



# Beef residue testing annual datasets 2018–19

National Residue Survey, Department of Agriculture

## Dataset abbreviations

**LOR** Limit of reporting.

**MRL** Maximum Residue Limit.

**no limit** No Australian standard applicable for the contaminant. The ‘as low as reasonably achievable’ principle applies. Detections at low levels are allowable.

**not defined** Standards are not defined in inedible matrixes (urine, retina and faeces).

**not set** No Australian standard has been set for the chemical in the edible matrix and any detection is a contravention of the Australia New Zealand Food Standards Code.

## Disclaimer

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**Table 1 Anthelmintics**

| Chemical             | Matrix | LOR<br>(mg/kg) | MRL<br>(mg/kg) | No. of<br>samples<br>tested | > LOR to<br>≤ ½ MRL | > ½ MRL<br>to ≤ MRL | > MRL |
|----------------------|--------|----------------|----------------|-----------------------------|---------------------|---------------------|-------|
| abamectin            | fat    | 0.005          | 0.1            | 330                         | 0                   | 0                   | 0     |
| albendazole          | liver  | 0.001          | 0.1            | 330                         | 0                   | 0                   | 0     |
| clorsulon            | liver  | 0.08           | 0.1            | 330                         | 0                   | 0                   | 0     |
| closantel            | liver  | 0.05           | not set        | 330                         | 0                   | 0                   | 0     |
| derquantel           | fat    | 0.001          | not set        | 330                         | 0                   | 0                   | 0     |
| doramectin           | fat    | 0.005          | 0.1            | 330                         | 1                   | 0                   | 0     |
| emamectin            | fat    | 0.005          | 0.01           | 330                         | 0                   | 0                   | 0     |
| eprinomectin B1a     | fat    | 0.005          | 0.5            | 330                         | 0                   | 0                   | 0     |
| fenbendazole         | liver  | 0.001          | 0.1            | 330                         | 9                   | 0                   | 1     |
| fenbendazole sulfone | liver  | 0.001          | not set        | 330                         | 2                   | 0                   | 0     |
| ivermectin H2B1a     | fat    | 0.005          | 0.2            | 330                         | 3                   | 0                   | 0     |
| levamisole           | liver  | 0.001          | 1              | 330                         | 4                   | 0                   | 0     |

| Chemical                             | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|--------------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| mebendazole                          | liver  | 0.005       | 0.02        | 330                   | 0                               | 0                                 | 0     |
| mebendazole, 5-hydroxy-              | liver  | 0.005       | not set     | 330                   | 0                               | 0                                 | 0     |
| milbemectin                          | fat    | 0.01        | 0.002       | 330                   | 0                               | 0                                 | 0     |
| monepantel sulphone                  | fat    | 0.005       | 7           | 330                   | 0                               | 0                                 | 0     |
| morantel                             | liver  | 0.001       | 2           | 330                   | 0                               | 0                                 | 0     |
| moxidectin                           | fat    | 0.005       | 1           | 330                   | 19                              | 0                                 | 1     |
| nitroxynil                           | liver  | 0.012       | 1           | 330                   | 0                               | 0                                 | 0     |
| oxfendazole (fenbendazole sulfoxide) | liver  | 0.001       | 3           | 330                   | 2                               | 0                                 | 0     |
| oxibendazole                         | liver  | 0.001       | not set     | 330                   | 0                               | 0                                 | 0     |
| oxyclozanide                         | liver  | 0.005       | 2           | 330                   | 0                               | 0                                 | 0     |
| praziquantel                         | fat    | 0.005       | not set     | 330                   | 0                               | 0                                 | 0     |
| thiabendazole-A                      | liver  | 0.006       | 0.2         | 330                   | 0                               | 0                                 | 0     |
| triclabendazole                      | liver  | 0.05        | 2           | 330                   | 0                               | 0                                 | 0     |

