National statutory surveillance scheme for veterinary residues in animals and animal products: 2024

Residues detected above the reference point to date: 31 December 2024

Sample	Analysed for	No. of analyses	No. of non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l
Calf kidney	Antimicrobials screen 1	118	3	600	1000 chlortetracycline
				600	6200 oxytetracycline
				3000	9300 tulathromycin
	Antimicrobials screen 4	100	4	1000	140000 dihydrostreptomycin
				1500	2000, 6100, 9400 paromomycin
	Florfenicol	98	3	300	890, 3100, 4100 florfenicol
Calf kidney fat	Pyrethroids	86	1	50	480 deltamethrin
Calf liver	Coccidiostats	140	1	30	37 halofuginone
Cattle kidney	Metals	177	12-2 substances in three samples	1000	1200, 2700, 4700, 7000, 8100, cadmium
				Presence	13, 14, 23 inorganic arsenic
				200	230, 340, 410, 420, 430, 460, 1100 lead
	NSAIDs	375	4	10	13 diclofenac
				Presence	67, 280 ibuprofen
				65	170 meloxicam
Cattle milk	Antimicrobials screen 1	460	1	4	12.1 amoxycillin
	Florfenicol	674	3	Presence – prohibited for use in milk producing animals	0.378, 0.985, 1.9 florfenicol
	NSAIDs	132	1	0.1	0.96 diclofenac
Cattle serum	Testosterone	310	2	Presence	0.2, 1.9 beta-testosterone
Cattle urine	Steroid screen 1	1074	17-2 substances in three samples	2	2.5 alpha-boldenone
				12 Male	418 alpha-estradiol
				Presence	1.2, 1.6, 1.8, 2.3, 5.7, 5.7, 6.5, 7.8 alpha-nortestosterone
				Presence	3.4 beta-boldenone
					0.53, 2400 beta-nortestosterone
				12 Male	14, 17, 16, 19, 19, 19, 74 testosterone
	Zeranol	423	11-2 substances in each sample	Presence	0.9, 1.0, 1.0, 1.2, 1.8, 1.8, 2.4, 2.7, 2.7, 4.7, 6.8 taleranol
					0.28, 0.41, 0.52, 0.56, 0.59, 0.79, 0.82, 0.99, 1.1, 1.3, 3.9 zeranol
Fattening cattle serum	Testosterone	345	1	Presence	0.21 beta-testosterone
Fattening cattle urine	Steroids screen 1	1220	31-2 substances in five samples	2	2.4, 2.8, 3.3, 6.0 alpha-boldenone
				12 Male	28 alpha-estradiol
			3 substances in one sample	Presence	0.71, 5.2, 5.5, 5.5, 6.6, 7.4, 7.6, 8.5, 9.2, 9.4, 9.6, 11, 11, 12, 12, 14, 16, 19, 21, 31 alpha-nortestosterone

Sample	Analysed for	No. of analyses	No. of non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l
Fattening cattle urine				Presence	0.61, 0.74, 2.2, 3.1, 3.8, 8, 11, 11, 14, 29, 31 beta-estradiol
				Presence	0.44 beta-nortestosterone
				12 Male	26 testosterone
	Thyrostats	236	1	30	72 thiouracil
	Zeranol	402	8-2 substances in each sample	Presence	0.61, 0.84, 1.1, 1.3, 1.3, 1.9, 2.3, 2.4 taleranol
				Presence	0.31, 0.45, 0.63, 0.82, 0.88, 0.96, 1.1, 1.5 zeranol
Honey	Nitrofurans	67	1	0.5	3.8 semicarbazide
Horse kidney	Metals	1	1	1000	37000 cadmium
Pig kidney	Antimicrobials screen 1	849	1	100	210 sulfadiazine
	Metals	64	1	150	280 lead
Pig liver	Anthelmintics	365	1-3 substances in one sample	500	2200 fenbendazole
					150 oxfendazole sulfone
					100 oxfendazole
Quail egg	Coccidiostats	2	1	150	560 lasalocid
Salmon muscle & skin	Dyes	72	1	Presence	25 crystal violet
Sheep kidney	Metals	196	17	1000	1200, 1400 cadmium
				Presence	25 inorganic arsenic
				200	210, 220, 250, 330, 370, 400, 420, 490, 650, 860, 980, 1200, 1400, 1600 lead
Sheep liver	Anthelmintics	1172	8-3 substances in one sample 2 substances in one sample	1500	1700, 1700, 4100, 4800 closantel
				Presence	4 flubendazole
				Presence	23 (2-amino-1H-benzimidazol-5-yl) (4-fluorphenyl)-methanone
				500	1200 oxyclozanide
				150	1917 rafoxanide
				250	7.2 triclabendazole sulfoxide
					95 triclabendazole sulfone
					230 triclabendazole
Sheep urine	Steroid screen 1	477	40-2 substances in one sample	2	2.2, 2.2, 2.3, 2.3, 2.4, 2.5, 2.5, 2.5, 2.7, 2.7, 3.0, 3.1, 3.2, 3.5, 3.6, 3.6, 3.7, 4.1, 4.4, 4.4, 4.8, 4.9, 5.0, 5.4, 6.1, 6.7, 6.8, 6.9, 7.2, 7.5, 7.9, 8.8, 9.7, 12, 15, 17 alpha-boldenone
				Presence	0.50 beta-boldenone
				Presence	0.47, 0.72, 1.1, 1.2 beta-nortestosterone
	Zeranol	95	1-2 substances in the one sample	Presence	1.0 taleranol
					0.92 zeranol

