

NATIONAL STATUTORY SURVEILLANCE SCHEME FOR VETERINARY RESIDUES IN ANIMALS AND ANIMAL PRODUCTS: 2017

RESIDUES DETECTED ABOVE THE REFERENCE POINT TO DATE: 31 December 2017

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)
Cattle Urine	Steroid (Screen 1)	1427	38	0.7 (male), 5 (female)	0.36, 0.37, 0.42, 0.45, 0.51, 0.63, 0.63, 0.85, 0.97, 1.1, 1.1, 1.2, 1.3, 1.5, 1.6, 1.8, 1.9, 2.0, 2.6, 2.6, 2.8, 4.3, 4.5, 5.6, 5.6, 5.8, 5.8, 5.9, 5.9, 6.3, 6.3, 6.5, 6.7, 7.0, 8.1, 8.6, 10.0, 12, 23, 29 (alpha-nortestosterone) 13,17, 20 (testosterone) 3.1 (alpha-boldenone) 124, 362, (a-estradiol)
		415	3	n/a	
		415	2	n/a	
Cattle Urine	Thyrostats	136	1	30	14 (thiouracil)
Cattle Kidney	Antimicrobial (Screen 1)	1248	3	600	1700 (oxytetracycline)
				100	860 (sulfadiazine)
				3000	11000 (tulathromycin)
Cattle Kidney	Metals	69	3	1000	1400,1600, 3400 (cadmium)
Cattle Liver	Anthelmintics	521	2	1000	4600, 14000 (closantel)
		131	1	20	67 (nitroxinyl)
Fattening Cattle Serum	Testosterone	279	2	0.7 (male), 5 (female) Presence	3.5, 0.42 (beta-testosterone)
Fattening Cattle Urine	Steroid (Screen 1)	1294	8	0.7 (male), 5 (female) Presence	0.23, 2.2, 2.9, 5.6, 9.1, 9.5, 18 (alpha-nortestosterone) 0.26 (beta-boldenone)
Fattening Cattle Urine	Zeranol	570	14 (Both substances found in 7 samples)	Presence	0.78, 1.3, 1.3, 1.3, 2.1, 8.6, 13 (taleranol) 0.28, 0.70, 0.71, 0.88, 0.36, 5.5. 4.4 (zeranol)
Calves Kidney	Antimicrobial (Screen 1)	101	3	100	1100, 1300, 3200 (gamithromycin)
			1	1000	6800 (tilmicosin)
			1	600	770 (oxytetracycline)
			1	600	1000 (chlortetracycline)
Calves Kidney	Antimicrobial (Screen 4)	98	1	1000	5800 (dihydrostreptomycin)
Calves Kidney	Florfenicol	97	1	300	8400 (florfenicol)
Cattle Urine	Zeranol	796	8 (Both substances found in 4 samples)	Presence	4.9, 13, 1.6, 1.7 (taleranol) 0.57, 0.63,1.1, 4.4 (zeranol)
Cattle Milk	Chloramphenicol	887	5	Presence	0.66, 1.13, 2.3, 2.4, 4.3 (florfenicol)
Cattle Milk	Antimicrobials	1,222	1	Presence	110 (penicillin G)
Cattle Milk	Avermectins	285	1	16	19.1 (clorsulon)
		104	2	Presence	1.5, 6.9 (ivermectin)
		104	1	45	70 (closantel)
Cattle Milk	Anthelmintics	397	1	10	21 (triclabendazole sulfone)
Pig Kidney	NSAIDS	36	1	Presence	9.7 (ibuprofen)
Pig Liver	Mycotoxins	79	2	Presence	3.1, 4.2 (ochratoxin A)

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 Kidney	Metals	52	4	500 1000	850, 1600 (lead) 1100, 1800 (cadmium)
Sheep Kidney	Antimicrobials	2127	1	600	1185 (oxytetracycline)
Sheep Liver	Anthelmintics	1,523	5 substances found in 12 samples	500 1500 250 50 20	75*, 110* (fenbendazole) 1700, 1700, 2000, 2500, 2700, 3000, 3100, 3600, 2304, 4662 (closantel) 710, 1800*** (triclabendazole) 44, 110*** (triclabendazole sulfoxide) 170***, 340*** (triclabendazole sulfone) 470*, 760* (oxfendazole) 140 (nitroxinyl)
Sheep Urine	Steroid (Screen 1)	549	36 13 11	2 Presence National level	2.0, 2.1, 2.1, 2.2, 2.2, 2.2, 2.3, 2.3, 2.4, 2.4, 2.6, 2.7, 2.9, 3.0, 3.1, 3.2, 3.4, 3.5, 3.5, 3.6, 3.8, 4.2, 4.3, 4.3, 4.6, 4.9, 5.0, 5.1, 5.1, 5.2, 6.5, 8.3, 8.5, 10, 10, 11 (alpha-boldenone) 2.8, 4.8, 5.6, 5.7, 5.8, 5.9, 6.3, 6.7, 7.0, 8.1, 10, 14 (alpha-nortestosterone) 0.65, 0.67, 0.78, 0.96, 1.3, 1.4, 1.4, 1.5, 1.6, 1.9, (beta-nortestosterone) 0.56 (beta-boldenone)
Sheep Urine	Zeranol	110	2 (Both substances found in one sample)	Presence	4.5 (taleranol) 4.3 (zeranol)
Broiler Liver	Coccidiostats	1,269	2	8	13, 13 (monensin)
Broiler Muscle	Chloramphenicol	619	1	Presence	0.31 (chloramphenicol)
Hen Egg	Coccidiostats	506	2	Presence 150	4.0 (narasin) 590 (lasalocid)
Horse Kidney	NSAIDs	36	1	Presence	28 (phenylbutazone)
Horse Kidney	Metals	1	1	1000	2200 (cadmium)
Horse Urine	Zeranol	1	2 (Both substances found in one sample)	Presence	0.82 (taleranol) 1.1 (zeranol)
Partridge muscle	Coccidiostats	5	1	60	340 (lasalocid)
Pheasant muscle	Coccidiostats	5	1	5	99 (lasalocid)
Wild Deer muscle	Metals	93	1	1000	23000 (lead)
Farmed Deer Kidney Fat	OC/PCBs	12	1	1000	1200 (*DDE-p,p')

*Sum of Fenbendazole & Oxfendazole

*** Sum of Triclabendazole metabolites

*** sum of triclabendazole sulfoxide & triclabendazole sulfone

RESULTS OF FOLLOW-UP INVESTIGATIONS: 31 December 2017

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle				
Cattle Urine	Alpha-boldenone 3.1 µg/kg 1724199		Great Britain	A dairy farm of approximately 265 cattle present on farm with 200 sheep also present. There is no bull present on farm. The cows are fed straw and silage; they are wormed, fluked and receive Rotavec at the time of drying off. All medicines and medicine records were found to be kept and stored in accordance with the regulations. There was no evidence of any steroidal substance used on farm, the cause or residue is likely to have been due to faecal contamination.
Cattle Urine	a-Estradiol 124 µg/kg		Northern Ireland	Resample received and was compliant. No further investigation required.
Cattle Urine	a-Estradiol 362 µg/kg		Northern Ireland	No investigation required as animal resampled and was compliant
Cattle Urine	Thiouracil 14 µg/kg		Northern Ireland	No investigation required, levels detected can be related to dietary factors
Cattle Urine	Alpha-nortestosterone 0.36 µg/kg 1713634		Great Britain	A 560 hectare farm of approximately 1450 beef cattle with laying poultry also on site. All records are kept in accordance with the regulations. At fattening stage the cattle are fed, straw, barley, wheat and dark grains + minerals. There was no evidence of any hormonal substances used on farm thus the cause of the positive residue is likely to be due to natural circumstances.
Cattle Urine	Alpha-nortestosterone 0.37 µg/kg 1718379		Great Britain	A well run large farm with sheep and cattle. All records were kept in accordance with the regulations with the withdrawal periods observed. It is likely the cause of residue was naturally occurring and the factors behind this have since been discussed with the farmer.
Cattle Urine	Alpha-nortestosterone 0.42 µg/kg 1707591		Great Britain	This is a well-run family farm with around 150 fattening cattle. Cattle are purchased at market and are permanently housed during the winter. The farm had good management and record keeping and no issues were found. It is likely that this residue was naturally occurring.
Cattle Urine	Alpha-nortestosterone 0.45 µg/kg 1730793		Great Britain	A large cattle farm with full accreditation. Upon inspection of the medicine storage the only issue was with one expired medicine which had not yet been marked. The animals were also inspected and there appeared to be no signs of abnormal muscular confirmation. The investigation concluded the likely cause of residue was due to naturally occurring circumstances.
Cattle Urine	Alpha-nortestosterone 0.51 µg/kg 1702619		Great Britain	A small-medium sized farm of 150 cattle. Cattle are fed with home grown barley, straw, silage, vitamins and minerals. All medicines are prescribed by a vet with anthelmintics supplied by a nutritional partner. During the inspection cattle were visually inspected and found to have normal growth development. The inspection found no evidence of any steroidal substance used on farm, the cause of residue is likely to have been due to natural levels of occurrence within the animal.
Cattle Urine	Alpha-nortestosterone 0.63 µg/kg 1707481		Great Britain	This is a medium sized farm hosting sheep and cattle. Medicines at the farm are only administered when required and records were exemplary. There was no evidence of growth promoters being used on the livestock. It is likely the positive result was caused by the journey from the farm to the abattoir.
Cattle Urine	Alpha-nortestosterone 0.63 µg/kg 1718389		Great Britain	This is a large farm of approximately 400 sheep on site with 819 finishing cattle all of which go directly for slaughter. The feed of the finishing cattle includes potatoes, hay, minerals, pot ale and rapeseed. Medicines records were of exceptional standard and stored aptly. There was no evidence of any steroidal substance used on farm. The conclusion reached was that the cause of residue was due to natural levels of occurrence within the animal.
Cattle Urine	Alpha-nortestosterone 0.63 µg/kg 1718404		Great Britain	This is a medium sized dairy cattle farm. The cattle are bought at approximately 18 months of age and fattened with non-medicated feed prior to slaughter. The farm appeared to be tidy and well kept, all medicines records were filled correctly and there was no evidence of any use of illegal substances. The conclusion reached was that the cause of residue was due to natural levels of occurrence within the animal.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Urine	Alpha-nortestosterone 0.85 µg/kg 1718495		Great Britain	A well-managed large farm of 1200 beef cattle and 200 sheep. The cattle are fed a mixed ration of potato, bred and home-grown hay and silage. Upon inspection the animals showed normal body conformation; there was no evidence of usage of any steroidal substance. It was concluded the cause of residue was naturally occurring.
Cattle Urine	Alpha-nortestosterone 0.97 µg/kg 1724144		Great Britain	This is a medium-sized dairy farm supporting 120 dairy cows and followers. The main crop is grass for grazing and silage. All medicine records and storage were sufficient; there was no indication of any use of hormonal substance used on farm. It was concluded the cause of residue was naturally occurring.
Cattle Urine	Alpha-nortestosterone 1.1 µg/kg 1718421		Great Britain	This is a large cattle farm of 800 fattening cattle at any given period with approximately 20 animals sent to slaughter per week. The farm is very clean and well-kept with excellent medicines records. There was no evidence of any use of steroidal substance. It was concluded the cause of residue was naturally occurring.
Cattle Urine	Alpha-nortestosterone 1.1 µg/kg 1718435		Great Britain	A medium sized farm with full accreditation keeping 275 cattle and 350 sheep. The farmer appeared to be well organised with a good standard of management on farm. Very few medicines are used on farm but they were all stored correctly and in date; the farmer was able to confirm the animal was not treated with any medication. The investigation concluded the cause of residue was due to natural circumstances.
Cattle Urine	Alpha-nortestosterone 1.2 µg/kg 1730841		Great Britain	A small cattle farm of 49 cattle. The animals are fed with home-grown barley and beans. Medicines records were well kept and readily available. At the time of inspection there did appear to be out-of-date antibiotics and other medicines in the medicines cupboard. There was no record of steroidal substances used on farm and the investigation subsequently concluded the cause of residue was due to naturally occurring circumstances.
Cattle Urine	Alpha-nortestosterone 1.3 µg/kg 1730851		Great Britain	A large cattle farm of over 200 cattle. During winter months animals are fed wheat, barley and potatoes. Wormers and antibiotics are kept on site to treat any animals at the farm. There was no evidence of any unauthorised products used on farm. The investigation concluded the cause of residue was due to naturally occurring circumstances.
Cattle Urine	Alpha-nortestosterone 1.5 µg/kg 1718465		Great Britain	This is a small beef finishing farm with approximately 200 cattle. The farm is well run with records up to date and the regulations adhered to. The cattle are usually kept on farm for 6-8 months. This was a randomly chosen animal and upon inspection by the Official Veterinarian showed no signs of abnormality or any abnormal muscling or any injection sites. Natural occurrence of the residue was the conclusion reached after investigation.
Cattle Urine	Alpha-nortestosterone 1.8 µg/kg 1724109		Great Britain	A medium sized farm rearing 148 beef cattle; there are 131 females with 2 bulls and 15 other males aged 4-18 months. Upon inspection, the medicines records were updated with animal movement of all cattle accurately recorded. There was no evidence of any steroidal substances used on this animal or on farm. The investigation concluded the cause of residue was due to natural causes.
Cattle Urine	Alpha-nortestosterone 1.9 µg/kg 1724151		Great Britain	A medium sized farm rearing a total of 490 cattle and poultry. Medicines are only administered when required and records appeared to be kept in accordance with the regulations. There was no evidence of any steroidal substances used on farm and the investigation concluded the cause of residue was due to natural occurrence.
Cattle Urine	Alpha-nortestosterone 2 µg/kg 1718325		Great Britain	A medium sized farm comprising of cattle, sheep and horses. No medicines are kept on site at the farm and all records are apt and kept in accordance with the regulations. It was concluded the cause of residue was naturally occurring.
Cattle Urine	Alpha-nortestosterone 2.6 µg/kg 1713665		Great Britain	A small organic farm with sheep, cattle, pigs and horses. The feed is predominantly natural with the livestock in good condition and withdrawal periods impeccably observed with medicines stores safely in accordance with the Veterinary Medicine Regulations. It is likely the cause of residue was naturally occurring. The farmer has since been informed of the facts behind the cause of nortestosterone.
Cattle Urine	Alpha-nortestosterone 2.6 µg/kg 1718434		Great Britain	A large farm comprising of cattle and calves. Record keeping and administration of medicines are in accordance with the Veterinary Medicines Regulations. The animals are kept in good clean conditions and displayed normal behaviour. It is likely the level of residues found were due to natural occurrence.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Urine	Alpha-nortestosterone 2.8 µg/kg		Northern Ireland	No investigation required as animal resampled and was complaint
Cattle Urine	Alpha-nortestosterone 4.3 µg/kg 1707540		Great Britain	A small farm with cattle, sheep and horses kept on site. All record keeping and administration of medicines were apt and in accordance with the Veterinary Medicines Regulations. The level of residue found in the animal was thought to be naturally occurring.
Cattle Urine	Alpha-nortestosterone 4.5 µg/kg 1707488		Great Britain	This is a medium sized farm with cattle of any age. Record keeping and administration of medicines are in accordance with the Veterinary Medicines Regulations. It is likely the level the positive result in the steer was naturally occurring.
Cattle Urine	Alpha-nortestosterone 5.6 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 5.8 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 5.8 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 5.9 µg/kg		Northern Ireland	Unbeknownst to the farmer at the time the animal was in calf hence the cause of residue. No further investigation required.
Cattle Urine	Alpha-nortestosterone 5.9 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 6.3 µg/kg 1724161		Great Britain	A small holding with 10 cattle. There were no medicines kept on farm, the farmer informed the inspector that he does not treat the animals and the last treatment occurred two years ago (there were no records of this). The likely cause of residue was due to natural occurrence within the animal. The farmer has since been advised to keep a medicines book and all records of movement.
Cattle Urine	Alpha-nortestosterone 6.3 µg/kg		Northern Ireland	Follow up sample compliant
Cattle Urine	Alpha-nortestosterone 6.5 µg/kg 1730802		Great Britain	Initial enquiries showed that this animal was in calf at the time of sampling, therefore the most likely cause of residue is from natural levels.
Cattle Urine	Alpha-nortestosterone 6.7 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 7.0 µg/kg		Northern Ireland	Herd flagged for sampling at slaughter house
Cattle Urine	Alpha-nortestosterone 8.1 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 8.6 µg/kg		Northern Ireland	Animal calved 2 weeks prior to sampling, concentrations relating to pregnancy. No investigation required

