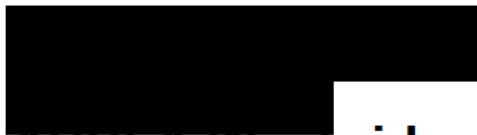


Monthly Report: Surveillance Project SB4008 IFNg tests for bovine tuberculosis

(TC0651 and TC0751)

Number 96

Report Period 1st - 31st August 2014



AFVLA Weybridge

Issued 15 September 2014

Operational notes on terminology, definitions, re-test and re-samples test outcomes:

- “Samples” refers to an individual tube of blood taken from an individual animal which is subsequently submitted for testing. It is generally assumed that the number of samples and the number of animals are analogous as any duplicate sample blood tube from the same animal will not be tested. However, minor discrepancies may occur where the same animal is tested more than once due to a request for a resample or the animal is tested twice under different categories (for example, as a PAR-RAPID and then as part of a PAR-HERD-S).
- “Submissions” refers to an individual batch or set of samples received for testing. Submissions may comprise 1 or more samples (for example, if an entire herd is being tested it is usually sent as 1 submission). It is generally assumed that the number of submissions and the number of herds are analogous.
- Retests are samples where the first ELISA assay fails and the same sample is retested on a new ELISA plate. Each sample can be retested only once. A retest is not a reportable test outcome.
- Resamples are where a sample has been retested and failed a second time, so that the lab requests a new sample. This is a reportable test outcome.
- Rejects are samples that are not tested by the lab for one of the following reasons: blood collected into wrong type of vacutainer, samples that have not been maintained at the appropriate temperature range ($22\pm 5^{\circ}\text{C}$), unlabelled samples, broken or cracked tubes, blood that is extensively clotted (small clots are OK), samples received after 4pm on the day after sample collection. Such samples are reported separately in the tables and in figure 5.
- POS (pokeweed mitogen) is a sample positive control reagent which provides a measure of the quality/viability of the blood sample. A POS fail (< 0.45 optical density reading) may indicate compromised blood quality as a result of collection/transportation conditions or due to the animal having an unusually low/suppressed cellular immune response.
- NEG (no-antigen control) is a sample negative control which provides a measure of the background antigen-independent IFN- responses. A NEG fail (> 0.3 optical density reading) may indicate a laboratory procedures problem (normally resolved during re-test) or that an animal has unusually high background levels of IFN-g.

Test Criteria

Submission Reason	Explanation	Mandatory?
Possible Herd Slaughter (PAR-HERD-S)	Parallel interferon-gamma blood testing of skin test negative cattle to inform whole or partial herd slaughters decisions	YES, if AHVLA are contemplating a herd slaughter
Persistent TB breakdowns (OTF status withdrawn) (PAR-P-CONF)	Parallel blood testing of skin test-negative cattle in chronically infected herds that have failed to resolve by repeated short-interval skin testing and fulfill a minimum of biosecurity standards.	NO (AHVLA discretion)
Parallel - Low Incidence (PAR-LOW-IN)	Parallel blood testing to maximise the probability of removing all infected cattle in a new herd breakdown in an area of low TB incidence as soon as possible after confirmation of TB.	YES
Rapid Testing of twice IR's (PAR-RAPID)	Parallel blood testing of two-times IRs identified under the severe interpretation of the skin test used in Wales.	YES (Wales only)
Parallel Edge Area OTFW (PAR-EDG-W)	Parallel blood testing to maximise the probability of removing all infected cattle in a new herd breakdown in the Edge Area (England) as soon as possible after confirmation of TB.	YES
Parallel Edge Area OTFS (PAR-EDG-S)	Discretionary parallel blood testing to maximise the probability of removing all infected cattle in a new suspected herd infection in the Edge Area (England).	NO (AHVLA discretion)
Parallel Other (PAR-OTHER)	Other parallel blood testing not covered in any of the other scenarios	NO (AHVLA discretion)
'NSR' Herds (SER-NSR)	Modified serial blood testing of individual skin test reactors and/or IRs in unconfirmed TB breakdown herds in 2-, 3- or 4-yearly areas, to clarify their infection status where there is evidence of non-specific sensitisation to bovine tuberculin (the "non-specific reactor" procedure)	NO (AHVLA's discretion)
Suspected Fraud (SER-FRAUD)	Modified serial blood test of suspected fraudulent reactors to the skin test (animals with abnormal skin swellings), in confirmed or unconfirmed TB incidents.	NO (AHVLA's discretion to firm up or rule out any suspicion of fraud and support any investigations)
Serial Other (SER-OTHER)	Serial test – other reasons	NO (AHVLA Discretion)

Table 1. Monthly Totals for August 2014

		Num samples August 2014	%	Total 2014	%	Total since 23/10/06	%
Submissions		80		842		9300	
Samples	Total (%)	6338	100.00 %	59022	100.00 %	292201	100.00 %
	England	4424	69.80 %	40641	68.86 %	197366	66.66 %
	Scotland	119	1.88 %	3406	5.77 %	24018	8.22 %
	Wales	1795	28.32 %	14975	25.37 %	74693	25.12 %
Parallel Tests	PAR-HERD-S	33	0.52 %	732	1.24 %	8582	2.94 %
	PAR-LOW-IN	1711	27.00 %	34736	58.85 %	219022	74.96 %
	PAR-OTHER	7	0.11 %	46	0.08 %	2431	0.83 %
	PAR-P-CONF	1621	25.58 %	8005	13.56 %	33635	11.51 %
	PAR-RAPID	30	0.47 %	679	1.15 %	12273	4.20 %
	PAR-S-EDG	0	0.00 %	214	0.36 %	214	0.07 %
	PAR-W-EDG	2930	46.23 %	14547	24.65 %	14547	4.98 %
	Total(% of all samples)	6332	99.91 %	58959	99.89 %	290704	99.49 %
Serial Tests	SER-FRAUD	6	0.09 %	52	0.09 %	1179	0.40 %
	SER-NSR	0	0.00 %	1	0.00 %	231	0.08 %
	SER-OTHER	0	0.00 %	10	0.02 %	87	0.03 %
	Total(% of all samples)	6	0.09 %	63	0.11 %	1497	0.51 %
	Total	6338	100.00 %	59022	100.00 %	292201	100.00 %
Retests	Total (% of all samples)	344	5.43 %	3618	6.13 %	22162	7.58 %
	England	264	4.17 %	2452	4.15 %	14202	4.86 %
	Scotland	2	0.03 %	168	0.28 %	2207	0.76 %
	Wales	78	1.23 %	998	1.69 %	5753	1.97 %
Resamples	Total (% of all samples)	201	3.17 %	2653	4.49 %	15110	5.17 %
	England	149	2.35 %	1855	3.14 %	9650	3.30 %
	Scotland	1	0.02 %	108	0.18 %	1409	0.48 %
	Wales	51	0.80 %	690	1.17 %	4051	1.39 %
Rejects	Total (% of all samples)	2	0.03 %	823	1.39 %	5337	1.83 %
	England	1	0.02 %	668	1.13 %	3458	1.18 %
	Scotland	0	0.00 %	69	0.12 %	486	0.17 %
	Wales	1	0.02 %	86	0.15 %	1393	0.48 %