Results of follow-up investigations: 31 December 2024

Medicinal products can be found on the Product Information Database.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Calf kidney	Chlortetracycline 1000 µg/kg 2416431	Great Britain	This is a large-sized, Tesco accredited, cattle farm, with around 1200 animals. Calves are moved here from the calving unit, when they are 3-4 days old, and are kept here until 13-14 months old. The positive calf was in a group of 80 Aberdeen Angus X calves that were housed in the same shed. They were all treated with Chloromed to prevent the spreading of respiratory disease (Pasteurella spp). The calf was moved to a different pen to be monitored because it was underweight. When back to weight it was mistakenly placed in a group intended for slaughter. Medicines were stored appropriately and there were no out of date or illegal drugs present. The residue was caused by the calf being wrongly placed in a group sent for slaughter in May 2024, whilst still within a withdrawal period.
Calf kidney	Dihydrostreptomycin 140000 µg/kg 2426914	Great Britain	An initial investigation took place at the farm that sent the positive animal to slaughter. This enterprise is a fattening cattle unit. The male calf, aged 10 days old, stayed at the farm for less than 24 hours in August 2024, before it was sent for slaughter. The calf did not receive any medical treatment whilst on site. The most likely reason for this positive result is the animal was treated prior to purchase. A second investigation then took place at the farm of origin; a medium-sized dairy farm. The positive animal had recently received medical treatment at this farm. The farmer submitting the calf to market was unaware that it could go direct to slaughter, being so young, and didn't include an FCI declaration. The cause of the residue detected is due to the animal being sent for slaughter whilst within a withdrawal period.
Calf kidney	Florfenicol 890 µg/kg 2426934	Great Britain	The investigation was unable to trace the animal in question.
Calf kidney	Florfenicol 3100 µg/kg 2426952	Great Britain	This is a large-sized farm, with approximately 130 cattle, with some sheep and horses onsite. Medicines are stored in a bucket inside a locked shed with only the farmer having access. He also is the only person in charge of administering medicines to the animals, intramuscularly or subcutaneously, on advice from his private veterinary surgeon. The drug cabinet contained Nuflor (active ingredient florfenicol), used for cattle and sheep. The bottle had not been used in accordance with the dosage instructions and kept beyond the recommended period after opening. Medicine records are stored electronically. They showed other animals receiving Nuflor, but not the sampled animal. The positive animal was born in May 2024. It was sent for slaughter in July 2024 in the farmer's own transport. The most likely cause of this residue is the animal being treated, but the treatment not recorded, resulting in the animal being sent for slaughter within a withdrawal period.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Calf kidney	Florfenicol 4100 µg/kg 2409417	Great Britain	The positive male calf was sent to slaughter from a dealers farm in February 2024, aged 18 days. It had spent less than 24 hours on this medium-sized, Red Tractor assured, cattle farm. They have around 200 animals onsite, and another 520 beef cattle herd within their other holdings. They don't keep breeding stock, cattle are bought in from different markets. The dealer declared he had not given any medication to this specific calf. The FCI document was present and medicine records showed florfenicol products have not been used onsite for 5 years. The dealer was not thought to have treated the animal on the basis of the evidence and absence of the product on the farm. A second investigation took place at the farm of origin; a large-sized cattle farm. Their record keeping is fairly well maintained. Medicines are kept in an unlocked cabinet, in a room that is locked overnight. Bull calves are organic and not treated with antibiotics. The female calves are treated with Resflor (active ingredient florfenicol). Female and male calves are separated in two different sheds, so confusion when treating is unlikely. The animal was not spray marked to indicate treatment and no treatment was recorded in the daybook or medicines record. The presence of the drug on farm means that even if there is no record of use, there is still a risk pathway for the drug to have been given to the animal. In conclusion, the most likely reason for the positive result is the animal was treated in error prior to the purchase by the dealer, and then inadvertently sent for slaughter within the withdrawal period. The residue was over 13 times the MRL, indicating a recent treatment. The withdrawal period for Resflor is 46 days.
Calf kidney	Oxytetracycline 6200 µg/kg 2426867	Great Britain	This is a large dairy farm with 310 cows and an additional 195 heifers and 28 beef calves. The beef calves are normally sold under 42 days old. Medicines are provided by their Private Veterinary Surgeon (PVS) and kept in a fridge and locked cabinet. Engemycin 10% (active ingredient oxytetracycline) was present in the cabinet. Medicine records are kept for more than 5 years and PVS invoices were available. Records did not show this calf being treated before going to slaughter, but other calves within the same group were treated with Engemycin 2 days before. The positive calf was moved off the farm, in a batch of 14 animals, in September 2024 and slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is an unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Calf kidney	Paromomycin 2000 µg/kg 2409364	Great Britain	This is a medium-sized, Red Tractor accredited, dairy farm. They have around 450 dairy cattle, 196 milking cows, 20 dry cows and the rest are calving heifers and calves. Calving is an all-year-round process. They have a known problem with Cryptosporidiosis, and Parofor (active ingredient paromomycin) is given to the calves. The positive calf was born in February 2024, treated with Parofor and sent to slaughter in March 2024, 2 days after the withdrawal period. No other medicines were administered to this calf while on farm. The cause of the residue is likely to be human error or vagary of the metabolism of the calf.
Calf kidney	Paromomycin 6100 µg/kg 2432951	Great Britain	This is a medium-sized, Red Tractor accredited, dairy cattle farm, with a closed herd of around 370 milking cows. Calving occurs all year round, with the majority born in September and October. Most female calves are kept as replacements and bull calves are sold at market. Movement records were satisfactory. Parofor (active ingredient paromomycin) is used on farm and was present in the medicine cabinet. The positive animal was not recorded as having been treated with this medicine, but calves with similar ear tag numbers had been. The positive animal was born in October 2024. It was sent to market in the same month and slaughtered the next day. The likely reason for this residue is an unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Calf kidney	Paromomycin 9400 µg/kg 2409369	Great Britain	This is a medium-sized, Red Tractor accredited, dairy cattle and sheep farm. There are around 450 dairy cattle, with 196 milking cows, 20 dry cows and the rest calving heifers and calves. This is an all-year-round calving farm. They have a small number of bull calves that are sent to slaughter at 1-2 months of age. The positive calf was recorded as female and placed in a pen with other females. The farm has a known problem with cryptosporidiosis, and paromomycin is given to female calves. The calf was later moved to the male's pen. The males hadn't been treated and were sent for slaughter, and the female calf was included in error, whilst still one week within the withdrawal period, in February 2024.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Calf kidney	Tulathromycin 9300 µg/kg 2409358	Great Britain	The farm that sent the calf to slaughter, is a small-sized cattle farm. The farmer goes to two or three markets every week to buy calves to send them directly to slaughter the next day. There is a very high turnover. No medicines are kept onsite and there is no reason for this farmer to have administered any drugs to the calf being investigated. The positive calf was bought from market in March 2024 and sent to slaughter the following morning, when the sample was taken. The cause of the residue is likely to be from the farm of origin, which is a large-sized cattle and sheep farm, with 399 dairy cattle, 13 beef cattle and around 200 sheep. Most of the dairy cattle are housed, with the calves separated from the rest of the herd. The beef cattle and sheep graze on the fields. Medicines are stored in a locked room and none of them contained tulathromycin. Their vet disposes of the used and out of date medicines. The vet confirmed that Tullavis 100mg/ml solution for injection (active ingredient tulathromycin) was sold to the farm on 2 occasions. This drug has a withdrawal period of 22 days for cattle in meat and offal. The farmer explained that the drug might have been administered to the calf by mistake. It is only meant to be administered to replacement calves (not to the group of beef calves, to which this animal belongs). The positive calf was sent to market in a group of 8 calves. They were under 42 days and therefore not tested. They usually send just the Friesian bull calves and the beef calves to market. The most likely cause for the residue is the animal was treated in error, then sent for slaughter whilst within the withdrawal period.
Calf kidney fat	Deltamethrin 480 µg/kg 2427013	Great Britain	This is a large cattle farm. The positive female calf was homebred and sent to slaughter aged 41 days, in August 2024. ‘Spot-On’ insecticide (active ingredient deltamethrin) was in use on farm, with a withdrawal period of 17 days, although there was no record of the positive calf being treated with it. However, the high level suggests a recent treatment. The most likely cause of the residue detected is an unrecorded treatment and subsequent slaughter whilst within a withdrawal period.
Calf liver	Halofuginone 37 µg/kg 2409432	Great Britain	This is a large-sized, Red Tractor assured, cattle farm. They have a 975 dairy cattle herd consisting mainly of Holstein Friesians. It is a closed herd, and they rear their replacements on farm. Cattle are housed during winter and grazed during summer. Cows are milked three times a day, and calving is all year around. Calves are sold at approximately 3 weeks old through a market. The medicine records are fully compliant, and the medicine room is very clean and tidy and permanently locked. Drugs are labelled with the necessary information, including the withdrawal period. Workers with access to the medicine cabinet have been trained in the handling of medicines. Medicines are administrated under the direct instruction of the farmer. Calves are treated with Kriptazen (active ingredient halofuginone), due to previous problems with cryptosporidiosis in the herd. It has a withdrawal period of 13 days for meat. The positive animal was born in January 2024 and transported to market in February 2024. It was sent in a group of 21 calves, some of which were still within the withdrawal period, giving rise to this residue.
Cattle kidney	Cadmium 7000 µg/kg 2409269	Great Britain	This is a small-sized cattle and sheep farm, accredited by Organic Farmers and Red Tractor. They have 28 Belted Galloway cattle and around 25 sheep. As an organic farm, medicine use is kept to a minimum and no medicines are kept onsite. The positive cow was born on farm in May 2005, and slaughtered in January 2024. It grazed it’s whole life on farm. The high level of the cadmium residue can be explained by the soil conditions. It is a historic mining area and there are high levels of both cadmium and lead in the soil.
Cattle kidney	Cadmium 1200 µg/kg Lead 430 µg/kg 2409267	Great Britain	This is a medium-sized farm with around 100 cattle and 100 breeding sheep. The positive female cattle was born on farm in May 2022. It was sold at market in January 2024 and taken to the abattoir, where it was slaughtered 4 days later. No issues were identified regarding medicine storage, usage or recording. The high level of cadmium and lead residues can be explained by the local soil conditions. It is a historic mining area and there are high levels of both cadmium and lead in the soil.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle kidney	Cadmium 2700 µg/kg 2431084	Great Britain	This is a small-sized, FAWL accredited cattle and sheep farm. They have a small suckler herd of 62, with 2 bulls for breeding and their own heifers for replacement. Store cattle are prepared for market at around 18-20 months of age. Calving is all year round. They graze in in the summer with supplements of silage, hay, nuts, mineral blocks and feeding buckets. Manure is spread on the silage fields, and fertilizer on grazing fields in spring. They also have around 400 sheep, with 10 rams for breeding. They buy replacement ewes in autumn and winter. Lambs are sold from 3-4 months to 12 months old from June to April. They also sell yearling lambs for wool from June to August. Medicine records and storage are satisfactory. The positive female cattle was homebred in April 2023 and grazed it's whole life on farm. Cattle from the same group appeared healthy. The positive animal was sent to slaughter in November 2024. There is a history of mining in the area, and it is likely the soil has high levels of cadmium. The most probable cause of this residue is geochemical accumulation, through grazing on this land.
Cattle kidney	Cadmium 4700 µg/kg Lead 410 µg/kg 2409257	Great Britain	This is a medium-sized organic farmers and growers accredited farm, with 118 Belted Galloway cattle and around 250 sheep. The positive animal was born in March 2017 and arrived on this farm in October 2018 It stayed on this farm until it was slaughtered in January 2024. The farm is organic and hardly any medicines are given to the animals. There is no medicine kept on the farm either. The high levels of cadmium and lead in livestock coming from this farm can be explained by the soil conditions of this area; this is a historic mining area with high levels of both cadmium and lead in the soil. Therefore, the most probable cause is natural residue from a farm in an old mining area.
Cattle kidney	Cadmium 8100 µg/kg Lead 230 µg/kg 2409275	Great Britain	This is a large-sized, well run, beef cattle farm. The animals are well looked after, with sufficient feed and water. The positive animal was born and bred on farm; it was 5 years old when taken to the abattoir. The animal grazed in fields with a potential source of cadmium and lead. The likely cause of this residue is geochemical accumulation, through grazing on land with high levels of cadmium and lead.
Cattle kidney	Diclofenac 13 µg/kg 2409043	Great Britain	This is a large cattle farm, with around 220 Holstein dairy cattle and 40 Angus-cross beef cattle. The positive animal was a homebred beef cow, born in August 2022, and grazed in the farms fields between April and November. Since November 2023 it had been housed until it was sent for slaughter in March 2024. The farm produces its own grass and grass silage. There is no mixing of medicated feed on farm. They buy the feed and concentrate cake from an agricultural supplier. All feedstuff is kept bagged on site. Records are kept according to the legal requirements. Medicines are administered under veterinary supervision and stored correctly. No diclofenac products were in the medicine cabinet or used on farm, and all medication had the purchase receipts and prescriptions. Animals presented normal body condition and conformation. The only medication given to this cow was wormer in 2023. Cows are usually collected by the farmer's contractor haulier, when sent to slaughter. They normally go directly to the same slaughterhouse, not mixing with other farmer's livestock. It is likely the result obtained was due to cross-contamination of the sample at collection.
Cattle kidney	Ibuprofen 67 µg/kg 2430641	Great Britain	This is a large-sized, FABBL accredited, cattle farm. The positive animal was bought in May 2024 aged 16 months. It was sent direct to slaughter 5 months later. There was no evidence of ibuprofen usage on farm. There remains the possibility the sample could have been contaminated at some point in its handling, but the cause of the residue source could not be established.
Cattle kidney	Ibuprofen 280 µg/kg 2409071	Great Britain	This is a medium-sized cattle and sheep farm. They have a 111 cattle fattening and suckler herd. They buy in store cattle and fatten them for approximately 12 months before sending them to slaughter. All animals are fed silage, straw and mineral supplements. Medicine records are kept electronically. The positive animal was born in April 2022 and purchased from market in April 2023. It was fattened and sent to abattoir in January 2024, where it was sampled. There is no evidence of the usage of ibuprofen, the reason for the residue is unknown.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle kidney	Inorganic arsenic 13 µg/kg 2431074	Great Britain	This is a large-sized beef cattle farm. They have a fattening herd of 578 cattle, grazing most of the year. During winter, the young stock is housed. Cattle are purchased as calves and kept on premises until around 24-30 months old, then sent direct to slaughter. Medicine records are satisfactory, and this animal had not received any medical treatment. The positive bull was sent to the abattoir in November 2024 and slaughtered the next day. According to the British Geological Survey, the soil from this area has high levels of inorganic arsenic and the most likely cause of this residue is geochemical accumulation, through grazing on this land.
Cattle kidney	Inorganic arsenic 14 µg/kg 2431086	Great Britain	This is a large-sized, FAWL accredited, cattle farm. Calves arrive from different farms, aged 4 – 6 months, to be reared and fattened. They go indoors for 3 - 4 weeks and are given standard calf-rearing cake. They are then grazed outdoors as much as possible. During the winter they are fed with silage and fodder beet grown onsite. The farmer has a contract to spread biosolids, the treated solid remains of dirty water, on his land. This material looks like compost, does not smell and it is treated to become microbiologically secure. It is tested for heavy metals, including inorganic arsenic. Cattle can graze the land 3 weeks after it has been spread. The water supply comes from a borehole. Movement and medicine records are satisfactory. The positive animal was sent directly to the abattoir, in a group of 30 animals, in November 2024 and slaughtered the next day. According to the British Geological Survey, the soil from this area has high levels of inorganic arsenic and the most likely cause of this residue is geochemical accumulation, through grazing on this land.
Cattle kidney	Inorganic arsenic 23 µg/kg 2431071	Great Britain	This is a small-sized, FAWL accredited cattle and sheep farm. The cattle graze in fields that have been fertilised for years. Medicine and movement records are satisfactory. Medicines are provided by their PVS and stored in a locked cabinet. The positive animal arrived on farm in February 2024. It did not receive any medical treatment and was sent to the abattoir in October 2024, aged 12-24 months and slaughtered 2 days later. According to the British Geological Survey, the soil from this area has high levels of inorganic arsenic and the most likely cause of this residue is geochemical accumulation, through grazing on this land.