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Urine	Alpha-nortestosterone 10.0 µg/kg		Northern Ireland	Pregnant female. No investigation required
Cattle Urine	Alpha-nortestosterone 12 µg/kg 1730880		Great Britain	A large farm of approximately 760 dairy cattle. The cattle are milked twice a day all year round. Upon investigation the inspector was provided with a comprehensive copy of the medicines record; there were no medicines which could have caused the positive result and no evidence of any steroidal substance used on farm. The investigation concluded the cause of residue was due to natural circumstances. The farmer was advised to ensure out-of-date medicines from the medicines cabinet are disposed of correctly.
Cattle Urine	Alpha-nortestosterone 23 µg/kg 1718397		Great Britain	Unable to investigate to incorrect sample data.
Cattle Urine	Alpha-nortestosterone 29 µg/kg 1718440		Great Britain	This is a large farm of dairy cattle and followers. All medicines are kept safely and securely in accordance with the regulations. There was no evidence of any use of steroidal substance. It is likely the cause of residue in the animal was a naturally occurring circumstance.
Cattle Urine	Testosterone 13 µg/kg		Northern Ireland	No investigating visit was undertaken as the animal concerned was a bull and bull animals can often produce high physiological levels of this hormone.
Cattle Urine	Testosterone 17 µg/kg		Northern Ireland	No investigating visit was undertaken as the animal concerned was a bull and bull animals can often produce high physiological levels of this hormone.
Cattle Urine	Testosterone 20 µg/kg		Northern Ireland	No investigating visit was undertaken as the animal concerned was a bull and bull animals can often produce high physiological levels of this hormone.
Cattle Urine	Taleranol 4.9 µg/l & Zeranol 1.1 µg/l 1707750		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.
Cattle Urine	Taleranol 1.6 µg/l & Zeranol 0.57 µg/l 1724339		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.
Cattle Urine	Taleranol 1.7 µg/l & Zeranol 0.63 µg/l 1724351		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.
Cattle Urine	Taleranol 13 µg/l & Zeranol 4.4 µg/l		Northern Ireland	No investigation required as levels indicative of fusarium toxin contamination
Cattle Liver	Closantel 4600 µg/kg 1717745		Great Britain	This is a small suckler farm with cattle, sheep and gamebirds. All regulations and recommendations appear to have been adhered to. The cause of residue could not be ascertained, however, there is a distinct possibility the non-compliance came as a result of the animal being accidentally injected twice in the weigh crush where the animals are treated. This case will be referred to the Rural Payments Agency for further investigation.
Cattle Liver	Closantel 14000 µg/kg 1713456	Closamectin 5mg/ml + 200 mg/ml Pour-on Solution for Cattle	Great Britain	A small family-owned farm of cattle and sheep. Cattle are bought into the farm when they are roughly 12 months old and sold for slaughter at the age of 2. The farmer treated all cattle with Closamectin in March 2017 with that the expectation the 28-day withdrawal period had been correctly. There is acknowledgement of inaccuracies in the record-keeping of medicines administered to the animal; the farmer believes the non-compliance could be attributed to a potential overdose or possible unrecorded treatment. Following the investigation into the non-compliance the farmer has been advised to keep accurate records of all medicines administered to the cattle, undertaking checks upon administration of medicines and ensuring segregation of animals during treatment to prevent possible contamination. Furthermore the farmer was also issued with a copy of the medicines recording requirements for keepers of food-producing animals (VM24) and its contents were discussed with him.
Cattle Liver	Nitroxinyl 67 µg/kg	Trodox	NI	An investigation was completed on 31/7/17. There is a herd of 40 beef animals and 300 sheep. 201