Figure 1. Number of samples submitted in each category during August 2014

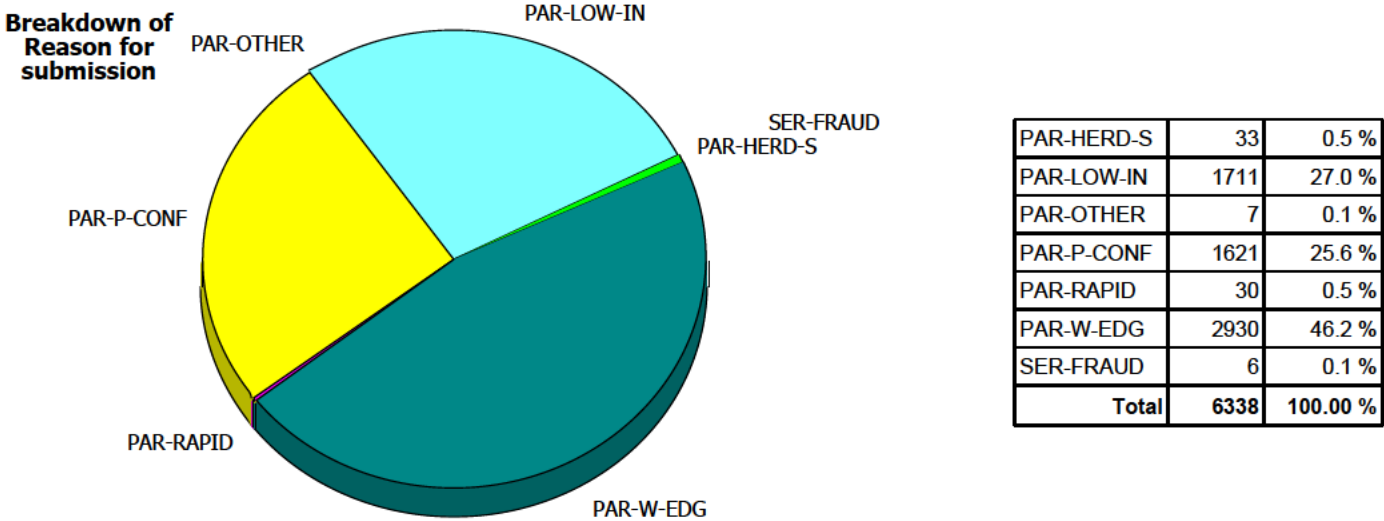


Figure 2. Number of samples submitted in each category by AHDO during August 2014