Cattle kidney	Lead 340 µg/kg 2416348	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in cattle offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Cattle kidney	Lead 420 µg/kg 2416375	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in cattle offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Cattle kidney	Lead 460 µg/kg 2416367	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in cattle offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Cattle kidney	Lead 1100 µg/kg 2409288	Great Britain	This is a medium-sized, Red Tractor accredited, beef farm. There are 254 animals onsite, which operates as a beef cattle herd with breeding stock. They are sold for slaughter when they reach between one to two years of age. Occasionally, animals are sold to other farms. The cattle are fed with hay, straw from the farm and pellets. There are blocks of Himalayan rock salt which could be a possible source of lead contamination. The water supply comes from the mains and a collection tank for spring water in the fields and at the farm. Movement and medicine records were satisfactory. Medicines are stored in a lockable farm office. The positive male calf was born in March 2022 and was sent for slaughter in February 2024. It was only on this farm for 7 months between July 2023 and February 2024. It was housed during this time and didn't graze outside. There is no evidence of any lead source at this farm, the source of this residue could not be established. The most probable reason for this positive result for lead was environmental contamination at a previous location. The first month at the natal farm and the second farm where the calf stayed a total of 16 months are both high lead areas and likely to account for a large proportion of the residue.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle kidney	Meloxicam 170 µg/kg 2416143	Great Britain	This is a large-sized, Red Tractor accredited dairy farm, with 500 cattle, comprised of approximately 160 milking cows and young stock. Farmland is used for making grass silage and summer grazing, and cattle are housed during winter. Replacements are bought in. Milking cows have concentrates in the parlour. Sheep are only kept during the winter period. Medicated feed is given to young calves (Deccox). The herd is vaccinated for BVD, IBR and Leptospirosis. The farm uses medical treatments for mastitis, pneumonia, and foul. Medicine products are kept in a lockable medicine storage, only accessible by the farmer, his wife and son. All medicines are used in date, and there is no overstock. Expired medicines and empty containers are disposed of by the PVS. Medicine records were satisfactory. Proof of purchase is retained for all medications for at least 5 years. The farmer uses anti-inflammatory drug Metacam (active ingredient meloxicam) to aid recovery and reduce pain in animals. The positive dairy cow, a Holstein Friesian female, was born in March 2013 and bought in October 2015. It was sent to slaughter in April 2024. The likely cause of this residue was due to miscommunication between the farmer and his son resulting in sending the cow to the abattoir two days before the end of the withdrawal period.
Cattle milk	Amoxycillin 12.1 µg/kg	Northern Ireland	The positive cow was from a dairy herd with 136 animals. Movement and medicine records are kept in accordance with legislation. Records show one animal was treated with Betamox injectable (active ingredient amoxicillin) two days prior to sampling. The withdrawal period for milk is 24 hours. 30ml was administered and repeated 24 hours later. Estimation of weight of the animal suggests the correct dosage was given, however the whole dose was injected into one site, this exceeds the maximum dosage per site of 20ml.
Cattle milk	Diclofenac 0.96 µg/kg 2410907	Great Britain	This is a medium-sized, Red Tractor accredited, dairy farm. Aging animals are sold at market, bull calves are kept up to 18 months old. Milk collection is automated, and data is stored online. Milk is monitored for signs of mastitis and cows treated accordingly. Deworming is also recorded, and data kept for a minimum of 5 years. Information for the other animals, sheep, calves and non-lactating cows, are kept in writing and recorded for 3 years. Medicines are kept in a locked cupboard. The private veterinarian supplies the medicines and disposes of expired drugs. This sample was taken by the farmer. The most likely cause of this residue is cross contamination during the handling of animals and/or sample material by a person treated or in contact with this substance.
Cattle milk	Florfenicol 0.378 µg/kg	Northern Ireland	The positive animal came from a herd of 413 dairy cows. Movement and medicine records were kept in accordance with legislation. The herd owner confirmed that a suckler cow suffering pneumonia was injected with Nuflor (active ingredient florfenicol) 46 days prior to sampling. The treated animal was brought into the milking parlour and milk was mistakenly sent to the tank. Four follow up samples were compliant.
Cattle milk	Florfenicol 0.985 µg/kg	Northern Ireland	The positive animal came from a herd of 305 pedigree dairy cows. Movement and medicine records were kept in accordance with legislation. The herd owner confirmed that he used florfenicol in the past to treat pneumonia in calves but does not use it in cows or heifers nearing calving, only in very young calves. Only the herd keeper has access to the medicine cabinet. No evidence of non-compliance was found. One follow-up sample contained florfenicol at 0.574 µg/kg, further follow ups were compliant.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle milk	Florfenicol 1.9 µg/kg 2410929	Great Britain	This is a medium-sized dairy cattle farm, with approximately 417 dairy animals, mainly Holstein. The rest are calves, heifers and dry cows. There have been 122 births in the last 6 months and extra stock is bought in from private farms. The cattle are fed with grazing, hay and nuts. Additional feed is bought from suppliers, no medicated feeding stuffs are used. Water is supplied from a spring or the mains if needed. Movement and medicine records are satisfactory. Medicines and medical equipment are kept separate for calves and dairy cattle. There is a routine vaccination and de-worming programme in place, as per a herd health plan agreed annually with the PVS. Fenflor (active ingredient florfenicol) is kept on site for treating the calves, it's not used for milking cattle. All medicines are purchased from their vet, who also dispose of expired medicines. Milking begins at 5:30 and 15:30 each day, calf feeding starts an hour after milking begins. The dairy company collects the milk from the bulk tank twice a week. A sample of the milk is tested before each collection. There is a regular, thorough cleaning regime in place and routine for milking, feeding and bedding. There are measures in place to prevent medicated milk entering the bulk milk tank. The most probable reason for this positive result is a cross-contamination at the point of sampling in the bulk tank. Inadvertent non-compliance with operational instructions may have led to the farmer handling the sample pot, having dosed an animal earlier in the morning. The amount of antibiotic found in the sample corroborates this. The milk company test for the same day was negative.
Cattle serum	Beta-testosterone 0.2 µg/kg 2425747	Great Britain	This is a FABBL (Farm Assured British Beef and Lamb) accredited beef cattle and sheep farm. Herd stores are bought at market or from a dealer, they stay on farm for around 8 months. No breeding takes place, all animals are fattened and sent to slaughter. There is a high throughput, 264 cattle were sent to slaughter within the last 6 months. They have around 220 lambs and all the animals graze. Movement and medicine records, and drugs storage is satisfactory. Expired medication is disposed of through an environmental waste management company. There was no evidence of anabolic steroid usage, and the herd appeared healthy with normal growth rate. The positive animal did not receive any treatment whilst on farm. The heightened stress of a 2-hour journey to the slaughterhouse and the fact the cow was barren is the likely cause of the naturally high levels of the hormone residue detected.
Cattle serum	Beta-testosterone 1.9 µg/kg 2425720	Great Britain	This is a medium-sized, Red Tractor accredited, dairy cattle farm. Movement and medicine records, and drugs storage are all satisfactory. There was no evidence of steroid usage. The homebred positive animal was born in August 2017 and sent to the abattoir, in a group of 3 cows by transporter, in August 2024. It was slaughtered the next day when the sample was taken. The 90-minute journey to the abattoir and a night in lairage would have heightened stress levels and is the most likely cause of the detected residue.
Cattle urine	Alpha-boldenone 2.5 µg/kg 2430813	Great Britain	This is a medium-sized, FABBL accredited, sheep and cattle farm. Some animals are housed while others graze, with a feed supplement as required. Medicines are stored in a locked cabinet. There was no evidence of steroid usage. Medicine records were satisfactory. The positive cattle was bought at market in July 2024. It spent 3 months on farm before being sent directly to slaughter in October 2024.The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Cattle urine	Alpha- nortestosterone 1.2 µg/kg 2422028	Great Britain	This is a medium-sized, Farm Assurance accredited cattle farm, with around 110 fattening beef store cattle. Store cattle aged 12-14 months, typically Charolais cross, are bought in from market and fattened for approximately 12-14 months before being sent direct to slaughter. They are housed in large deep-bedded straw barns and fed a mixture of silage, barley and a beef finisher mix sourced from a supplier. They work closely with their private veterinary surgeon and administer medicines with their advice. Medicine records were adequate and written in a book. There were no medicines or treatments that could have caused this residue. All animals were inspected and appeared normal. The positive animal was bought at 10 months old and sent to the abattoir in August 2024, aged 2 years old. It was slaughtered the next day, when the sample was taken. The most likely cause of the residue is stress, either from the 90-minute journey, where minor injuries or bruising could be sustained, or stress experienced at the abattoir.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle urine	Alpha-nortestosterone 1.6 µg/kg 2415385	Great Britain	This is a small-sized, Soil Association certified, beef cattle farm, with additional animals onsite. Their 101 cattle consists of 39 males and 62 females. Small numbers of animals are purchased from local farms as calves or stores (to be fattened), then sent to slaughter, but most of the stock is homebred. Cattle are fed with high quality grass silage, grown and processed onsite. Cattle graze outdoors in summer and autumn and are housed for winter. Medicines are supplied by their Private Veterinary Surgeon (PVS) and stored in a metal lockable cabinet. Medicine records are kept electronically and available since 2011. Any expired products are returned to the PVS for disposal. There was a record of treating this animal with a dewormer in March 2024, but no evidence of treatment with steroids. The animal was homebred in April 2022, and reared and fattened on farm. It was sent direct to slaughter, by haulier, with 2 other beef cattle in June 2024, when the sample was taken. The journey from the farm to the slaughterhouse was over 50 miles and over an hour. The low level of residue, from a male animal and a long journey under potentially stressful conditions, points to a naturally occurring residue.
Cattle urine	Alpha-nortestosterone 1.8 µg/kg 2407955	Great Britain	This is a medium-sized Red Tractor accredited farm which rears sheep with 520 adult sheep on the farm, cattle stores with 58 Beef breeds are also kept for fattening. The positive animal was a Limousin steer sheep born in September 2022 and then sold to market in October 2023. It was purchased by the farm in January 2024 and slaughtered three days later. They are usually purchased from markets, coming from more than one farm, kept for about 6 months for finishing then sold to markets for slaughter. They are fed home grown hay, oats and beans. Concentrate food is purchased on occasion and purchased mineral supplement also added to feed. The animals are kept in good clean conditions and showed normal calm behaviour during the inspection. Most recent medicine records were complete, with IDs of animals treated; however older records lacked details such as the ear tag number. Medicine usage on the farm is limited to antibiotics and non-steroidal anti-inflammatories for bovine respiratory disease. There was no evidence on farm of the use of anabolic steroids, the probable cause of this residue is from natural levels, triggered by stress during transport/at the market.
Cattle urine	Alpha-nortestosterone 5.7 µg/kg 2430751	Great Britain	This is a large-sized Farm Assured dairy farm, with 954 cattle. The cows are housed all year round and fed a Total Mixed Ration (TMR) diet. Dry cows graze in the fields. The positive cow was born in September 2016 and last calved in June 2024. It had not received any medical treatment. It was sent for slaughter in October 2024. There was no evidence of steroid usage and other animals appeared in a good condition. The 8-year-old cow may have been barren with cystic ovaries, and the long journey to the abattoir probably increased stress levels. The positive residue detected is likely to be of natural origin.
Cattle urine	Alpha-nortestosterone 5.7 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Cattle urine	Alpha-nortestosterone 7.8 µg/kg 2408052	Great Britain	This is a large-sized, Red Tractor accredited, dairy cattle farm, with around 382 cattle, Fleckvieh X and Swiss Brown being the predominant breeds plus a small number of beef cross. Only AI is used as part of the breeding program. Management on the farm is good and records are of a high standard. Medicines were stored appropriately in a locked cabinet, with no out of date or illegal medicines present. No products containing nortestosterone, or anabolic compounds were found. Only medicines prescribed by the private vet are administered to the animals. The positive animal was moved to a collection centre in February 2024. It is most likely that the residue has occurred naturally. It may be explained by a minor injury sustained in transit or at the collection centre, or the possibility the cow was in the early stages of pregnancy.
Cattle urine	Alpha-nortestosterone 2.3 µg/kg Alpha-estradiol 418 µg/kg	Northern Ireland	The positive animal was purchased into a beef finisher herd and was on farm for 16 months prior to sampling. The farm herd gets animals at around 4 months old. No obvious concerns, follow-up samples were compliant.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle urine	Alpha-nortestosterone 6.5µg/kg Beta-nortestosterone 0.53 µg/kg 2422025	Great Britain	This is a medium-sized, QMS accredited, cattle farm, with a herd of 446 animals. They mainly graze outdoors with some additional feed supplements. Medicine and movement records were satisfactory, and there was no evidence of steroid usage. The positive female cow was born in May 2016, lived at several sites and received minimal medical treatment. It had last calved in June 2024. It was sent to the abattoir on a 125 mile, 2-hour plus, journey in August 2024 and slaughtered the next day, when the sample was taken. The most likely cause of this low-level residue is an endogenous (natural) origin, due to stress of the journey to the abattoir.
Cattle urine	Beta-boldenone 3.4 µg/kg Beta-nortestosterone 2400 µg/kg 2408076	Great Britain	This is a large-sized, Red Tractor accredited, beef cattle farm with 700 cattle. Approximately 300 fattening cattle graze outside (from 6 to 14 months old) and the rest are housed for fattening and finishing (from 16 to 36 months old). The cattle are vaccinated for IBR and black leg and are dewormed. The 600 acres of farmland is used for making grass & maize silage, whole crops (barley) and for cattle grazing in the summer. The cattle are housed during the winter. The farmer buys in beef cattle for fattening (approximately 16 to18 months old). They are fed with the grass and maize silage, barley, and a mix of proteins, concentrates and minerals. Medicines are kept in lockable storage and are all in date. Any out-of-date medicines and empty containers are disposed of by their Private Veterinary Surgeons (PVS). Medicine Records are up to date and medicines invoices are kept for at least 5 years. The positive Limousin cross cow was born in May 2022 and bought in August 2023 in a group of 120 male and female cattle. These were never grazed but were housed in the same shed. The sampled cow was sold in January 2024 at market and sent to slaughter in February 2024, when the sample was taken. It had been running with the stock bulls 60 days prior to being sold and could have been pregnant. It had not been treated for the previous 2 months and animals remaining on the farm from the same management group had no conformation changes or abnormal muscling. It is likely the boldenone has arisen following faecal contamination of the sample or was of endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine. It may also be due to an early undetected pregnancy.
Cattle urine	Taleranol 0.9 µg/kg Zeranol 0.28 µg/kg 2425815	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 1.0 µg/kg Zeranol 0.41 µg/kg 2425819	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 1.0 µg/kg Zeranol 0.59 µg/kg 2415618	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 1.2 µg/kg Zeranol 0.79 µg/kg 2430715	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 1.8 µg/kg Zeranol 0.56 µg/kg 2404655	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 1.8 µg/kg Zeranol 0.82 µg/kg 2408330	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 2.4 µg/kg Zeranol 0.52 µg/kg 2408315	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)	Region	Cause of residue
Cattle urine	Taleranol 2.7 µg/kg Zeranol 1.1 µg/kg 2430701	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 2.7 µg/kg Zeranol 1.3 µg/kg 2415611	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 4.7 µg/kg Zeranol 0.99 µg/kg 2415626	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 6.8 µg/kg Zeranol 3.9 µg/kg 2425791	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	Testosterone 14 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Cattle urine	Testosterone 16 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Cattle urine	Testosterone 17 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Cattle urine	Testosterone 19 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Cattle urine	Testosterone 19 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Cattle urine	Testosterone 19 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Cattle urine	Testosterone 74 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Fattening cattle serum	Beta-testosterone 0.21 µg/kg 2401084	Great Britain	This is a medium-sized, FABBL accredited, beef cattle farm. Medicines are acquired from their vet or local retailer. Medicine records are kept in two formats, one is computer based and the other in a pocket notebook. Although there were some discrepancies between the two. Medicines are stored inside a disused fridge that is kept in a locked building. Some of the medicines were open and out-of-date, although there was no evidence they had been used to treat animals. Medicines administered to the positive cow are routinely used in beef production, such as dewormers, BVD vaccines and the PPD (purified protein derivative) test (for TB). The positive cow is a home bred animal and was born in April 2020. It is in good health and the same size and shape as its herd mates of the same age. The sample was collected in March 2024 when the cow was heavily in calf, and this is the likely reason for the residue. Conclusion natural origin.
Fattening cattle urine	Alpha-boldenone 2.4 µg/kg Alpha-nortestosterone 16 µg/kg 2400583	Great Britain	This is a large-sized sheep and beef cattle farm. The cattle are kept for breeding purposes and at the end of their productive life, they are sent for slaughter as cull cows, via market or directly to the slaughterhouse. The cattle are fed with hay, silage and Berrystock cakes. The only medicines used are antibiotics and anti-inflammatory drugs to treat lameness in cattle, or wormers for sheep. Any expired medicine is taken to the vet practice and disposed of accordingly. The cattle are kept in two locations, one with approximately 15 cattle, Aberdeen Angus X and Hereford breeds. At the other location they keep the pregnant cows. The sample was taken from a cow at the pregnant group site. It is likely therefore, the positive residue result is due to the animal being in-calf at time of sampling.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Fattening cattle urine	Alpha-boldenone 2.8 µg/kg 2418067	Great Britain	This is a small sheep and cattle farm. They buy in calves for finishing (about 12 to 16 months old when they're sent to slaughter), they also have beef cows and a bull. The positive animal was born in May 2024 and bought at auction in July. It has been housed since then with other bull calves and fed with hay and grass silage. It has never received any medicinal treatment. Medicine and movement records were satisfactory. Medicines are stored in a fridge inside a locked room, only accessible by the farmer and his daughter. There was no evidence of any drugs related to the residue detected. The most likely cause of the residue is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Fattening cattle urine	Alpha-boldenone 3.3 µg/kg Alpha-nortestosterone 31 µg/kg Beta-nortestosterone 0.44 µg/kg 2409941	Great Britain	This is a medium-sized cattle farm, with a mix of 61 British and Holstein Friesians. Cattle are grass fed during the day and brought in overnight when they are fed home-produced silage. The grass has been seeded along with clover. It is supplemented with bought in feed nuts and straw. Replacement cattle are bought in. Medicine records are in good order. The medicine cupboard was lockable, and medicines were in date and licensed for use in cattle. The positive calf was born in May 2024 and the sample taken the next day. It was not treated with any medication. The mother had only been treated with an intramammary antibiotic and sealant in March 2024. None of the cattle had abnormal musculature. The most likely reason for the residue detected is due to the recent birth of the calf, 1 day prior to the sample collection.