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Fattening Cattle Urine	Alpha-boldenone 2.2 µg/kg 1700085		Great Britain	A medium sized farm of sheep and cattle. Medicine record keeping was apt and in accordance with the regulations. The cause of residue is likely to have been due to faecal contamination.
Fattening Cattle Urine	Alpha-nortestosterone 0.23 µg/kg 1700176		Great Britain	This is a large winter-housed, summer-grazed beef suckler farm. Cattle are fattened to slaughter and sold through market. The farm had a high standard of management and good record keeping. There were no issues of non-compliance found on farm and it is likely that the residue was naturally occurring.
Fattening Cattle Urine	Alpha-nortestosterone 9.1 µg/kg 1700172		Great Britain	Initial enquiries showed that this animal was in calf at the time of sampling, therefore the most likely cause of residue is from natural levels.
Fattening Cattle Urine	Alpha-nortestosterone 9.5 µg/kg 1700201		Great Britain	Initial enquiries showed that this animal was in calf at the time of sampling, therefore the most likely cause of residue is from natural levels.
Fattening Cattle Urine	Alpha-nortestosterone 18 µg/kg 1710320		Great Britain	Initial enquiries showed that this animal was in calf at the time of sampling, therefore the most likely cause of residue is from natural levels.
Fattening Cattle Serum	Beta-testosterone 3.5 µg/kg 1700519		Great Britain	The calf concerned came from a large cattle farm. Initial documentation stated the calf was a female when in fact it was a male therefore displaying natural levels of testosterone. No further investigation was required.
Fattening Cattle Serum	Beta-testosterone 0.42 µg/kg 1719471		Great Britain	This is a large beef cattle farm approximately 500 in number. The cattle spend the summer seasons grazing in the fields adjacent to the shed. Medicines are kept inside the house and upon inspection records appeared to be in order and updated with full compliance. There was no evidence or suggestion of any steroidal substance used on farm. It is likely the positive result was due to natural causes.
Fattening Cattle Urine	Alpha-nortestosterone 2.9 µg/kg 1710297		Great Britain	This is a medium sized farm comprising of cattle, sheep and horses. The steers are purchased locally and fattened for sale to a local abattoir. Upon inspection there was no evidence of any malpractice or use of hormonal substances in the livestock. It is likely the positive result was due to natural causes.
Fattening Cattle Urine	Alpha-nortestosterone 5.6 µg/kg 1728111		Great Britain	Initial enquiries showed that this animal was in calf at the time of sampling, therefore the most likely cause of residue is from natural levels.
Fattening Cattle Urine	Beta-boldenone 0.26 µg/kg 1710316		Great Britain	This is a small sized accredited cattle and sheep farm. All veterinary medicines were used and stored in accordance with the Veterinary Medicines Regulations. No medicated feed is used on farm and there was no evidence of any steroidal use. The cause of residue is likely to be due to faecal contamination.
Fattening Cattle Urine	Taleranol 0.78 µg/kg & Zeranol 0.36 µg/kg 1719552		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 1.3 µg/kg & Zeranol 0.70 µg/kg 1719551		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.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Fattening Cattle Urine	Taleranol 1.3 µg/kg & Zeranol 0.28 ug/kg 1719533		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 2.1 µg/kg & Zeranol 0.88 ug/kg 1719546		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 1.3µg/kg & Zeranol 1.3µg/kg 1719562		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 8.6 µg/kg & Zeranol 5.5 ug/kg 1728453		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 4.7µg/kg & Zeranol 1.6µg/kg 1733919		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.
Calves Kidney	Florfenicol 8400 µg/kg 1725149		Great Britain	A large dairy farm of over 1400 cattle and calves. The farm is clean and tidy with all animal movement on and off the farm suitably recorded. All animal treatment is also recorded in two diaries (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 farmer explained all animals receiving antibiotic treatment are kept in isolation. Although the recorded keeping appeared to be extremely accurate the farmer explained there had been staff changes thus different people handling the drug recorded. It is possible the animal was accidentally treated (unbeknownst to the farmer) and therefore sent for slaughter within the withdrawal period.
Calves Kidney	Gamithromycin 1100 µg/kg 1706378	Zactran	Great Britain	The non-compliance is concerning a male calf from a medium-sized farm. Female calves (Heifers) are vaccinated against Infectious Bovine Rhinotracheitis (IBR) and are treated for Pneumonia with Zactran, male calves are not treated on farm. The sampled calf was treated with Zactran on 8 th December 2016 and sent to slaughter on 3 rd January 2017 thus falling within the 64-day withdrawal period of the product. Medicine records were also found to be incomplete upon drug administration with batch numbers, withdrawal periods and animal ID also absent. The herdsman inadvertently injecting a male calf with Zactran (Gamithromycin) as opposed to a heifer was the underlying cause of this residue. As a result of the non-compliance the farmer has been asked to ensure all purchase records are kept with a detailed calf medicine book to record administration of all medicines; calves are to be carefully segregated in accordance with type of medication they require. The farmer has also received a written letter detailing the requirements and advice given. The case will be referred to the Rural Payments Agency for further investigation.
Calves Kidney	Gamithromycin 1300 µg/kg 1714104		Great Britain	The farm is a large enterprise of 628 beef and dairy cattle located in an endemic Bovine Tuberculosis (TB) area. The farmer keeps a detailed calving record every season. Medicines were stored and secured appropriately but some appeared to be outdated. The calf was treated with Zactran (which has a 35 day withdrawal period) on 02/04/17 and inadvertently sent for slaughter 18 days after treatment. The farmer has since been requested to remove all outdated medicine from the store and a to continue keeping accurate medicine records. No further investigation was required.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Sulfadiazine 860 µg/kg 1706558	Norodine 24 Solution for Injection	Great Britain	The farm is a large cattle enterprise which was predominantly a dairy herd. There were missing entries in the medicines records, particularly wormers and vaccines. There was also no record of disposal of unused or out of date medicines. The farmer had administered Norodine 24 Solution for Injection to the animal and assumed a shorter withdrawal period. As a result the animal was submitted for slaughter within the withdrawal period. This case has been referred to the Rural Payments Agency as a breach of cross compliance.
Cattle Kidney	Tilmicosin 6800 µg/kg 1706391	Micotil 300mg/ml Solution for Injection	Great Britain	This is a larger dairy herd of approximately 300 cattle. Female calves are fed on milk powder. Male calves are fed on waste milk and then usually sent to slaughter via market. The medicines records were in good order. There was evidence of use of Micotil 300 mg/ml Solution for Injection in one cow and the animal had been treated twice in three days. The milk was not discarded and was fed to the male calf. The farmer was given advice to discard milk from treated cows. This case will be referred to the Rural Payments Agency for further investigation.
Cattle Kidney	Tulathromycin 11000 µg/kg 1724648	Draxxin 100 mg/ml Solution for Injection for Cattle, Pigs and Sheep	Great Britain	A large dairy cattle farm of 670 milking cows, two bulls and 100 dry cows with 670 replacements and approximately 30 calves. The cattle are mainly reared indoors (the location where the positive animal was housed). With regard to recording medicines, usual protocol is to record the medicine in a diary first and transfer to a computer system thereafter. Upon inspection it was noted the records were not up to date and diary incomplete with key information absent such as withdrawal period, dosage and batch number of the medicine. Tulathromycin is the active ingredient of Draxxin (one of the four medicines used on farm). The farmer admitted neglect of his responsibilities and that usage of veterinary medicines had not been kept in accordance with the regulations. His reasoning was due to a difficult summer with a high turnover of staff. The conclusion reached was given the poor record keeping on farm, the animal was likely to have been slaughtered within the withdrawal period. The farmer received verbal advice about veterinary medicine record keeping and was issued with a written warning. This case has been referred to the Rural Payments Agency for further investigation.
Cattle Kidney	Penicillin G 228 µg/kg	Depocillin	Northern Ireland	An investigation was completed on 05/01/18. Animal was last treated on 08/11/17 with depocillin (5 day withdrawal) and sampled on 07/12/17. Cow had been operated on for a displaced stomach and never really recovered. She was sick and weak animal and the wound has never healed properly.
Cattle Kidney	Cadmium 1400 µg/kg 1729320		Great Britain	A large enterprise keeping cattle and sheep. All medicines and records appeared to be kept in accordance with the regulations. The farm is located near a former lead mining area; cadmium is likely to have accumulated in the nearby soil over a lengthy period of time. It was concluded the cause of residue was due to consumption of contaminated soil through diet which has accumulated over time.
Cattle Kidney	Oxytetracycline 1700 µg/kg 1731259	Alamycin LA	Great Britain	A medium sized accredited beef cattle farm. Upon inspection all records appeared to be up to date with movement records intact. On farm records and other evidence suggest the positive result was due to an injection of 50ml Alamycin LA on 13/10/2017, following recommendation from the Private Veterinary Surgeon to treat an abscess in the jaw of the animal. The dosage and withdrawal period were correctly observed by the farmer, however, due to the drastic weight loss of the animal due to being unable to eat it is likely this may have impacted on the metabolism of the animal and pharmacodynamics. The only advice given to the farmer was to continue ensuring medicines records are accurately kept.
Cattle Kidney	Cadmium 1600 µg/kg 1724096		Great Britain	A small farm of cattle and sheep. Medicines records appeared to be well kept. There was no sewage kept on the fields or dumping of batteries, no history of mining nearby the land or any other obvious causes of land contamination; the farmer has not administered any products containing the metal. The investigation concluded the likely cause of residue was accumulation through diet; on occasion cadmium can accumulate over a period of time.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Cadmium 3400 µg/kg 1724084		Great Britain	A medium sized cattle farm of 560; pigs and sheep are also kept on farm. The farm is located within close proximity to an RAF base. Medicines records were very of high standard. The land nearby was previously used to dispose of sheet metal, batteries and aircraft parts. There is a possibility the accumulation from the heavy metal gradually distributed by water course into the surrounding land where the cattle have been grazing for years. The investigation concluded the likely cause of residue was via environmental contamination. The farmer has been advised to avoid grazing the cattle in the land adjacent to the contaminated land.
Calves Kidney	Oxytetracycline 770 µg/kg 1714102		Great Britain	A medium-sized dairy farm of sheep and cattle. Heifer calves are fed waste milk from cows under treatment. The cause of residue is believed to be due to a male calf entering the heifer pen thus being fed waste milk by mistake. The farmer has since been advised to amend current practices to avoid incidents, this involves delegating the role of feeding the calves and manipulating waste milk to a solitary person and ensuring the male and female calves are adequately segregated. The farmer has since received written correspondence as a reminder of the requirements and regulations regarding withdrawal periods. This case has been referred to the Rural Payments Agency for further investigation.
Calves Kidney	Dihydrostreptomycin 5800 µg/kg 1714121		Great Britain	A small dairy cattle enterprise also keeping sheep. All treatment information is kept in diary then transferred to the medicines book on an annual basis. Medicines records were checked and stored appropriately, however, some medication appeared to be out of date. The farmer admitted an antimicrobial was used on the calf but had since forgotten to update the records. Verbal advice was issued to the farmer and he was asked to dispose of all out of date medicines.
Calves Kidney	Chlortetracycline 1000 µg/kg 1725086	Chloromed	Great Britain	This is a large cattle farm of 1000 in number. Medicines records were of excellent standard and storage was found to be satisfactory. Chloromed powder is administered to the heifer calves and has a withdrawal period of 10 days. Upon inspection a minor issue found with the medicine records was the ID of individual animals is not annotated for calves; Chloromed is the only medicine for which this is not recorded. Bull calves and and heifer calves are kept in separate pens but it is plausible the bull calf could have jumped into the heifer pen or was mistakenly placed there by one of the stockmen. The conclusion reached was the bull calf was inadvertently treated as a result of being mistaken for a heifer.
Sheep				
Sheep Kidney	Lead 850 µg/kg 1705732		Great Britain	This is a large and long-established farm turning over 17,000 sheep per annum. The sheep are bought and fattened in winter and sold for slaughter in the spring. The grazing at the farm was not within any former mining or lead contaminated areas. The source of residue could not be established.
Sheep Kidney	Lead 1600 µg/kg 1715559		Great Britain	The source of residue could not be established.
Sheep Kidney	Cadmium 1100 µg/kg 1732169		Great Britain	Unable to trace animal.
Sheep Kidney	Cadmium 1800 µg/kg 1705744		Great Britain	A large farm rearing 1500 ewes. Beef cattle are also kept on farm but upon investigation were cleared of disease. All medicines are kept and stored in accordance with the regulations. The farm is located in an area heavily associated with mining and smelting which may have polluted the area with lead and cadmium. Based on the geology of the area it was concluded the cause of residue was due to accumulation of cadmium in the kidney over an extended period of time.
Sheep Kidney	Tildipirosin 478 µg/kg		Northern Ireland	An Investigation was completed on 15/05/17. Cattle and sheep (commercial and pedigree) both on farm. No treatment given by herd keeper. Lambs slaughtered after purchase.
Sheep Kidney	Tildipirosin 5330 µg/kg		Northern Ireland	An Investigation was completed on 15/05/17. Cattle and sheep (commercial and pedigree) both on farm. No treatment given by herd keeper. Lambs slaughtered after purchase.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Kidney	Tildipirosin 9405 µg/kg		Northern Ireland	An Investigation was completed on 15/05/17. Cattle and sheep (commercial and pedigree) both on farm. No treatment given by herd keeper. Lambs slaughtered after purchase.
Sheep Kidney	Oxytetracycline 1185 µg/kg		Northern Ireland	An investigation was undertaken on 24/05/17 and the cause of residue could not be fully established. The animal was purchased 3 days prior to slaughter and not treated by herd keeper. The five follow up samples were compliant.
Sheep Liver	Triclabendazole 924 µg/kg 1705092	Combinex Oral Suspension	Great Britain	This is a small farm with both sheep and cattle. All medicines are supplied by the registered vet or local merchant which were all recorded in the medicines records. The sheep was given Combinex Oral Suspension and the withdrawal period was observed. The farmer noticed the product had an unusual odour and returned it to the merchant. In March 2017 the animal then tested positive for Triclabendazole, four batches of the product were found to be faulty and were recalled by the Marketing Authorisation Holder. It is likely that this is the explanation for the residues found.
Sheep Liver	Closantel 1700 µg/kg 1723498		Great Britain	A medium sized farm holding sheep and cattle. Medicines records were poor and one bottle of medicine appeared to be absent of any form of identification – the farmer was adamant the bottle contained calcium for cattle which was later challenged by the inspector. A vial of Trodax was heavily contaminated and the expiry date was not legible. The medicines records did not reflect the actual treatment of the sheep. Based on the inspection, the conclusion reached was the animal may have received unrecorded treatment which ultimately led to the positive result. The inspector issued the farmer with instructions and guidance regarding record keeping of veterinary medicines. The case has been referred to the Rural Payments Agency for further investigation.
Sheep Liver	Closantel 1700 µg/kg 1720713		Great Britain	A small sheep and cattle farm with full accreditation. The land is part arable and part dry; only the adult flock have access to the wet areas. The farm has extensive animal and medicine records with an individual history. Although closantel containing products are kept on farm there was no reason this particular lamb should have received the product. Due to an isolated case of misidentification the possible it is likely the animal received an unrecorded treatment and therefore the sample was taken whilst still within a withdrawal period. The farmer has been advised to ensure the correct product is administered according to flock.
Sheep Liver	Closantel 2000 µg/kg 1705081 (linked to 1705027)	Solantel	Great Britain	This is a medium sized farm hosting approximately 200 sheep in addition to 3 hens and 5 horses. All medicines are supplied by the registered vet or local merchant with all records of purchase within the last 5 years retained. The farmer became unwell and is no longer responsible for record taking, in his absence an error was made and Solantel was administered to the breeding flock and then transported without correct observation of the withdrawal period. The farmer has since been reminded of requirements to update official records more promptly and been issued with documents of the legislative requirements.
Sheep Liver	Closantel 3100 µg/kg 1705027 (linked to 1705081)	Solantel	Great Britain	This is a large farm comprised of approximately 1300 sheep/ewes and 426 cattle. Soon after farm arrival the sheep are administered fluke treatment. The animals are inspected once a day with a diet comprised of barley, hay, sheep cake and turnips. The non-compliance came from a female sheep bought from the market on 10 th January 2017. Movement records of the sheep were satisfactory; however, the farmer did not record the fluke treatment of the sheep upon arrival to the farm as per the usual protocol. The conclusion reached was the non-compliance was a probable unrecorded or inadvertent treatment of the animal. Following the aforementioned a letter was sent with advice on the legal requirements of keeping an accurate and updated medicine book.
Sheep Liver	Closantel 2304 µg/kg	Flukiver	Northern Ireland	An investigation was completed on 10/8/17. Lambs were dosed 10 weeks before slaughter with Flukiver (oral dose) which has a 6 week withdrawal. All lambs were given same dose however it is suggested the dose, if anything, was underestimated.
Sheep Liver	Closantel 2500 µg/kg 1732259		Great Britain	Unable to trace animal due to administrative error
Sheep Liver	Closantel 2700 µg/kg 1732424		Great Britain	Source of residue could not be established but it is likely to have been caused by a traceability issue or incorrect observation of the withdrawal period.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Liver	Closantel 3000 µg/kg 1715100	Solantel	Great Britain	This is a large farm comprised of approximately 1300 sheep/ewes and 426 cattle. Soon after farm arrival the sheep are administered fluke treatment. The animals are inspected once a day with a diet comprised of barley, hay, sheep cake and turnips. The non-compliance came from a female sheep bought from the market on 10th January 2017. Movement records of the sheep were satisfactory; however, the farmer did not record the fluke treatment of the sheep upon arrival to the farm as per the usual protocol. The conclusion reached was the non-compliance was a probable or inadvertent unrecorded treatment of the animal. Following the aforementioned a letter was sent with advice on the legal requirements of keeping an accurate and updated medicine book.
Sheep Liver	Closantel 3600 µg/kg 1723417		Great Britain	Unable to trace animal due to administrative error made with the Food Chain Information.
Sheep Liver	Bendazole 545 µg/kg (Fenbendazole 75 µg/kg & Oxfendazole 470 µg/kg) 1715156	TriclaMox	Great Britain	The lamb came from a medium sized farm. All medicines were completed accurately with no data missed. The ewes were treated with the TriclaMox (an anthelmintic used to treat Sheep). Lambs were artificially fed with waste milk. However, some of them were suckling from ewes. The implication of the milk from the treated ewes was unbeknownst to the farmer at the time of treatment due to the contra-indications on the product labelling being very confusing. The conclusion reached was the lamb being treated with waste milk from a treated ewe. The farmer has since been advised to not feed animals intended for human consumption with waste milk and to obey withdrawal periods to the last date of possible access.
Sheep Liver	Bendazole 870 µg/kg (Fenbendazole 110 µg/kg & Oxfendazole 870 µg/kg)1715264		Great Britain	A well run medium-sized farm of 560 breeding ewes and 45 cattle (plus follower calves). Lambs due to be marketed are not to be drenched with anthelmintics, however, due to extenuating circumstances the lamb in question was inadvertently drenched. The farmer has since outlined solutions to prevent recurrence and intend to carry out prospective procedures with extra care. The case has been referred to the Rural Payments Agency for further investigation.
Sheep Liver	Triclabendazole sulfoxide 110 µg/kg, Triclabendazole 1800 µg/kg & Triclabendazole sulfone 340 µg/kg 1723379		Great Britain	Unable to trace animal.
Sheep Liver	Closantel 2304 µg/kg	Flukiver	Northern Ireland	An investigation was completed on 10/8/17. Lambs were dosed 10 weeks before slaughter with fliukiver (oral dose) which has a 6 week withdrawal. All lambs were given same dose however it is suggested the dose, if anything, was underestimated.
Sheep Liver	Closantel 4662 µg/kg		Northern Ireland	An investigation was completed on 11/12/17. These two animals were bought by the same producer just shortly before slaughter; neither were treated while in the seller's flock.
Sheep Liver	Nitroxinyl 140 µg/kg		Northern Ireland	An investigation was completed on 11/12/17. These two animals were bought by the same producer just shortly before slaughter; neither were treated while in the seller's flock.
Sheep Urine	Alpha-boldenone 2.0 µg/kg 1731635		Great Britain	A medium sized accredited sheep farm. All medicines appeared to be up to date and there was no evidence of any anabolics used on farm. The investigation concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.1 µg/kg & Beta-Nortestosterone 0.67 µg/kg 1716062		Great Britain	This is a medium sized farm keeping sheep and cattle. The flock of cattle consists of approximately 300 ewes, 13 rams and 500 lambs. The sheep are generally kept outdoors until lambing season. The sheep graze all year round with additional forage given to them during winter months. The additional forage is made from home-grown crops such as barley and oats mixed with concentrate feed. Upon investigation there was no evidence of any steroidal substance having been administered to the animal. It is likely the cause of residue was due to a combination of faecal contamination and natural levels of hormones.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Urine	Alpha-boldenone 2.1 µg/kg 1722467		Great Britain	Due to the Animal ID not being recorded a back-trace was unable to be conducted therefore no further investigation carried out.
Sheep Urine	Alpha-boldenone 2.2 µg/kg 1706284		Great Britain	A large farm of sheep and cattle. Lambs are usually grazed and fed turnips and beet, at times of year when grazing is poor they will also be fed hogget nuts. The record keeping is apt with medicines stored neatly and appropriately. Medicines may be administered by individuals other than the farmer but always under supervision of the farmer or shepherd. There was no evidence of illegal medicines in use. The cause of residue is likely to have been due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.2 µg/kg 1716035		Great Britain	A medium sized farm of 560 sheep and 32 fattening cattle. Veterinary medicines are supplied by the Veterinary practice and only bought on necessity to avoid waste. Upon inspection of the medicines it was found all medicines had been administered correctly with withdrawal periods observed. It was concluded the cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.2 µg/kg 1716036		Great Britain	A large sheep enterprise which finishes 100,000+ sheep per annum. Medicines records scrutinised and found to be apt. The sheep in question was not yet finished and had only been on the premise for a week. No record of any steroidal use and it is thought the occurrence of boldenone was due to faecal contamination. The farmer has subsequently been informed of the reasons behind the non-compliance.
Sheep Urine	Alpha-boldenone 2.2 µg/kg 1716041		Great Britain	The lamb concerned came from a medium sized organic farm. The farmer runs a 250-strong beef suckler herd with 1000 ewes. Cattle graze in the summer and are housed in the winter, ewes graze all year round. Sheep are fed with grass and get organic feed before lambing. Upon inspection all veterinary records appeared to be up to date and in accordance with the regulations, no treatment was administered to the animal prior to assignment. It was concluded the cause of residue is likely to have been due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.3 µg/kg 1722424		Great Britain	A medium sized farm with full accreditation keeping sheep and cattle. There was no indication from the medicines records or the medicines storage that steroidal substances had ever been used or present on farm. The investigation concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.3 µg/kg 1722444		Great Britain	A medium sized accredited sheep farm. No other species are kept on farm aside from dogs. No medicines were found which could produce an anabolic residue. There was no evidence of any steroidal substance used on farm and the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.4 µg/kg 1706279		Great Britain	A large family run farm containing 1433 sheep. Records of medicine use are kept and recorded in accordance with the Veterinary Medicines Regulations. Amongst the lambs there were no signs of indicated steroid effects. It is likely the cause of the positive result was due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.4 µg/kg 1722454		Great Britain	This is a large enterprise of predominantly sheep. This particular lamb was purchased through a market with a diet consisting of nuts, barley and turnip tops. Upon inspection of the medicine store all records were up to date. There was no evidence of any steroidal substance used on farm and the likely cause of residue could be attributed to faecal contamination.
Sheep Urine	Alpha-boldenone 2.6 µg/kg 1716041		Great Britain	A medium sized organic farm rearing cattle and approximately 1000 ewes. Some ewes are brought indoors to give birth and live off a diet of grass and organic feed. Of the medicines found all were identified and sourced appropriately. The inspection concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 2.7 µg/kg 1722459		Great Britain	Unable to trace animal due to entry errors on the Food Chain Information.
Sheep Urine	Alpha-boldenone 2.9 µg/kg 1722476		Great Britain	A medium sized farm of sheep and cattle. Last year 480 lambs were produced and sold at 5 months of age. Medicines records were poor but in spite of this there was no evidence to suggest administration of any steroidal supplements. The investigation concluded the cause of residue was due to faecal contamination. The farmer was subsequently issued with written correspondence stating the requirements and guidance regarding the recording of veterinary medicine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Urine	Alpha-boldenone 3.0 µg/kg 1722534		Great Britain	This is a medium sized farm of sheep and cattle. Lambs are fed with cake, silage and grass feed. All medicines appeared to be well kept and stored. The inspection concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 3.1 µg/kg 1716069		Great Britain	This is a small farm with sheep and pigs kept on site. The use and storage of medicines records is all recorded in accordance with the Veterinary Medicines Regulations. It is likely the positive result is due to faecal contamination.
Sheep Urine	Alpha-boldenone 3.2 µg/kg 1706248		Great Britain	A small sized farm comprising of sheep and cattle. No medicines or treatments are administered to the animals on farm which was later confirmed by the vet practice. It is likely the cause of the positive result is due to faecal contamination.
Sheep Urine	Alpha-boldenone 3.4 µg/kg 1722531		Great Britain	A medium sized sheep farm of approximately 350 in number. Medicines record keeping was poor; there were no records of medicines or proof of purchase. In spite of this, there was no evidence of any steroidal substance had been administered to the animal. The investigation concluded the likely cause of residue was due to faecal contamination. The farmer has since been left with a template medicines record with further guidance and instructions regarding the recording of veterinary medicines and movement of sheep.
Sheep Urine	Alpha-boldenone 3.5 µg/kg 1706213		Great Britain	This is a large farm with both sheep and pigs The farm had adequate record keeping and no presence or record of illegal substances. It is likely the positive result is due to a natural cause or faecal contamination.
Sheep Urine	Alpha-boldenone 3.5 µg/kg 1722488		Great Britain	Unable to trace animal
Sheep Urine	Alpha-boldenone 3.6 µg/kg 1706295		Great Britain	A medium sized farm with 119 Cattle and approximately 1300 sheep. The use and storage of all Veterinary Medicines are recorded in accordance with the Veterinary Medicines Regulations with withdrawal periods observed. It is likely the positive result is due to faecal contamination.
Sheep Urine	Alpha-boldenone 3.8 µg/kg 1722462		Great Britain	A small farm enterprise of approximately 200 ewes, 6 rams and approximately 21,000 chickens. Six weeks prior to lambing ewes are fluked and wormed. Grass, silage and concentrate provided. Storage and records of medicines were found to be satisfactory; there was no evidence of any steroidal substances used on farm and the cause of residue is likely to have been caused by faecal contamination
Sheep Urine	Alpha-boldenone 4.2 µg/kg 1706322		Great Britain	This is a large farm of sheep and cattle. Adequate practices are in place with record keeping adhered to in accordance with the regulations. It is likely the cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 4.3 µg/kg 1706296		Great Britain	This is a large farm of sheep, cattle, turkeys and horses. All medicines records were checked and there was no evidence of any usage of steroidal substance. The cause of residue is believed to be due to faecal contamination. The farmer has been advised to continue use and storage of medicines in the correct way (as doing so at present).
Sheep Urine	Alpha-boldenone 4.3 µg/kg 1716019		Great Britain	A medium sized farm with 129 cattle, 700 sheep and 2 horses. Medicines records and medicines storage all found to be in accordance with the Veterinary Medicines Regulations and there was no evidence of any unauthorised substance on farm. The cause of the residue is likely to have been caused by faecal contamination.
Sheep Urine	Alpha-boldenone 4.6 µg/kg 1706261		Great Britain	This is a small sheep farm. Use and storage of medicines records are recorded in accordance with the Veterinary Medicines Regulations. It is likely the positive result is due to natural causes or faecal contamination.
Sheep Urine	Alpha-boldenone 4.9 µg/kg 1722434		Great Britain	A medium sized accredited farm of 1100 ewes, 210 dairy cattle and 70 beef cattle. All information about the farm, animals and medicines was easily accessible. The farmer displayed very impressive management skill and knowledge. There was no evidence to suggest any unauthorised substances were used on farm. The cause of the residue is likely to have been caused by faecal contamination.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Urine	Alpha-boldenone 5.0 µg/kg 1716064		Great Britain	A medium sized family operated farm of sheep, pigs, beef cattle and horses. Only wormers are kept on site with all treatments recorded in a diary. The flock of sheep did not appear to display any unusual muscle confirmation and there was no suggestion of any steroidal use. It is likely the cause of residue was due to faecal contamination of the animal.
Sheep Urine	Alpha-boldenone 5.1 µg/kg 1716043		Great Britain	A medium sized farm rearing cattle and sheep. All documentation kept in accordance of the regulations. It is likely the cause of residue was due to faecal contamination. The farmer has since been advised to discuss the cause of residue with his private veterinary surgeon.
Sheep Urine	Alpha-boldenone 5.1 µg/kg 1731621		Great Britain	A medium sized farm with many species kept on site including cattle, sheep, horses, pigs and poultry. The welfare status of animals was found to be satisfactory. Throughout medicines checks there were no major issues, all records were updated and recorded but the quantity/dosage was not always recorded. There was no evidence of any steroidal substances used on farm. The investigation concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 5.2 µg/kg 1722431		Great Britain	A large farm with 75 cattle, 1300 sheep kept on site. No medicines are mixed on farm and no feedstuffs are used. The medicines record book was checked and up to standard. The farmer was able to demonstrate his management and organisational skills regarding the administration of veterinary medicines. There was no evidence of any steroidal substances. The investigation concluded the cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 6.5 µg/kg 1715991		Great Britain	A medium sized farm rearing cattle and sheep direct for slaughter. The sheep graze all year round but are given supplementary feed during lambing season as the quality of grass is poor and lacks nutritious value. None of the ingredients in the supplementary feed contain a substance for which boldenone was detected. It is likely the cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 8.3 µg/kg 1731616		Great Britain	A small farm keeping pigs and 50 sheep. The sheep are kept outside all year round and feed off grass in the summer and some heylage in the winter. Medicines checks showed no major issues. All sheep looked very healthy and there were no issues detected regarding the welfare of the animals. There was no evidence of any use of steroidal substances used on farm and the investigation concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 8.5 µg/kg & 0.56 µg/kg 1731640		Great Britain	A small accredited farm with a total of 150 ewes, 26 cattle and 2 horses. Medicines are kept in lockable room with the out-of-date medicines separated from the valid medicines. Upon inspection of the medicines records non-compliances were found, there were missing entries and no proof of purchase provided. In spite of this there was no evidence to suggest there was any steroidal substance used on farm. The investigation concluded the likely cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 10 µg/kg 1706283		Great Britain	This is a medium sized farm with Calves, Cattle and Sheep. There is a good standard of animal husbandry and the farm had adequate record keeping. It is likely the positive result is due to faecal contamination.
Sheep Urine	Alpha-boldenone 10 µg/kg 1731629		Great Britain	A large farm with over 1000 breeding ewes spread across 500 acres of land. The sheep are treated for fluke in autumn and for worms in the summer. Accurate records are kept of all treatments administered. Upon inspection of a group of animals no issues were observed; there was also no evidence of any steroids in the medicines storage. The investigation concluded the cause of residue was due to faecal contamination.
Sheep Urine	Alpha-boldenone 11 µg/kg 1722443		Great Britain	This case was investigated by the Isle of Man authorities
Sheep Urine	Alpha-nortestosterone 4.8 µg/kg 1706249		Great Britain	A large sheep enterprise of 2000 in number with a medium pig enterprise also on site. Ewes are fed grass and barley, lambs are fed barley, soya and wheat mixture. All medicines records were inspected and found to be kept in accordance with the regulations. There was no evidence of any use of illegal substances and the animals did not appear to display any unusual condition. It is likely the cause of residue was due to faecal contamination.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Urine	Beta-nortestosterone 0.65 µg/kg 1716010		Great Britain	A medium sized farm of 145 acres of land. The sheep flock is approximately 500 in number. There is also a laying hen unit of 6600 birds. Upon inspection all medicines were stored correctly stored and identifiable. No product stored at the premises was liable to have triggered the positive result. No chemical compounds are used within the land and no chemical fertilisers or any other product are used on the terrain. The performance of the farm is good, as evidenced by two inspections of late neither of which flagged up any issues. The conclusion reached was the cause of residue being attributed to natural levels of occurrence within the animal.
Sheep Urine	Beta-nortestosterone 0.78 µg/kg 1706273		Great Britain	A medium sized farm with hens, dairy cattle and calves. The farming practices on the farm are of good standard with the Veterinary Medicines Regulations adhered to. The cause of the positive result is likely to be due to natural occurrence.
Sheep Urine	Beta-nortestosterone 0.96 µg/kg 1715999		Great Britain	A medium sized organic sheep farm approximately 550 in number. Lambs are sold very early (4-5 months) to avoid use of medicament. General treatment is recorded in the medicine book and all medication is stored safely and securely. No evidence suggested any Beta-nortestosterone had been administered to the animal or any other livestock thus the conclusion reached was the cause of residue in the animal was naturally occurring.
Sheep Urine	Beta-nortestosterone 1.3 µg/kg 1722521		Great Britain	Unable to trace animal.
Sheep Urine	Beta-nortestosterone 1.4 µg/kg 1706241		Great Britain	Unable to trace farm of origin therefore no investigation was carried out.
Sheep Urine	Beta-nortestosterone 1.4 µg/kg 1722507		Great Britain	A medium sized farm keeping sheep and cattle. The farm is run by a total of three people. The standard of management on the farm and medicine record keeping appeared to be very good; regulations appeared to be followed very closely with a proactive approach taken regarding the health of the live animals on farm. The investigation concluded the likely cause of residue was due to natural circumstances.
Sheep Urine	Beta-nortestosterone 1.5 µg/kg Alpha-nortestosterone 14 µg/kg 1716050		Great Britain	A medium sized family-operated farm with cattle and 250 sheep (180 ewes and 70 lambs). All medicines are stored, recorded and administered in accordance of the regulations. Treatment is administered to animals on farm but only for cattle. Lambs are fattened solely off grass and receive no supplementary feed. It is likely the cause of residue was naturally occurring.
Sheep Urine	Beta-nortestosterone 1.6 µg/kg 1706309		Great Britain	A medium size farm of sheep, cattle and poultry. The animals are grazed over the summer prior to sale in Autumn. In general, medicine records and storage were very good and there was no indication of anabolic misuse.
Sheep Urine	Beta-nortestosterone 1.9 µg/kg 1715990		Great Britain	The sheep came from a medium sized farming enterprise; no other species of animal are kept on farm. The sheep are purchased directly from farms and auction marts. The sheep are treated solely for ecto and endo parasites. There was no evidence of any steroidal substance used on farm, the likely cause of residue was established to have been as a result of natural occurrences.
Sheep Urine	Taleranol 4.5 µg/kg & Zeranol 4.3 µg/kg 1731691		Great Britain	A small farm of 12 sheep with horses also kept on site. All medicines and details of withdrawal periods are obtained from the vet. The residue is likely to have been caused by mould contamination in the feed or sample. Sheep may have inadvertently had access to leftovers of the horse feed which could have been mouldy. The farmer has been advised to prevent sheep accessing areas in close proximity to the horse feed.
Pigs				
Pig Kidney	Ibuprofen 9.7 µg/kg 1733505		Great Britain	Source of residue could not be established but there is a possibility the positive result was due to human contamination as a result of sampling officer being on medication.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Pig Liver	Ochratoxin A 3.1 µg/kg 1721046		Great Britain	A small farm comprising of 25 beef cattle and approximately 100 fattening pigs. The pigs are mainly fed barley, wheat, soya oil, field beans and lime flour. Medicines are also kept in lockable storage with limited access; all medicines are up to date with the last treatment administered in July 2017. It is likely the cause of residue was due to mould contamination of the feed.
Pig Liver	Ochratoxin A 4.2 µg/kg 1733556		Great Britain	A small accredited farm of 10 hens, 40 cattle and 80 followers. Pigs are only bought and kept in farm during the summer whilst cattle graze outdoors; there were no pigs at the time of inspection. The affected pig belonged to a batch of 8 pigs bought at a market at the end of May 2017. No medication was given to the pigs during the period at farm. Only the farmer and her daughter fed the pigs. It was noted by the inspector that food was located in dark and damp conditions and it is likely the cause of residue was due to mould contamination of the pig feed.
Game				
Wild Deer Muscle	Lead 23000 µg/kg 1733689		Great Britain	It was concluded the cause of residue was attributed to the by-product of the method used to cull the deer. No historic lead mining took place where the animal was culled thus ruling out possibility of environmental contamination.
Deer Kidney fat	DDE-p,p' 1200 µg/kg 1709790		Great Britain	Referred to the Health & Safety Executive as a Pesticide breach.
Poultry				
Broiler Liver	Monensin 13 µg/kg 1712050		Great Britain	This is a farm supplying broilers for produce. The broilers are fed with product from two local feed companies specialising in animal feed. Upon inspection it was found the farmer was not following his own rule of keeping a plain bin for a withdrawal diet thus a possible cause of residue may have been on-farm contamination. The inspectors recommended the farmer puts in place corrective action and have reminded him of the importance of withdrawal diets via written communication, to which the farmer has also provided written acknowledgement.
Broiler Liver	Monensin 13 µg/kg 1730431	Coxidin	Great Britain	A poultry farm rearing chickens for meat. The non-compliance came as a result of cross contamination of the feed as a result of miscommunication concerning the suggestion in a change of coccidiostat. Suggestions have been made to made to the feed mill to identify customers using a finisher feed containing a coccidiostat with a withdrawal period. It has been recommended to the farm to follow the advice of the vet and use the stronger coccidiostat with the one-day withdrawal period as opposed to a zero-day withdrawal period coccidiostat.
Broiler Liver	Salinomycin 8.5 µg/kg 1712089		Great Britain	The farm produces approximately 150 broilers at a time and also hosts cattle and pigs. The evidence in the follow-up investigation suggests the cause of residue was due to feed contamination at both the mill and farm. The inspector identified areas of malpractice at both the mill and the farm which may have resulted in cross-contamination. The mill has been asked to make changes to the practice and inform the inspectorate by November 2017. The farm has also provided written acknowledgement of the concerns addressed.
Broiler Liver	Salinomycin 21 µg/kg 1712176		Great Britain	A poultry farm rearing chickens for meat. As a general rule the chicks receive a starter diet, when the feed bins are near empty, this is then followed by a grower diet and a finisher diet. Upon inspection it was noted there was no dry cleaning of the bin carried out between diets and it was concluded the possible cause of residue was cross-contamination of the medicated feed with the non-medicated feed. As a result of the non-compliance the inspector recommended a change of practice to reduce the possibility of cross contamination, the farmer also received written correspondence reiterating this advice. Written acknowledgement of the correspondence has since been received by the farmer.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Broiler Muscle	Chloramphenicol 0.31 µg/kg 1712517		Great Britain	This is a large farm comprised of broilers and turkeys. There have been five crops of broilers this year. The broiler from which the muscle sample was collected came from the fourth crop. Upon inspection all medicine records, veterinary invoices and feed delivery tickets were presented by the farmer with no evidence to suggest any administration of Chloramphenicol on site. Chloramphenicol is used in humans to treat a number of bacterial infections thus the likely cause of residue in this case was contamination from medication used by the collecting officer handling the samples. The farmer expressed concern at the residue found in the broiler and has since consulted a private veterinary surgeon.
Partridge Muscle	Lasalocid 340 µg/kg 1727791	Avatec 150G	Great Britain	The sample came from a gamekeepers farm with pheasant also kept on site, details of the game feed supplier were also provided. Lasalocid sodium is an antibacterial agent and a coccidiostat used in the prevention of coccidiosis. Avatec is fed only when the pheasants first arrive on site at 14-16 weeks old. They are checked from game farm to shoot and are then kept under nets in a 40x40 pen on water with solulite, fishmeal and Avatec. The vet carries out a pre-release post mortem to check for coccidiosis and internal parasites before any birds are released. A possible cause of residue was a bag of medicated feed was administered in error with the plain pellets or the bird coming from a neighbouring shoot. The inspector has recommended the farm introduces measures to ensure medicated feed is clearly segregated from non-medicated feed during storage and transportation on the pick-up truck. The inspector has requested additional training be provided to the gameskeepers and apprentices regarding transporting, storing and administering medicated feed.
Pheasant Muscle	Lasalocid 99 µg/kg 1733737		Great Britain	Awaiting investigation report.
Horse				
Horse Kidney	Phenylbutazone 28 µg/kg 1703104		Great Britain	Unable to establish source of residue.
Horse Kidney	Cadmium 2200 µg/kg 1725028		Great Britain	The horse came from a small farm with eleven other horses kept on farm. The horses are fed twice per day with haylage and grazed in the summer. Medicines and movement records were not available. The horses were all in good condition. Upon inspection there was no evidence of any source of cadmium on the premises. The likely cause of residue was environmental contamination which led to the accumulation of cadmium through diet over a lengthy period of time. The farmer has been advised to keep medicines and movement records for all animals kept on farm.
Horse Urine	Taleranol 0.82 µg/kg & Zeranol 1.1 ug/kg 1725029		Great Britain	A medium sized farm located by a reservoir. There are approximately 35 horses, 40 cows and 250 ewes. Two vets regularly attend the premises; the main issues identified in horses were colics and lameness. The horses at the holding are fed with hay and haylage; there is a possibility the haylage may have been contaminated with fungi. The medicines records were inspected with pictures taken; they are also inspected independently by the local authority on a regular basis. There was no evidence to suggest any medicine in the storage could have triggered the positive result investigation concluded the likely cause of residue was due to fungal contamination of the haylage.
Milk				
Cattle Milk	Florfenicol 0.66 µg/kg	Nuflor	Northern Ireland	An investigation was completed on 08/12/17. Animal from herd of 323 animals. The herdkeeper stated he uses nuflor in calves but has never used it in milking cows. A follow up sample was compliant.
Cattle Milk	Florfenicol 1.13 µg/kg	Norfenicol	Northern Ireland	An investigation was completed on 24/11/17. Animal is from a dairy herd. The herdkeeper had injected the cow prior to lactation commencing and had then kept the milk out of the tank for the first five days milking. He was aware that it was not for use in lactating animals. A follow up sample was also non-compliant for Florfenicol (0.48 µg/L)