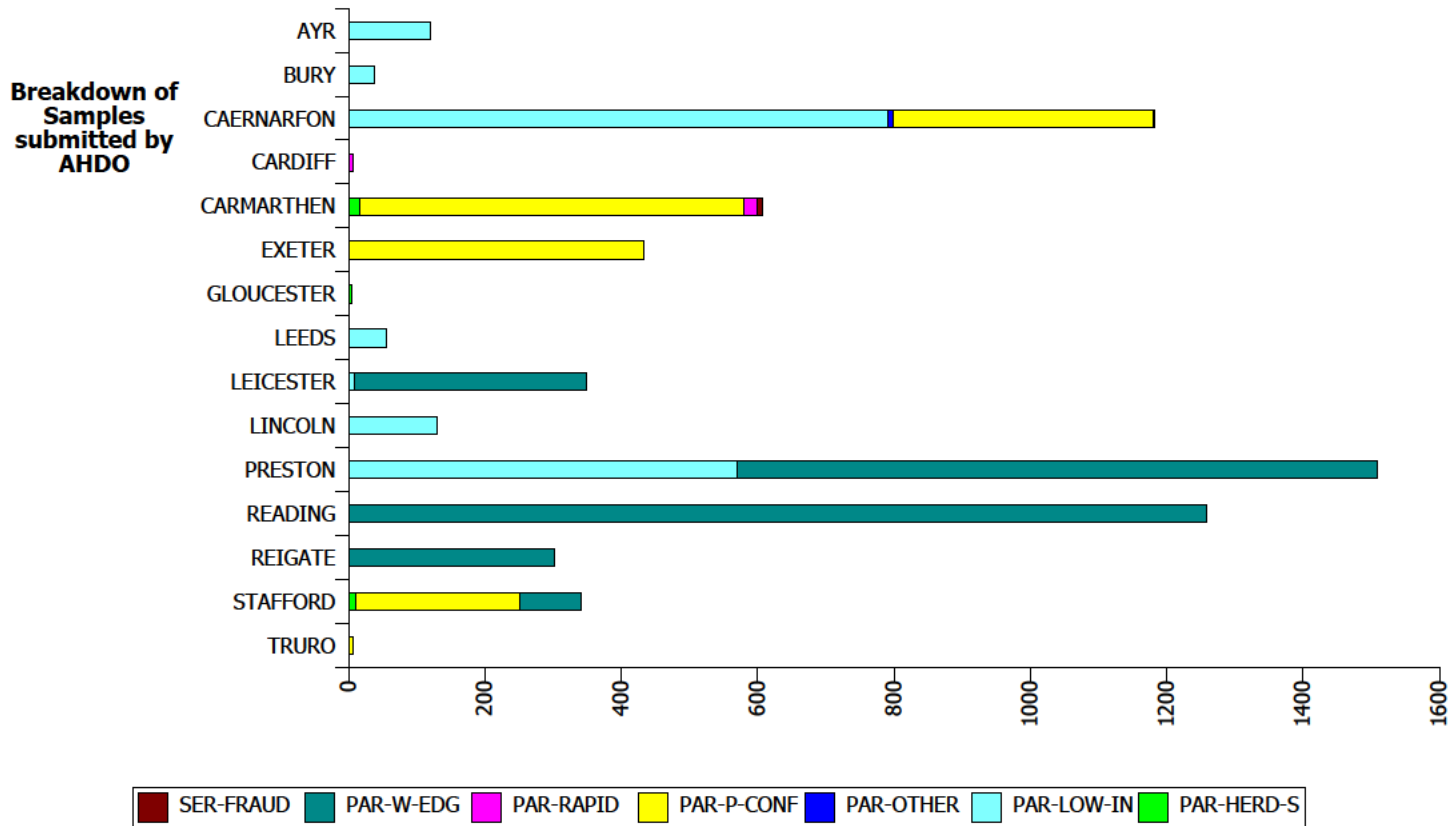


Figure 3. Number of samples submitted in each category by AHDO during 2014

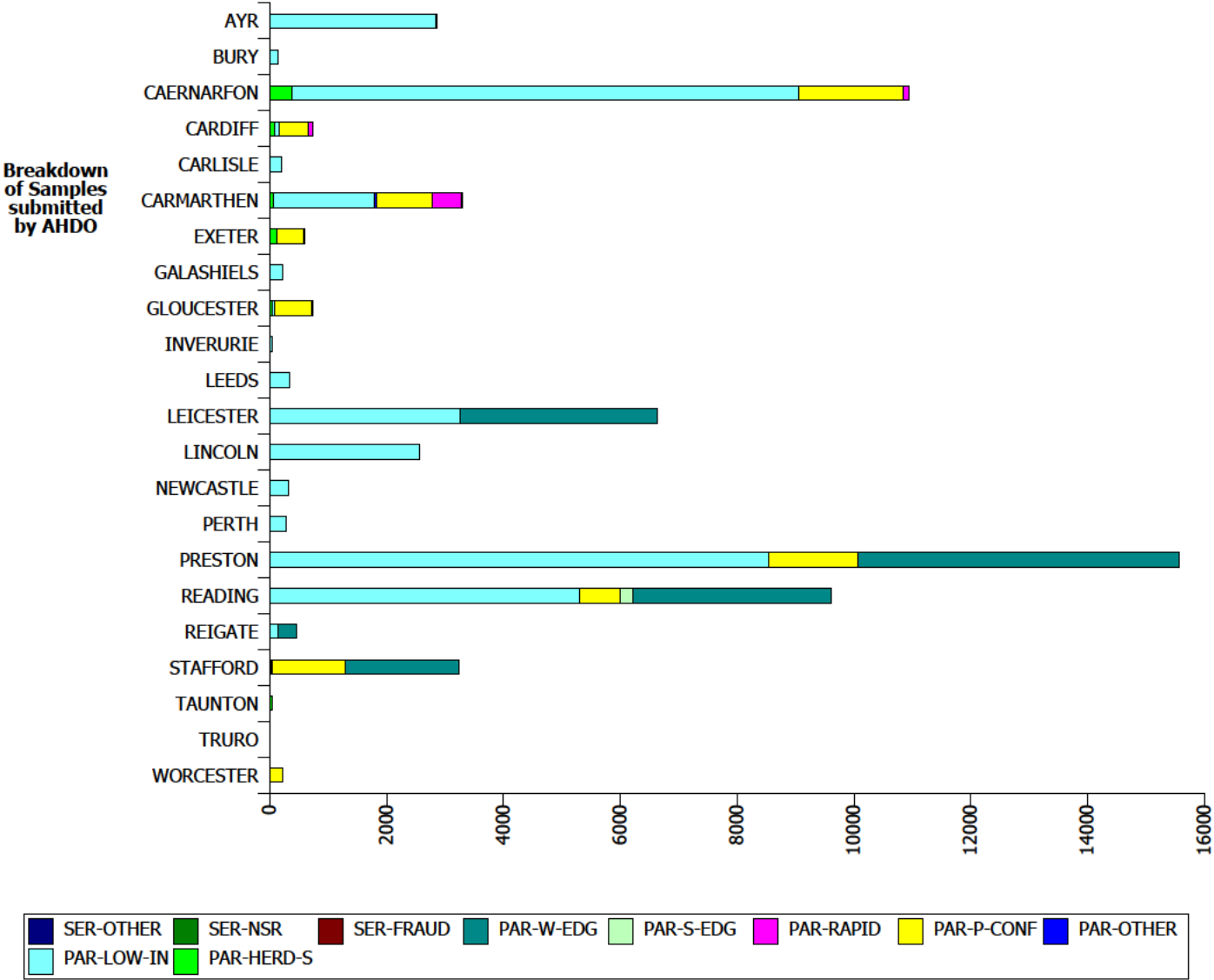


Table 2. Summary by AHDO for August 2014

Country	AHDO	Submission Reasons*	No submissions	Samples		Gamma Positive		Gamma Negatives		Retest*		Resample		Reject	
				n	% of total	n	%	n	%	n	%				
England	BURY	PAR-LOW-IN	1	38	0.60 %	1	2.63 %	35	92.11 %	2	5.26 %	2	5.26 %	0	0.00 %
	EXETER	PAR-P-CONF	2	432	6.82 %	9	2.08 %	415	96.06 %	8	1.85 %	7	1.62 %	1	0.23 %
	GLOUCESTER	PAR-HERD-S	1	5	0.08 %	1	20.00 %	4	80.00 %	0	0.00 %	0	0.00 %	0	0.00 %
	LEEDS	PAR-LOW-IN	2	55	0.87 %	2	3.64 %	52	94.55 %	8	14.55 %	1	1.82 %	0	0.00 %
	LEICESTER	PAR-LOW-IN	1	9	0.14 %	1	11.11 %	6	66.67 %	2	22.22 %	2	22.22 %	0	0.00 %
		PAR-W-EDG	6	340	5.36 %	9	2.65 %	307	90.29 %	38	11.18 %	24	7.06 %	0	0.00 %
	LINCOLN	PAR-LOW-IN	1	129	2.04 %	0	0.00 %	122	94.57 %	9	6.98 %	7	5.43 %	0	0.00 %
	PRESTON	PAR-LOW-IN	2	570	8.99 %	4	0.70 %	546	95.79 %	37	6.49 %	20	3.51 %	0	0.00 %
		PAR-W-EDG	7	939	14.82 %	5	0.53 %	906	96.49 %	43	4.58 %	28	2.98 %	0	0.00 %
	READING	PAR-W-EDG	8	1259	19.86 %	24	1.91 %	1212	96.27 %	51	4.05 %	23	1.83 %	0	0.00 %
	REIGATE	PAR-W-EDG	3	301	4.75 %	7	2.33 %	281	93.36 %	35	11.63 %	13	4.32 %	0	0.00 %
	STAFFORD	PAR-HERD-S	1	11	0.17 %	0	0.00 %	11	100.00 %	0	0.00 %	0	0.00 %	0	0.00 %
		PAR-P-CONF	1	239	3.77 %	4	1.67 %	224	93.72 %	13	5.44 %	11	4.60 %	0	0.00 %
		PAR-W-EDG	2	91	1.44 %	0	0.00 %	81	89.01 %	17	18.68 %	10	10.99 %	0	0.00 %
	TRURO	PAR-P-CONF	2	6	0.09 %	0	0.00 %	5	83.33 %	1	16.67 %	1	16.67 %	0	0.00 %
Scotland	AYR	PAR-LOW-IN	1	119	1.88 %	2	1.68 %	116	97.48 %	2	1.68 %	1	0.84 %	0	0.00 %
Wales	CAERNARFON	PAR-LOW-IN	5	791	12.48 %	2	0.25 %	768	97.09 %	29	3.67 %	20	2.53 %	1	0.13 %
		PAR-OTHER	1	7	0.11 %	0	0.00 %	5	71.43 %	2	28.57 %	2	28.57 %	0	0.00 %
		PAR-P-CONF	6	382	6.03 %	15	3.93 %	347	90.84 %	26	6.81 %	20	5.24 %	0	0.00 %
		PAR-RAPID	1	2	0.03 %	0	0.00 %	2	100.00 %	0	0.00 %	0	0.00 %	0	0.00 %
	CARDIFF	PAR-RAPID	4	7	0.11 %	3	42.86 %	4	57.14 %	0	0.00 %	0	0.00 %	0	0.00 %
	CARMARTHEN	PAR-HERD-S	1	17	0.27 %	0	0.00 %	17	100.00 %	0	0.00 %	0	0.00 %	0	0.00 %
		PAR-P-CONF	6	562	8.87 %	13	2.31 %	541	96.26 %	17	3.02 %	8	1.42 %	0	0.00 %
		PAR-RAPID	13	21	0.33 %	3	14.29 %	18	85.71 %	3	14.29 %	0	0.00 %	0	0.00 %
		SER-FRAUD	2	6	0.09 %	0	0.00 %	5	83.33 %	1	16.67 %	1	16.67 %	0	0.00 %
		Sum:	80	6338		105		6030		344		201		2	