Fattening cattle urine	Alpha-boldenone 6.0 µg/kg 2418285	Great Britain	This is a medium-sized fattening cattle farm. They buy at market, fatten for around 100 days and then send to slaughter. Most of the cattle are fed on grass and supplemented with barley and grass silage. No medicated feeds are used. Some cattle are kept in a shed and provided with straw and concentrated feed, produced and milled on farm. There was some feed bought for a new batch of calves, sourced from an authorised provider. The positive female animal was born in March 2022, bought in May 2024 and sent to slaughter in September. Medicines are bought from their vet and other retailers and stored in a cabinet. Medicine records were satisfactory. There was no evidence of anabolic steroids usage on farm. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Fattening cattle urine	Alpha-estradiol 28 µg/kg Alpha-nortestosterone 0.71 µg/kg	Northern Ireland	Follow up investigation confirmed animal as female. No further action required
Fattening cattle urine	Alpha-nortestosterone 5.2 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 5.5 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 5.5 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 6.6 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 7.4 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 7.6 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 8.5 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 9.2 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 9.4 µg/kg	Northern Ireland	Pregnant female. No further investigation required.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Fattening cattle urine	Alpha-nortestosterone 11 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 11 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 12 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 19 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 21 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 14 µg/kg Beta-estradiol 14 µg/kg	Northern Ireland	Female, freshly calved at time of sampling. No further action to be taken.
Fattening cattle urine	Alpha-nortestosterone 12 µg/kg Beta-estradiol 11 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Alpha-nortestosterone 9.6 µg/kg Beta-estradiol 31 µg/kg	Northern Ireland	Pregnant female. No further investigation required.
Fattening cattle urine	Beta-estradiol 0.61 µg/kg	Northern Ireland	Beta-estradiol can be present when very high levels of alpha-estradiol are present. No further investigation required
Fattening cattle urine	Beta-estradiol 0.74 µg/kg	Northern Ireland	Beta-estradiol can be present when very high levels of alpha-estradiol are present. No further investigation required
Fattening cattle urine	Beta-estradiol 2.2 µg/kg	Northern Ireland	A follow up sample was taken from the same animal, β-Estradiol was not detected. No further action required
Fattening cattle urine	Beta-estradiol 3.1 µg/kg	Northern Ireland	Beta-estradiol can be present when very high levels of alpha-estradiol are present. No further investigation required
Fattening cattle urine	Beta-estradiol 3.8 µg/kg	Northern Ireland	Beta-estradiol can be present when very high levels of alpha-estradiol are present. No further investigation required
Fattening cattle urine	Beta-estradiol 8 µg/kg	Northern Ireland	Beta-estradiol can be present when very high levels of alpha-estradiol are present. No further investigation required
Fattening cattle urine	Beta-estradiol 11 µg/kg	Northern Ireland	Animal calved two weeks prior to sampling. No further investigation required.
Fattening cattle urine	Beta-estradiol 29 µg/kg	Northern Ireland	Beta-estradiol can be present when very high levels of alpha-estradiol are present. No further investigation required
Fattening cattle urine	Taleranol 0.61 µg/kg Zeranol 0.31 µg/kg 2401133	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 0.84 µg/kg Zeranol 0.45 µg/kg 2427463	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 1.1 µg/kg Zeranol 0.63 µg/kg 2418639	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 0.82 µg/kg 2418634	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)	Region	Cause of residue
Fattening cattle urine	Taleranol 1.3 µg/kg Zeranol 1.1 µg/kg 2418625	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 1.9 µg/kg Zeranol 0.88 µg/kg 2401136	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 2.3 µg/kg Zeranol 1.5 µg/kg 2418645	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 2.4 µg/kg Zeranol 0.96 µg/kg 2418632	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	Testosterone 26 µg/kg	Northern Ireland	Bull status confirmed. No further investigation required.
Fattening cattle urine	Thiouracil 72 µg/kg 2417794	Great Britain	This is a large-sized, FABBL accredited, cattle and sheep farm. They have a herd of around 200 finishing beef cattle and 1000 sheep. Cattle are bought as stores and usually stay on the premises for around 3 months before going to slaughter. They are housed for the duration and fed homegrown silage, a mix of molasses and rolled barley, and minerals mixed on farm. They also have access to salt licks (rock salt). Cattle are bedded on bought-in straw. The positive animal was moved onto farm in September 2024, the sample taken in October and moved off farm in December. Medicine storage and records were satisfactory, and the animals appeared in a good condition. They was no evidence of thiouracil in use. The exact source of residue could not be established, but was likely caused by ingestion, possibly from one of the components of the feed mix.
Honey	Semicarbazide 3.8 µg/kg 2409829	Great Britain	This is a small producer of honey, with supplies going to family and friends. Medicine records were lacking in detail. Further samples of honey, jarred honey and empty jars were taken for testing. The results confirmed the positive residue was caused by the gasket in the jar lids, coming into contact with the honey.
Horse kidney	Cadmium 37000 µg/kg 2426781	Great Britain	This is a small beef cattle farm with a herd of 25. There are 20 horses on site for showing and breeding and some sheep are purchased in the spring, fattened up and sent to slaughter in the summer. Cattle are fed grass and silage, the sheep graze. Additional feed is bought in, but no medicated food is used. Some horses are purchased for slaughter, they stay a few days in the stables and are then sent to an abattoir. They are fed silage or haylage, not concentrate, and mains water. Horses for breeding and showing are vaccinated against equine influenza annually. They only receive medication if it is prescribed by a veterinary surgeon. Medicines are sourced from a supplier and locked away. Medicine records were only available from May 2024. The positive animal was sent from the farm to the abattoir in July 2024, when the sample was taken. The meat was not used for human consumption. The horse was 13 years old and likely to have grazed in an area of mining activity and high natural levels of cadmium in the soil, resulting in the high residue.
Pig kidney	Lead 280 µg/kg 2407890	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Pig kidney	Sulfadiazine 210 µg/kg 2407325	Great Britain	This is a medium-sized, Red Tractor and RSPCA accredited, pig farm. It is an indoor commercial pig unit for fattening pigs. They arrive when they are 4 weeks old and stay onsite for approximately 20 weeks and are then sent to slaughter when they reach 110kg in weight. The premises can accommodate 2 batches of pigs, one of 1600 pigs and another of 1800. There is a difference in age of 12 weeks between the two batches. The pigs are split into 6 buildings per batch. There are 6 siloes on the farm, 2 of them receive feed for the younger stock and 4 of them receive feed for the older stock. Medicated feed is bought in. Due to a streptococcal infection, the younger stock were fed a Sulfoprim 15% Premix, at a concentration of trimethoprim 50mg and sulfadiazine 250mg, with a withdrawal of 7-10 days. It should not have been fed to the older stock. The older pigs were transported internally in a livestock trailer used to transport the younger stock during the period they were medicated through their feed. The older pigs were exposed to the detected substance via the urine of younger stock. The trailer wasn't cleaned between the different uses. Injectable drugs are also used on site in addition to medication in water and feed. They are stored refrigerated in the farm's office. Animals that are treated individually are marked with spray paint and aren't selected for slaughter. Out of date medicines, used needles and empty containers are collected and disposed of by a contractor. The positive pig was part of a batch of 201 finished pigs sent to the abattoir in January 2024. The trailer urine exposure is a possible explanation for the residue, but it is more likely the buildings are not dedicated to a specific age group and the siloes were not cleaned or flushed with non-medicated feed, or possibly medicated feed was delivered to the wrong silo.
Pig liver	Fenbendazole 2200 µg/kg Oxfendazole sulfone 150 µg/kg Oxfendazole 100 µg/kg 2414850	Great Britain	This is a medium-sized, RSPCA accredited pig finisher farm, with 1200 pigs. Pigs arrive on farm, as stores, at around 35 kg in weight. They are housed in 4 large straw-based sheds, with adlib feeders, some automated, others filled manually. Feed comes from a supplier, with 2 rations throughout, the first medicated with fenbendazole. The pig and feed supplier provides fieldsmen who regularly inspect the pigs and administer most of the injectable medication. They instruct the farmer if any additional medication is to be given. Medicine and medicated feed records were available. A batch of pigs were delayed being sent to slaughter for 2 weeks, and a new batch of pigs arrived plus a delivery of medicated feed. It is likely the residue is due to unintentional feeding of the medicated ration to the positive animal being sent to slaughter.
Quail egg	Lasalocid 560 µg/kg 2419455	Great Britain	This farm has between 1100 and 2500 quails, depending on the time of year. The egg was collected in September 2024 and tested in October. Avatec 150G (active ingredient lasalocid A sodium) is authorised for use in feed for poultry for the prevention of coccidiosis. It is not authorised for use in laying birds. Although present on the farm, procedures are in place to prevent laying birds consuming it. As the residue finding is a result of ingested feed, a further investigation took place at the feed mill. This is a large multi-species manufacturer producing around 110,000 tonnes of compound feed per annum. Further samples were tested, which were also positive. The residue detected was due to a mechanical issue at the feed mill that allowed pheasant starter feed into the out-loading bin which already contained the quail breeder/layer feed.
Salmon	Crystal Violet 25 µg/kg 2400297	Great Britain	There is no evidence to suggest fish were exposed to this residue at the fish farm. Treatment records were satisfactory, and their medicine storage only contained veterinary products with a valid Marketing Authorisation (MA). Fish were shoaling normally and responding to feed. No moribund fish were observed. The site collects daily water samples to monitor plankton levels, but this process does not involve any chemicals. The cause of the residue is undetermined. Crystal violet is a widely used commercial dye, and it is used as a colourant in practically all black and blue ballpoint pens. Follow up samples were compliant.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep kidney	Cadmium 1200 µg/kg 2406656	Great Britain	The positive ewe was born at a large established sheep and cattle farm, with 800 breeding ewes and offspring, and around 40 calving cows. Some sheep are kept indoors during the winter, and most are sold at auction. Medicine records were handwritten and in good order, but the medicines store was a disorganised cupboard which could not be locked. Multiple expired medications were found. Sheep had been dipped in mid-2023 and some dewormed. The farmer reports that the ewe in question was most likely kept indoors for the last 3 months before sale being fattened on feed from a supplier. They use their own groundwater supply. Adjacent to the holding is a military firing range. A large section of moor in the west part of the holding was used for tank shell target practice during the 1940s. It is possible this has been contaminated. The positive ewe was sold at market in January 2024 and sent to slaughter a week later. In the week between purchase and slaughter, she was grazed in a field by the new owner. It is likely that cadmium, in bioavailable form (acid moor soil), was being taken in naturally at grazing leading to this residue finding.
Sheep kidney	Cadmium 1400 µg/kg 2432696	Great Britain	An initial investigation took place at the farm of origin, a medium-sized, Farm Assured, beef cattle and sheep farm. The animal was moved to another farm where a second investigation took place. This is a large-sized, Farm Assured, sheep and beef cattle farm. Medicine and movement records were satisfactory at both sites, and animals appeared normal. The positive animal was over 36 months and was sent direct to slaughter in November 2024. This is an upland area with acidified soils which may be a source of bioavailable cadmium. The most probable cause of this residue is geochemical accumulation, through grazing on this land.
Sheep kidney	Inorganic arsenic 25 µg/kg 2425199	Great Britain	This is a small farm with 17 sheep. They graze in 3 fields belonging to a neighbour. Medicine records were satisfactory. Sheep are sent from this holding to slaughter or to market, twice a year, normally the first batch goes around June/July, the second around September. The positive sheep was homebred and sent direct to slaughter in September 2024, in a batch of 13. According to the British Geological Survey, the soil from this area has high levels of inorganic arsenic and the most likely cause of this residue is geochemical accumulation, through grazing on this land.
Sheep kidney	Lead 210 µg/kg 2406616	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Sheep kidney	Lead 220 µg/kg 2425188	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Sheep kidney	Lead 250 µg/kg 2406626	Great Britain	This is a small-sized, city farm with multiple species. The positive animal was a homebred male lamb and was intended for slaughter. The animal was sent from this CPH to an abattoir in January 2024. The sheep are fed with grazing, hay, and energy feed that can be used all year round to provide supplementation for ewes, rams, and lambs. No medicated feed is given to the animals. A full check was conducted on the veterinary medicine record – all was seen as satisfactory, and the withdrawal periods for the vet meds always observed. The cause of this residue is due to environmental pollution, with the farm in an area of old mining fields.
Sheep kidney	Lead 330 µg/kg 2417608	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Sheep kidney	Lead 370 µg/kg 2406622	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep kidney	Lead 400 µg/kg 2417648	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Sheep kidney	Lead 420 µg/kg 2406645	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Sheep kidney	Lead 490 µg/kg 2417643	Great Britain	It should be noted that the GB Maximum Residue Level (MRL) for lead in sheep offal is 500 µg/kg. The respective EU MRL is 200 µg/kg, and so the GB laboratory tests to 200 µg/kg as the more conservative value. Whilst this sample is technically compliant against the GB MRL, the farm of origin has still been subject to an investigation to satisfy EU export obligations.
Sheep kidney	Lead 650 µg/kg 2406649	Great Britain	This is a large sheep farm, with a medium-size beef cattle enterprise. Cattle are bought at 10-11 months old and sold at two years of age for finishing. Cattle are housed in winter (Nov-Jan) and only a small number graze around the farm. The sheep flock is made up of 1300 north country and Welsh mule breeding ewes plus their offspring. Additional store lambs are bought every year (500 bought this year). Lambing is indoors and sheep graze around the farm all summer and then weaned lambs are turned onto stubble turnip fields. The main water source is a borehole. The positive lamb was born in spring 2023. It was in a batch of 62 lambs transported to the abattoir in February 2024 and slaughtered the day after. Partridge shooting takes place in two of the grazing areas, and in May 2023 a local blaze may have released particles in the immediate surrounding area. However, the area has a long past of lead mining, and environmental contamination of the soil is a more likely source. The probable cause of this residue is geochemical accumulation, through grazing on land with high levels of lead.
Sheep kidney	Lead 860 µg/kg 2406658	Great Britain	This is a large-sized, Red Tractor accredited farm, with more than 6000 sheep and around 500 cattle. Movement and medicine records are satisfactory. The sheep was homebred and sent direct to slaughter in March 2024. The soil in this area has high levels of lead and the likely cause of this residue is geochemical accumulation, through grazing on this land.
Sheep kidney	Lead 980 µg/kg 2406610	Great Britain	This is a small, Farm Assurance accredited sheep farm, with 300 ewes, 66 store lambs and around 45 baby lambs. Sheep are kept for breeding, fattening and wool, and replacements are reared on farm. Lambing is between April and May and approximately 400 lambs are reared every year. They are sold finished, from 8 to 12 months old and some are kept as replacements. Sheep are grazed all year round and only brought in for lambing. They are occasionally fed locally grown silage. Medicine storage and records were inspected and appeared fully compliant. All animals are vaccinated with Heptavac, ewes are wormed twice a year and lambs monthly. The positive animal was born in March 2023 on farm. It grazed in nearby fields and was transported in March 2024 by the owner, to the abattoir, along with 48 other sheep. It was kept in a group of 100 sheep, only 7 of which are left. There is known shooting activity in the area and the sheep have grazed in fields that have spent lead pellets deposited. It is possible that this animal may have ingested lead pellets while grazing or less likely, soil contamination on a grazed patch. Absence of typical signs of lead toxicity suggest this could be an isolated incident.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep kidney	Lead 1200 µg/kg 2406618	Great Britain	This is a medium-sized, Red Tractor accredited, permanent pasture farm, rearing beef cattle and sheep. Cattle and sheep are never kept in the same fields. There are 182 sheep (3 stud Rams, 86 ewes and 93 lambs). They are a mixture of Charollais, Blue Texel and Hampshire crossbreeds. They are all homebred with only rams bought in. The sheep spend all year round on the pasture and are only brought into the sheds 1-2 weeks before lambing. They go out again within 48 hrs of having lambed. Lambing occurs between February and March. Lambs spend all their life in the pasture, except for the first 48 hours after birth. They are fed a commercial lamb creep feed which is bought in ready-made. Homegrown silage and hay may be given in winter to supplement them. Lambs are sold at market between 4-12 months of age, dependent on their weight. Until they reach 12 months of age, they only have the flock mark tag number. There is a herd health plan set up with their vets. Medicine records were satisfactory, and medicines were kept locked in a cupboard. Any requiring disposal are done so via their vets. The positive sheep was in a batch of 38 sold to a dealer in February 2024, kept at the dealers for only 5 days, then sent for slaughter. The amount of residue suggests the positive sheep may have had a longer term low-level subclinical chronic exposure. The farm of origin is in an area with a history of lead mining and is susceptible to localised flooding. It is likely that the source of the lead contamination was environmental.
