kg & Zeranol 0.55 µg/kg 1928918		Great Britain	Low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus. At this level of residue, a statistical model based on research has confirmed this to be the case. No further investigation was required.
Fattening Cattle Urine	Taleranol 1.5 µg/kg & Zeranol 1.1 µg/kg 1920231		Great Britain	Low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus. At this level of residue, a statistical model based on research has confirmed this to be the case. No further investigation was required.
Fattening Cattle Urine	Taleranol 1.8 µg/kg & Zeranol 0.92 µg/kg 1920218		Great Britain	Low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus. At this level of residue, a statistical model based on research has confirmed this to be the case. No further investigation was required.
Fattening Cattle Urine	Taleranol 1.8 µg/kg & Zeranol 1.1 µg/kg 1920224		Great Britain	Low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus. At this level of residue, a statistical model based on research has confirmed this to be the case. No further investigation was required.
Fattening Cattle Urine	Taleranol 9.6 µg/kg & Zeranol 4.5 µg/kg 1911926		Great Britain	Low levels of zeranol and fungal metabolites may be present in the urine of animals that have ingested feeding-stuffs contaminated with the fusarium fungus. At this level of residue, a statistical model based on research has confirmed this to be the case. No further investigation was required.
Fattening Cattle Urine	Alpha-boldenone 2.2 µg/kg & Alpha-nortestosterone 18 µg/kg 1911353		Great Britain	A large sized dairy cattle farm which is a member of the Quality Farm Assured, Red Tractor Scheme. The animal sampled was a calf born on the farm. An investigation was carried out and no non-compliances were found during the visit. Medicine records were found to be satisfactory and medicines were appropriately stored. There were no expired medicines on site. Adequate animal ID had been recorded and withdrawal periods were observed. The Nortestosterone could potentially be as a result of stress from handling, whilst catching the calf to get the sample on farm. This residue is therefore considered to be natural in origin.
Fattening Cattle Urine	Alpha-boldenone 2.9 µg/kg & Alpha-nortestosterone 7.9 µg/kg 1928440		Great Britain	Pregnant female. No investigation required.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Fattening Cattle Urine	Alpha-boldenone 3.0 µg/kg & Alpha-nortestosterone 0.20 µg/kg 1911388		Great Britain	Awaiting investigation report (held up due to COVID-19).
Fattening Cattle Urine	Alpha-nortestosterone 5.4 µg/kg 1900270		Great Britain	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 7.0 µg/kg		Northern Ireland	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 7.1 µg/kg 1928397		Great Britain	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 7.1 µg/kg		Northern Ireland	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 8.6 µg/kg 1920102		Great Britain	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 12 µg/kg		Northern Ireland	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 12 µg/kg		Northern Ireland	Animal had just calved. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 13µg/kg		Northern Ireland	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 14 µg/kg		Northern Ireland	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 17 µg/kg 1900240		Great Britain	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-boldenone 18 µg/kg 1900267		Great Britain	Pregnant female. No investigation required.
Fattening Cattle Urine	Alpha-nortestosterone 30 µg/kg		Northern Ireland	Pregnant female. No investigation required. This animal also contained α- Boldenone free (0.2 µg/l) and α- Boldenone conjugated (3.0 µg/l).
Cattle Plasma	Phenylbutazone 1.3 µg/kg		Northern Ireland	An investigation was undertaken with the most likely cause of the residue being contamination as a neighbour who keeps a horse had been assisting with the feeding of this animal. The owner of this animal keeps a small number (7 in total this year) of animals for fattening and then slaughter, he has no direct involvement with horses. The remaining 6 animals were re-sampled and one of these gave non-compliant phenylbutazone levels (see Suspects section for follow-up result).

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Plasma	Phenylbutazone 2.8 µg/kg		Northern Ireland	An investigation was undertaken with the most likely cause of the residue being contamination due to a cow being in close contact with horses. The positive animal had been purchased as a calf and had been on the farm for 2 years and 7 months. The movement and medicine records were all kept in accordance with legislation with only horse medication in stock on the farm. The positive animal was a TB reactor which had been brought from the out farm (where the cattle are kept) to the home premises for isolation. The cow was placed adjacent to where two elderly equines are kept who are both treated daily for arthritis with phenylbutazone. All follow up samples were compliant.
Cattle Milk	Florfenicol 0.34 µg/kg	Cadorex	Northern Ireland	The positive animal was 7 years old was born on farm. Both the movement and medicine records are kept in accordance with legislation and were found to be satisfactory. The positive animal was from a dairy herd of 160 animals and had been injected with Cadorex in early December 2019. Mid-December a milk sample was taken. The herd owner was not given any advice on the withdrawal period. Follow up sample was compliant.
Cattle Milk	Diclofenac 0.48 µg/kg 1920711		Great Britain	A medium sized farm of organic dairy cattle only, where the feeding system is organic. There are around 140 cattle (70 of them milking twice per day, the milk collection of the tank is every second day). The animals were kept in good clean condition and showed normal calm behaviour. The positive sample was taken from the main milk tank and included milk from all the animals milking in that period. Diclofenac is a nonsteroidal anti-inflammatory drug (NSAID) and is used to treat mild to moderate pain, or signs and symptoms of osteoarthritis or rheumatoid arthritis in humans. The medicine records were checked and appeared to be satisfactory. As this is an organic farm, the use of medicines is kept to a minimum. The owner was advised to maintain a hygienic routine after using cream, to always use gloves when dealing with animals or milk, including the cleaning of the tank. The inspector concluded that the likely cause of residue is due to inadvertent contamination of the milk sample or tube at the time of sampling.
Pigs				
Pig Liver	Ivermectin 180 µg/kg		Northern Ireland	An investigation was undertaken. The positive animal is from a herd of 3000 weaners and fatteners. Movement and medicine records were all kept in accordance with legislation. No ivermectin preparations are used in the weaner or finisher units.
Pig Kidney	Sulphadiazine 110 µg/kg & Trimethoprim 64		Northern Ireland	An investigation was undertaken in November 2019. The positive animal was 6 months old and was born on farm. The animal was taken to slaughter by the haulier and was not mixed with other animals. Movement and medicine records were kept in accordance with legislation. The farmer stated that to the best of his knowledge drugs containing the substances detected have never been used in finishers. The finishers are located at a different unit to breeding pigs and the young pigs. Medicated feed is never administered to finishers, they have their own meal bin and feed line. A follow up meal sample taken during the investigation contained low levels of a range of veterinary drug residues.

Sheep				
Sheep Urine	Alpha-boldenone 1.0/2.3 µg/kg		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.
Sheep Urine	Alpha-boldenone 0.76/4.1 µg/kg		Northern Ireland	β-Boldenone is indicative of abuse and α-Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.
Sheep Urine	Alpha-boldenone 2.0 µg/kg 1926465	Clikzin	Great Britain	A small size hobby enterprise with low numbers of sheep, goats and poultry. Sheep normally graze and no additional supplements are provided. There appeared to be a discrepancy between the age and sex of the animal (no individual ID number was provided, a female age 6-12 months). According to the farmer's record all sheep sent for slaughter were male and aged over 2 years. There was no evidence of the use of banned substances. Medicine and movement records appeared satisfactory. A minor deficiency was identified: when treating the groups of animals (de-worming or using flystrike prevention product like Clikzin), under the quantity administered, the quantity of medicine used is not recorded or as instructed. The cause of result is unclear, however it is likely due to faecal cross-contamination at the time of sampling.
Sheep Urine	Alpha-boldenone 2.0 µg/kg 1926507	Combinex	Great Britain	A medium sized farm comprised of 120 sheep and 31 growing cattle. The farmer breeds fat lambs and sells them at approximately 4-6 months old. All sheep were treated with Combinex (for fluke and worms) in May 2019. The positive lamb had not been treated with anything else since birth. Medicine records were found to be satisfactory and stored securely. The farmer checks for expired medicines and stores them securely for disposal, the PVS collects disposals. Sheep appeared normal, no abnormal muscling or conformation changes were found. There was no evidence of the use of banned substances. It is likely the residue was caused by faecal contamination of the urine or other endogenous origin as it is possible that certain plant sterols can be metabolised to produce Boldenone in the urine.
Sheep Urine	Alpha-boldenone 2.1 µg/kg 1926450		Great Britain	A medium sized farm comprised of cattle, sheep and poultry. The sheep side of the farm is oriented almost exclusively for production of lamb direct for slaughter, supplying the local slaughterhouse. The main breed is Texel, Reyland, Suffolk and Blackface. Lambing usually takes place from mid-March-April. Approximately 30 lambs are kept every year for breeding and the rest are sold directly to a local slaughterhouse. Medicines and movement records appeared to be satisfactory. No deficiencies were noted in the supply, storage and use of medicines. Medicines requiring refrigeration were all adequately kept at good temperature in a fridge located in the farmer's house. The investigation established that there was no evidence of the use of banned substances, therefore the presence of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.1 µg/kg 1926418		Great Britain	This is a large farm of dairy cattle, sheep and poultry, comprised of 450 acres of land used mainly for sheep grazing. Small blocks of land are used for forage rape crops and fodder beet. The use of fertiliser is kept at minimum. No mixing of any medicated product takes place or is used to feed the livestock. The farmer is a sheep dealer, the majority of sheep are purchased from markets and stay for a short term, the rest are kept for longer (December to April). Sheep are kept both inside and outside, fed with pellets, minerals and vitamins. Medicine records and storage facilities were satisfactory on inspection. Individual treated animals are marked, whole batches of sheep are separated from the rest of the flock in specific fields or pens. Medicine records indicated the use of standard treatments for livestock. Animals displayed normal behaviour and normal conformation for their sex, age and breed. There was no evidence of the use of banned substances, therefore the presence of Alpha-boldenone is considered to be of natural occurrence, likely due to accidental faecal contamination of the urine at the time of sampling.