*For test criteria please refer to Operational notes.

* Sufficient plasma supernatant is collected and stored following the overnight culture stage of the assay such that if the sample fails any of the QC criteria, it is possible for the laboratory to 're-test' the original sample. Depending on the outcome of a retest, a resample (if QC criteria fail to be met), a positive or a negative result will be reported. Therefore, the total number of samples = the sum of positive, negative, resample and reject samples only.

Table 3a. Summary of IFN Gamma results by country and protocol August 2014

Country	Protocol	No submissions	Samples		Positive		Negatives		Retest*		Resample		Reject	
			n	% of total	n	%	n	%	n	%	n	%	n	%
England	Parallel	40	4424	100.0%	67	1.5%	4207	95.1%	264	6.0%	149	3.4%	1	0.0%
	Serial	0	0	0.0 %	0	0.0 %	0	0.0 %	0	0.0 %	0	0.0 %	0	0.0 %
	Total	40	4424	100.0%	67	1.5%	4207	95.1%	264	6.0%	149	3.4%	1	0.0%
Scotland	Parallel	1	119	100.0%	2	1.7%	116	97.5%	2	1.7%	1	0.8%	0	0.0 %
	Serial	0	0	0.0 %	0	0.0 %	0	0.0 %	0	0.0 %	0	0.0 %	0	0.0 %
	Total	1	119	100.0%	2	1.7%	116	97.5%	2	1.7%	1	0.8%	0	0.0 %
Wales	Parallel	37	1789	99.7%	36	2.0%	1702	95.1%	77	4.3%	50	2.8%	1	0.1%
	Serial	2	6	0.3%	0	0.0 %	5	83.3%	1	16.7%	1	16.7%	0	0.0 %
	Total	39	1795	100.0%	36	2.0%	1707	95.1%	78	4.3%	51	2.8%	1	0.1%
GB	Parallel	78	6332	99.9%	105	1.7%	6025	95.2%	343	5.4%	200	3.2%	2	0.0%
	Serial	2	6	0.1%	0	0.0 %	5	83.3%	1	16.7%	1	16.7%	0	0.0 %
	Total	80	6338	100.0%	105	1.7%	6030	95.1%	344	5.4%	201	3.2%	2	0.0%

* Sufficient plasma supernatant is collected and stored following the overnight culture stage of the assay such that if the sample fails any of the QC criteria, it is possible for the laboratory to 're-test' the original sample. Depending on the outcome of a retest, a resample (if QC criteria fail to be met), a positive or a negative result will be reported. Therefore, the total number of samples = the sum of positive, negative, resample and reject samples only.

Table 3b. Summary of IFN Gamma results by country and protocol (Total 2014)

Country	Protocol	No submissions	Samples		Positive		Negatives		Retest*		Resample		Reject	
			n	% of total	n	%	n	%	n	%	n	%	n	%
England	Parallel	388	40618	99.9%	1792	4.4%	36313	89.4%	2452	6.0%	1855	4.6%	658	1.6%
	Serial	4	23	0.1%	0	0.0 %	13	56.5%	0	0.0 %	0	0.0 %	10	43.5%
	Total	392	40641	100.0%	1792	4.4%	36326	89.4%	2452	6.0%	1855	4.6%	668	1.6%
Scotland	Parallel	48	3388	99.5%	107	3.2%	3104	91.6%	168	5.0%	108	3.2%	69	2.0%
	Serial	2	18	0.5%	0	0.0 %	18	100.0%	0	0.0 %	0	0.0 %	0	0.0 %
	Total	50	3406	100.0%	107	3.1%	3122	91.7%	168	4.9%	108	3.2%	69	2.0%
Wales	Parallel	395	14953	99.9%	922	6.2%	13256	88.7%	997	6.7%	689	4.6%	86	0.6%
	Serial	5	22	0.1%	1	4.5%	20	90.9%	1	4.5%	1	4.5%	0	0.0 %
	Total	400	14975	100.0%	923	6.2%	13276	88.7%	998	6.7%	690	4.6%	86	0.6%
GB	Parallel	831	58959	99.9%	2821	4.8%	52673	89.3%	3617	6.1%	2652	4.5%	813	1.4%
	Serial	11	63	0.1%	1	1.6%	51	81.0%	1	1.6%	1	1.6%	10	15.9%
	Total	842	59022	100.0%	2822	4.8%	52724	89.3%	3618	6.1%	2653	4.5%	823	1.4%

* Sufficient plasma supernatant is collected and stored following the overnight culture stage of the assay such that if the sample fails any of the QC criteria, it is possible for the laboratory to 're-test' the original sample. Depending on the outcome of a retest, a resample (if QC criteria fail to be met), a positive or a negative result will be reported. Therefore, the total number of samples = the sum of positive, negative, resample and reject samples only.