Sheep kidney	Lead 1400 µg/kg 2406615	Great Britain	This is a medium-sized sheep farm with just over 100 sheep. They are mainly homebred, but replacements are bought in locally. Sheep graze outdoors and are only taken in, if under treatment. They are provided with extra feed (pellets) and mineral licks. Lambing is done outside on the fields. Sheep are sold at market for store, meat and wool. Medicines are stored in a box in a room off the farmer's home office. The movements, mortality and medicine records kept on site, were satisfactory. The positive sheep was part of group of 8 cull ewes sent to market at just over a year old. There was no obvious source of lead, but the farm and particularly other grazing areas nearby have high lead levels, and the area is reported to flood regularly. The probable cause of this residue is geochemical accumulation, through grazing on land with high levels of lead.
Sheep kidney	Lead 1600 µg/kg 2406661	Great Britain	This is a medium-sized sheep and cattle farm. The 29 suckler Luing cattle are home bred, crossed with a Simmental bull for spring calving. Cattle are housed for as short a period as possible, last year housed in late December and back out on grass in March/April. The sheep flock is made up of 450 Swaledale breeding ewes, plus their offspring. Lambing is indoors. Medicine records are kept on an app and are in good order. No issues were found in the medicines store. The positive animal was born in spring 2023. It was sold via market in October 2023 to another farm, then sent for slaughter in March 2024. Both locations have naturally occurring high lead soil levels. No other obvious sources of the lead were found. The likely cause of this residue is geochemical accumulation, through grazing on land with high levels of lead.
Sheep liver	Closantel 1700 µg/kg 2406128	Great Britain	This is a medium sized, SAI Global affiliated, sheep farm. They have 430 ewes, 370 hogs, 16 tups and 120 replacements/lambs, and they buy in around 500 sheep per year. The positive animal was a homebred hog, from a batch of 34 with the same herd mark, that was sent with others as a group of 71 to slaughter in January 2024. The 71 came from a field of 222 animals that were treated with Flukiver and Noromectin, at the same time in December 2023. Flukiver's active substance is closantel and the animal was given a larger dosage than the recommend 1ml per 5kg weight of animal. The farmer confirmed he always used 10ml per animal for both drugs, not taking into consideration the different recommendations of dosage from each box. The treatment, at the same time as the additional wormer, may also have had a bearing as the liver would be unable to clear the drug metabolically at the same rate. Therefore, the likely cause of the residue is an unintended drug overdose.
Sheep liver	Closantel 1700 µg/kg 2432483	Great Britain	This is a medium-sized sheep farm, with 600 ewes and 150 lambs, most of which were homebred. All sheep are grass fed. Medicine and movement records were satisfactory. There was record of Supaverm (active ingredient closantel) being used last year but not on the positive lamb. Medicines are provided by their PVS. This animal was part of a batch of 39 lambs which was sent to the abattoir in October 2024 and slaughtered the next day. The most likely cause of this residue is an unrecorded treatment and subsequent slaughter whilst within a withdrawal period.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep liver	Closantel 4100 µg/kg 2405721	Great Britain	This is a large-sized, FAWL accredited, sheep farm. The sheep are kept outside all year round and fed grass and cake that is kept in bags. They are not grazing on common land, but some incidents of escaped sheep have been observed. Sheep are mostly homebred, and rams are usually bought as replacements. Medicines are provided by their vet or from an agricultural supplier. Withdrawal periods are recorded in a medicine record book and expired products are returned to the vet for disposal. Medicines are stored in a lockable fridge. The farmer advised they have become organic, and the use of medicines is very limited and under strict conditions. The positive sheep was treated with the wormer Flukiver (active ingredient closantel). The medicine was administered orally via drench. Withdrawal period for meat is 42 days, and the animal was taken to slaughter 101 days after the drug was administered. The dosage recorded applied to sheep with an estimated weight of 50 kg, no weighing equipment was used. The sheep was taken directly to the abattoir in a batch of 17 animals in February 2024, by the owner in his own transport, and slaughtered the next day. It is possible that an overdose of the medicine was administered due to imprecise knowledge of the animal's weight. It is less likely that the sheep escaped into the neighbouring holding and was treated again with the same medicine.
Sheep liver	Closantel 4800 µg/kg 2432440	Great Britain	The animal was untraceable.
Sheep liver	Flubendazole 4.0 µg/kg (2-amino-1H-benzimidazol-5-yl) (4-fluorphenyl)-methanone 23 µg/kg 2424709	Great Britain	This is a medium-sized, Red Tractor accredited, sheep farm. They have approximately 1200 sheep, made up of around 750 breeding ewes, with rams, lambs and replacements. All graze in the fields. The wormer Albex 2.5, active ingredient albendazole, was given to sheep in June 2024 with a withdrawal period of only 5 days. Storage and records of medicines is satisfactory, and they do not use medicines unless needed. Anthelminthic use is discussed with their vet before applying. They do not advise using a white wormer late in the season and to only use when they diagnose Nematodirus battus. All animals inspected were in good condition. The positive sheep was a castrated male, under 12 months of age, born on this farm. It was sent to slaughter in August 2024, in a lot of 60 sheep. Due to the probability that the sheep feed could be the source of the residue, a further investigation was carried out at the feed mill. This concluded that due to the ineffectiveness of their equipment flush, a batch of feed was cross contaminated with medicated feed and was the likely cause of this residue.
Sheep liver	Oxyclozanide 1200 µg/kg 2406258	Great Britain	This is a large, FABBL accredited, sheep farm. They buy sheep to fatten, then sell direct to slaughter or market. No breeding takes place at the farm. In the last 12 months they bought approximately 12.000-13.000 lambs through local markets. From the market, sheep are grazed in order to rest for 2-3 days then brought to the farm and weighed. Depending on their weight some of the sheep are treated (dosed) for fluke and then separated in different pens inside the sheds. The sheep that are heavy/fat enough are not treated with any medicine, they are kept for 2-3 weeks and then sent direct to slaughter or sold via a local market. All the sheep treated for fluke are kept on the farm for at least 4-6 weeks until they reach the right weight. They mark all the treated sheep with red spray on the head (red head). They use Levafas Diamond (oral suspension) and occasionally Alamycin LA, (both have the active ingredient oxyclozanide) bought from farm shop suppliers and from their private vet. Medicines are in date and stored in a dedicated lockable cabinet. All treatments are recorded in a medicine record book, but the ID of individual animals for big lots of sheep is not recorded, only the total number of animals. 873 sheep were treated for fluke at the start of 2024 (withdrawal period for Levafas is 5 days). It is possible the ovine animal was still in the withdrawal period when sent to slaughter and could be the reason for the residue. The positive female animal was part of a group of 90 sheep, sent to slaughter in February 2024. The likely of cause of the residue is the animal has been sent for slaughter whilst accidentally failing to observe the full withdrawal period.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep liver	Rafoxanide 1917 µg/kg	Northern Ireland	A remote investigation was completed in March 2024. This animal was purchased at market in February 2024 less than 24 hours before sampling, herd keeper submitted a statement that they did not administer any medications during this time. Herd keeper has a high turnover of sheep purchased at mart then taken to slaughter within a day or two. The seller has not adhered to withdrawal period (72 days) and did not declare treatment at sale. Follow up to go ahead with seller. Five follow up samples from current owner all compliant.
Sheep liver	Triclabendazole sulfoxide 7.2 µg/kg Triclabendazole sulfone 95 µg/kg Triclabendazole 230 µg/kg 2404412	Great Britain	This is a medium-sized, Farm Assured, beef cattle and sheep farm. It is a family farm, and the standard of management is good. The medicine records were neat and tidy, including all information required. Out of date medication is disposed of by the PVS. The animal was accidentally dosed in February 2024 at the same time as the other hoggs on the farm. The positive animal was transported by the owner to the abattoir via market in February 2024. It was slaughtered the next day, when it was sampled. Accidental human error was the cause of this incident due to miscommunication between personnel on farm.
Sheep urine	Alpha-boldenone 2.2 µg/kg 2432373	Great Britain	This is a large-sized, FABBL accredited, cattle and sheep farm. Medicine and movement records were satisfactory. There was no evidence of steroid usage. The male lamb was sent from the natal holding to market then direct to the abattoir, in October 2024, and slaughtered the next day. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 2.2 µg/kg 2432378	Great Britain	This is a medium-sized sheep and cattle farm. They have 39 cattle and 800 Cheviot breeding ewes. Sheep graze all year round and lambing is also outside except for multiple births. They are fed homegrown silage and hay, and the lambs feed is supplemented with cake. Medicine and movement records were satisfactory. Medicines are supplied by their Private Veterinary Surgeon or a commercial supplier and stored in a lockable cabinet. There was no evidence of steroid usage and animals appeared in a good condition. The positive 6-month-old, homebred male lamb was sent to slaughter in a bunch of 35 sheep. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 2.3 µg/kg 2430175	Great Britain	An initial investigation took place at the farm that sent the positive animal to slaughter. This enterprise is a large, QMS accredited, meat wholesaler business with mainly sheep and a beef suckler herd. The keeper buys in a mixture of breeds of lambs and ewes from markets, that are already at slaughter weight. They are kept at the holding for a maximum of 10 days before being transported directly to the abattoir. Medicine records and storage is satisfactory. The vet confirmed the animal did not receive any treatment whilst on farm. There is a health plan in place, and medicines are prescribed accordingly. There was no evidence of steroid usage and animals appeared normal. The positive animal was bought from market in October 2024, it stayed on farm for 7 days, then went directly to slaughter. A second investigation then took place at the farm of origin; a large-sized sheep and cattle farm. They have 1100 sheep of Texel crosses and replacements and Limousin cross cattle. Lambs are homebred and sold at market. They are fed on grass or kale all year round with water access from either natural sources or troughs. Medicine and movement records were satisfactory. Medicines are supplied by their Private Veterinary Surgeon or a registered veterinary pharmacy and stored in a lockable cabinet. There was no evidence of steroid usage. The female lamb did not receive any medical treatment and was taken to the market in the farmer's own transport. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 2.3 µg/kg 2432315	Great Britain	This is a large-sized, FABBL accredited, cattle and sheep farm. A traditional moorland suckler herd with 303 cattle, mainly Aberdeen Angus. They also have 1000 ewes for lamb production. Lambing is from mid-February to the end of April. Sheep are homebred, with the farmer purchasing replacement rams and occasionally ewes, up to 10 a year. Sheep graze on the moor and are supplemented with sheep nuts from January to April. Medicine and movement records are kept in paper format and are satisfactory. Medicines are stored in a lockable cabinet. There was no evidence of anabolic steroid usage. The male positive lamb was taken to the abattoir, in a group of 46 animals, by the farmer in October 2024. It was born on farm and was 6-12 months old at the time of slaughter. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 2.4 µg/kg 2432325	Great Britain	This is a large-sized, FAWL accredited sheep farm. They have 1400 breeding ewes, mostly homebred. All sheep are grass fed. Medicine records and storage were satisfactory. All medicines are provided by their PVS. There was no evidence of steroid usage. The positive animal was sold at market in October 2024 and slaughtered 4 days later, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 2.5 µg/kg 2416676	Great Britain	This is a small-sized sheep farm, with around 15-20 ewes with lambs on foot, about 40 sheep in total. Medicines are stored in a cabinet in a locked garage. Medicine records are recorded in a diary with only 2024's records available. There are no steroid substances recorded in the diary and none found in the drugs cabinet. All drugs administered were past their withdrawal period. The positive sheep was sent for slaughter in April 2024, for the farm's own consumption. The low-level residue, from a male sheep, has likely arisen following faecal contamination of the sample or was of endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 2.5 µg/kg 2423910	Great Britain	This is a medium-sized cattle and sheep farm. They have a suckler herd of cattle with spring and summer calving. The calves are sold as stores or kept for finishing. They buy in replacement cows from market. Cattle are housed over the winter and fed on locally grown silage and grazed during the summer. They have about 570 breeding ewes and buy in replacements. They lamb indoors from mid-February into March, with the flock outside the rest of the year. Ewes are given some supplementary feeding. Lambs are sent direct to slaughter. Medicines are bought from their vets and stored in a locked cabinet inside a shed. None of the products in the medicine cabinet could have caused the positive residue reported. Medicine records were up to date. The positive lamb was homebred and in a batch of 40 lambs sent for slaughter by haulier, in July 2024. The sample was taken the next day. It is most likely the residue has arisen following faecal contamination of the sample or other endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in the urine.
Sheep urine	Alpha-boldenone 2.5 µg/kg 2432313	Great Britain	This is a large-sized, Red Tractor and FAWL accredited, cattle and sheep farm. Medicine and movement records were satisfactory. Medicines are provided by their Private Veterinary Surgeon (PVS) and stored correctly. Their PVS attends every 2 weeks. There was no evidence of steroid usage and animals appeared in a good condition. The positive homebred lamb was sent to market in October 2024. It went from there to the abattoir in a group of 52 lambs. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 2.7 µg/kg 2432281	Great Britain	This is a large-sized, Red Tractor accredited, sheep farm. There are 1200 ewes, 1200 lambs and 47 tups. They graze in the field, and lambs also get mineral licks, Himalayan salt and a mineral drench. Some sheep are kept for breeding, while others are sold as store sheep or sent directly to slaughter. The few medicines kept are stored in a lockable fridge. Any unwanted medicines are disposed of by their PVS practice. There was no evidence of steroid usage and animals appeared normal. The male positive animal was part of a group of 126 sheep collected and taken to the abattoir in October 2024. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 2.7 µg/kg 2432342	Great Britain	This is a large-sized cattle and sheep farm. They have a beef herd of 289 cattle and about 3400 sheep. Cattle and young sheep are housed and fed haylage, and around 2000 ewes graze in the fields. Movement and medicine records were satisfactory. Animals are only treated with medicines that are prescribed by their private vet. There was no evidence of steroid usage and animals appeared in a good condition. The positive female animal was part of a group of 5 sheep sold at market in November 2024 and sent to slaughter the same day. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 3.0 µg/kg 2423916	Great Britain	This is a medium-sized farm, both Red Tractor and FAWL accredited. They have a 221 dairy cattle herd consisting of 120 milkers, 45 heifers, 15 calves, 40 stores and 1 bull. They graze on grass in the summer and are housed in the winter and fed on silage. Cake is added as a supplement all year round, but no medicated food is given. Stores, 15-20 months old, are sold at market and barren cows are sent to slaughter. They also have 282 sheep, made up of 12 rams, and 270 ewes and lambs. They are kept outdoors all year round except for the lambing season, January to March. They are fed on grass, and cake is provided during the lambing season. No medicated food is used. They buy 2 or 3 rams per year and sell ewes at market and send lambs around 4 months old to slaughter. Medicines are stored in a metal lockable cabinet. They are provided by the Private Veterinary Surgeon (PVS) or from another approved supplier. Medicines are normally finished when used, but any expired bottles are sent to their PVS. Medicine and movement records and medicine invoices are stored electronically. The positive animal was part of a group of 53 homebred lambs sent to the abattoir in June 2024 and slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 3.1 µg/kg 2432350	Great Britain	This is a large-sized sheep and beef cattle farm. The positive homebred male sheep was sent to slaughter in November 2024. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 3.2 µg/kg 2416628	Great Britain	The farm of origin for the sampled animal is a medium-sized sheep farm, with 106 ewes and 200 lambs. The lambs are not grown but sold at market or to other farmers. Medicines are kept in the refrigerator inside the house and some in the shearing shed. Records are kept for at least 5 years and their private veterinarian supplies the medicines. No evidence of incorrect use of medications was found and records are adequate. There is no reason to suggest the sampled animal was treated with steroids on this farm. The positive animal was sold at market in December 2023. The new owner has a large-sized, Red Tractor accredited sheep farm with around 1700 sheep, rising to 3000-4000 in spring. Young sheep are usually purchased in autumn, kept for fattening for 3-6 months, and sold for meat production around May. Additionally, there are around 200 ewes kept specifically for breeding purposes. The sheep are kept on the farmland and on Temporary Land Association areas. Sheep are reared outside all year round. Their primary food source is grass pasture. Most of the fields are used to grow grass and clover mixes. Medicines are kept in a lockable garage and records are up to date on computer. Disposal and purchase records are in compliance with regulations. Movement records confirmed the positive sheep was sold at market in May 2024 and sent to slaughter 3 days later. The sheep on farm showed no indications of anabolic steroid use or evidence of illegal substances. Farm systems, pastures, and animal locations suggest that the presence of the detected hormone is likely natural. The residue might have arisen due to faecal contamination of the sample or other endogenous (natural) origins, such as feeding the lambs with clover during grazing on field.