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Milk	Florfenicol 2.3 µg/kg 1719954	Resflor	Great Britain	A large cattle farm rearing both dairy and beef cattle. At the time of sampling Resflor was administered to calves; confirmed by the medicines records. The investigation concluded there was a possibility of cross-contamination due to cross-contamination as the scoop used to take the milk sample was not used on a regular basis and was also located in the medicines cabinet. This case has been referred to the Rural Payments Agency.
Cattle Milk	Florfenicol 2.4 µg/kg	Resflor	Northern Ireland	An Investigation was undertaken on 22/09/17. Large dairy herd of 888 cattle. Herd keeper treated 5 pregnant heifers with Resflor on 20/6/17. Calving was due on 01/08/17. The dose was possibly over-estimated and not sited correctly. Also treatment should be at least 2 months from calving date. A follow -up sample taken on 20/09/17 was non-compliant.
Cattle Milk	Florfenicol 4.3 µg/kg 1709869		Great Britain	A large farm of 749 cattle (beef and cattle). The initial investigation was conducted. Two separate medicines records are kept on farm – one for beef cattle and the other for dairy cattle. The likely cause of residue was due to the result of management practices on farm and a milking cow receiving treatment with a product containing Florfenicol. Medicines records were also found to be incomplete. The PVS has been contacted and the farmer has received a formal warning with regard to the management practices at the farm. This case has been referred to the Rural Payments Agency.
Cattle Milk	Clorsulon 19.1 µg/kg	Ivomec Super Injection for Cattle	Northern Ireland	An Investigation was undertaken on 07/06/17. Herd keeper routinely uses Ivomec super on dry cattle and had last used it on 03/04/17. Use of Ivomec super in dry cows is not permitted in the 60 days prior to calving. It contains both Ivermectin and Clorsulon. Herd keeper suggested that a dry cow may have calved earlier than anticipated and that milk accidentally entered the tank. There was no official medicines records book to be able to check all details although some recording is carried out. 1 follow-up sample compliant.
Cattle Milk	Penicillin G 110 µg/kg 1720017		Great Britain	This is a large dairy farm of 540 cattle and 19 sheep. The cows are milked every day early in the morning, the milk produce is then sold to local families. The cattle are housed from October until April or May and graze during the summer in fields close to the premises. The sheep are kept on different land. All veterinary medicines and invoices are kept in the medicine storage, which is lockable and with limited access. Penicillin G is an active ingredient in one of the medicines administered to the cow. Whilst there was no evidence of the medicine containing Penicillin G being administered to the cow (within the withdrawal period) it seems likely an unrecorded dose of medicine was given to the cow thus leading to the residue found. The farmer has since been instructed to ensure the administration of all medicinal products and to check the withdrawal periods and dosage of all medicines used.
Cattle Milk	Ivermectin 1.5 µg/kg 1729022	Ivomec	Great Britain	A medium-sized farm dairy cattle farm with horses also kept on the premises. Cows are milked twice a day. The medicines records were only available for 2017, the farmer could not find the books for the previous years. Medicines records were unsatisfactory and there appeared to be no recording of withdrawal periods. The farmer confirmed he had been using Ivomec to treat the cattle; the animal was marked but as the farmer did not personally milk the cattle it is likely the contaminated milk entered the bulk tank due to miscommunication between the farmer and his staff. The farmer has been subsequently advised to keep full traceability of the medication given to all livestock. The case has been referred to the Rural Payments Agency.
Cattle Milk	Ivermectin 6.9 µg/kg	Enovex	Northern Ireland	An investigation was completed on 17/11/17. A batch of 14 heifers were treated with Enovex pour on solution. Heifers should not be treated within 60 days of calving however three heifers calved very early so milk was entering bulk tank within 10 days of treatment. A follow up sample was compliant.
Cattle Milk	Closantel 70 µg/kg		Northern Ireland	An investigation was completed on 04/01/18. Herd keeper had treated all stock except cows between 06/10/17 and 10/10/17 with closamectin pour on. This included a batch of heifers, 3 of which were to calf the following month. Herdkeeper had not realised that the pre calving withdrawal time was so long (in this case in the second half of pregnancy).
Cattle Milk	Triclabendazole sulfone 21 µg/kg 1729002	Tribex 10% Oral Suspension for Cattle	Great Britain	A large dairy farm of approximately 1100 beef and dairy cattle. All cows are permanently housed and medicines records are kept up to date. The cause of residue was due to a heifer being treated with Tribex 10% Oral Suspension for Cattle and the product withdrawal period not observed correctly. The farmer has been reminded to check withdrawal periods are being followed accordingly.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Eggs				
Eggs	Narasin 4.0 µg/kg 1720126		Great Britain	The chicks are fed with Special Feed Additives (SFA) from the mill until 16 weeks of age; they are then relocated to the laying house and only fed plain feed. Following an inspection and discussion with the farm manager it seems the likely cause of residue was contamination of the feed off-farm.
Eggs	Lasalocid 590 µg/kg 1720127		Great Britain	This is a small enterprise run by a farmer on his own. It is primarily a layers farm and at point of lay they are sold on. There is one layers house split into separate barns with approximately 70 birds in total. The positive sample was taken from Barn 2 and 3 within the layers house. The condition of the house was OK, no issues with pests seen and it didn't appear to be in any state of disrepair. All feed is bought from one supplier and there are four product bins which were all labelled; two for growers, one for chicks and one for layers. Avatec is the only SFA used on farm and no medicated feeds are used as routine, however Avatec should only be found in the chick and grower diet, not the layers diet. Whilst no firm conclusion could be made it was noted very little record-keeping taking place and no feed samples are kept on the farm because their understanding is that this is all taken care of by the feed mill. It is possible the wrong product was being fed to the laying hens at farm or an excessive amount of Lasalocid in the Poultry Grower Mash at the Mill led to the positive result. The mill has already taken corrective action which should remove the possibility of this happening in the future.