Table 3c. Summary of IFN Gamma results by country and protocol (Total since test roll out)

Country	Protocol	No submissions	Samples		Positive		Negatives		Retest*		Resample		Reject	
			n	% of total	n	%	n	%	n	%	n	%	n	%
England	Parallel	4435	194025	99.6%	12013	6.2%	168980	87.1%	14166	7.3%	9605	5.0%	3435	1.8%
	Serial	65	749	0.4%	18	2.4%	663	88.5%	36	4.8%	45	6.0%	23	3.1%
	Total	4500	194774	100.0%	12031	6.2%	169643	87.1%	14202	7.3%	9650	5.0%	3458	1.8%
Scotland	Parallel	325	23980	99.8%	1223	5.1%	20862	87.0%	2205	9.2%	1408	5.9%	486	2.0%
	Serial	7	38	0.2%	0	0.0 %	37	97.4%	2	5.3%	1	2.6%	0	0.0 %
	Total	332	24018	100.0%	1223	5.1%	20899	87.0%	2207	9.2%	1409	5.9%	486	2.0%
Wales	Parallel	4427	72699	99.0%	7114	9.8%	60202	82.8%	5658	7.8%	4001	5.5%	1380	1.9%
	Serial	41	710	1.0%	18	2.5%	629	88.6%	95	13.4%	50	7.0%	13	1.8%
	Total	4468	73409	100.0%	7132	9.7%	60831	82.9%	5753	7.8%	4051	5.5%	1393	1.9%
GB	Parallel	9187	290704	99.5%	20350	7.0%	250044	86.0%	22029	7.6%	15014	5.2%	5301	1.8%
	Serial	113	1497	0.5%	36	2.4%	1329	88.8%	133	8.9%	96	6.4%	36	2.4%
	Total	9300	292201	100.0%	20386	7.0%	251373	86.0%	22162	7.6%	15110	5.2%	5337	1.8%

* Sufficient plasma supernatant is collected and stored following the overnight culture stage of the assay such that if the sample fails any of the QC criteria, it is possible for the laboratory to 're-test' the original sample. Depending on the outcome of a retest, a resample (if QC criteria fail to be met), a positive or a negative result will be reported. Therefore, the total number of samples = the sum of positive, negative, resample and reject samples only.

Table 4a. Summary of IFN Gamma results by submission reason (August 2014)

Submission Reason (full)	No submissions	Samples		Gamma Positive		Gamma Negatives		Retest		Resample		Reject	
		n	% of total	n	%	n	%	n	%	n	%	n	%
Possible Herd Slaughter	3	33	0.5%	1	3.0%	32	97.0%	0		0		0	
Persistent TB breakdowns (OTFW)	17	1621	25.6%	41	2.5%	1532	94.5%	65	4.0 %	47	2.9 %	1	0.1 %
Parallel - Low Incidence	13	1711	27.0%	12	0.7%	1645	96.1%	89	5.2 %	53	3.1 %	1	0.1 %
Rapid Testing of twice IR's	18	30	0.5%	6	20.0%	24	80.0%	3	10.0 %	0		0	
Parallel - OTFW in Edge Area	26	2930	46.2%	45	1.5%	2787	95.1%	184	6.3 %	98	3.3 %	0	
Parallel Other	1	7	0.1%	0	0.0 %	5	71.4%	2	28.6 %	2	28.6 %	0	
Suspected Fraud	2	6	0.1%	0	0.0 %	5	83.3%	1	16.7 %	1	16.7 %	0	
	80	6338	100.0%	105	1.7%	6030	95.1%	344	5.4 %	201	3.2 %	2	0.0 %

Table 4b. Summary of IFN Gamma results by submission reason (Total 2014)

Submission Reason (full)	No submissions	Samples		Gamma Positive		Gamma Negatives		Retest		Resample		Reject	
		n	% of total	n	%	n	%	n	%	n	%	n	%
Possible Herd Slaughter	32	732	1.2%	147	20.1%	525	71.7%	75	10.2 %	48	6.6 %	12	1.6 %
Persistent TB breakdowns (OTFW)	69	8005	13.6%	631	7.9%	6948	86.8%	507	6.3 %	416	5.2 %	10	0.1 %
Parallel - Low Incidence	380	34736	58.9%	1427	4.1%	30850	88.8%	2271	6.5 %	1698	4.9 %	761	2.2 %
Rapid Testing of twice IR's	216	679	1.2%	234	34.5%	406	59.8%	41	6.0 %	26	3.8 %	13	1.9 %
Parallel - OTFW in Edge Area	129	14547	24.6%	375	2.6%	13703	94.2%	704	4.8 %	452	3.1 %	17	0.1 %
Parallel Other	4	46	0.1%	4	8.7%	40	87.0%	2	4.3 %	2	4.3 %	0	
'NSR' Herds	1	1	0.0%	0	0.0 %	1	100.0%	0		0		0	
Suspected Fraud	8	52	0.1%	1	1.9%	40	76.9%	1	1.9 %	1	1.9 %	10	19.2 %
Serial Other	2	10	0.0%	0	0.0 %	10	100.0%	0		0		0	
Parallel - OTFS in Edge Area	1	214	0.4%	3	1.4%	201	93.9%	17	7.9 %	10	4.7 %	0	
	842	59022	100.0%	2822	4.8%	52724	89.3%	3618	6.1 %	2653	4.5 %	823	1.4 %

Table 4c. Summary of IFN Gamma results by submission reason (Total since rollout)

Submission Reason*	No submissions	Samples tested		Gamma Positive		Gamma Negatives		Retest		Resample		Reject	
		n	% of total	n	%	n	%	n	%	n	%	n	%
Possible Herd Slaughter	232	8582	2.9%	1093	12.7%	6707	78.2%	734	8.55 %	556	6.48 %	225	2.62 %
Persistent TB breakdowns (OTFW)	421	33635	11.5%	3156	9.4%	28276	84.1%	2388	7.10 %	1675	4.98 %	529	1.57 %
Parallel - Low Incidence	2543	219022	75.0%	10159	4.6%	192965	88.1%	17106	7.81 %	11589	5.29 %	4314	1.97 %
Rapid Testing of twice IR's	5778	12273	4.2%	5313	43.3%	6220	50.7%	833	6.79 %	556	4.53 %	184	1.50 %
Parallel - OTFW in Edge Area	129	14547	5.0%	375	2.6%	13703	94.2%	704	4.84 %	452	3.11 %	17	0.12 %
Parallel Other	83	2431	0.8%	251	10.3%	1972	81.1%	247	10.16 %	176	7.24 %	32	1.32 %
'NSR' Herds	29	231	0.1%	9	3.9%	210	90.9%	13	5.63 %	12	5.19 %	0	0.00 %
Suspected Fraud	74	1179	0.4%	26	2.2%	1064	90.2%	118	10.01 %	66	5.60 %	23	1.95 %
Serial Other	10	87	0.0%	1	1.1%	55	63.2%	2	2.30 %	18	20.69 %	13	14.94 %
Parallel - OTFS in Edge Area	1	214	0.1%	3	1.4%	201	93.9%	17	7.94 %	10	4.67 %	0	0.00 %
	9300	292201		20386		251373		22162		15110		5337	

*For test criteria please refer to Operational notes.