Sheep urine	Alpha-boldenone 3.5 µg/kg 2432310	Great Britain	This is a large-sized, Red Tractor accredited, sheep farm, with a flock of around 450. Lambing occurs at the end of March, and they also buy in store lambs for fattening. Medicine and movement records were satisfactory, and there was no evidence of steroid usage. The positive male lamb was bought in October 2024 and sent for slaughter in November, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 3.6 µg/kg 2432256	Great Britain	This is a large-sized, Red Tractor accredited, sheep and cattle farm. They have 4900 ewes and 309 cattle. Sheep graze in the fields with additional haylage and licks. The lambing period is from March to April. Medicine and movement records were satisfactory. There was no evidence of steroid usage and animals appeared in a good condition. The positive homebred female animal was part of a batch of 149 lambs sent to the abattoir in November 2024 and slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 3.6 µg/kg 2432291	Great Britain	This is a medium-sized farm, with around 200 sheep and 40 cattle. Sheep are homebred and the rams are bought in. They are kept on grass, with the lambs feed supplemented with fattener pellets and silage. There was no evidence of steroid usage and animals appeared in a good condition. Medicine and movement records were lacking in detail. Medicines are provided by their PVS and stored in a locked shed. The positive homebred lamb was in a batch of 21 animals sold at market in October 2024. It was slaughtered 5 days later, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 3.7 µg/kg 2423846	Great Britain	This is a medium-sized FAWL accredited farm, with around 1000 sheep and 118 cattle. Sheep are a mixture of homebred and bought in. They graze in a pasture with a high presence of clover and have additional silage as required. Around 250 ewe lamb replacements are purchased annually. Medicine and movement records were satisfactory. Medicines are provided by their PVS and there was no evidence of steroid usage. The homebred positive animal was sent to the abattoir, in a batch of 100 sheep, in September 2024 and slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 4.1 µg/kg 2422347	Great Britain	This is a medium-sized sheep farm, with a flock of around 1000. They mainly graze but have additional total mixed ration (TMR) or homegrown silage as required. The ewes lamb indoors between March and April. The lambs are fattened on grass for 5-6 months and either kept as replacement ewes for the following year or sent directly to slaughter by the farmer. Medicine records were satisfactory. They work alongside their private veterinary practice with health plans for the flock. There was no evidence of anabolic steroids usage. They have well-ventilated sheds and plentiful space for separate isolation and hospital facilities. Ewes are housed in individual deep straw bedded pens, during the lambing period, and closely monitored inside before moving ewes with lambs to pasture (weather and individual dependent). The positive animal was sent direct to the abattoir, in a batch of 120 sheep, in September 2024, and slaughtered the next day when the sample was taken. Sheep from the same management group, sent for slaughter, were present on farm. They were clinically inspected and nothing untoward was noted. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 4.4 µg/kg 2423845	Great Britain	This is a medium-sized, Quality Meat Scotland (QMS) accredited, sheep and cattle farm. They have 150 cattle and around 840 sheep over two locations. Lambs are milk bucket reared inside, with additional fattening pellets and last year's barley straw. All other sheep and cattle are grass fed. Winter and spring Barley is produced on farm, as well as oil seed rape. Medicine records were satisfactory. Medicines are stored in a cupboard, instead of a fridge. Normal growth was noted in other spring 2024 born lambs. The positive lamb went straight to the abattoir in August 2024 and slaughtered the next day, when the sample was taken. No medication was given on farm for 30 days prior to this. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 4.4 µg/kg 2432364	Great Britain	This is a large-sized, FAWL accredited, sheep and cattle farm. They have 1050 sheep and 22 beef cattle. All are homebred and fattened for slaughter. The sheep graze outside all year round, and feed is supplemented with sugar beet pellets. Medicine and movement records were satisfactory. Medicines are provided by their PVS and locked away. There was no evidence of steroid usage and animals appeared in a good condition. The positive female lamb was sent to market in a group of 56 animals in November 2024 and slaughtered 2 days later. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 4.8 µg/kg 2432219	Great Britain	This is a medium-sized, FAWL accredited, sheep and cattle farm. They have around 800 ewes and 175 breeding suckler cattle. Movement records were satisfactory. The homebred lamb was sold at market in October 2024 and sent for slaughter. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 4.9 µg/kg 2432309	Great Britain	This is a large-sized, FAWL accredited, sheep and cattle farm. They have around 2500 sheep and 350 store cattle. Lambs are homebred or purchased for fattening, and graze with the sheep in pasture with a high presence of clover. Movement and medicine records, and medicine storage were satisfactory. Medicines are provided by their PVS. There was no evidence of steroid usage. The homebred lamb was sent to slaughter in a group of 91 animals in October 2024. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 5.0 µg/kg 2432303	Great Britain	This is a medium-sized, FAWL accredited farm, with around 800 sheep and 160 dairy cattle. Sheep are homebred or purchased and kept on grass. Medicine and movement records were satisfactory. Medicines are provided by their PVS and kept in a locked building. There was no evidence of steroid usage and animals appeared in a good condition. The positive homebred lamb was in a batch of 42 sheep sold at market in October 2024. The dealer-buyer sent it to the abattoir 2 days later and it was slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 5.4 µg/kg 2423842	Great Britain	This is a small-sized farm with around 200 sheep. All sheep are homebred and graze outside. Medicines are stored in a locked cabinet and only purchased when required. There was no evidence of steroid usage. Animals appeared in a good condition. Movement records were satisfactory, but medicine records were lacking in detail. The positive animal was part of a batch of 20 lambs sent to market in August 2024, and slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 6.1 µg/kg 2423917	Great Britain	This is a medium-sized sheep and cattle farm. They only buy direct from markets. Medicines are supplied by their private veterinary surgeon and administered at the time of visit. No regular medication is given to the sheep. There were no drugs in the medicine cupboard that contained alpha-boldenone as an ingredient. The positive lamb was bought at market and was under 6 months old when it was sent for slaughter in August 2024. It was in a batch of 126 sheep and travelled in the farmer's own transport. The positive lamb was female which suggests the most likely cause of the residue is of natural origin due to contamination of the urinary tract and possibly production from intake of certain plant sterols, but unlikely as the sheep are given purchased feed.
Sheep urine	Alpha-boldenone 6.7 µg/kg 2432271	Great Britain	This is a large-sized, FAWL accredited, sheep and cattle farm. They have 2500 Welsh Mountain breeding ewes, plus 200 suckler cows and some stores. Lambs sold are homebred. Medicine and movement records were satisfactory. Medicines are stored in a lockable cabinet. There was no evidence of steroid usage and animals appeared in a good condition. The positive male lamb was sold at market as part of a batch of 104 lambs, in October 2024. It was taken to the abattoir and slaughtered the next day, when the sample was taken, aged 6 months old. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 6.8 µg/kg 2423788	Great Britain	This is a large-sized, FAWL accredited farm, with 3500 sheep and 416 cattle. Sheep are homebred or purchased, and around 300 lambs are moved in per year for replacement and fattening. The sheep are fed on grass, stubble turnips, lamb fattener pellet and silage. They can graze in areas with a high presence of clover, which is known to contain natural sterols. Movement and medicine records, and medicine storage are satisfactory. All medicines are provided from their PVS and there is no evidence of anabolic steroid usage. The positive homebred sheep was sold at market in August 2024, then taken straight on to the abattoir. It was slaughtered the next day when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 6.9 µg/kg 2432276	Great Britain	This is a small-sized sheep and pig farm. Lambs are produced for finishing and sold at market, pigs are fattened and sent to a small local abattoir. They have 100 ewes, mostly homebred, with occasional replacements purchased. Sheep graze on grass or turnips and are only indoors for 3 weeks a year for shearing. They practice low level medicine usage. The positive homebred female was sold at market in October 2024 in a group of 16 lambs. It was bought by a dealer who sent it for slaughter 5 days later, aged 6-12 months. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine. The long journey to the abattoir may have added a stress factor.
Sheep urine	Alpha-boldenone 7.2 µg/kg 2416663	Great Britain	This is a Farm Assured Welsh Livestock (FAWL) accredited sheep dealer. They purchase around 800 – 1000 sheep a month, mainly from markets, that are either sold or kept for a short period and sent to slaughter. Some sheep graze on farm and some are kept indoors in pens and fed with concentrate feed. Medicines are bought from their vet and other retailers and stored in a fridge inside a lockable garden shed, inside the livestock shed. Medicine records showed the positive sheep had not been treated during its stay at these premises. There was no evidence of any steroid usage. The sheep was sent to slaughter in a group of 3, in June 2024, when the sample was taken. Movement records were checked and accurate. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 7.5 µg/kg 2432277	Great Britain	This is a medium-sized, Red Tractor accredited, sheep farm. All medicines are recommended by their PVS and there is no evidence of anabolic steroid usage. The positive male animal was part of a group of 52 lambs sent for slaughter in October 2024. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 7.9 µg/kg 2432349	Great Britain	This is a large-sized, FAWL accredited, sheep and cattle farm. They have around 2500 sheep and 600 cattle. They purchase animals from market, keep until fattened, then send them directly to slaughter. Sheep are grazed outdoors all year round. Medicine and movement records were satisfactory. Medicines are purchased from their PVS (Private Veterinary Surgeon) and stored out of reach. Out of date medicines are returned to their PVS. There was no evidence of steroid usage and animals appeared in a good condition. The positive male sheep was purchased in a batch of 245 sheep from market in August 2024. It did not receive any medical treatment and was sent to the abattoir in September 2024 and slaughtered 2 days later, when the sample was taken. It was aged between 6-12 months. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 8.8 µg/kg 2423902	Great Britain	This is a large-sized, Red Tractor accredited, sheep farm. They have a high turnover, with minimal veterinary intervention and low usage of medication. They buy sheep from local farms and markets, fatten them, and then send for slaughter. They are mixed breeds and most graze the fields around the farmhouse. The fattened sheep are brought inside the shed for a few days before being sent for slaughter. Movement and medicine records, and medicine storage are satisfactory. Out of date medicines are disposed of by their Private Veterinary Surgeon (PVS). There is a health plan in place developed by their PVS and the sheep are in good physical condition. There is no evidence of anabolic steroid usage. The positive animal was on farm for a few months before being sent for slaughter in August 2024. It was taken in the farmer's own transport for the three-and-a-half-hour journey and slaughtered the next day. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Alpha-boldenone 9.7 µg/kg 2432217	Great Britain	This is a medium-sized, FAWL accredited, sheep farm. The flock consists of around 315 ewes, 61 replacements and 50 lambs. All are homebred except for the rams which are bought in. Sheep are grazed and fed additionally with home produced silage and hay. Lambs are provided with a mixed blend. Medicine and movement records were satisfactory. Medicines are supplied from their PVS or commercial suppliers and kept in a locked cabinet. Expired medicines are returned to their veterinary practice for disposal. The farmer treats the sheep himself and his PVS visits at least every 18 months. There was no evidence of steroid usage and animals appeared in a good condition. The homebred lamb was sent to the abattoir in the farmers own transport in October 2024. It was slaughtered the next day, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 12 µg/kg 2432370	Great Britain	This is a large-sized, Red Tractor accredited, dairy and sheep farm. They have 675 cattle, mainly Montbéliarde. Calves are retained as replacements for the dairy herd. Lambs are produced for finishing, then sent to slaughter. Their current stock is 134 ewes, 19 longhorn ewes, 5 rams, 20 lambs and 30 cull ewes. Lambing is from mid-February to the last week in April. Sheep are homebred, with occasional replacements purchased. Sheep graze on sown pastures made up of a mix of grasses, herbs and legumes and are occasionally supplemented with sheep nuts from January to April. Medicine and movement records were satisfactory. Medicines are stored in a lockable cabinet. There was no evidence of steroid usage and animals appeared in a good condition. The positive homebred male lamb was taken directly to the abattoir in November 2024 by the farmer, in a group of 40 animals. It was slaughtered the next day, aged 6-12 months, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 15 µg/kg 2423921	Great Britain	This is a small, QMS accredited, family-run farm, with around 120 mule ewes and 30 Aberdeen Angus cows, with 15 calves. All animals graze, with additional supplementary feed through winter and at lambing and calving time. Lambing is in April. Medicines are stored appropriately, and medicine records are satisfactory. Vets attend the farm twice a year for routine work and are consulted when necessary. The positive animal had not received any treatment for at least 60 days before slaughter. It was sold at market in September 2024 and sent straight to the abattoir. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Alpha-boldenone 17 µg/kg Beta-boldenone 0.50 µg/kg 2432258	Great Britain	This is a large-sized, FAWL accredited sheep and cattle farm. They have 1500 breeding ewes, plus suckler cows and some stores. All lambs sold are homebred. All movement, purchase and treatment records are in good order, and drugs are in date and kept in a lockable cabinet. There was no evidence of steroid usage. The positive animal was part of a group of 33 lambs sent to market in October 2024 and slaughtered 2 days later, when the sample was taken. The most likely cause of the residue detected is either faecal contamination of the sample or endogenous (natural) origin, as it is possible that certain plant sterols can be metabolised to produce boldenone in urine.
Sheep urine	Beta-nortestosterone 0.47 µg/kg 2404325	Great Britain	This is a large-sized, QMS accredited, sheep farm. They have around 1400 ewes and 2500 lambs, although numbers vary throughout the year. Stock is bought from local markets and sent to local abattoirs. Animals are kept in good clean condition and showed normal calm behaviour. Medicine records were satisfactory. The positive sample originated from a castrate homebred male that according to the records didn't receive any treatment. All treatment given is agreed with the PVS. Medicine is kept in a safe box in the farmer's car and matched treatment recorded in the records. When medicines are not in use, they are kept in a locked room at the farm, which only the farmer has access to. The animal was transported in the farmer's own transport, in February 2024, to the abattoir. It was a 16-mile journey and took 90 minutes. The animal was then kept in lairage for over 12 hours and slaughtered the next day, when the sample was taken. The stress of the journey and lairage is likely to have caused the low-level residue finding, which is of natural origin.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Sheep urine	Beta-nortestosterone 0.72 µg/kg 2404996	Great Britain	This is a large-sized, FAWL accredited, cattle and sheep farm. They buy store cattle for rearing and fattening, and keep 420 ewes. These are lambed indoors and reared on grass. The medicine cabinet, associated records and movement records were in good order. One bottle of Colvasone (active ingredient dexamethasone) was found in the medicine cabinet. This was used for joint-ill in lambs, sometime previously. It is unlikely that corticosteroid use would have any effect on the nortestosterone reading. The animal was brought onto this holding in January 2021, sold at market in March 2024 and slaughtered two days later. The elevated level of nortestosterone is likely to have been a natural occurrence, due to a minor injury, transit stress or a possibly pregnancy. There is no evidence of illegal steroid use on the farm.
Sheep urine	Beta-nortestosterone 1.1 µg/kg 2423818	Great Britain	This is a large-sized, Quality Meat Scotland (QMS) accredited, sheep farm. They keep mostly Texel and Aberfield breeds, with approximately 1,400-1,500 ewes, 400 lambs, and 42 rams. They have two lambing cycles, both lasting around 30 days, until the end of April. The lambing peak is in mid-April. Medicine records were satisfactory and there was no evidence of drug misuse. The positive sheep was homebred and sold at market in August 2024, aged 4 years old. It was sent for slaughter 5 days later, when the sample was taken. The long distance, and the delay between the sale and slaughter, which included several days at a lairage, would have heightened stress levels. The ewe was also sold as barren and it's possible that cystic ovaries or other condition prevented the ewe getting pregnant and may be the cause of the low positive residue.
Sheep urine	Beta-nortestosterone 1.2 µg/kg 2432377	Great Britain	This is a medium-sized, FAWL accredited, sheep farm, with a flock of 300 animals. They have 6 rams for breeding and 55 lambs for replacements. Lambing starts from mid-March, all of it outside. Sheep graze outside and feed is supplemented with haylage, sheep nuts and liquid for energy. Lambs are sold in the autumn and only fed grass before going to market. Medicine and movement records were satisfactory. There was no evidence of steroid usage and animals appeared in a good condition. The positive homebred female was sold at market in September 2024 and went straight to slaughter, when the sample was taken. The most likely cause of this low-level residue is an endogenous (natural) origin, due to stress of the journey to the abattoir.
Sheep urine	Taleranol 1.0 µg/kg Zeranol 0.92 µg/kg 2431909	Great Britain	This is a small family farm with 21 Poll Dorset sheep. No sheep are bought in. Sheep are grazed all year but housed during lambing, and selected numbers are housed a few days before slaughter. They presented normal body development with no evidence of growth promoter usage. The flock is occasionally fed with a sheep mix, purchased from a local feed store. No medicines are stored on the farm, and the flock receive very few treatments from their Private Veterinary Surgeon (PVS). A batch of 10 lambs were kept in a pen, in the lambing shed, for 3 days before being taken straight to slaughter by the owner, with the majority returning for family and friends' consumption. A small number are sold through market. The pen in the lambing shed had not been cleaned since spring, but the bedding had been topped up. The bedding under the top layer was mouldy in places and compatible with fungi from the Fusarium family, responsible for producing natural occurring zeranol. The most likely cause of the positive residue is ingestion of mouldy feed or bedding.