**Table 2 Antibiotics**

| Chemical                       | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|--------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| AHD                            | retina | 0.002       | not defined | 50                    | 0                               | –                                 | –     |
| amoxicillin                    | kidney | 0.01        | 0.01        | 970                   | 0                               | 0                                 | 0     |
| AMOZ                           | retina | 0.002       | not defined | 50                    | 0                               | –                                 | –     |
| ampicillin                     | kidney | 0.01        | not set     | 970                   | 0                               | 0                                 | 0     |
| AOZ                            | retina | 0.002       | not defined | 50                    | 0                               | –                                 | –     |
| apramycin                      | kidney | 0.5         | 2           | 970                   | 0                               | 0                                 | 0     |
| avilamycin                     | kidney | 0.1         | not set     | 970                   | 0                               | 0                                 | 0     |
| benzyl G penicillin            | kidney | 0.01        | 0.06        | 970                   | 0                               | 0                                 | 0     |
| ceftiofur (desfuroylceftiofur) | kidney | 0.2         | 2           | 970                   | 0                               | 0                                 | 0     |
| cefuroxime                     | kidney | 0.05        | 0.1         | 970                   | 0                               | 0                                 | 0     |
| cephalonium                    | kidney | 0.05        | 0.1         | 970                   | 0                               | 0                                 | 0     |
| chloramphenicol                | muscle | 0.0003      | not set     | 432                   | 0                               | 0                                 | 0     |
| chlortetracycline              | kidney | 0.01        | 0.6         | 970                   | 4                               | 0                                 | 0     |
| ciprofloxacin                  | kidney | 0.005       | not set     | 50                    | 0                               | 0                                 | 0     |
| cloxacillin                    | kidney | 0.05        | not set     | 970                   | 0                               | 0                                 | 0     |
| danofloxacin                   | kidney | 0.005       | not set     | 50                    | 0                               | 0                                 | 0     |
| difloxacin                     | kidney | 0.005       | not set     | 50                    | 0                               | 0                                 | 0     |
| dihydrostreptomycin            | kidney | 0.1         | 0.3         | 970                   | 0                               | 0                                 | 0     |
| doxycycline                    | kidney | 0.01        | not set     | 970                   | 0                               | 0                                 | 0     |
| enrofloxacin                   | kidney | 0.005       | not set     | 50                    | 0                               | 0                                 | 0     |
| erythromycin                   | kidney | 0.1         | 0.3         | 970                   | 0                               | 0                                 | 0     |

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| Chemical                            | Matrix | LOR<br>(mg/kg) | MRL<br>(mg/kg) | No. of<br>samples<br>tested | > LOR to<br>≤ ½ MRL | > ½ MRL<br>to ≤ MRL | > MRL |
|-------------------------------------|--------|----------------|----------------|-----------------------------|---------------------|---------------------|-------|
| florfenicol                         | muscle | 0.003          | 0.3            | 432                         | 0                   | 0                   | 0     |
| flumequine                          | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| gatifloxacin                        | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| gentamycin                          | kidney | 0.1            | not set        | 970                         | 0                   | 0                   | 0     |
| levofloxacin                        | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| lincomycin                          | kidney | 0.1            | 0.2            | 970                         | 0                   | 0                   | 0     |
| lomefloxacin                        | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| marbofloxacin                       | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| moxifloxacin                        | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| nalidixic acid                      | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| neomycin                            | kidney | 0.1            | 10             | 970                         | 3                   | 0                   | 0     |
| norfloxacin                         | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| oleandomycin                        | kidney | 0.2            | 0.1            | 970                         | 0                   | 0                   | 0     |
| orbifloxacin                        | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| oxolinic acid                       | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| oxytetracycline                     | kidney | 0.01           | 0.6            | 970                         | 3                   | 0                   | 0     |
| sarafloxacin                        | kidney | 0.005          | not set        | 50                          | 0                   | 0                   | 0     |
| SEM                                 | retina | 0.002          | not defined    | 50                          | 0                   | –                   | –     |
| streptomycin                        | kidney | 0.1            | 0.3            | 970                         | 0                   | 0                   | 0     |
| sulfachloropyridazine               | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfadiazine                        | kidney | 0.05           | 0.1            | 970                         | 0                   | 0                   | 0     |
| sulfadimethoxine                    | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfadimidine<br>(sulfamethazine)   | kidney | 0.05           | 0.1            | 970                         | 0                   | 0                   | 0     |
| sulfadoxine                         | kidney | 0.05           | 0.1            | 970                         | 0                   | 0                   | 0     |
| sulfafurazole                       | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfamerazine                       | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfamethoxazole                    | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfamethoxydiazine<br>(sulfameter) | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfamethoxypyridazine              | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfapyridine                       | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfaquinoxaline                    | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfathiazole                       | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| sulfatroxazole                      | kidney | 0.05           | 0.1            | 970                         | 0                   | 0                   | 0     |
| tetracycline                        | kidney | 0.01           | not set        | 970                         | 0                   | 0                   | 0     |
| thiamphenicol                       | muscle | 0.0029         | not set        | 432                         | 0                   | 0                   | 0     |
| tilmicosin                          | kidney | 0.2            | 1              | 970                         | 0                   | 0                   | 0     |
| trimethoprim                        | kidney | 0.05           | not set        | 970                         | 0                   | 0                   | 0     |
| tulathromycin                       | kidney | 0.3            | 1              | 970                         | 1                   | 0                   | 0     |

| Chemical      | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|---------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| tylosin       | kidney | 0.1         | 0.1         | 970                   | 0                               | 0                                 | 0     |
| virginiamycin | kidney | 0.2         | 0.2         | 970                   | 0                               | 0                                 | 0     |

