

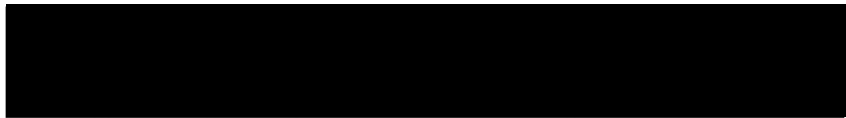


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FMD Detection And Serotyping Results

Lab Reference WRL batch Number: WRLFMD/2011/00048

Sender Details:



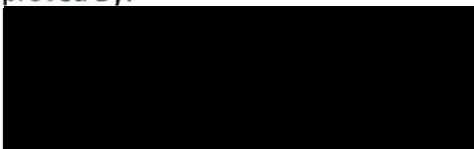
Date Received: 09/12/2011

Country of Origin: MALAYSIA

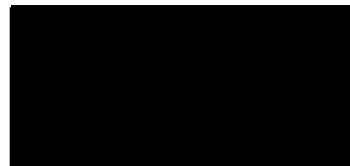
Dear Dr Norlida Bt Othman,

Diagnostics work has now been completed in respect of the samples you submitted and the details are as attached.

Results Approved By:



Official Stamp



Date:

6/1/12

To help us improve the quality of our service, please send any suggestions or requests to the Reference Laboratory by fax (+44 (0)1483 232621) or email (gareth.shimmon@iah.ac.uk). IAH actively seeks and appreciates feedback, if you would like to offer feedback please complete the WRLFMD survey: <http://www.surveymonkey.com/s/WRLFMD>

FMD Detection And Serotyping Results Report

INSTITUTE FOR ANIMAL HEALTH

Director: Professor John Fazakerley BSc, MBA, PhD, FRCPath

Lab Reference WRL Batch Number: WRLFMD/2011/00048

PIRBRIGHT LABORATORY

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Email: iah@iah.ac.ukWebsite: www.iah.bsrc.ac.ukSender
Details:

Date Received: 09/12/2011 Country Of Origin: MALAYSIA

Date Tests Completed 22/12/2011

Your Reference	WRL Reference	Description of Sample	PCR Result	Serotyping Result by Cell Culture/ELISA
3748/10	MAY 15/2010	CATTLE, os in trizol, Collected 21/12/2010	POS	NVD
3688/10	MAY 16/2010	CATTLE, os in trizol, Collected 22/12/2010	POS	NVD
3694/10	MAY 17/2010	CATTLE, os in trizol, Collected 23/12/2010	POS	NVD
3695/10	MAY 18/2010	CATTLE, os in trizol, Collected 23/12/2010	POS	NVD
3696/10	MAY 19/2010	CATTLE, os in trizol, Collected 23/12/2010	POS	NVD
3723/10	MAY 20/2010	CATTLE, os in trizol, Collected 24/12/2010	POS	NVD
3704/10	MAY 21/2010	CATTLE, os in trizol, Collected 27/12/2010	POS	NVD
47/11	MAY 22/2010	CATTLE, epithelial suspension, Collected 29/12/2010	POS	NVD
08/11	MAY 23/2010	CATTLE, os in trizol, Collected 30/12/2010	POS	NVD
572/11	MAY 1/2011	CATTLE, os in trizol, Collected 28/01/2011	POS	NVD

NVD - No Virus Detected POS - FMDV Genome Detected NEG - No FMDV Genome Detected FMDVGD - FMDV Genome Detected

SOPs - WRL 026 (PCR), WRL 002 (Cell Culture), WRL 006 (ELISA)

A UKAS accredited testing laboratory No. 4025.