Sheep Urine	Alpha-boldenone 2.3 µg/kg 1904803		Great Britain	A medium sized farm comprised of 205 ewes, 117 lambs and 3 rams. Replacement ewes (around 40 per year) are purchased by the same farm. Lambs are sent to slaughter on a weekly basis (around 12 per week). The positive lamb was born on farm and sent to slaughter. The farmer declared that no medicines are stored at the farm and he had not treated any sheep in the last three years. He was not registered with any vet practice and was advised to do so. All the sheep were inspected and appeared to be in satisfactory health. The cause of residue is likely due to faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.3 µg/kg 1916978		Great Britain	A small farm of 76 cattle, 350 ewes and 150 lambs, 4 pigs and 5 chickens. The cattle are mixed and organically reared. This is mainly a sheep farm, which sends an average of 5 lambs weekly to the abbatoir. Only routine worming treatments are given, with occasional antibiotic use when required. The medicine records and storage facilities were found to be satisfactory and in good order. There was no evidence of the use of anabolic steroids. Advice was given to the farmer and a copy of the summary of the medicine recording requirements for keepers of food-producing animals was provided. The investigation established that the likely cause of this residue is from faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.3 µg/kg 1926391	Alamycin Pen & Strep	Great Britain	This is a medium sized farm comprised of sheep. The positive animal was a cull ram bought from market in July 2019. The animal was on farm for 14 days when it was slaughtered and sampled. Sheep are held for 1-2 weeks maximum and sold directly to slaughter (around 2000 sheep are traded each week). Regular checks are carried out and medicine records are in good order. All treatments are written down in the diary which showed that this animal had no recorded treatments whilst on the holding. Two main medicines are used, Alamycin and Pen Strep, (main issues lameness). All medicines are supplied by the PVS or agricultural wholesalers. Medicine storage facilities were compliant with requirements. Advice was given to continue recording all treatments and the importance of observing withdrawal periods was stressed. There was no evidence of the use of banned substances, therefore the presence of this hormone is considered to be natural due to faecal contamination of the urine during sampling.
Sheep Urine	Alpha-boldenone 2.3 µg/kg 1933021		Great Britain	Awaiting investigation report (held up due to COVID-19).
Sheep Urine	Alpha-boldenone 2.4 µg/kg 1916926		Great Britain	The cause of residue could not be established as the specific animal was untraceable.
Sheep Urine	Alpha-boldenone 2.5 µg/kg 1916876		Great Britain	This is a large sheep farm (accredited Red Tractor Scheme). The animal a lamb born on farm, was fed grass and some creep feed. It was sent to the abattoir through local market. No medicines were administered to the animal. Use of all veterinary medicines are recorded and withdrawal periods are observed. All medicines are stored appropriately, and no expired medicines were found. Alpha-boldenone is a steroid which is banned for the purposes of growth promotion in food-producing animals. The investigation established that there was no evidence of the use of banned substances, therefore the presence of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.5 µg/kg 1919852		Great Britain	This is a small farm buying in sheep, pigs, growing cattle from various markets and farms. The resident animals were kept in good condition and showed normal calm behaviour. Whilst on farm the sheep were grazed and occasionally fed hay and straw only. The positive sample originated from a male sheep, to which no veterinary treatment was given while on the farm. There was no sign of the use of banned substances nor abnormal muscling in the resident animals. The medicine records were inspected, minor non-compliances were found. No veterinary medicines were stored on site. Withdrawal periods were not recorded in the medicine records for a number of purchased products. However, these could have been observed from the product label as well. The farmer was advised to ensure withdrawal periods are recorded and observed to avoid cross-contamination. The presence of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.

Sheep Urine	Alpha-boldenone 2.5 µg/kg 1926509	Albex Bravoxin Ovivac	Great Britain	There are around 200 beef cattle (including calves), the farmer has a closed homebred herd of around 500 ewes and 250 lambs. All fattened lambs are sent for slaughter in small batches of around 30 animals per week, the farmer moves animals himself. Sheep are kept on grass fields most are far away from the farm, whilst closer fields are dedicated for cattle. Ewes are drenched twice a year, lambs in summer with ewes using Albex 2.5% Oral Suspension. Lambs are given vaccinations Bravoxin and Ovivac P Plus, all withdrawal periods were observed. There was no evidence of the use of banned substances. Medicine records were found to be satisfactory and medicines were appropriately stored, there were no expired medicines. Guidance for record keeping requirements were provided, some minor recommendations for improvement were made. The likely cause of residue is faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.6/2.2 µg/kg	N/A	Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.
Sheep Urine	Alpha-boldenone 2.7 µg/kg 1923850		Great Britain	A large farm of mainly sheep (1800 breeding ewes – Blackface, Mule, Textel). The farm also breeds a cattle beef herd of 30 animals. Two full time workers look after the stock. Ewes are mated in November. Lambing is from the end of March to April. Medicine records appeared to be satisfactory. The Veterinary Practice was contacted, and they confirmed no hormones are used by the Practice. The farmer is aware of withdrawal period requirements and withdrawal periods are respected. There was no evidence of the use of banned substances, therefore the presence of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.9 µg/kg 1916974		Great Britain	A large sized farm, comprised of 25 calves, 50 beef cattle and 600 ram lambs spread on the fields. The sheep are usually kept outside depending on the weather conditions. The farm follows a vaccination program against pasturella, as this year a postmortem came back positive. At the same time, animals are treated for fluke and worms. Sheep are fed grass, swedes and cake. The owner provided movement records and Food Chain Information (50 sheep were moved off to slaughter in April). Animals are moved in a livestock box from market to abattoir. The farm buys in rams only (October-January). Accurate records of all treatments and proof of purchases are kept. Medicines are stored appropriately. There was no evidence of the use of banned substances, therefore the presence of this hormone is considered to be natural due to accidental contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 2.9 µg/kg 1926495		Great Britain	The holding is Red Tractor Farm Assured and has a small-to-medium beef herd comprising of approximately 365 beef cattle. The farmer breeds cattle using 3 bulls, there is no artificial insemination. 25% of the animals are kept as replacement and the remainder are fattened, then sold at around 15-20 months old. The farmer buys cattle from local markets and farms. Purchased cattle for fattening are housed and kept separately from others. Cattle are sent to the abattoir every 2 weeks. There were approximately 1100 breeding ewes and 1700 lambs on the holding. 250 lambs are kept for breeding and 370 are sold to a local farm for breeding, the remainder are fattened and sent for slaughter. In summer all sheep are kept grazing, during winter, sheep are fed hay. Routine medication is used for fluke and worming treatment. Three medicine records are kept, (daily cattle diary, medicines purchased and a medicine book). Animals can be traced if required, however all 3 books need to be available, as in the case of cattle ID, there is not enough space to record multiple animals (hence a daily diary is used to record information). This method also applies for sheep ID records where multiple sheep are treated. Medicines are kept in a lockable room; no expired medicines were found. The investigation established that the cause of residue is likely to be of natural origin due to accidental faecal contamination of the urine at the time of sampling.