Pending investigation reports Great Britain:

Species & Matrix	Residue detected & concentration (RIM Ref)	RIM reference

Pending investigation reports Northern Ireland:

Species & Matrix	Residue detected & concentration

Sampling of animals suspected of containing a residue at the time of slaughter: 31 December 2024

Residues detected above the reference point to date: 31 December 2024

Medicinal products can be found on the Product Information Database.

Sample	Analysed for	No. of Analyses	No. of non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l
Cattle kidney	Antimicrobials screen 1		11	50	76.5 amoxicillin
				1000	3060 dihydrostreptomycin
				100	450 gamithromycin
				150	957 marbofloxacin
				600	889, 2953 oxytetracycline
				3000	7660, 8720, 10848 tulathromycin
	Florfenicol		3	300	422, 550 florfenicol
Cattle muscle	Antimicrobials screen 1		1	100	625 oxytetracycline

Results of suspect follow-up investigations: 31 December 2024

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle kidney	Amoxicillin 76.5 µg/kg	Northern Ireland	An investigation was undertaken in March 2024. The animal was 13 years old and was born on farm into a dairy and beef finishing herd with 158 animals, sheep also kept onsite. Movement and medicine records were kept in accordance with legislation. The animal was treated by vet for retained foetal membranes post calving in February 2024. Animal was last administered Synulox (active ingredients Amoxicillin trihydrate & Clavulanic acid) in February 2024. Animal was not recovering well so herd keeper sent to slaughter 18 days after last treatment. Herd keeper admitted that he forgot the withdrawal period was longer for meat (42days) than milk (60 hrs). Cause of residue was human error.
Cattle kidney	Dihydrostreptomycin 3060 µg/kg	Northern Ireland	An investigation was undertaken in February 2024. The animal was 3 years old, purchased into a high turnover beef finishing unit in January 2024 2 days prior to slaughter. Movement and medicine records were kept up to date. The herd keeper confirmed they did not administer any medication to the animal. Previous owner provided a letter from their vet to confirm the animal was examined November 2023 and surgical enucleation of the eye was performed. Anaesthesia and pain-relieving medication were administered and 45ml Ultrapen LA (procaine benzylpenicillin) was also given. No record of dihydrostreptomycin administration.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle kidney	Florfenicol 422 µg/kg	Northern Ireland	The positive animal was just over 14 months old at sampling, purchased 8 months prior into a beef fattening herd with 479 animals, sheep are also present on farm. The animal was transported to the abattoir in the herd keeper's own transport. Movement and medicine records are kept in accordance with legislation. The animal was treated with Resflor (active ingredients florfenicol and flunixin), two doses were given eight days apart. Although the withdrawal period of 46 days (meat) was complied with, the medicine was not administered as per manufacturer's instructions, the animal was given two doses eight days apart (advice is only one dose should be given) and more than 10ml was administered per injection site. Failure to follow manufacturer's instructions was the likely cause of the residue finding. All follow-up samples were compliant.
Cattle kidney	Florfenicol 550 µg/kg	Northern Ireland	The positive animal was 26 months old at sampling, it was purchased into a beef finishing herd with 226 animals and was on-site for 8 and a half months prior to sampling. The animal was transported to slaughter on its own, in the herd keeper's own transport. Movement and medicines records kept in accordance with legislation. The animal was administered two doses of Nuflor (active ingredient florfenicol) in rump, 24 hours apart, the last dose was administered 28 days prior to slaughter, the withdrawal period is 30 days. The herd keeper admitted he knew it was early but thought it was 29 days as he counted last day of administration as day 1 not day zero and thought it would be ok. The herd keeper also noted he may have dosed slightly higher than the correct dosage and he did not follow the manufacturer instruction to space doses 48 hours apart. The cause of residue level detected was due to several failings to follow manufacturer instructions. All follow-up samples were compliant.
Cattle kidney	Gamithromycin 450 µg/kg	Northern Ireland	The positive animal was 12 months old when it was sent for slaughter. It was homebred into a beef herd of around 50 animals, sheep are also kept on-site. The animal was transported to slaughter separately in the owner's own transport. Movement and medicine records were kept in accordance with legislation. Zactran (active ingredient gamithromycin) was used on the farm to treat lameness in lambs. It has a withdrawal period of 64 days in bovine meat. Although the herd keeper was sure that no bovines had been treated with Zactran, it is likely the residue was due to a mix up in treatment.
Cattle kidney	Marbofloxacin 957 µg/kg	Northern Ireland	The positive animal was 17 months old at sampling, purchased in September 2024 into a beef herd of 1516 animals. It was on farm 37 days prior to slaughter and was transported in the herd keeper's own transport separated from other herds. Movement and medicine records kept in accordance with legislation. The animal was administered Marbocyl 10% injectable in October 2024, 8 days prior to slaughter, the withdrawal period for this medication was complied with. It was determined during investigation that the dose given, based on the carcase weight, exceeded the recommended dosage. The cause of residue was overdosing. All follow-up samples were compliant.
Cattle kidney	Oxytetracycline 889 µg/kg	Northern Ireland	The positive animal was 22 months old and part of a 383-fattening herd. It had been purchased 13 months prior to slaughter. The animal was transported to the abattoir on the farms own trailer. Movement and medicine records were up to date and in accordance with legislation. The animal had a sore foot and was treated with 40ml (20ml in 2 sites) of Alamycin LA300 (active ingredient oxytetracycline) which has a 28-day withdrawal period. It was slaughtered 48 days later. The withdrawal period was adhered to; but the manufacturer recommends a dosage of 15ml at one site. Two follow up samples contained oxytetracycline at compliant levels (184 and 541 µg/kg).
Cattle kidney	Oxytetracycline 2953 µg/kg	Northern Ireland	The positive animal was 25 months old and part of a 1680 finishing herd. There is a high turnover of animals and this animal had been purchased 2 days prior to slaughter. The herd keeper said he has never treated the animal while on his farm. The animal was transported to the abattoir in the farm's own lorry. Movement and medicine records were up to date and in accordance with legislation. A follow-up check with the previous herd keeper's medicine records showed this animal was treated with oxytetracycline. All follow up samples were compliant.

Species & Matrix	Residue detected & concentration (RIM Ref)	Region	Cause of residue
Cattle kidney	Tulathromycin 7660 µg/kg	Northern Ireland	The positive animal was 26 months old and purchased into a beef finishing and breeding herd of approximately 1200 cattle. It arrived on site 21 days prior to slaughter. The animal was transported to the abattoir by a haulier with animals from the same herd. Movement and medicine records were up to date and in accordance with legislation. There was no treatment recorded for this animal, but there were two bottles of Draxxin (active ingredient tulathromycin) on farm. One bottle was purchased in January 2024 and had 85ml left, it was recorded in the medicine book that 15ml was used to treat another animal. The second bottle was unopened. The farm manger had no recollection of this animal being treated with any medicines on farm. He was aware of the 22-day meat withdrawal period and that no more than 7.5ml should be administered in one site, from a previous investigation. Follow up samples were compliant.
Cattle kidney	Tulathromycin 8720 µg/kg	Northern Ireland	The positive animal was 29 months old when it was sent for slaughter, separated from the herd in the owner's own transport. Movement and medicine records were kept in accordance with legislation. The source of the residue could not be established.
Cattle kidney	Tulathromycin 10848 µg/kg	Northern Ireland	The positive animal was 17 months old when it was sent for slaughter. It was purchased 18 days prior to sampling, by a beef production unit of 234 animals, sheep are also kept on-site. The animal was transported in the herd keeper's own transport. Movement and medicine records were kept in accordance with legislation. The cause of the residue was the animal had been treated with injectable tulathromycin 1 week prior to slaughter, and the withdrawal period of 22 days for this medication was not observed.
Cattle muscle	Oxytetracycline 625 µg/kg	Northern Ireland	The positive animal was 7 years 3 months old when it was sent for slaughter. It was born on-site into a suckler herd of 228 cattle. The animal was transported to slaughter separately in the owner's own transport. Movement and medicine records were kept in accordance with legislation. The animal was treated with Hexasol LA (active ingredient oxytetracycline) in June 2024, 39 days prior to sampling, observing the 35-day withdrawal period. A total of 60ml was given to the animal (10mls at 6 different sites), and the live weight of the animal was approximately 700Kg. The herd keeper had spoken with his own vet who confirmed the correct dose was given. The cause of residue was not determined.

Pending suspect investigation reports Northern Ireland:

Species & Matrix	Residue detected & concentration (RIM Ref)

Details of 2024 UK statutory surveillance programme by sector

Cattle

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
A2	Thyrostats	Cattle	Urine	0/181
		Fattening cattle	Urine	1/236 (0.4%)
A3 Hormones	Gestagens	Cattle	Kidney fat	0/314
		Fattening cattle	Serum	0/319
	Oestradiol	Cattle (male)	Serum	0/238
		Fattening cattle (male)	Serum	0/349
	Steroid screen 1	Cattle	Urine	17/1074 (1.6%)
		Fattening cattle	Urine	31/1220 (2.5%)
	Testosterone	Cattle (female)	Serum	2/310 (0.6%)
		Fattening cattle (female)	Serum	1/345 (0.3%)
A3B	Plant protection Products/Biocides	Cattle	Muscle	0/21
A4 Hormones	Zeranol	Cattle	Urine	11/423 (2.6%)
		Fattening cattle	Urine	8/402 (2.0%)

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
A5	Beta-agonists	Calves < 6 months	Liver	0/8
		Cattle	Liver	0/565
		Fattening cattle	Feed	0/176
		Fattening cattle	Urine	0/207
A6 Annex IV	Chloramphenicol	Calves < 6 months	Kidney	0/8
		Cattle	Kidney	0/353
		Fattening cattle	Feed	0/281
		Fattening cattle	Urine	0/94
	Nitrofurans	Calves < 6 months	Kidney	0/5
		Cattle	Kidney	0/182
		Fattening cattle	Feed	0/226
	Nitroimidazoles	Calves < 6 months	Kidney	0/5
		Cattle	Kidney	0/182
B1 Antimicrobials	AMS1	Calves < 6 months	Kidney	3/118 (2.5%)
		Cattle	Kidney	0/759
	AMS2	Cattle	Kidney	0/139
	AMS4	Calves < 6 months	Kidney	4/100 (4.0%)
		Cattle	Kidney	0/125
	Florfenicol	Calves < 6 months	Kidney	3/98 (3.0%)
		Cattle	Kidney	0/216

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
B2A	Anthelmintics	Cattle	Liver	0/585
	Avermectins	Cattle	Liver	0/338
B2B	Coccidiostats	Calves < 6 months	Liver	1/140 (0.7%)
B2C Pesticide screen	Pyrethroids	Calves < 6 months	Kidney fat	1/86 (1.2%)
	Carbamates	Cattle	Liver	0/16
B2D	Sedatives	Cattle	Liver	0/41
B2E	NSAIDs	Cattle	Kidney	4/375 (1.1%)
B2F	Glucocorticoids	Cattle	Liver	0/250
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Cattle	Kidney fat	0/196
B3B Pesticide screen	Organophosphorus compounds	Cattle	Kidney fat	0/258
B3C Heavy metals	Metals	Cattle	Kidney	12/177 (6.8%)
B3D	Mycotoxins	Cattle	Liver	0/138