Your Reference	WRL Reference	Description of Sample	PCR Result	Serotyping Result by Cell Culture/ELISA
2447/11	MAY 2/2011	CATTLE, fluid/cell culture, Collected 03/05/2011	POS	A
2814/11	MAY 3/2011	CATTLE, os in trizol, Collected 23/05/2011	POS	NVD
2814/11	MAY 4/2011	CATTLE, fluid/cell culture, Collected 23/05/2011	POS	A
3055/11	MAY 5/2011	NOT KNOWN, os in trizol, Collected 07/06/2011	POS	NVD
3306/11 -1	MAY 6/2011	SHEEP, os in trizol, Collected 22/06/2011	NEG	NVD
3306/11 -2	MAY 7/2011	SHEEP, os in trizol, Collected 22/06/2011	NEG	NVD
3306/11 -3	MAY 8/2011	SHEEP, os in trizol, Collected 22/06/2011	NEG	NVD
3306/11 -4	MAY 9/2011	SHEEP, os in trizol, Collected 22/06/2011	NEG	NVD
3306/11 -5	MAY 10/2011	SHEEP, os in trizol, Collected 22/06/2011	NEG	NVD
3306/11 -6	MAY 11/2011	SHEEP, os in trizol, Collected 22/06/2011	NEG	NVD
3641/11	MAY 12/2011	CATTLE, os in trizol, Collected 07/07/2011	POS	NVD
3641/11	MAY 13/2011	CATTLE, fluid/cell culture, Collected 07/07/2011	POS	O
4013/11	MAY 14/2011	CATTLE, os in trizol, Collected 27/07/2011	POS	NVD

NVD - No Virus Detected POS - FMDV Genome Detected NEG - No FMDV Genome Detected FMDVGD - FMDV Genome Detected
SOPs - WRL 026 (PCR), WRL 002 (Cell Culture), WRL 006 (ELISA)

A UKAS accredited testing laboratory No. 4025.

Your Reference	WRL Reference	Description of Sample	PCR Result	Serotyping Result by Cell Culture/ELISA
4013/11	MAY 15/2011	CATTLE, fluid/cell culture, Collected 27/07/2011	POS	A
4181/11	MAY 16/2011	CATTLE, os in trizol, Collected 09/08/2011	POS	NVD
4181/11	MAY 17/2011	CATTLE, fluid/cell culture, Collected 09/08/2011	POS	A
5000/11	MAY 18/2011	CATTLE, os in trizol, Collected 26/10/2011	NEG	NVD
5000/11	MAY 19/2011	CATTLE, fluid/cell culture, Collected 26/10/2011	POS	A
5490/11	MAY 20/2011	CATTLE, epithelium, Collected 05/10/2011	NEG	A

NVD - No Virus Detected POS - FMDV Genome Detected NEG - No FMDV Genome Detected FMDVGD - FMDV Genome Detected
SOPs - WRL 026 (PCR), WRL 002 (Cell Culture), WRL 006 (ELISA)

A UKAS accredited testing laboratory No. 4025.

LAB DATA VALIDATION REPORT
LAB DATA AND TESTS FOR BATCH - WRLFMD/2011/00048

GENERAL LAB DATA

WRL REF NUMBER	DATE RECEIVED	WEIGHT IN GRAMS	PH	STORED AMOUNT	DATE STORED	RT-PCR	INTERIM RESULT	FINAL RESULT	DATE VALIDATED	VALIDATED BY
MAY/2010/00015	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00016	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00017	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00018	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00019	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00020	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00021	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00022	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2010/00023	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00001	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00002	09/12/2011	0	0	1	09/12/2011	POSITIVE		A		
MAY/2011/00003	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00004	09/12/2011	0	0	1	09/12/2011	POSITIVE		A		
MAY/2011/00005	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00006	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00007	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00008	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00009	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00010	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00011	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00012	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00013	09/12/2011	0	0	1	09/12/2011	POSITIVE		O		
MAY/2011/00014	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00015	09/12/2011	0	0	1	09/12/2011	POSITIVE		A		
MAY/2011/00016	09/12/2011	0	0	1	09/12/2011	POSITIVE		FMDV GD		
MAY/2011/00017	09/12/2011	0	0	1	09/12/2011	POSITIVE		A		
MAY/2011/00018	09/12/2011	0	0	1	09/12/2011	NEGATIVE		NVD		
MAY/2011/00019	09/12/2011	0	0	1	09/12/2011	POSITIVE		A		
MAY/2011/00020	09/12/2011	1.168	7.4	1	09/12/2011	NEGATIVE		A		