**Table 3 Anticoccidials**

| Chemical                             | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|--------------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| amprolium                            | liver  | 0.01        | not set     | 330                   | 0                               | 0                                 | 0     |
| decoquinate                          | liver  | 0.002       | not set     | 73                    | 0                               | 0                                 | 0     |
| diclazuril                           | liver  | 0.01        | not set     | 73                    | 0                               | 0                                 | 0     |
| halofuginone                         | liver  | 0.01        | 0.03        | 330                   | 0                               | 0                                 | 0     |
| lasalocid                            | liver  | 0.01        | 0.7         | 330                   | 2                               | 1                                 | 0     |
| maduramicin                          | liver  | 0.002       | not set     | 330                   | 0                               | 0                                 | 0     |
| monensin                             | liver  | 0.01        | 0.05        | 330                   | 28                              | 0                                 | 0     |
| narasin                              | liver  | 0.01        | 0.05        | 330                   | 0                               | 0                                 | 0     |
| nicarbazin (4,4'-dinitrocarbanilide) | liver  | 0.01        | not set     | 330                   | 0                               | 0                                 | 0     |
| salinomycin                          | liver  | 0.002       | 0.5         | 330                   | 0                               | 0                                 | 0     |
| semduramycin                         | liver  | 0.002       | not set     | 330                   | 0                               | 0                                 | 0     |
| toltrazuril                          | liver  | 0.01        | 2           | 73                    | 0                               | 0                                 | 0     |

**Table 4 Contaminants**

| Chemical                        | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|---------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| aldrin and dieldrin (HHDN+HEOD) | fat    | 0.02        | 0.2         | 1115                  | 2                               | 0                                 | 0     |
| aroachlor 1254                  | fat    | 0.03        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| aroachlor 1260                  | fat    | 0.03        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| chlordane                       | fat    | 0.02        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| DDT                             | fat    | 0.05        | 5           | 1115                  | 6                               | 0                                 | 0     |
| endosulfan                      | fat    | 0.02        | not set     | 1115                  | 0                               | 0                                 | 0     |
| endrin                          | fat    | 0.01        | not set     | 1115                  | 0                               | 0                                 | 0     |
| HCB (hexachlorobenzene)         | fat    | 0.02        | 1           | 1115                  | 0                               | 0                                 | 0     |
| HCH (BHC)                       | fat    | 0.02        | 0.3         | 1115                  | 0                               | 0                                 | 0     |
| heptachlor                      | fat    | 0.02        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| lindane (gamma-HCH)             | fat    | 0.01        | 2           | 1115                  | 0                               | 0                                 | 0     |
| mirex                           | fat    | 0.02        | not set     | 1115                  | 0                               | 0                                 | 0     |
| pentachlorobenzene              | fat    | 0.02        | not set     | 1115                  | 0                               | 0                                 | 0     |