Sheep Urine	Alpha-boldenone 2.9 µg/kg 1926521		Great Britain	This is a medium sized farm of fattening cattle and 2000 sheep (cattle sheds with 120 suckling cows and around 280 young calves which are sold as stores in the market). The use of fertiliser is kept to a minimum. Cows are fed grass silage and hay, young calves are fed extra with beef finisher nuts (barley, wheatfeed, rape, sunflower, molasses) mixed with barley during the winter. The farmer has 2000 sheep, the lambs graze and close to the slaughtering date are fed with a intensive lamb finisher cake (maize, sugar beet pulp, soya, wheat, rape). The medicine records were found to be correctly completed and records indicated the use of standard treatments for livestock. Veterinary medicines were all stored appropriately and locked. The animals displayed normal behavior and conformation for their sex, age and breed. There was no evidence of the use of banned substances on the farm, therefore the presence of Alpha-Boldenone is considered of a natural ocurrance due to faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 3.0 µg/kg 1931143		Great Britain	Awaiting investigation report (held up due to COVID-19).
Sheep Urine	Alpha-boldenone 3.2 µg/kg 1904807	Alamycin LA Cydectin LA	Great Britain	A medium sized farm of calves, 92 dairy cattle and sheep (280 ewes and 270 lambs). Food provided to the sheep is mainly crop; barley and straw provided directly in the field. Movement, medicine records and storage conditions were inspected. Movement records confirmed the animal was moved off farm to market in February. Only minor breaches were found, batch number date missing for Alamycin LA used for the treatment of lameness in 140 lambs, Cydectin LA used for the treatment of scab in 302 ewes, 356 baby lambs (date of treatment finished missing). There was no evidence of the use of banned substances, therefore the presence of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 3.2 µg/kg 1933006		Great Britain	The source of residue is likely to be from natural occurrence; however, the animal was untraceable.
Sheep Urine	Alpha-boldenone 3.3 µg/kg 1923847		Great Britain	A medium organic farm, (approximately 167 cattle, 400 sheep and 1 goat). Cattle graze on a rotational basis between May-October, lambing occurs in April. Medicines are prescribed by a veterinary surgeon, other products (anthelmintics) are purchased from a supplier of livestock nutrition and animal health care products. Medicines were separated from any feed and labelled, a few expired drugs were found. Withdrawal periods doubled those reflected in the medicine data sheets, as required by organic standards. The farmer was advised it would be more appropriate to record the legal withdrawal period and add the double length organic one. There were a number of withdrawal periods missing and lapses in recording of administered medicines. All cattle and sheep were found with good normal growth development. There was no evidence of the use of banned substances. A copy of medicine recording requirements for food producing animals was provided. The farmer was advised to liaise with the vet practice on appropriate disposal of expired medicines. The residue may have arisen as a result of natural endogenous origin or faecal contamination of the urine during sampling.
Sheep Urine	Alpha-boldenone 3.5/2.2 µg/kg		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.
Sheep Urine	Alpha-boldenone 3.8 µg/kg 1916979		Great Britain	A small sized farm with calves, beef cattle and sheep. Sheep were not present at the time of the inspection. The farmer purchases batches of sheep at market, sheep for immediate slaughter are kept at a farm adjoining the abattoir. Store lambs are finished on farm premises where they are wormed and vaccinated against clostridiosis; animals are sent to slaughter within approximately 6 weeks. According to the medicine book, the batch of 37 lambs were wormed and vaccinated a day after purchase. All information was recorded in the medicine book and found to be satisfactory. There was no evidence of the use of banned substances, therefore the cause of residue is likely to be faecal contamination of the urine at the time of sampling or from other endogenous (natural) origin.
Sheep Urine	Alpha-boldenone 3.8/13.2 µg/kg		Northern Ireland	β- Boldenone is indicative of abuse and α- Boldenone indicative of faecal contamination. No investigation required as no presence of conjugated β- Boldenone.

Sheep Urine	Alpha-boldenone 4.4 µg/kg 1926524		Great Britain	A large farm comprised mainly of dairy cattle, sheep, pigs, additionally ducks, geese and quail. Cattle are bought from local markets and sold as stores. The positive residue was found in a male sheep. There are approximately 800 sheep on farm which are mainly homebred, but a few lambs per year are bought in at local markets. The positive lamb was in a batch of 99 lambs and slaughtered in September 2019. The farm only administers medicines to livestock after consultation with a PVS. Livestock are regularly inspected; no banned substances are given to the livestock. The farmer was advised further on medicine storage, although no non-compliances were found. It is likely that the cause of residue is due to accidental faecal contamination of the urine during sampling.
Sheep Urine	Alpha-boldenone 5.0 µg/kg 1904795	Pen & Strep Suspension for Injection	Great Britain	This is a large farm, of mainly cattle and 1100 sheep (plus lambs), with poultry and geese. The owner breeds sheep when they are 3 years old and sells lambs through local auctions or to abattoir. Replacement tups are bought every year. The tup in which the residue was found had been injected with Penstrep for a bad foot. The withdrawal period was met. In addition, the farmer runs a small 169 beef suckler herd with 35 cattle. Cattle are sold as stores at 11-12 months old. The business is well run, and records are kept satisfactorily. Some medicines were kept for too long after broaching. No signs of steroids or other products containing Boldenone being used on this farm were found. The farmer was advised to check and dispose of expired/broached medicines and to record the identity of the animals on the medicine book when they are individually treated so that they can be better traced. The presence of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 5.1 µg/kg 1923842		Great Britain	A medium sized enterprise comprised of cattle and sheep which are purchased from different markets then sent onto abattoir using an approved haulage company. The positive sheep was a male 6-12 months old but was not fully identified at the collection time. No information was available for that movement as there was a problem with the EID system from mid-July to August, therefore there are movements not recorded centrally in the system. There has been no treatment of sheep, medicine records were available for cattle and the PVS is contacted if treatment is required. The animal had been on the farm for a very short period of time, with no need of any treatment. The farm's records have helped to trace back this case despite electronic ID failure. The farmer was reminded of the importance of record keeping requirements and advised to ensure withdrawal periods are observed. The cause of residue is considered to be natural due to faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 5.3 µg/kg 1904872		Great Britain	A large farm comprised of sheep only. The positive animal was homebred (only breeding tups are purchased). The animal was part of a 103 sheep batch sent to market. The animal spent just a few hours there and onward movement appears to be direct to slaughter. No evidence was found that any testosterone products were kept, purchased or administered to the animals. Medicine records and storage facilities were found to be satisfactory and compliant. Advice was given to review the sheep castration procedure as one of the reasons for positive residue results could be a failed castration. However, the likely cause of this hormone is considered to be natural due to accidental faecal contamination of the urine at the time of sampling.
Sheep Urine	Alpha-boldenone 5.5 µg/kg 1916900		Great Britain	No inspection was carried out due to unrecorded ear tag information at the time of sampling, therefore the specific animal was unable to be traced. A medicine record check was carried out and this was satisfactory.
Sheep Urine	Alpha-boldenone 6.0 µg/kg 1926426		Great Britain	This is medium sized enterprise consisting of 350 ewes and 6-8 rams. The positive animal was a female sheep (14 months old). Grazing grounds consist of naturally growing pasture, grass, clovers, ryegrass, festuca. There was no evidence of the use of banned substances. The owner provided details of all medicines and treatments used on the sheep with the accompanying medicine records and withdrawal periods. The investigation established that it is likely the residue has arisen following faecal contamination of the urine at the time of sampling, or other endogenous origin, as it is possible that certain plant sterols can be metabolised to produce Boldenone in the urine.

Sheep Urine	Alpha-boldenone 9.8 µg/kg 1926374	Supaverm Clik	Great Britain	A small sized farm of 6 adult sheep (lowland cross bred sheep), poultry and horses kept in another area of the farm. The sheep flock appeared in normal condition. The owner confirmed the flock had not received any recent medication and equines on the premises had not received any banned substances. The positive ram had been on the farm for approximately 1 year. It had grazed with horses away from the ewes up to 2 weeks before slaughter and was only fed hay, no concentrate ration. The animal was found to have a cryptorchid testes and was infertile, it was taken direct to slaughter. Medicine records showed the animal was wormed with Supaverm and Clik for fly strike prevention; records were in good order. Adequate animal ID and withdrawal period details were recorded. The importance of keeping accurate medicine records was reiterated to the owners. The level of residue is likely to be of natural origin, as could faecal contamination of the urine at the time of sampling.
Sheep Urine	Beta-nortestosterone 0.95µg/kg 1904786		Great Britain	A large farm used mainly for cattle (suckler herd) and sheep grazing. A small block of land is used for forage rape crops for sheep feeding and the use of fertiliser is kept at a minimum. No mixing of medicated products takes place or is used to feed livestock. There is regular use of mineral supplements. Medicine records were found to be satisfactory and stored appropriately. Animals inspected were found to be in good clean condition and displayed normal behaviour. A second holding was also inspected, (a temporary keep of sheep/goats/cattle for supply to the adjoining abattoir). Sheep are not kept for more than 6 weeks, occasionally goats are purchased for slaughter. Cattle are purchased through markets, fattened and kept for several months, depending on customer orders, 7-8 are slaughtered every week. There was no evidence of the use of banned substances at either holding, therefore the presence of this hormone is considered to be from natural levels.
Sheep Urine	Beta-nortestosterone 1.0 µg/kg 1904824		Great Britain	A small sized farm of mainly dairy beef cattle and approximately 60 sheep. The farm buys sheep, pigs, growing cattle from various markets and farms. Animals are in good condition and showed normal calm behaviour. Sheep are fed hay and straw only. The animal (female 13-18 months old), had been given no veterinary treatment while on farm. No veterinary medicines were stored on site and the farmer had adopted a zero-tolerance policy for veterinary treatment given to animals. The medicine records were inspected, and minor non-compliances were found. For products purchased, withdrawal periods were not always recorded. The farmer was advised to ensure withdrawal periods are recorded and observed to avoid cross-contamination and to double check with the PVS on target species and dosage. There was no evidence of the use of banned substances on farm, therefore the presence of this hormone is considered to be a natural level. .
Sheep Urine	Beta-nortestosterone 590 µg/kg & Beta-boldenone 2.1 µg/kg 1926393	N/A	Great Britain	The source of residue could not be established as there was insufficient chain of evidence, therefore an investigation could not be carried out.
Sheep Urine	Taleranol 0.71 µg/kg & 0.95 Zeranol µg/kg		Northern Ireland	No investigating visit was undertaken as levels indicative of fusarium toxin contamination.
Sheep Urine	Taleranol 1.2 µg/kg & 2.2 Zeranol µg/kg		Northern Ireland	No investigating visit was undertaken as levels indicative of fusarium toxin contamination.