SAMPLING OF ANIMALS SUSPECTED OF CONTAINING A RESIDUE AT THE TIME OF SLAUGHTER: 2017

RESIDUES DETECTED ABOVE THE REFERENCE POINT TO DATE: 31 December 2017

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	Antimicrobials	119	30	1000 100 600	4000, 10,000 (dihydrostreptomycin) 4500, 8500 (gamithromycin) 810, 980, , 1500, 1700, 2500, 2600, 2800, 3200, 4300, 5100, 5200, 6300, 6600, 6700, 6900, 7000, 8100, 8200, 9200, 9200, 9300, 14000, 14000, 16000, 19000, 49000, (oxytetracycline)
Calves Kidney	NSAIDS	1	1	100	320 (flunixin)
Cattle Kidney	Antimicrobials	1365 1222 1222 1222 1222 1222 1222	2 3 4 4 5 1 1	150 1000 300 150 50 300 3000	231, 1225 (amoxicillin) 1400, 3760, 4585 (dihydrostreptomycin) 535, 548, 943, 1832 (florfenicol) 250, 314, 3550, 4275 (marbofloxacin) 62, 88, 192, 210, 228 (penicillin G) 1900 (trimethoprim) 10856 (tulathromycin)
Cattle Plasma	NSAIDS	652	1	Presence	0.33 (phenylbutazone)
Cattle Muscle	Antimicrobials	29	1	100	218 (oxytetracycline)
Cattle Liver	Antiparasitics	545 545 545	1 3 2	1000 20 100	1230 (closantel) 24,25, 32 (nitroxylnil) 167, 269 (ivermectin)
Cattle Milk	Antimicrobials	223 223 223	1 12 1	20 Presence 4	42 (cefalonium) 0.38,0.39, 0.48, 0.63, 0.80, 0.85, 1.01, 1.3, 1.8, 2.5 ,3.9, 4.6 (florfenicol) 4.6 (penicillin)
Sheep Kidney	Antiparasitics	494	3	Presence	478,5330,9405, (tildipirosin)
Sheep Liver	Antiparasitics	489 596 489 107	1 8 2 1	1000 1500 500 20	1590 (albendazole) 1890, 2200, 2300, 2800, 3360, 3566, 5699, 6700 (closantel) 673, 1300 (fenbendazole) 73 (nitroxylnil)