**Table 5 Fungicides**

| Chemical        | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|-----------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| amisulbrom      | fat    | 0.01        | 0.01        | 180                   | 0                               | 0                                 | 0     |
| bixafen         | fat    | 0.02        | not set     | 1115                  | 0                               | 0                                 | 0     |
| boscalid        | fat    | 0.01        | 0.3         | 1115                  | 0                               | 0                                 | 0     |
| carbendazim     | fat    | 0.01        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| cyproconazole   | fat    | 0.02        | 0.03        | 1115                  | 0                               | 0                                 | 0     |
| difenoconazole  | fat    | 0.01        | 0.05        | 180                   | 0                               | 0                                 | 0     |
| fludioxonil     | fat    | 0.01        | 0.05        | 180                   | 0                               | 0                                 | 0     |
| fluopicolide    | fat    | 0.01        | 0.01        | 180                   | 0                               | 0                                 | 0     |
| fluopyram-A     | fat    | 0.01        | 0.02        | 180                   | 0                               | 0                                 | 0     |
| fluquinconazole | fat    | 0.01        | 0.5         | 1115                  | 0                               | 0                                 | 0     |
| flutriafol      | fat    | 0.02        | 0.5         | 1115                  | 0                               | 0                                 | 0     |
| fluxapyroxad    | fat    | 0.01        | 0.05        | 1115                  | 0                               | 0                                 | 0     |
| imazalil        | fat    | 0.01        | not set     | 180                   | 0                               | 0                                 | 0     |
| ipconazole      | kidney | 0.02        | 0.01        | 300                   | 0                               | 0                                 | 0     |
| mandestrobin    | fat    | 0.01        | not set     | 180                   | 0                               | 0                                 | 0     |
| procymidone     | fat    | 0.02        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| propamocarb     | fat    | 0.01        | 0.01        | 180                   | 0                               | 0                                 | 0     |
| propiconazole   | fat    | 0.02        | 0.1         | 1115                  | 0                               | 0                                 | 0     |
| prothioconazole | fat    | 0.02        | 0.02        | 1115                  | 0                               | 0                                 | 0     |
| pyrimethanil    | fat    | 0.01        | 0.05        | 180                   | 0                               | 0                                 | 0     |
| pyriofenone     | fat    | 0.01        | 0.01        | 180                   | 0                               | 0                                 | 0     |
| quinoxifen      | fat    | 0.01        | 0.1         | 180                   | 0                               | 0                                 | 0     |
| quintozene      | fat    | 0.02        | 0.2         | 1115                  | 0                               | 0                                 | 0     |
| tebuconazole    | fat    | 0.01        | 0.1         | 180                   | 0                               | 0                                 | 0     |
| trifloxystrobin | fat    | 0.01        | 0.05        | 180                   | 0                               | 0                                 | 0     |

**Table 6 Herbicides**

| Chemical                             | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|--------------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| 2,2-DPA (2,2-dichloropropionic acid) | kidney | 0.3         | 0.2         | 300                   | 0                               | 0                                 | 0     |
| 2,4-D                                | kidney | 0.03        | 2           | 300                   | 2                               | 0                                 | 0     |
| amitrole                             | kidney | 0.01        | 0.01        | 300                   | 0                               | 0                                 | 0     |
| atrazine                             | kidney | 0.015       | 0.1         | 300                   | 0                               | 0                                 | 0     |
| bromacil                             | kidney | 0.015       | 0.04        | 300                   | 0                               | 0                                 | 0     |
| bromoxynil                           | kidney | 0.05        | 3           | 300                   | 0                               | 0                                 | 0     |
| carfentrazone-ethyl                  | kidney | 0.02        | 0.05        | 300                   | 0                               | 0                                 | 0     |
| chlorpropham                         | kidney | 0.01        | not set     | 300                   | 0                               | 0                                 | 0     |