Sheep Urine	Taleranol 4.2 µg/kg & 4.2 Zeranol µg/kg 1904935		Great Britain	A medium sized family business comprised of 150 breeding ewes. Lambs are sold for meat through local auctions and approximately 30 animals are kept as replacements each year. There is also a small beef cattle herd consisting of 3 adult cows, 2 heifers and 22 young bulls. Young bulls are bought from a local farm at 3-4 months of age reared to be sold as fat at 15-18 months old. The enterprise is well run, and records were found to be satisfactory. Some recently expired medicines were found. Others were kept for too long after broaching. There was no evidence of the use of banned substances and animals appeared in good condition. The PVS confirmed that animals requiring vet advice were examined and the vet had no concerns. The farmer was advised to clean and power wash feeders occasionally to avoid build up and potential fungal growth. The farmer is to implement a better system of recording the ID of animals in the medicine book, so they can be traced (sheep are treated in batches and not all IDs are recorded). The investigation established that the most likely cause of residue is from fungi-infected feed.
Sheep Kidney	Lead 700 µg/kg 1907094		Great Britain	At the first holding, a large farm comprised of 1400 sheep and 58 cattle, lambs were transported to a field in November 2018 and transported to the abattoir in spring 2019. Lambs were less than one year old at that time. The owner confirmed there were no batteries or scrap metals in the 200-acre field, although there had been some rabbit shooting in fields without sheep. Medicine records were up to date at the time of the visit. The medicines store was inspected and found to be satisfactory. The inspector was unable to determine the source of the lead contamination. At the second holding, (a small farm of cows and sheep), the field was harvested, surrounded by an electric fence. The owners were not responsible for sheep and did not administer any medication. On one side of the field there was some construction debris, which the sheep had no access to. The investigation could not establish any potential sources of environmental contamination of the soil and water locally.
Sheep Liver	Closantel 2300 µg/kg 1933682	Supaverm	Great Britain	This is a medium sized farm comprised of cattle and sheep. The positive lamb was homebred. The owner confirmed he had administered Supaverm Oral Suspension (Closantel) which has 65 days withdrawal period. He had treated 460 lambs (260 Texels and 200 mixed store lambs.) Treated animals were marked with green colour. Previously, from the mixed store lambs group, he had separated 23 lambs that were intended to be sent to market. The non-treated and treated group were separated by a stone wall. The owner believed that several animals jumped over the wall and got mixed. After that, he was unable to differentiate which one was treated and which one was not due to the fact they had been sprayed with the same colour. The owner was advised to put in place a better system to differentiate treated from non-treated animals, to apply different colours for each treatment and to keep treated animals away from non-treated animals.
Sheep Liver	Closantel 2400 µg/kg 1927226	Supaverm Albex Levafas Diamond	Great Britain	A small farm of sheep (44 adult Texel sheep, 24 lambs) and pet chickens. Rams are bought when needed, no other livestock is kept. The lamb was homebred and spent its time on farm before going to abattoir. Management standards were good, and records were well organised. Medicines were stored appropriately and were up to date. Medicines were administered orally to sheep with a single gun which was washed frequently between administration of medicines. Supaverm was administered to all lambs in June 2019, Supaverm contains Closantel. Records show that Albex was administered to 15 lambs in September and Levafas Diamond administered to 10 lambs. The importance of using separate guns for different medicines and disinfection procedures were discussed and the owner was advised to seek further guidance from the PVS regarding administration and withdrawal periods. The investigation established that the likely cause of residue is possible unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Sheep Liver	Closantel 3800 µg/kg		Northern Ireland	An investigation was undertaken on 28/3/19. The positive animal had been purchased 2 days prior to slaughter. Movement and medicine records were all kept in accordance with legislation. Flock owner works as a supplier as animals are mostly bought and then sold within days of purchasing (see Suspects section for follow-up results).

Sheep Liver	Closantel 4400 µg/kg 1905851		Great Britain	A large farm comprised of calves, cattle and sheep. Approximately 3000 lambs are born on farm every year, the farmer breeds his own ewe replacements. Breeding ewes and rams are kept on the farm for around 5 years. Lambs are sold at 6 months. The farmer does not transport sheep directly to abattoir: Sheep are kept outside all year long, including lambing time March-May. Natural mating takes place in October-November. Medicine records were not up to date, the last entry was dated May 2018. There was a fire in one of the sheds (April 2019), where the records of the latest medicine administrations, including the ones which would refer to the sheep with the positive result were held. Entries were not moved to the proper medicine records; therefore, the inspector was unable to confirm whether the withdrawal period for products containing closantel were recorded correctly and applied. The farmer was advised of record keeping requirements and guidance provided. The likely cause of residue was an unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Sheep Liver	Closantel 5300 µg/kg 1933598	Zolvix	Great Britain	The farmer runs a small sheep herd (200 breeding ewes and 74 hoggs). He keeps his own replacements and only buys rams from local farm sales. A batch of lambs were sent to slaughter in October 2019 and had been wormed in August 2019 with Zolvix (oral solution for sheep), which has a withdrawal period of 7 days, but does not contain closantel. The lambs had not received any other treatments after that. The farmer had not used any wormers with closantel. Medicine records were inspected and were of excellent standard. Separate books were kept for purchase and usage of medicines. Medicine storage facilities were satisfactory, there were no expired medicines found. It is concluded that the sheep did not originate from this farm, the animal may have got mixed at the collection centre which may have led to the wrong information being recorded when the sample was taken. General advice about checking withdrawal periods and declaring correct information on FCI was given, although this had been done correctly. A further back trace investigation is required.
Sheep Liver	Doramectin 190 µg/kg 1906602	Dectomax	Great Britain	A large farm with finishing cattle and sheep. The farmer frequently buys and sells stock. The medicine records indicate that 81 sheep were treated with Dectomax in January 2018. Over the years, the farmer had bought Dectomax several times recording the correct withdrawal period. In December 2018 he purchased Dectomax again but did not record the withdrawal period. Consequently, several batches of sheep were treated, and medicine records did not identify the animals. Advice was given on procedures for record keeping and on requirements for observing correct withdrawal periods. The investigation established that the likely cause of residue was an unrecorded treatment and subsequent slaughter of the animal whilst within a withdrawal period.
Sheep Liver	Ivermectin 160 µg/kg 1917960		Great Britain	Investigation complete – reporting pending.
Sheep Liver	Toltrazuril sulfone 780 µg/kg 1918012		Great Britain	The farm focuses solely on sheep. The positive animal had left the farm as part of a group of 12 sheep in May 2019 and reached the abattoir on the same day. No dealer was involved in the process. There are around 1400 ewes with a production of approximately 2500 lambs per year. Lambing takes place in three batches: February, March and April. Treatment is administered orally to each individual lamb. The medicine cabinet is kept locked, medicines stored appropriately, and no expired products were found. The farmer presented knowledge of the animal welfare code of practice during the inspection and robust management was observed. Approximately 300 sheep were inspected and appeared to be in very good condition. Advice was given to continue administering treatment according to the product label and PVS, information on record keeping requirements was provided. The likely cause of residue is possible unrecorded treatment and subsequent slaughter of the animal whilst within a withdrawal period.