RESULTS OF FOLLOW-UP INVESTIGATIONS: 31 December 2017

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle				

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Calves Kidney	Dihydrostreptomycin 10000 µg/kg 1797033		Great Britain	The positive calf came from small cattle farm of and appeared to have a suspect inoculation site upon inspection of the OV (Official Veterinarian), it had only spent one day at the farm before prior to being moved on. The records of the farmer are basic, but his Private Veterinary Surgeon was able to confirm no veterinary medicines containing Dihydrostreptomycin were sold to the farmer in the last 3 years, nor any other medicines from the practice for two years, other practices in the area were contacted and had not sold any medicines to the farmer. It is likely the animal was treated at the farm of origin without any observation of withdrawal periods. Trading Standards were contacted and the case has been referred to the Rural Payments Agency.
Calves Kidney	Gamithromycin 8500 µg/kg & Oxytetracycline 980 µg/kg 1797032	Zactran Alamycin LA	Great Britain	The calf originated from a dairy herd on a medium sized farm. The standard treatment for Bovine Respiratory Disease on the farm is the simultaneous administration of Zactran and Alamycin LA. When administering the antibiotic to the calf a farm worker failed to record the administration in the medicines book and failed to spray mark the calf to signify it was within the withdrawal period, therefore when the calf was sold it was recorded as not being within the withdrawal period. The cause of this residue was down to an error on farm and the farmer has been reminded of his responsibility to ensure all farm workers record treatment of each animal in accordance with the regulations.
Calves Kidney	Oxytetracycline 810 µg/kg 1797018	Alamycin LA 300	Great Britain	The calf originated from a dairy herd. The medicines records were incomplete and did not include details of batch numbers. The calf had been treated with Alamycin LA 300 and according to the records it had left the farm outside of the withdrawal period. The correct dose of Alamycin for a calf of this age was recorded in the medicines records. It was concluded that the cause of this residue was an administrative error on farm. The farmer has since been advised to record the batch number of medicines administered to the livestock.
Calves Kidney	Oxytetracycline 1300 µg/kg 1797084	N/A	Great Britain	A calf originating from a mainly dairy herd with approximately 900 animals on farm overall. The farm is a family business run by two but with other contractors working for them. Both owners have access to the medicines in addition to the spouse of one of the owners who is a veterinary surgeon supervising drug administration. The medicines records were insufficient with the record of key details absent. Only the name of the product, date of administration and quantity recorded were recorded appropriately with no record of drug administration to calves. The cause of residue is likely to have been due to the unrecorded treatment of the calf as a direct result of poor record keeping and identification of the animal. Following the non-compliance the farm owners have been informed all drug administration must be recorded in accordance with the regulations and recommended methods to improve animal identification.
Calves Kidney	Oxytetracycline 6700 µg/kg 1797058		Great Britain	A large accredited dairy cattle farm milking approximately 1000 cows. Silage is grown on farm with concentrates brought in, cattle are kept indoors all year round. The dealer sold the calf and signed the Food Chain Information declaration, stating withdrawal periods had been observed despite the fact there was no such documentation to that effect. It is likely that prior to sale the calf received an unrecorded treatment within the withdrawal period. The inspector discussed the problem with the Private Veterinary Surgeon who suggested to avoid any further incidents he would ensure documentation was available to accompany sold calves stating whether they had received medical treatments.
Calves Kidney	Oxytetracycline 1500 µg/kg 1797013		Great Britain	This is a medium sized dairy farm. A comprehensive health plan is in place covering the usual diseases in dairy herds. Upon investigation, minor issues were found regarding the recording of the medicines kept on farm – a broached bottle of Penicillin & Streptomycin and a possible missing record of Oxytetracycline. Further investigation required.
Calves Kidney	Oxytetracycline 1700 µg/kg 1797045	Alamycin LA	Great Britain	The calf originated from a 550 cow Friesian Dairy Herd and had been treated with Alamycin LA with a withdrawal period of 31 days. The farmer was not aware the calf would be going straight to slaughter prior to the administration of the medicine. Furthermore the medicines records did not detail adequate information regarding withdrawal periods. The farmer has agreed to change management practices and outlined an achievable and more robust method of recording medicine treatments.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Calves Kidney	Oxytetracycline 2500 µg/kg 1797086	Engemycin LA	Great Britain	The calf came from a medium sized farm of 200 cows and one bull. There are also 300 breeding ewes on farm and layer hens. Calves are kept with their mothers for the first 24 hours and then fed with Colostrum for 3 days. Calving takes place all year round with female calves kept as replacements and male calves sold at 3 weeks old. The medicines book indicated the calf was treated with Engemycin LA however this was not accurately reflected in the Food Chain Information when the calf was sent for slaughter hence the positive residue. Upon further investigation the matter was discussed with the farmer and his vet. A letter is to be sent to the farmer reminding him of his legal responsibilities regarding record keeping, he was also given verbal advice on general record keeping.
Calves Kidney	Oxytetracycline 2600 µg/kg 1797010		Great Britain	The positive calf came from small cattle farm of and appeared to have a suspect inoculation site upon inspection of the OV (Official Veterinarian) The records of the farmer are basic nevertheless satisfactory. It is likely the animal was treated at the farm of origin without any observation of withdrawal periods. Trading Standards were contacted and the case has been referred to the Rural Payments Agency. d to be well kept with storage and recording of veterinary medicines in accordance of the regulations.
Calves Kidney	Oxytetracycline 2800 µg/kg 1797039	Alamycin LA (200 mg/ml)	Great Britain	A large dairy herd of 1400 cattle and calves. The main manager, the calf rearer and the farmer are the three people on farm responsible for the drug administration, storage and access to the medicines. Records of administration are computerised, however, data is not transferred on a daily basis thus some of the records were incomplete. The probable cause of residue was due to miscommunication between the farmer and calf-rearer due to the inadequacy of the record keeping on farm. Due to a mix up between farm staff, the animal most likely received an unrecorded treatment and was subsequently sent for slaughter within the withdrawal period. The farmer has since received a written warning detailing the offence with further advice to contact the private veterinary surgeon on prospective measures taken to ensure there is no repeat offence.
Calves Kidney	Oxytetracycline 3200 µg/kg 1797027	Alamycin LA 300	Great Britain	The calf originated from a farm with a large dairy herd, where bull calves are sold at market. Alamycin LA 300 (Solution for Injection 300mg/ml) was administered to the animal; however, the withdrawal period was not recorded in the medicines records. The calf had been sold at market whilst within the withdrawal period and slaughtered the following day. The farmer has received advice on the requirements for recording use of veterinary medicines on farm.
Calves Kidney	Oxytetracycline 4300 µg/kg 1797137		Great Britain	A medium sized accredited cattle farm with approximately 149 animals in total; more than the farmer previously claimed. The farmer works independently and claimed he did not recall any calf receiving antibiotic injections, nor was this reflected in his medicines records. However, when asked to show storage facilities of veterinary medicines an open bottle of Hexasol was found as well as three empty boxes of Hexasol. When confronted regarding the opened bottle of Hexasol the farmer admitted treating calves with it and agreed it was probably him who injected the calf in question. The farmer has been strongly advised to record all treatment of medicines administered to his animals and take appropriate measures to ensure withdrawal periods are correctly observed. The case has been referred to the Rural Payment Agency and the farmer has been informed of the possibility he may be financially penalised.
Calves Kidney	Oxytetracycline 5100 µg/kg 1797096	Unknown	Great Britain	The calf came from a medium sized dairy farm of 500 in number. There is no medicated feed and cows are fed through a mix of cake, silage and grazing. There is a comprehensive herd health plan covering the usual disease risks in dairy herds signed by both the Private Veterinary Surgeon (PVS) and the farmer, however, due to an oversight there was no section on Bovine Respiratory Disease (BRD). The farmer relayed the findings to the PVS and it became evident there were several instances of oxytetracycline-containing medicines administered and purchased by the farmer with no record of their use. The conclusion reached was that the probable cause of residue was unrecorded treatment of the calf subsequent to slaughter whilst within withdrawal period.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Calves Kidney	Oxytetracycline 5200 µg/kg & Dihydrostreptomycin 4000 µg/kg 1797023	Engemycin LA 10% (DD) Solution for injection	Great Britain	The calf came from a medium sized farm of dairy cattle. During January/February Engemycin LA was in regular use as per records. At the time of visit all medicines were stored safely and securely. The farm manager was interviewed at the time of visit. He explained under normal circumstances only he and the deputy would have access to the medicines but in the period in which the calf was at the farm there were occasions whereby a relief worker was working at the farm in his absence. It is possible the calf was injected (unbeknownst to the farmer) and therefore inadvertently sent for slaughter within a withdrawal period.
Calves Kidney	Oxytetracycline 6300 µg/kg 1797008		Great Britain	The calf originated from a large farm comprising of cattle, calves and sheep. Records are kept in accordance with the Veterinary Medicines Regulations. It is probable the animal was inadvertently treated with Occrycetin boluses by an inexperienced worker assisting over the Christmas Holidays. It seems the cause of residue was an unfortunate mistake. The farmer has since liaised with the worker and ensured there will be no recurrence. The case has been referred to the Rural Payments Agency for further investigation.
Calves Kidney	Oxytetracycline 9200 µg/kg 1797133 (linked to 1797135)	Terramycin LA	Great Britain	A medium sized accredited farm with cattle, calves and sheep kept on site. Calves are only sourced in late autumn and not during lambing time due to the risk of disease. Hexasol LA and Terramycin LA are the treatments kept on the premises. The farmer confirmed the calves had been administered antibiotic injections and due to a shortage of housing space some of the calves were sold for auction within the withdrawal period. There was no record of the affected calf having received treatment, to which the farmer later realised this was a mistake based on his recollection of treating the calf. The likely cause of residue is due to the farmer not making the distinction between the withdrawal periods for cattle and sheep; for cattle the withdrawal period for Terramycin LA is 36 days and for sheep it is 24 days. Upon further scrutiny of the medicines records it appears all withdrawal periods were recorded as 24 days irrespective of the species. The farmer has since been advised to check withdrawal periods more carefully in the future.
Calves Kidney	Oxytetracycline 6600 µg/kg 1797135 (linked to 1797133)	Terramycin LA	Great Britain	A medium sized accredited farm with cattle, calves and sheep kept on site. Calves are only sourced in late autumn and not during lambing time due to the risk of disease. Hexasol LA and Terramycin LA are the treatments kept on the premises. The farmer confirmed the calves had been administered antibiotic injections and due to a shortage of housing space some of the calves were sold for auction within the withdrawal period. There was no record of the affected calf having received treatment, to which the farmer later realised this was a mistake based on his recollection of treating the calf. The likely cause of residue is due to the farmer not making the distinction between the withdrawal periods for cattle and sheep; for cattle the withdrawal period for Terramycin LA is 36 days and for sheep it is 24 days. Upon further scrutiny of the medicines records it appears all withdrawal periods were recorded as 24 days irrespective of the species. The farmer has since been advised to check withdrawal periods more carefully in the future.
Calves Kidney	Oxytetracycline 6900 µg/kg 1797041		Great Britain	Unable to establish source of residue.
Calves Kidney	Oxytetracycline 7000 µg/kg 1797004	Hexasol LA Solution for Injection for Cattle	Great Britain	The calf originated from a very well managed 550 cow dairy unit. The calf had been treated with Hexasol LA with a withdrawal period of 35 days; however, it was sold on during this period. The farmer was unaware that the animal would subsequently be sent for slaughter. The administration had been recorded and the medicines records were satisfactory, however, it is possible that the calf had not been marked and the records were not checked when it was sold. The farmer agreed to change their management practices to prevent any recurrence.
Calves Kidney	Oxytetracycline 8100 µg/kg 1797012		Great Britain	Unable to establish source of residue. However, the farmer has received written correspondence reminding him of the regulatory requirements regarding animals slaughtered for human consumption.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Calves Kidney	Oxytetracycline 8200 µg/kg 1797090	Alamycin	Great Britain	A large farm comprising of cattle and calves. Due to an administrative error made by a new member of staff the animal was accidentally treated with Alamycin on 19/03/17. The calf was then sent to the mart on 29/3/17 invariably falling foul of the withdrawal period. Prior to the non-compliance the farmer already had a system in place to prevent this from happening but has since been advised to improve record keeping procedures.
Calves Kidney	Oxytetracycline 9200 µg/kg 1797127	Alamycin	Great Britain	A medium sized farm rearing dairy cattle. Sheep, ducks and horses are also kept on site. Medicines records were electronic and of excellent standard. The affected calf was injected with Alamycin on 25 th November due to a course of pneumonia. The calf was then sold to another farm for further rearing and export; unbeknownst to the farmer the calf was in fact taken elsewhere by the buyer. The buyer has been reported to the local authorities; no advice was issued to the farmer, records were of excellent standard.
Calves Kidney	Oxytetracycline 9300 µg/kg 1797037	Alamycin LA 300 (Solution for Injection 300mg/ml)	Great Britain	A large farm with a large dairy herd. The calf was treated with Alamycin LA 300 for pneumonia before being transported to the market and subsequently purchased the following day. Within 24 hours of purchase the calf was sent for slaughter. Prior to the administration of Alamycin LA the farmer did not record the withdrawal period and did not foresee the calf being immediately sent for slaughter. The farmer has since been advised to modify their medicine record keeping procedures.
Calves Kidney	Oxytetracycline 14000 µg/kg 1797092	Hexasol LA	Great Britain	The calf originated from a medium sized farm mainly breeding and rearing cattle. Due to an outbreak of pneumonia earlier in the year the calf was administered with 10ml of Hexasol LA. The farmer does not usually sell young calves and it was a one-off situation. The farmer was aware the calf had been treated however another farm worker who took the calf to the market wasn't aware it had been treated. It was concluded the cause of this residue was a genuine mistake. The farmer has been advised to ensure any person taking animals to market is to ensure withdrawal periods are correctly observed for every animal.
Calves Kidney	Oxytetracycline 1500 µg/kg 1797142		Great Britain	Source of residue could not be established.
Calves Kidney	Oxytetracycline 14000 µg/kg 1797131		Great Britain	A large accredited farm with a total of 478 cattle on the premises. The farmer is the main manager of the farm and is assisted by his daughter Cows calve all year round and the milk is subsequently sold for pasteurisation. If a bovine over 4 months of age is treated the treatment is entered into a diary the person administering the medicine. Upon further scrutiny of the veterinary medicines records it was noted not all wormers and vaccines appeared to be recorded in the medicines records and medicines for calves under the age of 4 months do not show the withdrawal period. In the opinion of the investigator the likely cause of residue is likely to have been due to a genuine clerical error which has resulted in the possible unrecorded treatment of the calf. The case has been referred to the Rural Payments Agency.
Calves Kidney	Oxytetracycline 16000 µg/kg 1797129	Halocur Terramycin LA	Great Britain	A medium sized accredited cattle farm. The affected calf was sold to a collection centre at 21 days of age. All medicines are kept in a lockable room and one person has access to the records. The system to record any medicines appeared to be robust. The calf was treated with Halocur to treat a possible Cryptosporidium infection and later treated with Terramycin LA to control pneumonia. In the opinion of the inspector a residue of this concentration in the kidney would be consistent with that of a recent injection. The farmer claims he believed the calf would be sent for finishing. The VMD have raised the issue with the APHA office and local authority and are undertaking an investigation of the collection centre. The farmer has been reminded of his responsibility to inform auctioneers of any animal sold through market under the withdrawal period. The case has been referred to the Rural Payments Agency.
Calves Kidney	Oxytetracycline 19000 µg/kg 1797088	Metacam/Alamixin LA	Great Britain	A large farm with a dairy closed herd of 500 in number. The calf was likely to have been treated for pneumonia. Usually the farmer records the treatments of each animal in his medicines book but when not on farm another farm worker may do so. The farmer believes the wrong product was written down in the medicines book and the calf could likely have been treated with Alamixin LA as opposed to Metacam. Advice was given to the farmer regarding recording procedures and the farmer has agreed to be more vigilant in the future.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Calves Kidney	Oxytetracycline 49000 µg/kg & Gamithromycin 4500 µg/kg 1797002	Hexasol LA Solution for Injection for Cattle	Great Britain	The calf originated from a very well managed 550 cow dairy unit. The calf was likely to have been treated along with other calves for pneumonia with Hexasol LA. The farmer was unaware that the animal would subsequently be sent for slaughter. The administration had not been recorded in the medicines records. The farmer agreed to change their management practices to prevent this happening again.
Calves Kidney	Flunixin 320 µg/kg & Trimethoprim 1900 µg/kg 1797043		Great Britain	Source of residue could not be established.
Cattle Kidney	Marbofloxacin 250 µg/kg	Unknown	Northern Ireland	Herd flagged for resampling, four follow up samples were compliant.
Cattle Kidney	Marbofloxacin 314 µg/kg	Unknown	Northern Ireland	Animal purchased 3 days prior to slaughter. Current herdkeeper had given no treatment. Five follow up samples were compliant.
Cattle Kidney	Marbofloxacin 3550 µg/kg	Marbocyl 10%	Northern Ireland	The farm has a large dairy herd of 638 animals. The animal was treated on 04/04/17 with Marbocyl. No progress noted with animal so it was subsequently sent to slaughter on 10/04/17. The herdsman milking the cows the evening before slaughter noted the animal was ill and administered another injection without telling the herd keeper. The herd keeper does not have medicine book; a treatment was issued on 04/04/17 but not on 09/04/17 (as was noted in a general diary only). All five follow up samples were compliant.
Cattle Kidney	Marbofloxacin 4275 µg/kg	Marbocyl 10%	Northern Ireland	The animal had been on farm for 11 days prior to sampling. It had been injected with marbocyl 10% and the withdrawal period had been adhered to however the injection had been given intravenously into the milk vein instead of intramuscularly. The five follow up samples were compliant for Marbofloxacin however one of these samples was non-compliant for PenG 88 µg/kg, no further investigation was completed.
Cattle Kidney	Amoxicillin 231 µg/kg		Northern Ireland	The animal had been born on farm and is from dairy herd. The Herd keeper stated that he did not treat the animal as it was a first calving heifer so had not been treated with intramammary tubes or injected. The post mortem examination had noted mastitis and dull eyes.
Cattle Kidney	Amoxicillin 1225 µg/kg	Unknown	Northern Ireland	An Investigation was completed on 09/06/17. The animal was injured in crush and went to the abattoir as OFES. No treatment was given in crush but as it turns out the stockman had injected this animal a few days before while herdkeeper was on holiday. The Herdkeeper does not know what was administered (treatment was not recorded in medicine records).
Cattle Kidney	Florfenicol 535 µg/kg	Resflor	Northern Ireland	Sample was a follow up sample to a national plan bovine milk non-compliant sample (Florfenicol) 2.4 µg/L) and relates to a further follow up milk sample taken which was non-compliant (Florfenicol 4.6 µg/L) These samples were all from the same producer.
Cattle Kidney	Florfenicol 548 µg/kg	Nuflor & Draxxin	Northern Ireland	An investigation was completed on 16/11/17. The animal was treated with nuflor & draxxin on 31/08/17 due to poor body condition and pneumomia. These have 44 and 22 day withdrawal periods respectively and these were adhered to.
Cattle Kidney	Florfenicol 943 µg/kg	Norfenicol	Northern Ireland	The animal was from a dairy herd and had been treated with norfenicol (injectable). It was withdrawn for 30 days (withdrawal period is 39 days). In addition intramuscularly administration was into a single site (45mls) when maximum in a single site should have been 10ml.
Cattle Kidney	Florfenicol 1832 µg/kg	Nuflor	Northern Ireland	An investigation was completed on 27/06/17. Animal was treated with nuflor due to respiratory problems. The injection was not given according to manufacturer's instruction ie in multiple sites. The correct withdrawal time was not applied as the herd keeper had looked this up on internet and misinterpreted the guidance. Thirty days withdrawal was applied rather than 44 days. The medicine was purchased from a veterinary clinic which does not do farm visits, only an annual health check. Medicines records were not kept correctly. The herd keeper was not asked by the FBO to sign a Food Chain Information declaration.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Penicillin G 62 µg/kg	Depocillin	Northern Ireland	An investigation was completed on 10/8/17. The animal was treated with Depocillin (injectable) in accordance with manufacturer's instructions. Medicine records in accordance with legislation. There was no veterinary examination prior to treatment.
Cattle Kidney	Penicillin G 88 µg/kg		Northern Ireland	An investigation was completed on 28/03/17. The animal had been on farm for 11 days prior to sampling. It had been injected with marbocyl 10% and the withdrawal period had been adhered to however the injection had been given intravenously into the milk vein instead of intramuscularly. Five follow up samples were compliant for Marbofloxacin however one of these samples was non-compliant for PenG 88 µg/kg, no further investigation was completed.
Cattle Kidney	Penicillin G 210 µg/kg	N/A	Northern Ireland	An investigation was completed on 25/10/17. The animal injected with Penicillin by a farm worker (herd keeper was unaware) on 9/10/17 and slaughtered 2 days later as OFES.
Cattle Kidney	Florfenicol 1832 µg/kg	Nuflor	Northern Ireland	An investigation was completed on 27/06/17. The animal was treated with Nuflor due to respiratory problems. The injection was not given according to manufacturer's instruction i.e. in multiple sites. The correct withdrawal time was not applied as the herdkeeper had looked this up on internet and misinterpreted the guidance. Thirty days withdrawal was applied rather than 44 days. The medicine was purchased from a veterinary clinic which does not do farm visits, only an annual health check. Medicines records were not kept correctly. The herdkeeper was not asked by the FBO to sign a Food Chain Information declaration.
Cattle Kidney	Penicillin G 62 µg/kg	Depocillin	Northern Ireland	An investigation was completed on 10/08/17. Animal was treated with depocillin (injectable) in accordance with manufacturer's instructions. Medicine records in accordance with legislation. There was no veterinary examination prior to treatment.
Cattle Kidney	Penicillin G 88 µg/kg	Unknown	Northern Ireland	An investigation was completed on 28/03/17. The animal had been on farm for 11 days prior to sampling. It had been injected with marbocyl 10% and the withdrawal period had been adhered to however the injection had been given intravenously into the milk vein instead of intramuscularly. Five follow up samples were compliant for Marbofloxacin however one of these samples was non-compliant for PenG 88 µg/kg, no further investigation was completed.
Cattle Kidney	Penicillin G 192 µg/kg	Pen & Strep	Northern Ireland	An investigation was completed on 01/03/17. This is a dairy herd of 400+ animals. Animal treated with Penicillin/Streptomycin 28 days prior to slaughter and the withdrawal period is 23 days. The cow was not weighed prior to treatment so dosage given questionable. The seven follow up samples were all compliant.
Cattle Kidney	Penicillin G 210 µg/kg	N/A	Northern Ireland	An investigation was completed on 25/10/17. Animal injected with penicillin by farm worker (herd keeper was unaware) on 19/10/17 and slaughtered 2 days later as OFES.
Cattle Kidney	Penicillin G 228 µg/kg	Depocillin	Northern Ireland	An investigation was completed on 05/01/18. Animal was last treated on 08/11/17 with depocillin (5 day withdrawal) and sampled on 07/12/17. Cow had been operated on for a displaced stomach and never really recovered. She was sick and weak animal and the wound has never healed properly.
Cattle Kidney	Dihydrostreptomycin 4585 µg/kg	Penicillin/Streptomycin	Northern Ireland	An Investigation was completed on 21/06/17. This animal was treated with Penicillin/Streptomycin by the herd keeper's son approximately one week prior to emergency slaughter due to a broken leg. The withdrawal period is 21 days and the herd keeper was unaware of treatment. Report states that medicine records were in accordance with legislation however treatment of this animal was not recorded at the time.
Cattle Kidney	Dihydrostreptomycin 3760 µg/kg	Penicillin/Streptomycin	Northern Ireland	An Investigation was completed on 29/09/17. Animal was slaughtered on farm. Animal's eye was removed on 17/08 and was treated with Pen & Strep for 3 days after operation. Slaughter took place on farm 26 days after treatment (recommended is 21 days).