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| Chemical                | Matrix | LOR<br>(mg/kg) | MRL<br>(mg/kg) | No. of<br>samples<br>tested | > LOR to<br>≤ ½ MRL | > ½ MRL<br>to ≤ MRL | > MRL |
|-------------------------|--------|----------------|----------------|-----------------------------|---------------------|---------------------|-------|
| chlorsulfuron           | kidney | 0.025          | 0.05           | 300                         | 0                   | 0                   | 0     |
| chlorthal-dimethyl      | kidney | 0.015          | 0.05           | 300                         | 0                   | 0                   | 0     |
| clethodim (parent only) | kidney | 0.02           | 0.05           | 300                         | 0                   | 0                   | 0     |
| clodinafop-propargyl    | kidney | 0.02           | 0.05           | 300                         | 0                   | 0                   | 0     |
| clopyralid              | kidney | 0.34           | 5              | 300                         | 0                   | 0                   | 0     |
| cloquintocet            | fat    | 0.01           | 0.1            | 180                         | 0                   | 0                   | 0     |
| cyanazine               | kidney | 0.02           | not set        | 300                         | 0                   | 0                   | 0     |
| dicamba                 | kidney | 1.3            | 0.05           | 300                         | 0                   | 0                   | 0     |
| dichlobenil             | kidney | 0.01           | not set        | 300                         | 0                   | 0                   | 0     |
| dichlorprop-P           | kidney | 0.01           | 0.05           | 300                         | 0                   | 0                   | 0     |
| diclofop-methyl         | kidney | 0.01           | 0.05           | 300                         | 0                   | 0                   | 0     |
| diflufenican            | kidney | 0.02           | 0.1            | 300                         | 0                   | 0                   | 0     |
| diquat                  | kidney | 0.02           | 0.05           | 300                         | 0                   | 0                   | 0     |
| diuron                  | kidney | 0.02           | 3              | 300                         | 1                   | 0                   | 0     |
| ethofumesate            | fat    | 0.02           | 0.5            | 1115                        | 0                   | 0                   | 0     |
| ethofumesate            | kidney | 0.05           | 0.5            | 300                         | 0                   | 0                   | 0     |
| fenoxaprop-ethyl        | kidney | 0.015          | 0.2            | 300                         | 0                   | 0                   | 0     |
| flamprop-M-methyl       | kidney | 0.01           | 0.01           | 300                         | 0                   | 0                   | 0     |
| fluazifop-p-butyl       | kidney | 0.025          | 0.05           | 300                         | 0                   | 0                   | 0     |
| flumetsulam             | kidney | 0.01           | 0.3            | 300                         | 0                   | 0                   | 0     |
| glufosinate             | kidney | 0.01           | 5              | 300                         | 0                   | 0                   | 0     |
| glyphosate              | kidney | 0.01           | 2              | 300                         | 14                  | 1                   | 0     |
| haloxyfop               | kidney | 0.01           | 0.5            | 300                         | 1                   | 0                   | 0     |
| imazamox                | kidney | 0.025          | 0.05           | 300                         | 0                   | 0                   | 0     |
| imazapic                | kidney | 0.01           | 0.05           | 300                         | 0                   | 0                   | 0     |
| imazapyr                | kidney | 0.015          | 0.05           | 300                         | 0                   | 0                   | 0     |
| imazaquin               | kidney | 0.015          | not set        | 300                         | 0                   | 0                   | 0     |
| imazethapyr             | kidney | 0.02           | 0.1            | 300                         | 0                   | 0                   | 0     |
| indaziflam              | fat    | 0.01           | not set        | 180                         | 0                   | 0                   | 0     |
| iodosulfuron-methyl     | kidney | 0.015          | 0.01           | 300                         | 0                   | 0                   | 0     |
| ioxynil                 | kidney | 0.02           | not set        | 300                         | 0                   | 0                   | 0     |
| isoxaben                | kidney | 0.02           | 0.01           | 300                         | 0                   | 0                   | 0     |
| linuron                 | kidney | 0.015          | 1              | 300                         | 0                   | 0                   | 0     |
| MCPA                    | kidney | 0.015          | 0.05           | 300                         | 4                   | 0                   | 1     |
| metazachlor             | fat    | 0.01           | not set        | 1115                        | 0                   | 0                   | 0     |
| methabenzthiazuron      | kidney | 0.01           | not set        | 300                         | 0                   | 0                   | 0     |
| metolachlor             | fat    | 0.02           | 0.05           | 1115                        | 0                   | 0                   | 0     |
| metolachlor             | kidney | 0.02           | 0.05           | 300                         | 0                   | 0                   | 0     |
| metosulam               | kidney | 0.02           | 0.01           | 300                         | 0                   | 0                   | 0     |

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|----------------------|--------|----------------|----------------|-----------------------------|---------------------|---------------------|-------|
| metribuzin           | kidney | 0.02           | 0.05           | 300                         | 0                   | 0                   | 0     |
| metsulfuron-methyl   | kidney | 0.02           | 0.1            | 300                         | 0                   | 0                   | 0     |
| napropamide          | kidney | 0.02           | not set        | 300                         | 0                   | 0                   | 0     |
| norflurazon          | kidney | 0.015          | not set        | 300                         | 0                   | 0                   | 0     |
| oryzalin             | kidney | 0.04           | not set        | 300                         | 0                   | 0                   | 0     |
| paraquat             | kidney | 0.02           | 0.5            | 300                         | 0                   | 0                   | 0     |
| pendimethalin        | kidney | 0.04           | 0.01           | 300                         | 0                   | 0                   | 0     |
| picloram             | kidney | 0.04           | 5              | 300                         | 0                   | 0                   | 0     |
| propachlor           | fat    | 0.02           | 0.02           | 1115                        | 0                   | 0                   | 0     |
| propachlor           | kidney | 0.015          | 0.1            | 300                         | 0                   | 0                   | 0     |
| propyzamide          | kidney | 0.015          | 0.2            | 300                         | 0                   | 0                   | 0     |
| pyrasulfotole        | fat    | 0.01           | 0.01           | 1115                        | 0                   | 0                   | 0     |
| pyroxsulam           | fat    | 0.01           | 0.01           | 180                         | 0                   | 0                   | 0     |
| quizalofop-ethyl     | kidney | 0.01           | 0.2            | 300                         | 0                   | 0                   | 0     |
| quizalofop-P-tefuryl | kidney | 0.01           | not set        | 300                         | 0                   | 0                   | 0     |
| saflufenacil-A       | fat    | 0.01           | 0.01           | 180                         | 0                   | 0                   | 0     |
| sethoxydim           | kidney | 0.01           | 0.05           | 300                         | 0                   | 0                   | 0     |
| simazine             | kidney | 0.02           | 0.05           | 300                         | 0                   | 0                   | 0     |
| tralkoxydim          | kidney | 0.13           | not set        | 300                         | 0                   | 0                   | 0     |
| triasulfuron         | kidney | 0.03           | 0.05           | 300                         | 0                   | 0                   | 0     |
| triclopyr            | kidney | 0.04           | 5              | 300                         | 0                   | 0                   | 0     |
| trifluralin          | kidney | 0.01           | 0.05           | 300                         | 0                   | 0                   | 0     |