Year	Month	Herds sampled	Samples tested	Herds with positives	IFNg+ samples	Wrong Eartags	No PM No Cult	No PM Cult Pend	No PM Cult Neg	No PM Cult Mb	No PM Cult Other	VL No Cult	VL Cult Pend	VL Cult Neg	VL Cult Mb	VL Cult Other	NVL No Cult	NVL Cult Pend	NVL Cult Neg	NVL Cult Mb	NVL Cult Other
2013	September	80	3015	46	152	0	3	0	0	0	3	9	0	1	3	0	54	6	72	1	3
	October	120	4947	58	198	2	4	0	0	0	1	6	0	0	0	0	127	0	58	0	1
	November	65	3647	37	141	3	3	0	0	0	3	7	0	0	7	0	79	0	39	0	3
	December	70	4473	46	227	15	0	0	0	0	0	34	0	0	2	0	145	0	29	1	0
2014	January	102	7192	75	616	5	6	0	0	0	4	93	0	1	2	0	395	0	91	2	4
	February	100	7276	71	438	2	7	0	0	0	2	48	0	0	1	0	329	0	48	0	2
	March	122	6799	66	405	5	17	0	0	0	4	15	0	2	5	0	250	22	83	1	4
	April	95	7200	67	477	0	21	0	0	0	4	60	0	0	5	0	355	11	20	1	4
	May	111	8273	61	204	0	0	0	0	0	2	6	2	0	5	0	142	16	30	0	2
	June	125	9482	61	340	0	13	0	0	0	0	72	2	0	0	0	209	39	0	0	0
	July	107	6462	54	237	11	48	0	0	0	0	33	2	0	0	0	125	12	0	0	0
	August	80	6338	38	105	79		0													

Total since Test Rollout	9300	292201	5537	20386	670	553	0	93	13	0	1639	6	104	638	2	11381	115	4886	79	71
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Table 5b. Summary of culture results for IFNg positive animals.

Month	Herds sampled	Samples tested	Herds with positives	IFNg+ samples	VL No Cult	VL Cult Pend	VL Cult Neg	VL Cult Mb	VL Cult Other	NVL No Cult	NVL Cult Pend	NVL Cult Neg	NVL Cult Mb	NVL Cult Other
England	4511	194888	2860	12038	948	5	74	478	2	6251	74	3069	57	54
Scotland	332	24018	195	1223	135	0	5	14	0	788	3	135	1	5
Wales	4457	73295	2482	7125	556	1	25	146	0	4342	38	1682	21	12

Total since Test Rollout	9300	292201	5537	20386	1639	6	104	638	2	11381	115	4886	79	71
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Key: NoPM= no PME performed/recorded on Vet Net.
No Cult=M. bovis culture not performed, CultPend= M. bovis culture pending, CultNeg= M. bovis culture negative,
CultMtb= M. bovis culture positive, CultOther= Organism other than M. bovis cultured.

Figure 4a. Number of herds sampled for IFNg and numbers of herds with any positive IFNg results.