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Kidney	Dihydrostreptomycin 14000 µg/kg 1797080		Great Britain	A medium sized finishing enterprise with a high turnover of cattle; the majority are finished on high energy rations and stay at the premises for a short period of time. The farmer has been reported by various Official Veterinarians (OVs) for welfare incidents related to animals not fit for transport. The farm has also been inspected twice in the last 18 months for Cross Compliance visits. No non-compliance was found at the time of the inspections, however the inspector believes the farmer and his wife may not have a full understanding of the regulations. The copies of the medicines records supplied show no treatment recorded within the 23-day withdrawal period for the positive substance, however, both the OV and sampling officer present at the site noticed old and fresh injection sites on the animal.
Cattle Kidney	Tulathromycin 10856 µg/kg	Nuflor & Draxxin	Northern Ireland	An investigation was completed on 16/11/17. The animal was treated with nuflor & draxxin on 31/08/17 due to poor body condition and pneumomias. These have 44 and 22 day withdrawal periods respectively and these were adhered to.
Cattle Plasma	Phenylbutazone 0.33 µg/kg		Northern Ireland	Herd keeper has 9 horses on his farm as well as cattle and sheep. He has treated horses with danilon at the end of October. The treatment of horses is not recorded in medicine book. The PBZ was added to feed from a sachet in the horse shed- there was no sharing of the buckets etc.
Cattle Muscle	Oxytetracycline 218 µg/kg	Hexasol LA	Northern Ireland	An investigation was completed on 11/10/17. The animal was treated for meningitis with Hexasol LA, 38 days prior to slaughter (withdrawal period 35 days). The animal was administered with the correct dosage and no explanation as to why the residue was found.
Cattle Liver	Closantel 1230 µg/kg	Norofas	Northern Ireland	An investigation was carried out on 24/05/17. This is a beef/fattening herd. Animal, which was a Tuberculosis (TB) reactor, was treated with Norofas - a pour on containing Closantel. There is some doubt over whether correct withdrawal was given although herd keeper considers it was correct and thinks that the withdrawal period is not long enough.
Cattle Liver	Nitroxylin 24 µg/kg	Troday	Northern Ireland	An investigation was carried out on 29/09/17. There is herd of 130 cattle on farm, animal was injected with Troday and 60 days withdrawal time was adhered to. Five follow up samples were compliant.
Cattle Liver	Nitroxylin 25 µg/kg	Unknown	R.O.I	No Investigation report; animal transported from R.O.I
Cattle Liver	Nitroxylin 32 µg/kg	Product unknown	Northern Ireland	An investigation was completed on 17.12.17. Animal was from a beef herd of 155 animals. The animal was due to go to meat plant on 24.11.17 but broke its leg on 20.11.17 and was slaughtered on farm by PVP. According to herdkeeper the animal was treated with nitroxinil 84 days prior to slaughter. Withdrawal is 60 days. Medicine records are well kept.
Cattle Liver	Ivermectin 167 µg/kg	Unknown	Northern Ireland	Animal follow up to a non-compliant Risk sample (Ivermectin 269 µg/kg). All other follow up samples were compliant.
Cattle Liver	Ivermectin 269 µg/kg	Ecomectin	Northern Ireland	An investigation was carried out on 13/03/18. There is herd 200 cattle on farm. Animal was purchased 6 months previously. Herdkeeper reminded to record eartag details of which animals are treated so as withdrawal times can be adhered to clearly. As all animals are treated, no individual details are recorded. Ecomectin was administered as manufacturer's instructions. From 5 follow up samples one was non compliant (Ivermectin 167 µg/kg).
Cattle Milk	Cefalonium 42 µg/kg	Unknown	Northern Ireland	An investigation was carried out on 17/05/17. This is a dairy and suckler herd of ~75 animals. Medicine records available. The Herd keeper stated that he has not used Cefalonium in dry cow therapy since 2015.
Cattle Milk	Florfenicol 0.38 µg/kg	Unknown	Northern Ireland	An investigation was completed on 16/11/17. Several heifers out of a herd of 59 were treated but this was not recorded in the medicine book. These animals were not milking at the time of treatment. A follow up sample was non-compliant.
Cattle Milk	Florfenicol 0.39 µg/kg		Northern Ireland	An investigation was completed on 28/7/17. The Herd keeper milks around 180 cattle. Medicine records all of which are well maintained. Three recorded purchases of Florfenicol in recent months however no treatment of milking cattle was recorded. The presence of residues in milk remained unexplained. The follow up sample taken on 06/09/17 was compliant.
Cattle Milk	Florfenicol 0.48 µg/kg	Unknown	Northern Ireland	This was a follow up sample to national plan non-compliant Florfenicol milk sample (1.13 µg/L).

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Cattle Milk	Florfenicol 0.63 µg/kg	Nuflor	Northern Ireland	Relates to Risk non-compliant milk sample for Florfenicol 0.39 µg/L.
Cattle Milk	Florfenicol 0.80 µg/kg	Unknown	Northern Ireland	An investigation was completed on 16/11/17. Several heifers out of a herd of 59 were treated but this was not recorded in the medicine book. These animals were not milking at the time of treatment. A follow up sample was non-compliant
Cattle Milk	Florfenicol 0.85 µg/kg	Norfenicol	Northern Ireland	An investigation was completed on 29.08.17. This is a large dairy herd which operates a computerised milking system. Medicine records show the treatment of 5 animals with norfenicol. This was administered due to respiratory disease. Dose was correct per weight (if its use was permitted) however volume per injection site not correct. A 7 day withdrawal was applied. Herd keeper advised that drug was given in consultation with his PVP. Follow up sample taken on 25/08/17 was non-compliant (0.85 µg/L) for Florfenicol. Producer also has a non-compliant Florfenicol milk sample (1.01 µg/L) taken under the Risk scheme and a kidney non-compliant casualty animal for Florfenicol (943 µg/kg).
Cattle Milk	Florfenicol 1.01 µg/kg		Northern Ireland	Follow up milk samples were non-compliant (0.85 µg/L and 1.3 µg/L) for Florfenicol. Producer also had a kidney non-compliant casualty animal for Florfenicol (943 µg/kg).
Cattle Milk	Florfenicol 1.3 µg/kg		Northern Ireland	An investigation was completed on 29/08/17. This is a large dairy herd which operates a computerised milking system. Medicine records show the treatment of 5 animals with norfenicol. This was administered due to respiratory disease. Dose was correct per weight (if its use was permitted) however volume per injection site not correct. A 7 day withdrawal was applied. Herd keeper advised that drug was given in consultation with his PVP. Follow up sample taken on 25/08/17 was non-compliant.
Cattle Milk	Florfenicol 1.8 µg/kg	Nuflor	Northern Ireland	An investigation was undertaken on 27/09/17. Nuflor administered on 29/07/17 to two heifers. These animals were examined and treated by the vet but then calved early. Follow up sample taken on 19/09/17 was compliant.
Cattle Milk	Florfenicol 2.5 µg/kg		Northern Ireland	An investigation was completed on 07/09/17. The animal concerned came from a dairy herd of 282 animals; 90 milking at inspection. Norfenicol present on farm however herd keeper stated that it is not used on dairy cattle. He has, however, records of its use in beef cattle and calves. The Herd keeper stated that there has been no major health issue on his farm and no veterinary presence for approximately 12 months. Medicine records were not kept in accordance with legislation as they were detailed in a diary. All details have now been transferred to a medicine book. The follow up sample taken on 11/09/17 was compliant.
Cattle Milk	Florfenicol 3.9 µg/kg		Northern Ireland	An inspection was completed on 12/09/17. Animal had been treated with Nuflor injectable. Sample was taken on 03/07/17 however farmer continued to use nuflor until 01/08/17. Follow up sample 25/08.17 was positive. Farmer treated animal and then withdrew milk for 1 week.
Cattle Milk	Florfenicol 4.6 µg/kg	Resflor	Northern Ireland	This was a follow up sample to a national plan non-compliant Florfenicol milk sample (2.4 µg/L). Producer also had a non-compliant kidney sample for Florfenicol (535 µg/kg) which had been taken as a follow up at the abattoir.
Cattle Milk	Penicillin 4.6 µg/kg	Unknown	Northern Ireland	An investigation was completed on 08/11/17. No dosage was recorded in medicine book (large section missing from 01/17-05/08/17 however veterinary officer expects that residues were due to the use of intra mammary tubes.
Sheep				
Sheep Kidney	Oxytetracycline 1185 µg/kg		Northern Ireland	An investigation was undertaken on 24/5/17. Animal purchased 3 days prior to slaughter and not treated by herd keeper. 5 follow up samples were compliant.
Sheep Kidney	Tildipirosin 444 µg/kg	Unknown	Northern Ireland	An investigation was carried out on 15/05/17. There are both cattle and sheep (commercial and pedigree) on the farm. No treatment had been given by the herd keeper. Cause of residue could not be established.
Sheep Kidney	Tildipirosin 478 µg/kg		Northern Ireland	An investigation was completed on 15/05/17. Cattle and sheep (commercial and pedigree) both on farm. No treatment given by herd keeper. Lambs slaughtered after purchase.
Sheep Kidney	Tildipirosin 669 µg/kg	Unknown	Northern Ireland	An investigation was carried out on 15/05/17. There are both cattle and sheep (commercial and pedigree) on the farm. No treatment had been given by the herd keeper. Cause of residue could not be established.

Species & Matrix	Residue detected & concentration (RIM Ref)	Products used	Region	Cause of residue
Sheep Kidney	Tildipirosin 5330 µg/kg	Unknown	Northern Ireland	An investigation was completed on 15/05/17. Cattle and sheep (commercial and pedigree) both kept on farm. No treatment was given by herd keeper. Cause of residue could not be established.
Sheep Kidney	Tildipirosin 8125 µg/kg	Unknown	Northern Ireland	An investigation was carried out on 15/05/17. There are both cattle and sheep (commercial and pedigree) on the farm. No treatment had been given by the herd keeper. Cause of residue could not be established.
Sheep Kidney	Tildipirosin 9405 µg/kg	Unknown	Northern Ireland	An investigation was carried out on 15/05/17. There are both cattle and sheep (commercial and pedigree) on the farm. No treatment had been given by the herd keeper. Cause of residue could not be established.
Sheep Liver	Closantel 1890 µg/kg		Northern Ireland	An investigation was carried out on 13/03/17. The animals purchased one week prior to slaughter and not treated by Herd keeper. Cause of residue could not be established.
Sheep Liver	Closantel 2200 µg/kg	Unknown	Northern Ireland	. Relates to Risk non-compliant sample for Closantel 5699 µg/kg
Sheep Liver	Closantel 2300 µg/kg	Unknown	Northern Ireland	Relates to Risk non-compliant sample for Closantel 5699 µg/kg
Sheep Liver	Closantel 2800 µg/kg		Northern Ireland	An investigation was carried out on 15/02/17. The animal had been on farm 2-3 weeks prior to slaughter. No Closantel was administered by Herd keeper and no sheep identification possible. All five follow up samples were compliant.
Sheep Liver	Closantel 3360 µg/kg	Unknown	Northern Ireland	This was a follow up sample to a Rafoxanide non-compliant sample from late 2016.
Sheep Liver	Closantel 3566 µg/kg		Northern Ireland	An investigation was carried out on 08/06/17. The animal had been purchased 3 days prior to slaughter. No treatment had been given by the herd keeper. The ten follow up samples were all compliant.
Sheep Liver	Closantel 5699 µg/kg		Northern Ireland	An investigation was carried out on 08/02/17. The Animal had been bought a few days prior to slaughter and had not been treated by Herd keeper, who expressed his frustration regarding how the positive animal could not be tracked. Ten follow up samples taken; 3 were non-compliant (2 for Closantel and 1 for Nitroxynil).
Sheep Liver	Closantel 6700 µg/kg	Solantel	Northern Ireland	An investigation was carried out on 09/03/17. Lambs reared on farm and dosed with Solantel 65 days prior to slaughter. Withdrawal period is 42 days. All animals given an "average" dose.
Sheep Liver	Nitroxynil 73 µg/kg		Northern Ireland	Relates to Risk non-compliant sample for Closantel 5699 µg/kg
Sheep Liver	Fenbendazole 673 µg/kg	Ovidown SC Oral Suspension for Sheep	Northern Ireland	An investigation was carried out on 20/06/17. The flock of ewes was 200 in number. The ewes were treated with oxfendazole oral drench 11 days prior to slaughter (10 day withdrawal period). All five follow up samples were compliant.
Sheep Liver	Fenbendazole 1300 µg/kg	Parafend	Northern Ireland	An investigation was completed on 03/11/17. The animal was treated with Parafend (oxfendazole) on 29/05/17 and slaughtered on 25/09/17(10 day withdrawal period). There was no explanation as to how the cause of residue occurred.
Sheep Liver	Albendazole 1590 µg/kg	Tramazole	Northern Ireland	An investigation was completed on 12/10/17. It was found the animal was treated with tramazole (albendazole) orally five days before slaughter (withdrawal period is four days). Five follow up samples were compliant.