**Table 7 Hormones**

| Chemical                 | Matrix | LOR<br>(mg/kg) | MRL<br>(mg/kg) | No. of<br>samples<br>tested | > LOR to<br>≤ ½ MRL | > ½ MRL<br>to ≤ MRL | > MRL |
|--------------------------|--------|----------------|----------------|-----------------------------|---------------------|---------------------|-------|
| 16-hydroxystanozolol     | urine  | 0.001          | not defined    | 430                         | 0                   | –                   | –     |
| betamethasone            | liver  | 0.001          | not set        | 30                          | 0                   | 0                   | 0     |
| boldenone 17-alpha       | urine  | 0.001          | not defined    | 430                         | 3                   | –                   | –     |
| boldenone 17-beta        | urine  | 0.001          | not defined    | 430                         | 0                   | –                   | –     |
| dexamethasone            | liver  | 0.001          | 0.1            | 30                          | 0                   | 0                   | 0     |
| dienoestrol              | liver  | 0.0002         | not set        | 430                         | 0                   | 0                   | 0     |
| diethylstilboestrol      | liver  | 0.0002         | not set        | 430                         | 0                   | 0                   | 0     |
| flumethasone             | liver  | 0.001          | not set        | 30                          | 0                   | 0                   | 0     |
| hexoestrol               | liver  | 0.0002         | not set        | 430                         | 0                   | 0                   | 0     |
| methandriol              | urine  | 0.005          | not defined    | 430                         | 0                   | –                   | –     |
| methylprednisolone       | liver  | 0.001          | not set        | 30                          | 0                   | 0                   | 0     |
| nortestosterone 17-alpha | urine  | 0.001          | not defined    | 430                         | 3                   | –                   | –     |
| nortestosterone 17-beta  | urine  | 0.001          | not defined    | 430                         | 0                   | –                   | –     |

| Chemical                   | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|----------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| stanozolol                 | urine  | 0.001       | not defined | 430                   | 0                               | –                                 | –     |
| trenbolone                 | liver  | 0.0005      | 0.01        | 430                   | 8                               | 0                                 | 0     |
| triamcinolone              | liver  | 0.001       | not set     | 30                    | 0                               | 0                                 | 0     |
| triamcinolone acetonide    | liver  | 0.001       | not set     | 30                    | 0                               | 0                                 | 0     |
| zeranol (alpha-zearalanol) | liver  | 0.002       | 0.02        | 430                   | 2                               | 1                                 | 0     |