Horse				
Horse Kidney	Cadmium 11000 µg/kg 1925212	Panacur	Great Britain	A small farm comprised of mainly horses and approximately 6 hens. The farmer is a horse keeper and breeds them. He also keeps 15 competition horses (Welsh Cob). Horses are fed silage and hay. No non-compliances were observed in the horse buildings or feed store. The sample came from a 3-year-old horse. The only treatment administered to horses is Panacur 10% (wormer). There was no evidence of contamination from batteries, anticorrosive coating of metals, pigments or other substances. An airbase is located nearby, therefore it is possible metals are being released on the environment due to fuel combustion. The inspector suggested a water test be done for the brook in the fields if animals are drinking from it. A neighbour had obstructed the brook, and this was causing some accumulation of flooding/static water during winter. The owner was advised to keep accurate medicine and movement records. The investigation established that the most likely cause of the residue is from prolonged exposure to a high contaminated soil/water course and accumulation of cadmium through diet.
Horse Kidney	Phenylbutazone 5.7 µg/kg 1925186		Great Britain	The source of residue could not be found, as the animal was untraceable.
Poultry				
Broiler Liver	Monensin 10 µg/kg 1903316		Great Britain	The farm site houses 272,580 broilers at any one time. A sample of plain feed was taken from the farm and two samples of plain feed were taken from the mill. All contained monensin but at levels well below tolerance. The farm was going through changes in management and bin configuration at the time. There was a system for informing the driver of bin destination using a piece of paper on the last bin which was not retained for evidence. 14.44t of plain feed was put into bin 2A a day after 11.5t of feed with Coxidin was put in. As each house gets through 4.5t per day of feed, they could not have got through all the Coxidin feed before the plain was added. This is the most likely cause of contamination. However, there is no evidence to show whether the driver put the withdrawal diet in the wrong bin or if the farm told him to put it in that bin. There were no obvious errors found at the mill. The inspector advised the site to label pipes clearly, ensure the bin is empty before putting the withdrawal diet in and to have a confirmation system to check and show which bins have received feed, together with signed delivery paperwork to show verification of this. The investigation concluded that the residue was from possible feed contamination on farm.
Turkey Liver	Maduramycin 35 µg/kg 1903925	Flubenvet	Great Britain	This is a farm rearing turkeys and chickens. Turkeys are brought in at 42 days old and kept to approximately 137 days old. Turkeys are kept in 5 houses, each with their own feeding system. Feed is delivered automatically on an ad lib basis. It is delivered in bulk and blown into silos. Each delivery is fed into an empty silo. Silos are air cleaned every 3 months during the 10-day turnaround between crops. The liver sample was taken from a turkey where the birds were medicated with Cygro 10 plus Flubenvet. The information provided by the farm and mill does not provide any evidence to demonstrate how the turkey liver produced a positive result for Maduramycin. There were no retained feed samples either from the farm or the mill available for residue testing, subsequently the investigation was inconclusive, therefore the source of residue was not established. Both the mill and farm were reminded of the need to have robust systems and procedures in place.

Game				
Partridge Muscle	Lasalocid 120 µg/kg 1928154		Great Britain	In addition to farming the estate manages forestry, a range of game (including boar, deer, partridge and pheasants) as well as fishing. In 2019 a total of 8000 pheasants and 500 partridge were purchased at approximately one month old and were penned in several locations throughout the estate. Pheasants and some partridge were released after approximately. 8 weeks from the pens and fed outdoors on a mixture of wheat and plain game pellets. Most of the partridge were kept in the pens for longer due to a disease issue. Feeding stations were used as well as a few small pens with a group of 'call birds' in them to encourage released birds to return to the area. All feed is stored in a single shed and moved to the pens as and when required. Feed records showed a discrepancy of two bags of game grower plus Avatec, these were not accounted for in any of the usage records. In early October several pens were targeted by a group of wild boar who broke in to get to the feeders. The pens were repaired, and feeders refilled. The sampled bird is most likely to be an escaped call bird which had been consuming game grower, plus Avatec (residue at the bottom of the feeder moved by the wild boar). This case appears to be down to an unfortunate series of events, rather than the failing of procedures at either the shoot or mill.
Partridge Muscle	Lasalocid 250 µg/kg 1934346		Great Britain	The sample was taken from the same flock (see report above linked to 1928154).
Partridge Muscle	Lasalocid 290 µg/kg 1928152		Great Britain	The sample was taken from the same flock (see report above 1928154).
Bees				
Bee Honey	Lead 250 µg/kg 1928167		Great Britain	An analysis of honey tested positive for 250µg/kg lead in the sample above the Maximum Residue Limit (MRL). During an inspection, no evidence was found of the use of unauthorised substances in the hives. There was no evidence of lead or old paint in the apiary, bee shed, or garden. In conclusion the investigation was unable to establish the cause of residue. The owner was advised that all honey must be retained until further notice and a further inspection will be carried out at the apiary as part of routine surveillance.

SAMPLING OF ANIMALS SUSPECTED OF CONTAINING A RESIDUE AT THE TIME OF SLAUGHTER: 2019

RESIDUES DETECTED ABOVE THE REFERENCE POINT TO DATE: 31 December 2019

Sample	Analysed for	No. of Analyses	No. of Non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l (more than one substance may be found in one sample)
Calves Kidney	Antimicrobial (Screen 1)	4	1	3000	6600 (tulathromycin)
Cattle Kidney	Antimicrobial (Screen 1) & Florfenicol	942	17 (2 substances in 1 sample)	50 300 150 600 50 1000 1000	170, 1000, 1200 (amoxycillin) 550, 590, 630, 1300 >8000 (florfenicol) 350, 2200, 2900, (marbofloxacin) 2600, 6700, 7700(oxytetracycline) 160, 290 (penicillin G) 3500 (tilmicosin) 2500 (dihydrostreptomycin)
Cattle Liver	Anthelmintics	110	2	20 100	330 (nitroxinil) 200 (ivermectin)
Cattle Plasma	NSAIDS	30	1	Presence	13 (phenylbutazone)
Sheep Kidney	Antimicrobial (Screen 1)	25	1	600	14000 (oxytetracycline)
Sheep Liver	Anthelmintics	80	5	1500	1700, 1800, 2300, 2500, 2700 (closantel)