Full details of 2017 UK statutory surveillance programme by sector

RED MEAT						
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	Cattle		Urine	136	1	14 (thiouracil)
	Fattening cattle		Urine	185		
	Horses		Urine	1		
	Pigs		Urine	97		
	Sheep		Urine	70		
A3 Hormones						
Gestagens	Cattle		Kidney Fat	254		
	Fattening cattle		Serum	248		
	Pigs		Kidney Fat	97		
	Sheep		Kidney Fat	79		
Methyltestosterone	Pigs		Feed	26		
Oestradiol	Cattle	Male	Serum	168		
	Fattening cattle	Male	Serum	278		
Steroid screen 1	Cattle		Urine	1427	44	0.36, 0.37, 0.42, 0.45, 0.51, 0.63, 0.63, 0.85, 0.97, 1.1, 1.1, 1.2, 1.3, 1.5, 1.6, 1.8, 1.9, 2, 2.6, 2.6, 2.8, , 4.3, 4.5, 5.6, 5.6, 5.8, 5.8, 5.9 6.3, 6.5, 6.7, 7.0, 8.1, 8.6, 10.0 12, 23, 29 (alpha-nortestosterone) 13, 17, 20 (testosterone) 3.1 (alpha-boldenone) 124, 362 (a-estradiol)
	Fattening cattle		Urine	1,294	8	0.23, , 2.2, 2.9, 5.6, 9.1, 9.5, 18 (alpha-nortestosterone) 0.26 (beta-boldenone)
	Horses		Urine	2		
	Pigs		Urine	301		
	Sheep		Urine	549	49	2.0, 2.1,2.1, 2.2, 2.2, 2.2, 2.3, 2.3, 2.4, 2.4, 2.6, 2.7, 2.9, 3.0, 3.1, 3.2, 3.4, 3.5, 3.5, 3.6, 3.8, 4.2, 4.3, 4.3, 4.6, 4.9, 5.0, 5.1, 5.1,5.2, 6.5, 8.3, 8.5, 10, 10, 11 (alpha-boldenone) 4.8, 14 (alpha-nortestosterone) 0.65, 0.67, 0.78, 0.96, 1.3, 1.4, 1.4,1.5, 1.6, 1.9, (beta-nortestosterone) 0.56 (beta-boldenone)
Testosterone	Cattle	Female	Serum	272		
	Fattening cattle	Female	Serum	279	2	0.42, 3.5 (testosterone)
A4 Hormones						
Zeranol	Cattle		Urine	796	8	1.6, 1.7, 4.9, 13 (taleranol) 0.57, 0.63, 1.1, 4.4 (zeranol)
	Fattening cattle		Urine	570	14	0.78, 1.3, 1.3, 1.3, 2.1, 8.6, 13 (taleranol) 0.28, 0.70, 0.71, 0.88, 0.36, 5.5. 4.4 (zeranol)
	Horses		Urine	1	2	0.82 (taleranol) 1.1 (zeranol)
	Pigs		Urine	179		
	Sheep		Urine	110	2	4.5 (taleranol) 4.3 (zeranol)
A5 Beta-Agonists						
	Calves	< 6 months	Liver	7		
	Cattle		Liver	446		
	Fattening cattle		Feed	142		
	Fattening cattle		Urine	162		
	Horses		Liver	18		

	Pigs		Feed	45		
	Pigs		Kidney	1		
	Pigs		Liver	360		
	Sheep		Liver	272		
A6 Annex IV						
Chloramphenicol	Calves	< 6 months	Kidney	11		
	Cattle		Kidney	243		
	Fattening cattle		Feed	302		
	Fattening cattle		Urine	3		
	Horses		Kidney	3		
	Pigs		Kidney	240		
	Sheep		Kidney	146		
Nitrofurans	Calves	< 6 months	Kidney	4		
	Cattle		Kidney	137		
	Fattening cattle		Feed	176		
	Horses		Kidney	2		
	Pigs		Feed	7		
	Pigs		Kidney	297		
	Sheep		Kidney	232		
Nitroimidazoles	Calves	< 6 months	Kidney	4		
	Cattle		Kidney	140		
	Horses		Kidney	2		
	Pigs		Feed	16		
	Pigs		Kidney	221		
	Sheep		Kidney	109		
B1 Antimicrobial						
AMS1	Calves	< 6 months	Kidney	101	8	1100, 1300, 3200 (gamithromycin) 6800 (tilmicosin) 770, 1300, 1500 (oxytetracycline) 1000 (chlortetracycline)
	Cattle		Kidney	1,248	3	1700 (oxytetracycline) 860 (sulfadiazine) 11000 tulathromycin
	Horses		Kidney	7		
	Pigs		Kidney	1,305		
	Sheep		Kidney	2,127	1	1185 (oxytetracycline)
	Cattle		Milk	517	1	110 (penicillin G)
AMS2	Calves	< 6 months	Kidney	0		
	Cattle		Kidney	107		
	Pigs		Kidney	280		
AMS4	Calves	< 6 months	Kidney	98	1	5800, (dihydrostreptomycin)
	Cattle		Kidney	375		
	Sheep		Kidney	238		
Ceftiofur	Pigs		Kidney	113		
Florfenicol	Calves	< 6 months	Kidney	97	1	8400 (florfenicol)
	Sheep		Kidney	99		
B2A Anthelmintics						
Anthelmintics	Cattle		Liver	652	3	4600, 14000 (closantel) 67 (nitroxinyl)
	Pigs		Liver	285		
	Sheep		Liver	1,523	21	

						75, 110 (fenbendazole) 1700, 1700, 2000, 2500, 2700, 3000, 3100, 3600, 2304, 4662 (closantel) 710,1800 (triclabendazole) 44, 110 (triclabendazole sulfoxide) 170, 340 (triclabendazole sulfone) 470, 760 (oxfendazole) 140 (nitoxinyl)
	Cattle		Milk	43	1	19.1 (clorsulon)
Avermectins	Cattle		Liver	445	1	67 (nitroxyinil)
	Horses		Liver	7		
	Pigs		Liver	138		
B2B Coccidiostats						
Coccidiostats	Calves	< 6 months	Liver	17		
	Horses		Liver	2		
	Pigs		Liver	104		
	Sheep		Liver	312		
B2C Pesticide Screen						
Pyrethroids	Calves	< 6 months	Kidney Fat	31		
	Horses		Kidney Fat	2		
	Pigs		Kidney Fat	70		
	Sheep		Kidney Fat	534		
B2D Sedatives						
	Breeding Boar		Liver	82		
	Cattle		Liver	31		
	Horses		Liver	7		
	Pigs		Liver	124		
	Sheep		Liver	93		
B2E NSAIDs						
	Cattle		Kidney	528		
	Horses		Kidney	36	1	28 (phenylbutazone)
	Pigs		Kidney	36	1	9.7 (ibuprofen)
	Sheep		Kidney	47		
B2F Glucocorticoids						
	Cattle		Liver	283		
	Horses		Liver	6		
	Pigs		Liver	41		
	Sheep		Liver	22		
B3A Pesticide Screen						
OC/PCBs	Cattle		Kidney Fat	67		
	Horse		Kidney Fat	1		
	Pigs		Kidney Fat	67		
	Sheep		Kidney Fat	124		
B3B Pesticide Screen						
OPs	Cattle		Kidney Fat	193		
	Horses		Kidney Fat	1		
	Pigs		Kidney Fat	136		
	Sheep		Kidney Fat	549		
B3C Heavy Metals						
Metals	Cattle		Kidney	69	3	1400, 1600, 3400 (cadmium)
	Horses		Kidney	1	1	2200 (cadmium)
	Pigs		Kidney	12		

	Sheep		Kidney	52	4	850, 1600 (lead) 1100, 1800 (cadmium)
	Sheep		Muscle	0		
B3D Mycotoxins						
Mycotoxins	Cattle		Liver	24		
	Horses		Liver	1		
	Pigs		Liver	79	2	3.1, 4.2 (ochratoxin A)
	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 (Ug/Kg)
A3 Hormones						
Steroid screen 2	Broilers		Liver	479		
	Ducks		Liver	8		
	Hens		Liver	25		
	Turkeys		Liver	94		
A5 Beta-Agonists						
	Broilers		Feed	162		
	Broilers		Liver	313		
	Ducks		Feed	5		
	Ducks		Liver	8		
	Hens		Feed	10		
	Hens		Liver	21		
	Turkeys		Feed	26		
	Turkeys		Liver	76		
A6 Annex IV						
Chloramphenicol	Broilers		Muscle	619	1	0.31 (chloramphenicol)
	Ducks		Muscle	14		
	Hens		Muscle	30		
	Turkeys		Muscle	44		
Nitrofurans	Broilers		Feed	237		
	Broilers		Muscle	455		
	Ducks		Feed	5		
	Ducks		Muscle	11		
	Hens		Feed	13		
	Hens		Muscle	31		
	Turkeys		Feed	30		
	Turkeys		Muscle	56		
Nitroimidazoles	Broilers		Feed	232		
	Broilers		Serum	768		
	Ducks		Feed	5		
	Ducks		Serum	16		
	Hens		Feed	12		
	Hens		Serum	30		
	Turkeys		Feed	30		
	Turkeys		Serum	89		
B1 Antimicrobial						
AMS1	Broilers		Muscle	919		

	Ducks		Muscle	26		
	Geese		Muscle	1		
	Hens		Muscle	72		
	Turkeys		Muscle	123		
AMS2	Broilers		Muscle	451		
	Ducks		Muscle	13		
	Geese		Muscle	2		
	Hens		Muscle	30		
	Turkeys		Muscle	94		
Tiamulin	Broilers		Muscle	11		
B2A Anthelmintics						
Anthelmintics	Broilers		Liver	234		
	Ducks		Liver	8		
	Hens		Liver	24		
	Turkeys		Liver	70		
B2B Coccidiostats						
Coccidiostats	Broilers		Liver	1,269	4	13, 13 (monensin) 8.5, 21 (salinomycin)
	Hens		Liver	21		
	Turkeys		Liver	103		
B2C Pesticide Screen						
	Broilers		Liver	75		
	Ducks		Liver	7		
	Hens		Liver	8		
	Turkeys		Liver	14		
B2E NSAIDs						
	Broilers		Liver	6		
	Ducks		Liver	6		
	Hens		Liver	6		
	Turkeys		Liver	5		
B3A Pesticide Screen						
	Broilers		Liver	242		
	Ducks		Liver	5		
	Hens		Liver	10		
	Turkeys		Liver	13		
B3C Heavy Metals						
Metals	Broilers		Muscle	82		
	Ducks		Muscle	3		
	Hens		Muscle	3		
	Turkeys		Muscle	8		
B3D Mycotoxins						
Mycotoxins	Broilers		Liver	16		
	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 (Ug/Kg)
A6 Annex IV						
Chloramphenicol	Eggs		Eggs	126		
Nitrofurans	Eggs		Eggs	125		

Nitroimidazoles	Eggs		Eggs	127		
B1 Antimicrobial						
AMS1	Eggs		Eggs	97		
AMS2	Eggs		Eggs	99		
AMS3	Eggs		Eggs	183		
Tiamulin	Eggs		Eggs	34		
B2B Coccidiostats						
Coccidiostats	Eggs		Eggs	506	2	4 (narasin) 590 (lasalocid)
B3A Pesticide Screen						
	Eggs		Eggs	34		
B3B Fipronil	Eggs		Eggs	300		

FISH						
Substance Group/Analyte	Species	Age & Sex	Matrix	No of Analyses	No. above Action Level	Concentration where samples above the Action Level (Ug/Kg)
A3 Hormones						
Methyltestosterone	Trout		Muscle & Skin	4		
A6 Annex IV						
Chloramphenicol	Halibut		Muscle & Skin	1		
	Salmon		Muscle & Skin	200		
	Trout		Muscle & Skin	11		
	Turbot		Muscle & Skin	1		
Nitrofurans	Halibut		Muscle & Skin	1		
	Salmon		Muscle & Skin	101		
	Trout		Muscle & Skin	3		
Nitroimidazoles	Salmon		Muscle & Skin	177		
	Trout		Muscle & Skin	7		
B1 Antimicrobial						
AMS1	Salmon		Muscle & Skin	97		
	Trout		Muscle & Skin	4		
AMS2	Halibut		Muscle & Skin	1		
	Salmon		Muscle & Skin	32		
	Trout		Muscle & Skin	4		
	Turbut		Muscle & Skin	1		
AMS3	Halibut		Muscle & Skin	1		
	Salmon		Muscle & Skin	165		
	Trout		Muscle & Skin	4		
Florfenicol	Salmon		Muscle & Skin	83		
B2A Anthelmintics						
Anthelmintics	Halibut		Muscle & Skin	1		
	Salmon		Muscle & Skin	101		
	Trout		Muscle & Skin	2		
Avermectins	Salmon		Muscle & Skin	89		
	Trout		Muscle & Skin	1		
B2C Pesticide Screen						
Pyrethroids	Salmon		Muscle & Skin	118		
B3A Pesticide Screen						
OCs/PCBs	Salmon		Muscle & Skin	10		
	Trout		Muscle & Skin	3		

B3B Pesticide Screen						
OPs	Salmon		Muscle & Skin	38		
B3C Heavy Metals						
Metals	Salmon		Muscle & Skin	21		
	Trout		Muscle & Skin	2		
B3D Mycotoxins						
Mycotoxins	Salmon		Muscle & Skin	8		
	Trout		Muscle & Skin	3		
B3E Dyes						
Dyes	Salmon		Muscle & Skin	198		
	Tilapia		Muscle & Skin	2		
	Trout		Muscle & Skin	52		

MILK						
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	Cattle		Milk	887	5	0.66, 1.13, ,2.3, 2.4, 4.3,(florfenicol)
	Goats		Milk	5		
	Sheep		Milk	4		
B1 Antimicrobial						
AMS1	Cattle		Milk	499	1	110 (penicillin G)
	Goats		Milk	2		
	Sheep		Milk	2		
AMS2	Cattle		Milk	252		
	Goats		Milk	1		
	Sheep		Milk	2		
AMS3	Cattle		Milk	374		
	Goats		Milk	3		
	Sheep		Milk	2		
AMS4	Cattle		Milk	226		
	Goats		Milk	1		
Cefquinome	Cattle		Milk	162		
	Goats		Milk	2		
	Sheep		Milk	1		
Ceftiofur	Cattle		Milk	105		
	Goats		Milk	1		
	Sheep		Milk	1		
B2A Anthelmintics						
Anthelmintics	Cattle		Milk	398	4	19.1 (clorsulon), 2304, 4662 (closantel) 21 (triclabendazole)
	Goats		Milk	3		
	Sheep		Milk	2		
Avermectins	Cattle		Milk	408	4	1.9 (clorsulon) 1.5, 6.9 (ivermectin) 70 (closantel)
	Goats		Milk	2		
	Sheep		Milk	2		
B2E NSAIDs						
	Cattle		Milk	148		
	Goats		Milk	2		

	Sheep		Milk	2		
B3A Pesticide Screen						
OCs/PCBs	Cattle		Milk	26		
	Goats		Milk	1		
B3B Pesticide Screen						
OPs	Cattle		Milk	34		
B3C Heavy Metals						
Metals	Cattle		Milk	39		
B3D Mycotoxins						
Mycotoxins	Cattle		Milk	33		

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	4		
A5 Beta-Agonists						
	Deer		Liver	10		
A6 Annex IV						
Nitroimidazoles	Deer		Muscle	3		
B1 Antimicrobial						
AMS1	Deer		Kidney	15		
B2A Anthelmintics						
Anthelmintics	Deer		Liver	4		
	Partridge		Liver	4		
	Pheasant		Liver	5		
	Red Grouse		Liver	8		
B2B Coccidiostats						
Coccidiostats	Partridge		Muscle	5	1	340 (lasalocid)
	Pheasant		Muscle	5	1	99 (lasalocid)
	Quail		Muscle	1		
B2C Pesticide Screen						
Pyrethroids	Deer		Kidney Fat	2		
B2D Sedatives						
	Deer		Liver	4		
B2E NSAIDs						
	Deer		Kidney	4		
B3A Pesticide Screen						
OCs/PCBs	Deer		Kidney Fat	12	1	1200 (DDE-p,p')
B3C Heavy Metals						
Metals	Deer		Muscle	6		
	Partridge		Muscle	6		
	Pheasant		Muscle	7		
	Wild Deer		Muscle	93	1	23000 (lead)

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	10		
Nitrofurans	Bees		Honey	10		
B1 Antimicrobial						
AMS1	Bees		Honey	21		
AMS3	Bees		Honey	21		
AMS4	Bees		Honey	20		
AMS5	Bees		Honey	20		
B2C Pesticide Screen						
Pyrethroids	Bees		Honey	10		
B3A Pesticide Screen						
	Bees		Honey	12		
B3B Pesticide Screen						
OPs	Bees		Honey	14		
B3C Heavy Metals						
Metals	Bees		Honey	14		
B3F						
Amitraz	Bees		Honey	10		
Naphthalene	Bees		Honey	10		