**Table 8 Insecticides**

| Chemical                         | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|----------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| acetamiprid-A                    | fat    | 0.01        | 0.01        | 180                   | 0                               | 0                                 | 0     |
| bifenthrin                       | fat    | 0.02        | 2           | 1115                  | 0                               | 0                                 | 0     |
| bioresmethrin                    | fat    | 0.02        | not set     | 1115                  | 0                               | 0                                 | 0     |
| carbaryl                         | fat    | 0.01        | 0.07        | 1115                  | 0                               | 0                                 | 0     |
| chlorantraniliprole              | fat    | 0.01        | 0.02        | 1115                  | 0                               | 0                                 | 0     |
| chlorfenapyr                     | fat    | 0.02        | 0.05        | 1115                  | 0                               | 0                                 | 0     |
| chlorfenvinphos (sum of isomers) | fat    | 0.02        | 0.2         | 1115                  | 1                               | 0                                 | 0     |
| chlorfluazuron                   | fat    | 0.01        | not set     | 330                   | 0                               | 0                                 | 0     |
| chlorpyrifos                     | fat    | 0.02        | 0.5         | 1115                  | 0                               | 0                                 | 0     |
| chlorpyrifos-methyl              | fat    | 0.02        | 0.05        | 1115                  | 0                               | 0                                 | 0     |
| clothianidin                     | fat    | 0.01        | 0.02        | 180                   | 0                               | 0                                 | 0     |
| coumaphos                        | fat    | 0.02        | 0.02        | 1115                  | 0                               | 0                                 | 0     |
| cyantraniliprole                 | fat    | 0.01        | 0.01        | 180                   | 0                               | 0                                 | 0     |
| cyfluthrin (sum of isomers)      | fat    | 0.02        | 0.5         | 1115                  | 0                               | 0                                 | 0     |
| cyhalothrin (sum of isomers)     | fat    | 0.02        | 0.5         | 1115                  | 0                               | 0                                 | 0     |
| cypermethrin (sum of isomers)    | fat    | 0.02        | 0.5         | 1115                  | 4                               | 0                                 | 0     |
| cyromazine                       | kidney | 0.01        | 0.05        | 330                   | 0                               | 0                                 | 0     |
| deltamethrin                     | fat    | 0.02        | 0.5         | 1115                  | 8                               | 0                                 | 0     |
| diafenthiuron                    | fat    | 0.01        | not set     | 1115                  | 0                               | 0                                 | 0     |
| diazinon                         | fat    | 0.02        | 0.7         | 1115                  | 4                               | 0                                 | 0     |
| dichlorvos                       | fat    | 0.02        | 0.01        | 1115                  | 0                               | 0                                 | 0     |
| dicofol                          | fat    | 0.01        | not set     | 1115                  | 0                               | 0                                 | 0     |
| dicyclanil                       | kidney | 0.01        | not set     | 330                   | 0                               | 0                                 | 0     |
| diflubenzuron                    | fat    | 0.01        | 0.02        | 330                   | 0                               | 0                                 | 0     |
| dimethoate                       | fat    | 0.02        | 0.05        | 1115                  | 0                               | 0                                 | 0     |
| dinotefuran                      | fat    | 0.03        | not set     | 1115                  | 0                               | 0                                 | 0     |
| esfenvalerate                    | fat    | 0.02        | 1           | 1115                  | 0                               | 0                                 | 0     |
| ethion                           | fat    | 0.02        | 2.5         | 1115                  | 2                               | 0                                 | 0     |

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| Chemical                     | Matrix | LOR<br>(mg/kg) | MRL<br>(mg/kg) | No. of<br>samples<br>tested | > LOR to<br>≤ ½ MRL | > ½ MRL<br>to ≤ MRL | > MRL |
|------------------------------|--------|----------------|----------------|-----------------------------|---------------------|---------------------|-------|
| famphur                      | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| famphur oxygen-analogue      | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| fenitrothion                 | fat    | 0.02           | 0.05           | 1115                        | 0                   | 0                   | 0     |
| fenthion                     | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| fenvalerate (sum of isomers) | fat    | 0.02           | 1              | 1115                        | 0                   | 0                   | 0     |
| fipronil                     | fat    | 0.02           | 0.1            | 1115                        | 0                   | 0                   | 0     |
| flonicamid-A                 | fat    | 0.01           | 0.02           | 180                         | 0                   | 0                   | 0     |
| fluazuron                    | fat    | 0.01           | 7              | 330                         | 8                   | 0                   | 0     |
| flubendiamide                | fat    | 0.01           | 0.05           | 1115                        | 1                   | 0                   | 0     |
| flumethrin                   | fat    | 0.02           | 0.2            | 1115                        | 0                   | 0                   | 0     |
| imidacloprid                 | fat    | 0.01           | 0.05           | 1115                        | 0                   | 0                   | 0     |
| indoxacarb                   | fat    | 0.02           | 1              | 1115                        | 0                   | 0                   | 0     |
| malathion (maldison)         | fat    | 0.01           | 1              | 1115                        | 0                   | 0                   | 0     |
| melamine                     | kidney | 0.01           | no limit       | 330                         | 0                   | 0                   | 0     |
| metaflumizone                | fat    | 0.01           | not set        | 180                         | 0                   | 0                   | 0     |
| methidathion                 | fat    | 0.02           | 0.5            | 1115                        | 0                   | 0                   | 0     |
| methoxychlor                 | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| mevinphos                    | fat    | 0.01           | not set        | 1115                        | 0                   | 0                   | 0     |
| novaluron                    | fat    | 0.01           | not set        | 330                         | 0                   | 0                   | 0     |
| omethoate                    | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| parathion-methyl             | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| permethrin (sum of isomers)  | fat    | 0.02           | 1              | 1115                        | 8                   | 0                   | 0     |
| phosmet                      | fat    | 0.02           | 1              | 1115                        | 0                   | 0                   | 0     |
| pirimiphos-methyl            | fat    | 0.02           | 0.05           | 1115                        | 0                   | 0                   | 0     |
| prothiofos                   | fat    | 0.01           | not set        | 1115                        | 0                   | 0                   | 0     |
| pyraclofos                   | fat    | 0.02           | not set        | 1115                        | 0                   | 0                   | 0     |
| spinetoram                   | fat    | 0.005          | 2              | 330                         | 0                   | 0                   | 0     |
| spinosad                     | fat    | 0.005          | 2              | 330                         | 41                  | 0                   | 0     |
| spirotetramat                | fat    | 0.02           | 0.02           | 1115                        | 0                   | 0                   | 0     |
| sulfoxaflor                  | fat    | 0.01           | 0.2            | 1115                        | 0                   | 0                   | 0     |
| tau-fluvalinate              | fat    | 0.01           | not set        | 1115                        | 0                   | 0                   | 0     |
| temephos                     | fat    | 0.02           | 5              | 1115                        | 0                   | 0                   | 0     |
| triflumuron                  | fat    | 0.01           | 0.05           | 330                         | 0                   | 0                   | 0     |