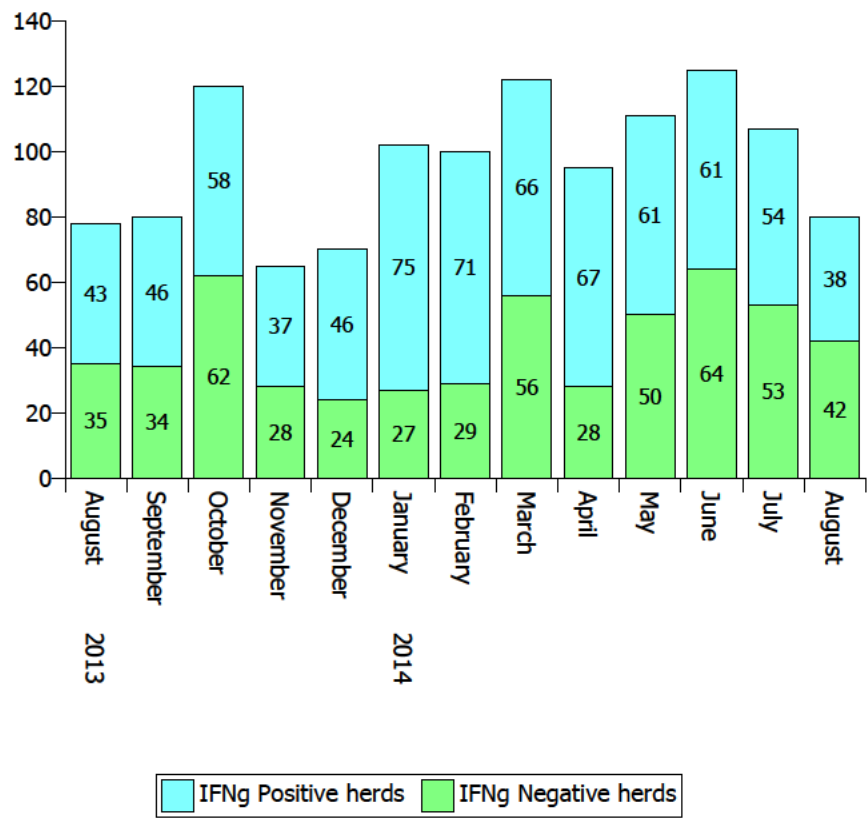
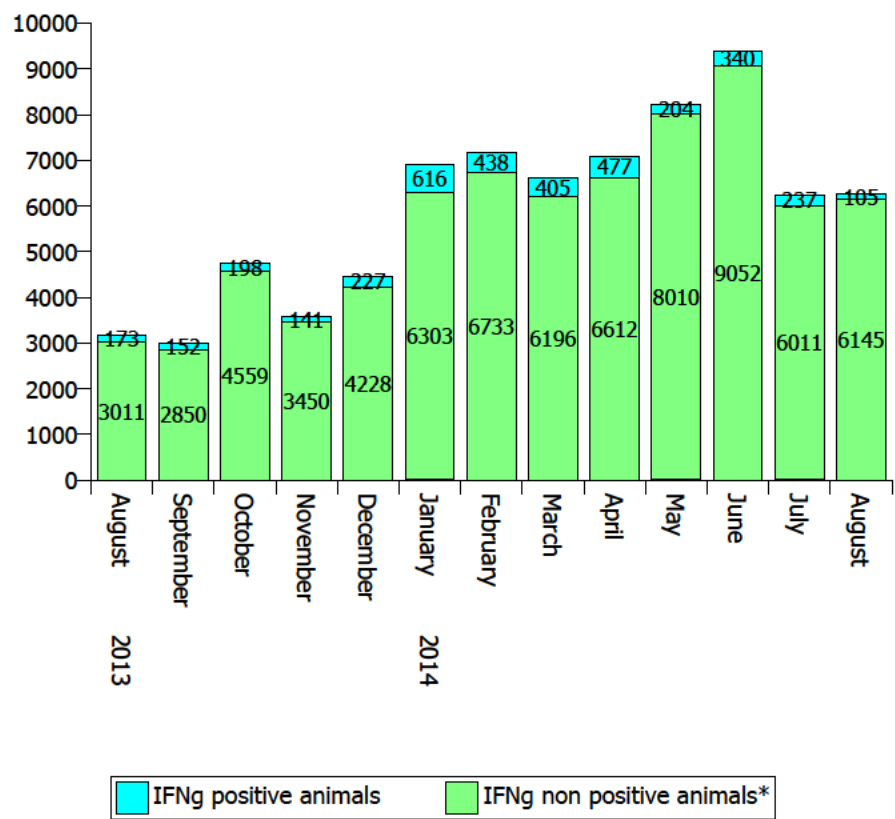
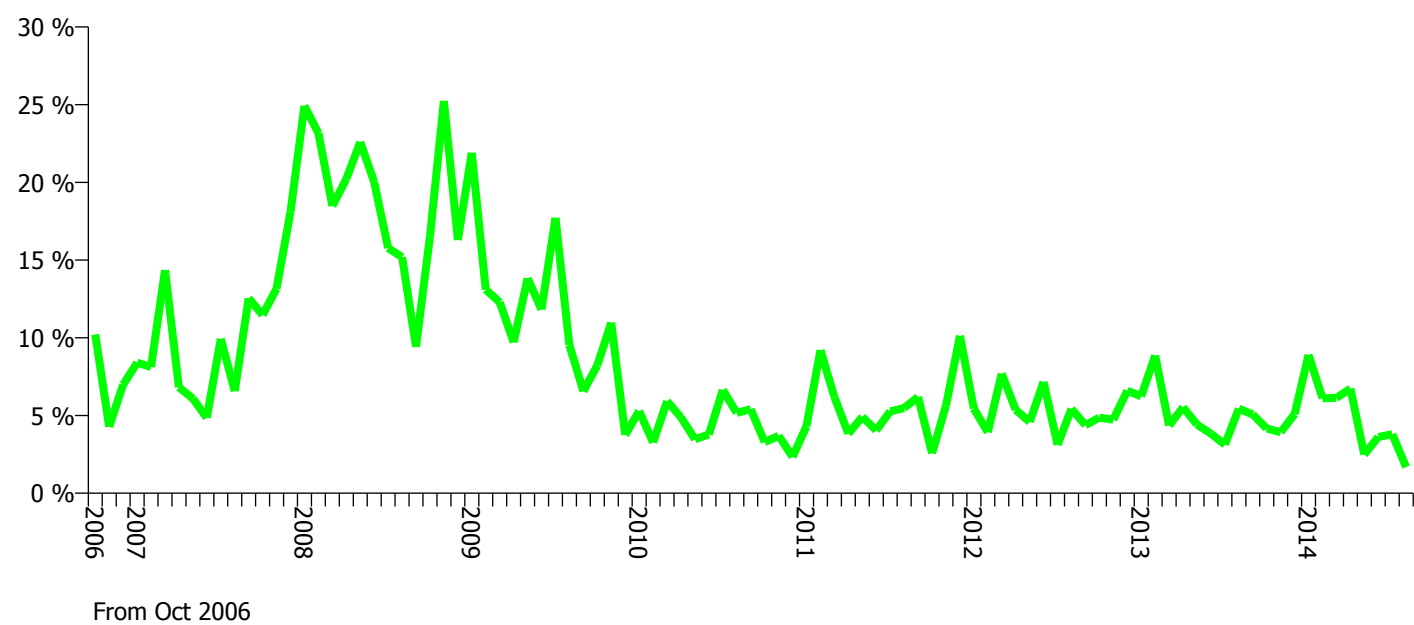


Figure 4b. Number of animals sampled for IFNg and numbers of animals with positive IFNg results.



*Includes all animals with IFNg test negative, resample and reject outcomes

Figure 4c. Percentage of animals tested with IFNg giving a positive response



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total
2006										10 %	4 %	7 %	5 %
2007	8 %	8 %	14 %	7 %	6 %	5 %	10 %	7 %	13 %	11 %	13 %	18 %	10 %
2008	25 %	23 %	18 %	20 %	23 %	20 %	16 %	15 %	9 %	17 %	25 %	16 %	20 %
2009	22 %	13 %	12 %	10 %	14 %	12 %	18 %	10 %	7 %	8 %	11 %	4 %	12 %
2010	5 %	3 %	6 %	5 %	3 %	4 %	7 %	5 %	5 %	3 %	4 %	2 %	5 %
2011	4 %	9 %	6 %	4 %	5 %	4 %	5 %	5 %	6 %	3 %	6 %	10 %	5 %
2012	5 %	4 %	8 %	5 %	5 %	7 %	3 %	5 %	4 %	5 %	5 %	7 %	6 %
2013	6 %	9 %	4 %	6 %	4 %	4 %	3 %	5 %	5 %	4 %	4 %	5 %	5 %
2014	9 %	6 %	6 %	7 %	2 %	4 %	4 %	2 %					5 %

Figure 5. Rates of resamples including the fail rates broken down for positive (POS) and negative (NEG) controls.