ELISA TEST DATA

WRL REF NO	TEST TYPE	ATTEMPT	HOUR	SEROTYPE	RESULTS	NEGATIVE	DATE VALIDATED	VALIDATED BY
MAY/2011/00002	BTY1	1	24	A	0.75	NO		
	RS1	1	24	A	0.64	NO		
MAY/2011/00004	BTY1	1	24	A	0.39	NO		
	RS1	1	24	A	0.45	NO		
MAY/2011/00013	BTY1	1	24	O	1.45	NO		
	RS1	1	48	O	1.45	NO		
MAY/2011/00015	BTY2	1	24	A	0.41	NO		
	RS2	1	24	A	0.49	NO		
MAY/2011/00017	BTY1	1	48	A	0.8	NO		
	RS1	1	48	A	0.45	NO		
MAY/2011/00019	RS2	1	24	A	0.54	NO		
MAY/2011/00020	BTY1	1	24	A	0.27	NO		
	OS	1	0	NEG	-0.9	YES		

TISSUE CULTURE TEST DATA

[Handwritten signature]

WRL REF NUMBER	TC TEST TYPE	ATTEMPT NUMBER	HOUR	NUMBER OF TUBES	READING	DATE READ	DATE VALIDATED	VALIDATED BY
MAY/2010/0002	BTY1	1	24	5	.			
	BTY1	1	48	5	.			
	BTY2	1	24	5	.			
	BTY2	1	48	5	.			
	RS1	1	24	5	.			
	RS1	1	48	5	.			
	RS2	1	24	5	.			
	RS2	1	48	5	.			
MAY/2011/0002	//BTY1	1	24	5	+			
	//RS1	1	24	5	+			
MAY/2011/0004	//BTY1	1	24	5	+			
	//RS1	1	24	5	+			
MAY/2011/00013	//BTY1	1	24	5	+			
	//RS1	1	24	5	VVE			
	//RS1	1	48	5	+			
MAY/2011/00015	//BTY1	1	24	1	+			
	//BTY1	1	48	4	.			
	//BTY2	1	24	5	+			
	//RS1	1	24	5	.			
	//RS1	1	48	1	E			
	//RS2	1	24	5	+			
MAY/2011/00017	//BTY1	1	24	1	+			
	//BTY1	1	48	4	+			
	//RS1	1	24	5	.			
	//RS1	1	48	1	+			
MAY/2011/00019	//BTY1	1	24	5	.			
	//BTY1	1	48	5	.			
	//BTY2	1	24	5	.			
	//BTY2	1	48	5	.			
	//RS1	1	24	5	.			
	//RS1	1	48	5	.			
	//RS2	1	24	5	+			
MAY/2011/00020	BTY1	1	24	5	+			
	RS1	1	24	5	.			
	RS1	1	48	5	.			

CT VALUES

WRL REF NUMBER	TEST NUMBER	WRL TEST REF	CT VALUE	CT MATERIAL	CT VIRUS	DATE VALIDATED	VALIDATED BY
MAY/2010/00015	1	WRL 0843	31.29	OS IN TRIZOL	FMD		
	2	WRL 0843	30.53	OS IN TRIZOL	FMD		
MAY/2010/00016	1	WRL 0843	13.29	OS IN TRIZOL	FMD		
	2	WRL 0843	12.41	OS IN TRIZOL	FMD		
MAY/2010/00017	1	WRL 0843	16.85	OS IN TRIZOL	FMD		
MAY/2010/00018	1	WRL 0843	16.85	OS IN TRIZOL	FMD		
	2	WRL 0843	16.66	OS IN TRIZOL	FMD		
MAY/2010/00019	1	WRL 0843	14.95	OS IN TRIZOL	FMD		
MAY/2010/00020	1	WRL 0843	12.82	OS	FMD		
	2	WRL 0843	12.72	OS	FMD		
MAY/2010/00021	1	WRL 0843	18.14	OS IN TRIZOL	FMD		
	2	WRL 0843	18.59	OS IN TRIZOL	FMD		
MAY/2010/00022	1	WRL 0847	23.25	OF	FMD		