**Table 9 Metals**

| Chemical        | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|-----------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| antimony        | liver  | 0.01        | no limit    | 450                   | 1                               | 0                                 | 0     |
| arsenic (total) | liver  | 0.05        | no limit    | 450                   | 1                               | 0                                 | 0     |
| cadmium         | liver  | 0.01        | 1.25        | 450                   | 365                             | 0                                 | 0     |
| lead            | liver  | 0.01        | 0.5         | 450                   | 218                             | 1                                 | 0     |
| mercury (total) | liver  | 0.01        | no limit    | 450                   | 10                              | 0                                 | 0     |

**Table 10 Mycotoxins**

| Chemical                      | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|-------------------------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| taleralanol (beta-zearalanol) | liver  | 0.002       | no limit    | 430                   | 3                               | 0                                 | 0     |
| zearalanone                   | liver  | 0.002       | no limit    | 430                   | 2                               | 0                                 | 0     |
| zearalenol alpha              | liver  | 0.002       | no limit    | 430                   | 15                              | 0                                 | 0     |
| zearalenol beta               | liver  | 0.002       | no limit    | 430                   | 24                              | 0                                 | 0     |
| zearalenone                   | liver  | 0.002       | no limit    | 430                   | 3                               | 0                                 | 0     |

**Table 11 Other veterinary drugs**

| Chemical        | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to $\leq \frac{1}{2}$ MRL | > $\frac{1}{2}$ MRL to $\leq$ MRL | > MRL |
|-----------------|--------|-------------|-------------|-----------------------|---------------------------------|-----------------------------------|-------|
| cimaterol       | liver  | 0.0003      | not set     | 430                   | 0                               | 0                                 | 0     |
| clenbuterol     | liver  | 0.0003      | not set     | 430                   | 0                               | 0                                 | 0     |
| flunixin        | kidney | 0.01        | 0.02        | 330                   | 0                               | 0                                 | 0     |
| ketoprofen      | kidney | 0.01        | 0.05        | 330                   | 0                               | 0                                 | 0     |
| mabuterol       | liver  | 0.0003      | not set     | 430                   | 0                               | 0                                 | 0     |
| meloxicam       | kidney | 0.01        | 0.2         | 330                   | 0                               | 0                                 | 0     |
| oxyphenbutazone | kidney | 0.01        | not set     | 330                   | 0                               | 0                                 | 0     |
| phenylbutazone  | kidney | 0.01        | not set     | 330                   | 0                               | 0                                 | 0     |
| ractopamine     | liver  | 0.0003      | not set     | 430                   | 0                               | 0                                 | 0     |
| salbutamol      | liver  | 0.001       | not set     | 430                   | 0                               | 0                                 | 0     |
| tolfenamic acid | kidney | 0.005       | 0.01        | 330                   | 0                               | 0                                 | 0     |
| zilpaterol      | liver  | 0.0003      | not set     | 430                   | 0                               | 0                                 | 0     |