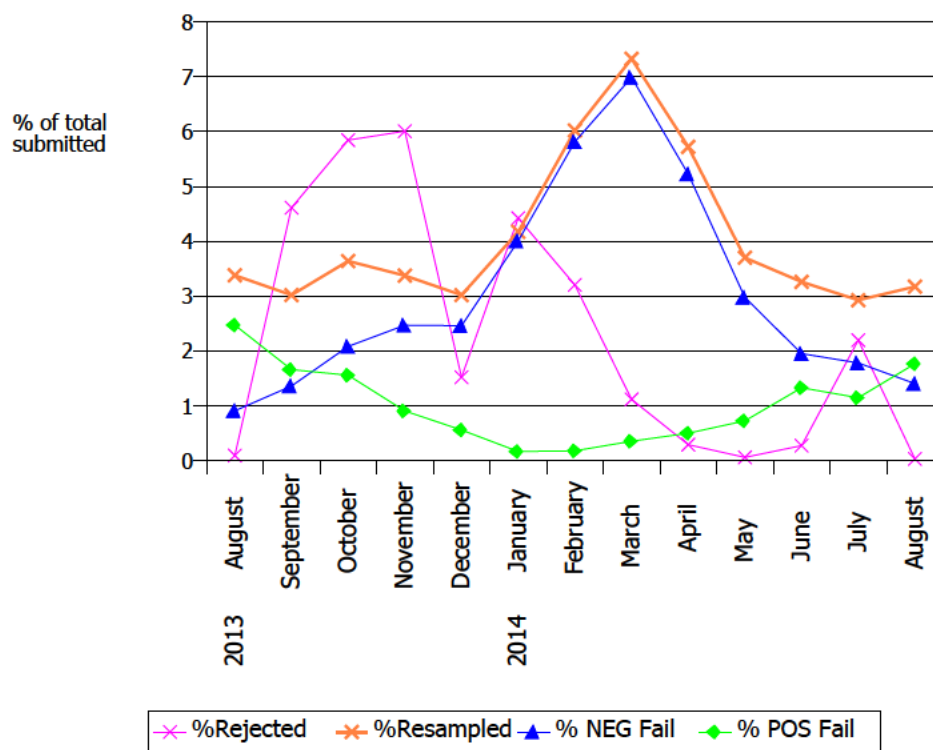


Figure 6. Proportion of samples retested, or requiring a resample, during August 2014 (% submission per AHDO)

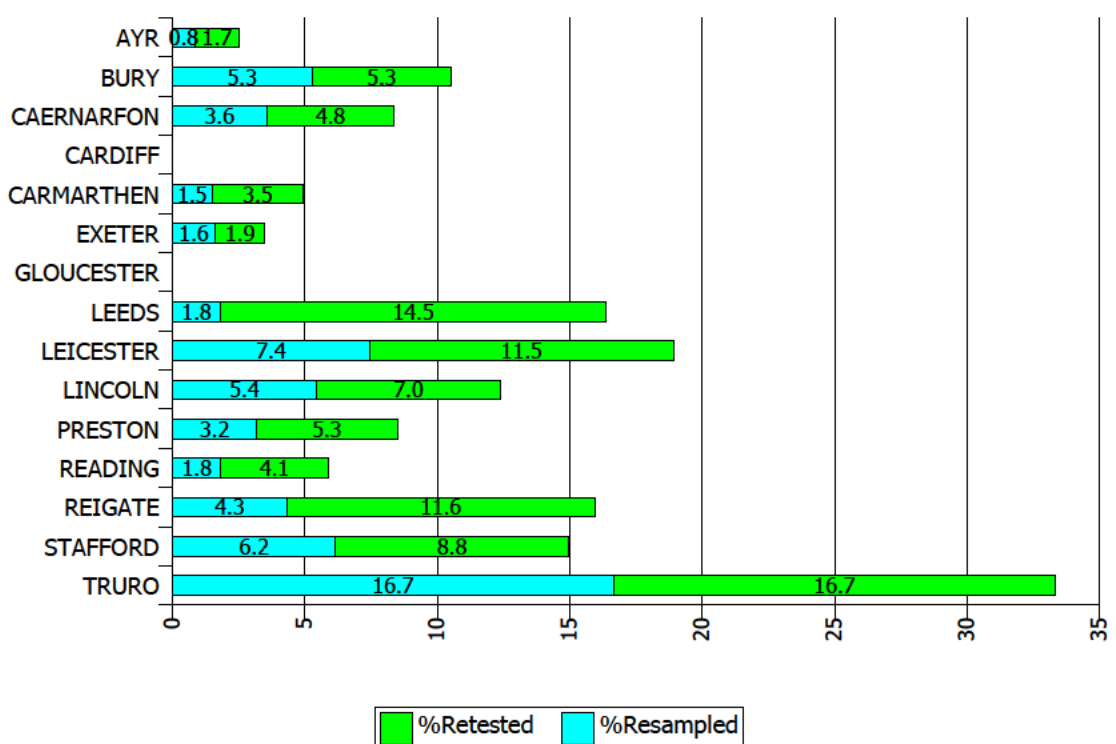


Table 6a: Number of animals and submissions tested in August 2014

Country	No. animals	No of IFHg+ animals	% Positive animals	No. samples	No of IFHg+ samples	% Positive samples
England	4371	67	1.5%	4424	67	1.5%
Scotland	119	2	1.7%	119	2	1.7%
Wales	1760	36	2.0%	1795	36	2.0%
GB	6250	105	1.7%	6338	105	1.7%

Table 6b: Number of animals and submissions tested in 2014

Country	No. animals	No of IFHg+ animals	% Positive animals	No. samples	No of IFHg+ samples	% Positive samples
England	38097	1791	4.7%	40641	1792	4.4%
Scotland	3257	107	3.3%	3406	107	3.1%
Wales	13446	923	6.9%	14975	923	6.2%
GB	54799	2821	5.1%	59022	2822	4.8%

Table 6c: Number of animals and submissions tested since test rollout

Country	No. animals	No of IFHg+ animals	% Positive animals	No. samples	No of IFHg+ samples	% Positive samples
England	170523	12025	7.1%	194774	12031	6.2%
Scotland	20837	1223	5.9%	24018	1223	5.1%
Wales	61539	7129	11.6%	73409	7132	9.7%
GB	252786	20377	8.1%	292201	20386	7.0%

Table 6d (Annual number of samples tested since test rollout, by country)

	2006*	2007	2008	2009	2010	2011	2012	2013	2014^
England	4,307	23,520	14,913	18,384	16,268	16,194	26,209	34,338	40,641
Scotland	100	3,875	3,345	5,177	2,320	1,217	3,420	1,158	3,406
Wales	862	3,231	4,087	7,063	7,758	7,416	15,922	12,095	14,975
GB Total	5,269	30,626	22,345	30,624	26,346	24,827	45,551	47,591	59,022

*(Oct to Dec)

^to end of current month