RESULTS OF FOLLOW-UP INVESTIGATIONS: 31 December 2019

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle				
Calves Kidney	Tulathromycin 6600 ug/kg 1997001	Draxxin	Great Britain	This is a medium sized dairy farm. Calves are kept with their mothers for 12 hours, then moved and placed in a pen in groups of 3. They are fed colostrum for 2.5 days; moved to a larger group and fed milk replacement from an automatic feeder. Heifers are kept for replacements. A daybook is kept in the farm office where details are supposed to be written down immediately after a treatment (animal identification and product used against the date in the diary). The treated animal is not marked in any way. The owner asked his employee to inject a calf with Draxxin (active substance tulathromycin) as the calf suffered pneumonia. The use of Draxxin for this particular calf is recorded in the daybook as well as in the computerised system. The owner admits that a human error occurred at this stage and his employee either injected a wrong calf or injected both calves and did not inform the owner of the mistake. The owner was advised to keep good records and establish a robust system for marking all treated animals - employees to be trained accordingly. The investigation established that the likely cause of residue was the animal was slaughtered within a withdrawal period due to human error.
Cattle Kidney	Amoxycillin 170 ug/kg	Unknown	Northern Ireland	An investigation was undertaken on 17/09/19. The animal was 7 years old and had been purchased 1 day prior to slaughter. The animal was taken to slaughter in the farmer's own transport and was mixed with other animals. Movement records are kept in accordance with legislation. There were no medicine records as no drugs are administered on farm.
Cattle Kidney	Amoxycillin 1000 ug/kg	Betamox LA	Northern Ireland	An investigation was undertaken, the animal was from a beef herd of 30 animals. The animal was treated with Betamox LA which has a withdrawal period of 28 days. In this instance treatment was given 8 days prior to slaughter. Unknown to the herd keeper the animal had been injected by his daughter.
Cattle Kidney	Amoxycillin 1200 ug/kg	Unknown	Northern Ireland	An investigation was undertaken in December 2019. The animal was from a dairy herd of 1316 and was 5 years old; the animal had been born on farm. It was taken to slaughter by haulier but kept separate. The medicine and movement records were kept in accordance with legislation. The Manager was off sick and the milking man had injected the animal on a Sunday evening; it was not clear if the use of medicine had been recorded as no information was transferred to the computer records. The animal was injured and was slaughtered on farm on the Wednesday evening.
Cattle Kidney	Florfenicol 550 ug/kg	Zeleris Colvasone	Northern Ireland	An investigation was undertaken on 12/3/19. Medicine and movement records are kept in accordance with legislation. The positive animal had been purchased 6 months prior to slaughter. It was not thriving and was examined and treated by the vet on 4/1/19 with Zeleris (Florfenicol & meloxicam) and Colvasone (Dexamethasone). The animal did not improve after treatment and the herd keeper took animal for slaughter on 18/2/19 (45 days after treatment), Zeleris has a 56-day withdrawal. The farmer claims he was not informed of the withdrawal period and had presumed 45 days later would have been sufficient. Follow up samples were compliant.
Cattle Kidney	Florfenicol 590 ug/kg	Norfenicol Lexicom	Northern Ireland	An investigation was undertaken on 25/2/19. Medicine and movement records are kept in accordance with legislation. The positive animal has been purchased 22 months prior to slaughter. It was from a beef herd of 220 animals. There are also sheep and pigs on the farm. The animal was treated with Norfenicol and Lexicom (meloxicam); Norfenicol has a withdrawal period of 44 days, animal was slaughtered the day after withdrawal period ended. All follow up samples were compliant.
Cattle Kidney	Florfenicol 630 ug/kg	Nuflor	Northern Ireland	An investigation was undertaken on 7/5/19. Medicine records were good. Animal came from a herd of 50 store cattle. It had been injected with Nuflor 25 days prior to slaughter. The withdrawal period for this product is 30 days. All follow up samples were compliant.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Florfenicol 1300 ug/kg	N/A	Northern Ireland	An investigation was undertaken and animal was from a 250-beef finishing herd. The animal was purchased 48 days prior to slaughter and was not treated by the herd keeper. Medicine records in accordance with legislation.
Cattle Kidney	Marbofloxacin 350 ug/kg	Marbonor 10%	Northern Ireland	An investigation was undertaken and animal was a heifer from a dairy herd of 106 animals. It had been seen by PVP 6 weeks prior to slaughter and treated at the time. There was no conclusive diagnosis and on relapsing the animal was treated by the farmer with a single injection of Marbonor 10% then slaughtered 7 days later. Withdrawal period is 6 days.
Cattle Kidney	Marbofloxacin 2200 ug/kg	Marbocyl	Northern Ireland	An investigation was undertaken in April 2019. Medicine and movement records are kept in accordance with legislation. The positive animal was 3 years and 9 months old, was born on farm. It came from a herd of 172. It was treated with Marbocyl 10% on 08/03/19 and given 6 days withdrawal. Herd keeper said that vet had advised him that the animal had a serious stomach problem and would not survive an operation so he would be best to sell the animal.
Cattle Kidney	Marbofloxacin 2900 ug/kg	Marbonar 10%	Northern Ireland	An investigation was undertaken on 16/5/19. The animal had been on farm for 5 and half years and was taken to slaughter on 30/4/19 by own transport. Medicine and movement records kept in accordance with legislation. Animal was treated for mastitis with Marbonar 10% injectable on 24/4/19; this has a 6-day withdrawal time. There was a suggestion that the animal could have been injected a second time in error. Follow up sample was compliant.
Cattle Kidney	Oxytetracycline 2600 ug/kg & Florfenicol >8000 ug/kg	Alamycin LA Nurflor	Northern Ireland	An Investigation was undertaken and animal was from a 236 animal suckler/beef finishing herd. Animal treated with Alamycin LA and Nurflor injectables, it was withdrawn for 43 days and then slaughtered. Withdrawal period is 31 & 30 days respectively. Medicine was administered according to manufacturer's instructions. Medicine records kept in accordance with legislation. All follow up samples were compliant.
Cattle Kidney	Oxytetracycline 6700 ug/kg 1997016		Great Britain	This is a medium farm comprised of calves, beef cattle and fattening cattle. The premises operate as a beef cattle herd of 500 animals with no breeding stock. Four of the holdings, including the main premises and three linked holdings include grazing sites surrounding the housing facilities. Fattening cattle are bought in from different markets and sold for slaughter at approximately two years of age. Fattening cattle are housed during winter and grazed during summer in the adjoining land that surrounds the housing facilities. Medicine records and storage facilities were found to be satisfactory. The male calf had been on the premises overnight before being sent for slaughter. No evidence of fraudulent treatment was observed during the investigation visit. The likely cause of residue was an unrecorded treatment and subsequent slaughter of the animal whilst within a withdrawal period. Information was provided regarding statutory requirements for record keeping and advice was given on ensuring withdrawal periods are observed.
Cattle Kidney	Oxytetracycline 7700 ug/kg 1997024	Engemycin	Great Britain	This is a medium sized cattle enterprise linked to 3 holdings. There are 170 animals on the main premises and approximately 300 animals in each of the other holdings that operate as beef cattle with no breeding stock. The premises also operate as a collection centre for young calves ages 10 days to 6 weeks old. Calves stopover in the main premises overnight before being sold and sent for slaughter. Approximately 15-30 calves are brought into the main premises every 2 weeks and are then sent to different abattoirs. The owner bought 4 bottles of Engemycin in November 2019 and 4 more in December. Three bottles remained on the cabinet. There were no records of the positive animal shown in the medicine book. The calf was 30 days old when it was slaughtered. The inspector concluded that the most possible reason for this positive result for Oxytetracycline is that the animal was treated prior to the purchase at the holding of birth and then inadvertently sent for slaughter whilst within the withdrawal period.
Cattle Kidney	Tilmicosin 3500 ug/kg	N/A	Northern Ireland	An investigation was undertaken the animal was from a 250-animal beef finishing herd. The animal was purchased 48 days prior to slaughter and was not treated by the herd keeper. Medicine records were in accordance with legislation. All follow up samples were compliant.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Dihydrostreptomycin 2500 ug/kg	Pen & Strep Suspension for Injection	Northern Ireland	An investigation was undertaken on 4/9/19. It was detailed that the animal had been treated with Vetrimoxin LA (active ingredient Amoxycillin) however residue detected in the kidney of this animal was Dihydrostreptomycin. The withdrawal time given was 18 days which is correct for Vetrimoxin LA cattle – meat (3 days for milk). However, during a stomach operation, a bottle of PenStrep had been administered to the open wound. On inspection, the medicine and movement records were found to be satisfactory and in accordance with legislation requirements.
Cattle Kidney	Penicillin 160 ug/kg	Norocillin	Northern Ireland	An investigation was undertaken in January 2020. The animal is one of 687 cattle and sheep kept on the farm. It was 5 years old and had been purchased 28 days prior to slaughter. The farm's own transport was used to take the animal to the slaughterhouse. Medicine and movement records are kept in accordance with legislation. The animal was administered Norocillin in December 2019 and was slaughtered 8 days later. The withdrawal period for this product is 7 days. The correct dosage and administration were applied. All follow up samples were compliant.
Cattle Kidney	Penicillin 290 ug/kg	Norocillin	Northern Ireland	An investigation was carried out in November 2019. The animal was 13 years old and had been purchased 2 months prior to slaughter. It was taken to slaughter in a separate pen in the farmer's own mode of transport. There were no medicines present on the farm and no medicine records were found. There were no other animals on the farm. Norocillin had been administered to the animal by the farmer 10 days prior to slaughter (withdrawal period is 7 days). He was aware of requirements for adhering to withdrawal periods and confirmed he will keep details of all future treatments.
Cattle Liver	Nitroxinil 330 ug/kg	Trodax	Northern Ireland	An investigation was undertaken on 17/4/19. Medicine and movement records are kept in accordance with legislation. The positive animal had been purchased 6 years prior to slaughter. It comes from a herd of 65 beef breeding animals. It was treated with Trodax injectable approximately 6 weeks prior to slaughter, medication has a 60-day withdrawal period. Medicine had been administrated in accordance with manufacturer's instructions however the owner had misread the date of administration before taking animal for slaughter.
Cattle Liver	Ivermectin 200 ug/kg	Unknown	Northern Ireland	An investigation was undertaken in September. The 3 year old animal had been born on farm. The animal was taken to slaughter in the farmer's own transport along with a bullock; they were kept separate during transport. The medicine and movement records are kept in accordance with legislation. The animal received injectable Ivomac Classic on 25/6/19; it was administered by the herd keeper. The preparation has a 49 day withdrawal and this animal received a 51 day withdrawal. The animal was examined twice (1st & 14th August) however it was not treated with Ivomec on either occasion. On the 1st August animal was treated with Marbocyl 10% and vit B complex. When the vet returned on 14th August he advised killing the animal as it was still suffering from a stomach complaint. The herd keeper raised concern that the carcase weight of his animal was given as 209kg and graded a P1 as she was a pedigree Aubrac and after calving in springtime she was 750kg.
Cattle Plasma	Phenylbutazone 1.3 µg/l	Unknown	Northern Ireland	See Investigation of NSS sample (Phenylbutazone 1.3 µg/l).
Sheep				
Sheep Kidney	Oxytetracycline 14000 ug/kg	Unknown	Northern Ireland	An investigation was undertaken on 21/3/19. Medicine and movement records are kept in accordance with legislation. The positive animal had been purchased almost 3 months prior to slaughter. It was not known which animals had been bought however 4 lambs were treated for lameness with Alamycin on 19/2/19 (20 days prior to slaughter), this medication has a 20-day withdrawal period. Herd keeper claimed medicine had been administrated correctly. Some confusion was caused regarding the correct withdrawal periods as PVP label and medicine bottle label differ. Advice given as to mark sheep when treated so as the same animal is not treated twice. This farm contains approx. 80 lambs, 2 ewes and cattle.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Liver	Closantel 1700 ug/kg	N/A	Northern Ireland	An investigation was completed, and the animal is from flock of 841 animals. The animal had been purchased 2 days prior to slaughter date. Medicine and movement records were kept in accordance with legislation. Three batches of 5 follow samples were taken; there were 2 non-compliant animals in the first batch, 3 non-compliant animals in the second batch and all animals were compliant in the third batch.
Sheep Liver	Closantel 1800 ug/kg	N/A	Northern Ireland	An investigation was completed, and the animal is from flock of 841 animals. The animal had been purchased 2 days prior to slaughter date. Medicine and movement records were kept in accordance with legislation. Three batches of 5 follow samples were taken; there were 2 non-compliant animals in the first batch, 3 non-compliant animals in the second batch and all animals were compliant in the third batch.
Sheep Liver	Closantel 2300 ug/kg	N/A	Northern Ireland	An investigation was completed, and the animal is from flock of 841 animals. The animal had been purchased 2 days prior to slaughter date. Medicine and movement records were kept in accordance with legislation. Three batches of 5 follow samples were taken; there were 2 non-compliant animals in the first batch, 3 non-compliant animals in the second batch and all animals were compliant in the third batch.
Sheep Liver	Closantel 2500 ug/kg	N/A	Northern Ireland	An investigation was completed, and the animal is from flock of 841 animals. The animal had been purchased 2 days prior to slaughter date. Medicine and movement records were kept in accordance with legislation. Three batches of 5 follow samples were taken; there were 2 non-compliant animals in the first batch, 3 non-compliant animals in the second batch and all animals were compliant in the third batch.
Sheep Liver	Closantel 2700 ug/kg	N/A	Northern Ireland	An investigation was completed, and the animal is from flock of 841 animals. The animal had been purchased 2 days prior to slaughter date. Medicine and movement records were kept in accordance with legislation. Three batches of 5 follow samples were taken; there were 2 non-compliant animals in the first batch, 3 non-compliant animals in the second batch and all animals were compliant in the third batch.