Horses

Group	Analyte	Matrix	Number of non-compliants / analyses (% non-compliant)
A2	Thyrostats	Urine	0/1
A3 Hormones	Steroid screen 1	Urine	0/1
A4 Hormones	Zeranol	Urine	0/1
A5	Beta-agonists	Liver	0/8
A6 Annex IV	Chloramphenicol	Kidney	0/2
	Nitrofurans	Kidney	0/1
	Nitroimidazoles	Kidney	0/1
B1 Antimicrobials	AMS1	Kidney	0/4
B2A Anthelmintics	Avermectins	Liver	0/4
B2B	Coccidiostats	Liver	0/2
B2C Pesticide screen	Pyrethroids	Kidney fat	0/2
B2D	Sedatives	Liver	0/4
B2E	NSAIDs	Kidney	0/10
B2F	Glucocorticoids	Liver	0/4
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Kidney fat	0/2
B3B Pesticide screen	Organophosphorus compounds	Kidney fat	0/1
B3C Heavy metals	Metals	Kidney	1/2 (50.0%)
B3D	Mycotoxins	Liver	0/1

Pigs

Group	Analyte	Matrix	Number of non-compliants / analyses (% non-compliant)
A2	Thyrostats	Urine	0/121
A3 Hormones	Gestagens	Kidney fat	0/119
	Methyltestosterone	Feed	0/33
	Steroid screen 1	Urine	0/424
A3B	Plant protection Products/Biocides	Muscle	0/11
A4 Hormones	Zeranol	Urine	0/285
A5	Beta-agonists	Feed	0/54
		Liver	0/434
A6 Annex IV	Chloramphenicol	Casings	0/4
		Kidney	0/301
	Nitrofurans	Casings	0/4
		Feed	0/12
		Kidney	0/308
	Nitroimidazoles	Casings	0/4
		Feed	0/20
		Kidney	0/296

Group	Analyte	Matrix	Number of non-compliants / analyses (% non-compliant)
B1 Antimicrobials	AMS1	Kidney	1/849 (0.1%)
	AMS2	Kidney	0/292
	AMS4	Kidney	0/47
	Ceftiofur	Kidney	0/92
	Florfenicol	Kidney	0/180
B2A	Anthelmintics	Liver	1/365 (0.3%)
	Avermectins	Liver	0/255
B2B	Coccidiostats	Liver	0/111
B2C Pesticide screen	Pyrethroids	Kidney fat	0/49
	Carbamates	Liver	0/5
B2D	Sedatives	Kidney	0/37
		Liver	0/173
B2E	NSAIDs	Kidney	0/43
		Liver	0/10
B2F	Glucocorticoids	Liver	0/159
	Carbadox	Kidney	0/11
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Kidney fat	0/160
B3B Pesticide screen	Organophosphorus compounds	Kidney fat	0/149
B3C Heavy metals	Metals	Kidney	1/92 (1.1%)
B3D	Mycotoxins	Liver	0/57

Sheep

Group	Analyte	Matrix	Number of non-compliants / analyses (% non-compliant)
A2	Thyrostats	Urine	0/78
A3 Hormones	Gestagens	Kidney fat	0/81
	Steroid screen 1	Urine	38/477 (8.0%)
A3B	Plant protection Products/Biocides	Muscle	0/6
A4 Hormones	Zeranol	Urine	1/95 (1.1%)
A5	Beta-agonists	Liver	0/278
A6 Annex IV	Chloramphenicol	Kidney	0/147
	Nitrofurans	Kidney	0/246
	Nitroimidazoles	Kidney	0/114
B1 Antimicrobials	AMS1	Kidney	0/1129
	AMS2	Kidney	0/7
	AMS4	Kidney	0/43
	Florfenicol	Kidney	0/81
B2A	Anthelmintics	Liver	8/1172 (0.7%)
	Avermectins	Liver	0/364
B2B	Coccidiostats	Liver	0/148
B2C Pesticide screen	Pyrethroids	Kidney fat	0/93
	Carbamates	Liver	0/4
B2D	Sedatives	Liver	0/60
		Kidney	0/3

Group	Analyte	Matrix	Number of non-compliants / analyses (% non-compliant)
B2E	NSAIDs	Kidney	0/39
		Liver	0/2
B2F	Glucocorticoids	Liver	0/23
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Kidney fat	0/233
B3B Pesticide screen	Organophosphorus compounds	Kidney fat	0/339
B3C Heavy metals	Metals	Kidney	17/196 (8.7%)
B3D	Mycotoxins	Liver	0/150

Goats

Group	Analyte	Matrix	Number of non-compliants / analyses (% non-compliant)
A3 Hormones	Gestagens	Kidney fat	0/1
A6 Annex IV	Chloramphenicol	Kidney	0/1
B1 Antimicrobials	AMS1	Kidney	0/2
B2A	Anthelmintics	Liver	0/1
B2B	Coccidiostats	Liver	0/2
B2E	NSAIDs	Kidney	0/2
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Kidney fat	0/1
B3B Pesticide screen	Organophosphorus compounds	Kidney fat	0/1

Eggs

Group	Analyte	Species	Number of non-compliants / analyses (% non-compliant)
A6 Annex IV	Chloramphenicol	Barn hen	0/8
		Caged hen	0/6
		Free range hen	0/176
		Organic hen	0/9
		Quail hen	0/1
	Nitrofurans	Barn hen	0/7
		Caged hen	0/5
		Free range hen	0/138
		Organic hen	0/9
	Nitroimidazoles	Barn hen	0/9
		Caged hen	0/9
		Free range hen	0/127
		Organic hen	0/13
		Quail	0/1
B1 Antimicrobials	AMS1	Barn hen	0/4
		Caged hen	0/2
		Free range hen	0/204
		Organic hen	0/5
		Quail	0/1

Group	Analyte	Species	Number of non-compliants / analyses (% non-compliant)
B1 Antimicrobials	AMS2	Barn hen	0/8
		Caged hen	0/9
		Free range hen	0/96
		Organic hen	0/9
		Quail	0/1
	AMS3	Barn hen	0/12
		Caged hen	0/9
		Free range hen	0/130
		Organic hen	0/17
	Florfenicol	Free range hen	0/126
	Tiamulin	Barn hen	0/3
		Caged hen	0/3
		Free range hen	0/12
		Organic hen	0/2
B2A	Anthelmintics	Free range hen	0/126
	Fipronil	Free range hen	0/126
B2B	Coccidiostats	Barn hen	0/24
		Caged hen	0/20
		Free range hen	0/425
		Organic hen	0/31
		Quail	1/2 (50%)
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Barn hen	0/3
		Caged hen	0/3
		Free range hen	0/19
		Organic hen	0/2
B3C	Inorganic Arsenic	Barn hen	0/1
		Caged hen	0/3
		Free range hen	0/43
		Organic hen	0/3
	Metals	Barn hen	0/9
		Caged hen	0/6
		Free range hen	0/102
		Organic hen	0/6
B3G	PFAS	Barn hen	0/1
		Caged hen	0/1
		Free range hen	0/16
		Organic hen	0/1

Poultry

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
A3 Hormones	Steroid screen 2	Broilers	Liver	0/605
		Broilers	Serum	0/31
		Ducks	Liver	0/4
		Hens	Liver	0/25
		Turkeys	Liver	0/56
A3B	Plant protection Products/Biocides	Broiler	Muscle	0/10
A5	Beta-agonists	Broilers	Feed	0/231
		Broilers	Liver	0/496
		Ducks	Feed	0/2
		Ducks	Liver	0/4
		Hens	Feed	0/9
		Hens	Liver	0/17
		Turkeys	Feed	0/15
		Turkeys	Liver	0/41
A6 Annex IV	Chloramphenicol	Broilers	Muscle	0/674
		Ducks	Muscle	0/9
		Hens	Muscle	0/33
		Turkeys	Muscle	0/29
	Nitrofurans	Broilers	Feed	0/310
		Broilers	Muscle	0/615
		Ducks	Feed	0/3
		Ducks	Muscle	0/7
		Hens	Feed	0/12
		Hens	Muscle	0/31
		Turkeys	Feed	0/24
		Turkeys	Muscle	0/38
		Turkeys	Serum	0/56

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
A6 Annex IV	Nitroimidazoles	Broilers	Feed	0/313
		Broilers	Serum	0/1026
		Ducks	Feed	0/3
		Ducks	Serum	0/10
		Hens	Feed	0/10
		Hens	Serum	0/23
		Turkeys	Feed	0/21
B1 Antimicrobials	AMS1	Broilers	Muscle	0/1251
		Ducks	Muscle	0/10
		Geese	Muscle	0/1
		Hens	Muscle	0/53
		Turkeys	Muscle	0/89
	Florfenicol	Broilers	Muscle	0/111
		Turkeys	Muscle	0/2
	AMS2	Broilers	Muscle	0/768
		Ducks	Muscle	0/5
		Geese	Muscle	0/1
		Hens	Muscle	0/29
		Turkeys	Muscle	0/54
	Tiamulin	Broilers	Muscle	0/14
B2A	Anthelmintics	Broilers	Liver	0/335
		Ducks	Liver	0/6
		Hens	Liver	0/6
		Turkeys	Liver	0/14
B2B	Coccidiostats	Broilers	Liver	0/1045
		Hens	Liver	0/40
		Turkeys	Liver	0/59
B2C Pesticide screen	Pyrethroids + Carbamates	Broilers	Fat	0/11
		Broilers	Liver	0/113
		Ducks	Liver	0/2
		Hens	Liver	0/8
		Turkeys	Liver	0/14

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
B2E	NSAIDs	Broilers	Liver	0/9
		Broilers	Muscle	0/3
		Ducks	Liver	0/5
		Hens	Liver	0/7
		Turkey	Liver	0/7
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Broilers	Fat	0/28
		Broilers	Liver	0/326
		Ducks	Liver	0/3
		Hens	Liver	0/12
		Turkeys	Liver	0/16
B3C Heavy metals	Metals	Broilers	Liver	0/12
		Broilers	Muscle	0/138
		Ducks	Muscle	0/3
		Hens	Muscle	0/5
		Turkeys	Muscle	0/13
B3D	Mycotoxins	Broilers	Liver	0/56
		Hens	Liver	0/5
		Turkeys	Liver	0/7

Fish muscle & skin

Group	Analyte	Species	Number of non-compliants / analyses (% non-compliant)
A3 Hormones	Methyltestosterone	Trout	0/3
A6 Annex IV	Chloramphenicol	Salmon	0/72
		Trout	0/5
	Nitrofurans	Salmon	0/54
		Trout	0/3
	Nitroimidazoles	Salmon	0/54
		Trout	0/3
B1 Antimicrobials	AMS1	Salmon	0/38
		Trout	0/2
	AMS2	Salmon	0/21
		Trout	0/4
	AMS3	Halibut	0/1
		Salmon	0/80
		Trout	0/2
	Florfenicol	Salmon	0/30
		Trout	0/1
B1A	Tetracyclines	Salmon	0/1
		Trout	0/1
B2A	Anthelmintics	Halibut	0/1
		Salmon	0/42
		Trout	0/3
	Avermectins	Salmon	0/42
		Trout	0/2
B2C Pesticide screen	Pyrethroids	Salmon	0/87
		Trout	0/6
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Salmon	0/30
		Trout	0/4
B3B Pesticide screen	Organophosphorus compounds	Salmon	0/18
B3C Heavy metals	Metals	Salmon	0/54
		Trout	0/2
B3D	Mycotoxins	Salmon	0/24
		Trout	0/3
B3E	Dyes	Salmon	1/72 (1.4%)
		Trout	0/18

Milk

Group	Analyte	Species	Number of non-compliants / analyses (% non-compliant)
A6 Annex IV	Chloramphenicol	Cattle	1/674 (0.2%)
		Goats	0/5
		Sheep	0/2
	Dapsone	Cattle	0/44
		Sheep	0/1
B1 Antimicrobials	AMS1	Cattle	1/460 (0.2%)
		Goats	0/4
		Sheep	0/2
	Florfenicol	Cattle	2/248 (0.8%)
		Goats	0/1
		Sheep	0/1
	AMS2	Cattle	0/189
		Goats	0/2
		Sheep	0/2
	AMS3	Cattle	0/214
		Goats	0/3
	AMS4	Cattle	0/129
		Goats	0/1
	Cefquinome	Cattle	0/90
		Goats	0/2
	Ceftiofur	Cattle	0/62
B2A	Anthelmintics	Cattle	0/370
		Goats	0/3
		Sheep	0/1
	Avermectins	Cattle	0/373
		Goats	0/4
		Sheep	0/2
B2E	NSAIDs	Cattle	1/132 (0.8%)
		Goats	0/2

Group	Analyte	Species	Number of non-compliants / analyses (% non-compliant)
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Cattle	0/44
		Goats	0/2
B3B Pesticide screen	Organophosphorus compounds	Cattle	0/38
		Goats	0/1
		Sheep	0/1
B3C Heavy metals	Metals	Cattle	0/56
		Goats	0/1
B3D	Mycotoxins	Cattle	0/48
		Goats	0/1

Game

Group	Analyte	Species	Matrix	Number of non-compliants / analyses (% non-compliant)
A2	Thyrostats	Deer	Liver	0/2
A3 Hormones	Steroid screen 2	Deer	Liver	0/7
		Deer	Urine	0/1
A3B	Plant protection Products/Biocides	Deer	Muscle	0/1
A5	Beta-agonists	Deer	Liver	0/8
A6 Annex IV	Chloramphenicol	Deer	Kidney	0/5
B1 Antimicrobials	AMS1	Deer	Kidney	0/22
B2A	Anthelmintics	Deer	Liver	0/5
		Partridge	Liver	0/3
		Pheasant	Liver	0/4
B2B	Coccidiostats	Partridge	Muscle	0/5
		Pheasant	Muscle	0/7
B2C Pesticide screen	Pyrethroids	Deer	Kidney fat	0/4
B2D	Sedatives	Deer	Liver	0/2
B2E	NSAIDs	Deer	Kidney	0/4
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	Deer	Kidney fat	0/6
B3C Heavy metals	Metals	Deer	Muscle	0/7
		Partridge	Muscle	0/2
		Pheasant	Muscle	0/5
		Wild deer	Muscle	0/106

Bees honey

Group	Analyte	Number of non-compliants / analyses (% non-compliant)
A6 Annex IV	Chloramphenicol	0/68
	Nitrofurans	1/67 (1.5%)
	Nitroimidazoles	0/35
B1 Antimicrobials	AMS1	0/37
	AMS2	0/32
	AMS3	0/35
	AMS4	0/35
	AMS5	0/35
B2C Pesticide screen	Pyrethroids	0/1
B3A Pesticide screen	Organochlorine compounds and polychlorinated biphenyls	0/2
B3B	Organophosphorus compounds	0/1
B3C Heavy metals	Metals	0/3
B3F	Amitraz	0/70
	Naphthalene	0/32