Full details of 2019 UK statutory surveillance programme by sector

RED MEAT

Substance	Species	Age &	Matrix	No of	No. above	Concentration where samples above the
A2 Thyrostats						
Thyrostats	Cattle		Urine	165		
	Fattening cattle		Urine	225		
	Horses		Urine	1		
	Pigs		Urine	104		
	Sheep		Urine	78		
A3 Hormones						
Gestagens	Cattle		Kidney Fat	291		
	Fattening cattle		Serum	283		
	Pigs		Kidney Fat	107		
	Sheep		Kidney Fat	85		
Methyltestosterone	Pigs		Feed	31		
Oestradiol	Cattle	Male	Serum	206		
	Fattening cattle	Male	Serum	334		
Steroid Screen 1	Cattle		Urine	1047	12	1.6/2.7, 2.6, (alpha-boldenone)
	Fattening cattle		Urine	1161	17	0.2/3.0, 0/2.5, 2.2, 2.9, 3.0, 18 (alpha-
	Horses		Urine	2		
	Pigs		Urine	357		
	Sheep		Urine	509	33	0.76/4.1,1.0/2.3, 2.0, 2.0, 2.1, 2.1, 2.3, 2.3,
Testosterone	Cattle	Female	Serum	322		
	Fattening cattle	Female	Serum	322		
A4 Hormones						
Zeranol	Cattle		Urine	382	4	0.85, 1.1, 1.5, 15 (taleranol)
	Fattening cattle		Urine	355	9	1.0, 1.2, 1.2, 1.5, 1.8, 1.8, 2,2, 9.6 13
	Horses		Urine	1		
	Pigs		Urine	241		
	Sheep		Urine	104	3	0.71, 1.2, 4.2 (taleranol)

A5 Beta-Agonists						
	Calves		Liver	7		
	Cattle		Liver	563		
	Fattening cattle		Feed	198		
	Fattening cattle		Urine	213		
	Horses		Liver	18		
	Pigs		Feed	49		
	Pigs		Liver	396		
	Sheep		Liver	292		
A6 Annex IV						
Chloramphenicol	Calves	< 6 months	Kidney	7		
	Cattle		Kidney	295		
	Fattening cattle		Feed	308		
	Fattening Cattle		Urine	54		
	Horses		Kidney	3		
	Pigs		Kidney	263		
	Sheep		Kidney	4156		
Nitrofurans	Calves	< 6 months	Kidney	4		
	Cattle		Kidney	166		
	Fattening cattle		Feed	212		
	Horses		Kidney	2		
	Pigs		Feed	9		
	Pigs		Kidney	323		
	Sheep		Kidney	248		
Nitroimidazoles	Calves	< 6 months	Kidney	4		
	Cattle		Kidney	172		
	Horses		Kidney	2		
	Pigs		Feed	18		
	Pigs		Kidney	241		
	Sheep		Kidney	117		
B1 Antimicrobial						
AMS1	Calves	< 6 months	Kidney	130	2	5800 (chlortetracycline) 130 (sulfadiazine)
	Cattle		Kidney	1245		
	Horses		Kidney	7		
	Pigs		Kidney	1394	1	110 (sulphadiazine) & 64 (trimethoprim)
	Sheep		Kidney	2142		
Florfenicol	Calves	< 6 months	Kidney	97	2	480, 2300 (florfenicol)
	Cattle		Kidney	260	1	820 (florfenicol)
	Pigs		Kidney	141		
	Sheep		Kidney	227		
AMS2	Cattle		Kidney	133		
	Pigs		Kidney	386		
	Sheep		Kidney	7		
AMS4	Calves	< 6 months	Kidney	105	3	1700, 2600, 11000 (dihydrostreptomycin)
	Cattle		Kidney	132		
	Sheep		Kidney	105		
Ceftiofur	Pigs		Kidney	105		

B2A Anthelmintics						
Anthelmintics	Cattle		Liver	722	1	1800 (closantel)
	Pigs		Liver	333	1	180 (ivermectin)
	Sheep		Liver	1532	5	2300, 2400, 3800, 4400, 5300 (closantel)
Avermectins	Cattle		Liver	301		
	Horses		Liver	7		
	Pigs		Liver	133		
	Sheep		Liver	475	2	160 (ivermectin) 190 (doramectin)
B2B Coccidiostats						
Coccidiostats	Calves	< 6 months	Liver	17		
	Horses		Liver	2		
	Pigs		Liver	113		
	Sheep		Liver	335	1	780 (toltrazuril sulfone)
B2C Pesticide Screen						
Pyrethroids + Carbamates	Calves	< 6 months	Kidney Fat	31		
	Horses		Kidney Fat	2		
	Cattle		Kidney Fat	5		
	Cattle		Liver	5		
	Pigs		Kidney Fat	78		
	Pigs		Liver	7		
	Sheep		Kidney Fat	571		
B2D Sedatives						
	Breeding Boar		Liver	61		
	Cattle		Liver	37		
	Horses		Liver	7		
	Pigs		Kidney	28		
	Pigs		Liver	118		
	Sheep		Kidney	7		
	Sheep		Liver	92		
B2E NSAIDs						
	Cattle		Kidney	347	2	76 (diclofenac) 650 (meloxicam)
	Cattle		Plasma	67	2	1.3, 2.8 (phenylbutazone)
	Horses		Kidney	44	1	4.4 (oxyphenylbutazone) 5.7 (phenylbutazone)
	Pigs		Kidney	41		
	Sheep		Kidney	51		
B2F Glucocorticoids						
	Cattle		Liver	337		
	Horses		Liver	6		
	Pigs		Liver	48		
	Sheep		Liver	24		
Carbadox	Pigs		Liver	8		
B3A Pesticide Screen						
OC/PCBs	Cattle		Kidney Fat	78		
	Horses		Kidney Fat	1		
	Pigs		Kidney Fat	73		
	Sheep		Kidney Fat	130		

B3B Pesticide Screen						
OPs	Cattle		Kidney Fat	224		
	Horses		Kidney Fat	1		
	Pigs		Kidney Fat	148		
	Sheep		Kidney Fat	587		
B3C Heavy Metals						
Metals	Cattle		Kidney	69	3	1300 (cadmium) 720, 1400 (lead)
	Cattle		Muscle	11		
	Horses		Kidney	1	1	11000 (cadmium)
	Pigs		Kidney	14		
	Pigs		Muscle	2		
	Sheep		Kidney	54	1	700 (lead)
	Sheep		Muscle	4		
B3D Mycotoxins						
Mycotoxins	Cattle		Liver	30		
	Horses		Liver	1		
	Pigs		Liver	75		
	Sheep		Liver	16		
POULTRY						
Substance Group/Analyte	**Species**	**Age & Sex**	**Matrix**	**No of Analyses**	**No. above Action Level**	**Concentration where samples above the Action Level (µg/kg/l)**
A3 Hormones						
Steroid screen 2	Broilers		Liver	540		
	Broilers		Serum	65		
	Ducks		Liver	9		
	Hens		Liver	30		
	Turkeys		Liver	77		
A5 Beta-Agonists						
	Broilers		Feed	207		
	Broilers		Liver	424		
	Ducks		Feed	5		
	Ducks		Liver	9		
	Hens		Feed	10		
	Hens		Liver	24		
	Turkeys		Feed	21		
	Turkeys		Liver	66		

A6 Annex IV						
Chloramphenicol	Broilers		Muscle	666		
	Ducks		Muscle	15		
	Hens		Muscle	36		
	Turkeys		Muscle	44		
Nitrofurans	Broilers		Feed	290		
	Broilers		Muscle	557		
	Ducks		Feed	5		
	Ducks		Muscle	10		
	Hens		Feed	15		
	Hens		Muscle	33		
	Turkeys		Feed	27		
	Turkeys		Muscle	53		
Nitroimidazoles	Broilers		Feed	289		
	Broilers		Serum	940		
	Ducks		Feed	6		
	Ducks		Serum	17		
	Hens		Feed	14		
	Hens		Serum	36		
	Turkeys		Feed	28		
	Turkeys		Serum	70		
B1 Antimicrobial						
AMS1	Broilers		Muscle	1183		
	Ducks		Muscle	27		
	Geese		Muscle	3		
	Hens		Muscle	79		
	Turkeys		Muscle	108		
Flofenicol	Broilers		Muscle	156		
AMS2	Broilers		Muscle	538		
	Ducks		Muscle	8		
	Geese		Muscle	4		
	Hens		Muscle	32		
	Turkeys		Muscle	78		
Tiamulin	Broilers		Muscle	12		
B2A Anthelmintics						
Anthelmintics	Broilers		Liver	290		
	Ducks		Liver	9		
	Hens		Liver	31		
	Turkeys		Liver	72		
B2B Coccidiostats						
Coccidiostats	Broilers		Liver	1380	1	10 (monensin)
	Hens		Liver	23		
	Turkeys		Liver	89	1	35 (maduramycin)
B2C Pesticide Screen						
Pyrethroids + Carbamates	Broilers		Fat	9		
	Broilers		Liver	87		
	Ducks		Liver	8		
	Hens		Liver	9		
	Turkeys		Liver	15		

B2E NSAIDs						
	Broilers		Liver	6		
	Ducks		Liver	6		
	Hens		Liver	6		
	Turkeys		Liver	6		
B3A Pesticide Screen						
	Broilers		Fat	9		
	Broilers		Liver	268		
	Ducks		Liver	6		
	Hens		Liver	10		
	Turkeys		Liver	12		
B3C Heavy Metals						
Metals	Broilers		Liver	10		
	Broilers		Muscle	87		
	Ducks		Muscle	4		
	Hens		Muscle	3		
	Turkeys		Muscle	8		
B3D Mycotoxins						
Mycotoxins	Broilers		Liver	15		
	Hens		Liver	1		
	Turkeys		Liver	1		
EGGS						
Substance Group/Analyte	**Species**	**Age & Sex**	**Matrix**	**No of Analyses**	**No. above Action Level**	**Concentration where samples above the Action Level (µg/kg/l)**
A6 Annex IV						
Chloramphenicol	Eggs		Eggs	187		
Nitrofurans	Eggs		Eggs	161		
Nitroimidazoles	Eggs		Eggs	161		
B1 Antimicrobial						
AMS1	Eggs		Eggs	179		
Florfenicol	Eggs		Eggs	73		
AMS2	Eggs		Eggs	127		
AMS3	Eggs		Eggs	198		
Tiamulin	Eggs		Eggs	35		
B2A Fipronil						
Fipronil	Eggs		Eggs	105		
B2B Coccidiostats						
Coccidiostats	Eggs		Eggs	640		
B3A Pesticide Screen						
	Eggs		Eggs	68		

FISH						
Substance Group/Analyte	**Species**	**Age & Sex**	**Matrix**	**No of Analyses**	**No. above Action Level**	**Concentration where samples above the Action Level (µg/kg/l)**
A3 Hormones						
Methyltestosterone	Trout		Muscle & Skin	5		
A6 Annex IV						
Chloramphenicol	Salmon		Muscle & Skin	185		
	Trout		Muscle & Skin	17		
Nitrofurans	Salmon		Muscle & Skin	186		
	Trout		Muscle & Skin	4		
Nitroimidazoles	Salmon		Muscle & Skin	190		
	Trout		Muscle & Skin	8		
B1 Antimicrobial						
AMS1	Salmon		Muscle & Skin	113		
	Trout		Muscle & Skin	5		
AMS2	Salmon		Muscle & Skin	37		
	Trout		Muscle & Skin	5		
	Turbot		Muscle & Skin	1		
AMS3	Salmon		Muscle & Skin	193		
	Trout		Muscle & Skin	5		
Florfenicol	Salmon		Muscle & Skin	97		
B2A Anthelmintics						
Anthelmintics	Salmon		Muscle & Skin	119		
	Trout		Muscle & Skin	2		
Avermectins	Salmon		Muscle & Skin	104		
	Trout		Muscle & Skin	2		
B2C Pesticide Screen						
Pyrethroids	Salmon		Muscle & Skin	138		
B3A Pesticide Screen						
	Salmon		Muscle & Skin	12		
	Trout		Muscle & Skin	3		
B3B Pesticide Screen						
OPs	Salmon		Muscle & Skin	45		
BC Heavy Metals						
Metals	Salmon		Muscle & Skin	24		
	Trout		Muscle & Skin	2		
B3D Mycotoxins						
	Salmon		Muscle & Skin	10		
	Trout		Muscle & Skin	3		
B3E Dyes						
Dyes	Salmon		Muscle & Skin	235		
	Trout		Muscle & Skin	71		

MILK						
Substance Group/Analyte	**Species**	**Age & Sex**	**Matrix**	**No of Analyses**	**No. above Action Level**	**Concentration where samples above the Action Level (µg/kg/l)**
A6 Annex IV						
Chloramphenicol	Cattle		Milk	892		
	Goats		Milk	5		
	Sheep		Milk	6		
Dapsone	Cattle		Milk	34		
	Goats		Milk	1		
B1 Antimicrobial						
AMS1	Cattle		Milk	509		
	Goats		Milk	3		
	Sheep		Milk	6		
Florfenicol	Cattle		Milk	141	1	0.34 (florfenicol)
	Goats		Milk	1		
	Sheep		Milk	3		
AMS2	Cattle		Milk	280		
	Goats		Milk	2		
	Sheep		Milk	3		
AMS3	Cattle		Milk	375		
	Goats		Milk	3		
	Sheep		Milk	3		
AMS4	Cattle		Milk	220		
	Goats		Milk	1		
	Sheep		Milk	1		
Cefquinome	Cattle		Milk	154		
	Goats		Milk	2		
	Sheep		Milk	2		
Ceftiofur	Cattle		Milk	105		
	Goats		Milk	1		
	Sheep		Milk	1		
B2A Anthelmintics						
Anthelmintics	Cattle		Milk	410		
	Goats		Milk	4		
	Sheep		Milk	6		
Avermectins	Cattle		Milk	302		
	Goats		Milk	2		
	Sheep		Milk	3		
B2E NSAIDs						
	Cattle		Milk	172	1	0.48 (diclofenac)
	Goats		Milk	2		
	Sheep		Milk	3		
B3A Pesticide Screen						
OCs/PCBs	Cattle		Milk	33		
	Goats		Milk	1		
	Sheep		Milk	1		

B3B Pesticide Screen						
OPs	Cattle		Milk	38		
	Sheep		Milk	1		
B3C Heavy Metals						
Metals	Cattle		Milk	43		
B3D Mycotoxins						
Mycotoxins	Cattle		Milk	39		
GAME						
Substance Group/Analyte	**Species**	**Age & Sex**	**Matrix**	**No of Analyses**	**No. above Action Level**	**Concentration where samples above the Action Level (ug/kg)**
A2 Thyrostats						
Thyrostats	Deer		Liver	4		
A3 Hormones						
Steroid Screen 2	Deer		Liver	8		
A5 Beta-Agonists						
Beta-Agonists	Deer		Liver	12		
A6 Annex IV						
Nitroimidazoles	Deer		Muscle	4		
B1 Antimicrobial						
AMS1	Deer		Kidney	28		
B2A Anthelmintics						
Anthelmintics	Deer		Liver	5		
	Partridge		Liver	4		
	Pheasant		Liver	5		
	Red Grouse		Liver	6		
B2B Coccidiostats						
Coccidiostats	Partridge		Muscle	8	3	120, 250, 290 (lasalocid)
B2C Pesticide Screen						
Pyrethroids	Deer		Kidney Fat	4		
B2D Sedatives						
	Deer		Liver	4		
B2E NSAIDS						
	Deer		Kidney	4		
B3A Pesticide Screen						
	Deer		Kidney Fat	7		
B3C Heavy Metals						
Metals	Deer		Muscle	6		
	Partridge		Muscle	6		
	Pheasant			6		
	Wild Deer		Muscle	101		

HONEY						
Substance Group/Analyte	**Species**	**Age & Sex**	**Matrix**	**No of Analyses**	**No. above Action Level**	**Concentration where samples above the Action Level (ug/kg)**
A6 Annex IV						
Chloramphenicol	Bees		Honey	11		
Nitrofurans	Bees		Honey	11		
B1 Antimicrobial						
AMS1	Bees		Honey	22		
AMS3	Bees		Honey	22		
AMS4	Bees		Honey	21		
AMS5	Bees		Honey	21		
B2C Pesticide Screen						
Pyrethroids	Bees		Honey	11		
B3A Pesticide Screen						
	Bees		Honey	13		
B3B Pesticide Screen						
OPs	Bees		Honey	15		
B3C Heavy Metals						
Metals	Bees		Honey	14	1	250 (lead)
B3F						
Amitraz	Bees		Honey	11		
Naphthalene	Bees		Honey	11		