MAY/2010/00023	1	WRL 0843	16.76	OS IN TRIZOL	FMD		
MAY/2011/00001	1	WRL 0843	15.89	OS IN TRIZOL	FMD		
MAY/2011/00002	1	WRL 0845	14.04	OF	FMD		
	2	WRL 0845	13.91	OF	FMD		
MAY/2011/00003	1	WRL 0843	14.88	OS IN TRIZOL	FMD		
	2	WRL 0843	15.77	OS IN TRIZOL	FMD		
MAY/2011/00004	1	WRL 0845	21.83	OF	FMD		
	2	WRL 0845	22.34	OF	FMD		
MAY/2011/00005	1	WRL 0843	22.67	OS IN TRIZOL	FMD		
MAY/2011/00006	1	WRL 0846	36.15	OS IN TRIZOL	FMD		
	2	WRL 0846	35.86	OS IN TRIZOL	FMD		
MAY/2011/00007	1	WRL 0846	50	OS IN TRIZOL	FMD		
	2	WRL 0846	50	OS IN TRIZOL	FMD		
MAY/2011/00008	1	WRL 0846	50	OS IN TRIZOL	FMD		
	2	WRL 0846	50	OS IN TRIZOL	FMD		
MAY/2011/00009	1	WRL 0846	36.72	OS IN TRIZOL	FMD		
	2	WRL 0846	50	OS IN TRIZOL	FMD		
MAY/2011/00010	1	WRL 0846	36.44	OS IN TRIZOL	FMD		
	2	WRL 0846	37.92	OS IN TRIZOL	FMD		
MAY/2011/00011	1	WRL 0846	50	OS IN TRIZOL	FMD		
	2	WRL 0846	50	OS IN TRIZOL	FMD		
MAY/2011/00012	1	WRL 0844	18.67	OS IN TRIZOL	FMD		
	2	WRL 0844	18.71	OS IN TRIZOL	FMD		
MAY/2011/00013	1	WRL 0845	16.71	OF	FMD		
	2	WRL 0845	16.81	OF	FMD		
MAY/2011/00014	1	WRL 0844	16.81	OS IN TRIZOL	FMD		
	2	WRL 0844	16.53	OS IN TRIZOL	FMD		
MAY/2011/00015	1	WRL 0845	12.92	OF	FMD		
	2	WRL 0845	12.99	OF	FMD		
MAY/2011/00016	1	WRL 0844	18.25	OS IN TRIZOL	FMD		
	2	WRL 0844	18.26	OS IN TRIZOL	FMD		
MAY/2011/00017	1	WRL 0845	13.94	OF	FMD		
	2	WRL 0845	13.57	OF	FMD		
MAY/2011/00018	1	WRL 0844	34.81	OS IN TRIZOL	FMD		
	2	WRL 0844	35.26	OS IN TRIZOL	FMD		
MAY/2011/00019	1	WRL 0845	13.92	OF	FMD		
	2	WRL 0845	13.27	OF	FMD		
MAY/2011/00020	1	WRL 0845	50	OS	FMD		
	2	WRL 0845	50	OS	FMD		

Validated by



Date

22/12/14

FMD DETECTION AND SEROTYPING FULL RESULTS

BATCH NUMBER - WRLFMD/2011/00048 DATE RECEIVED AT SITE - 09/12/2011 FROM MALAYSIA

SENDER DETAILS

Your Reference	WRL Reference	Description of Sample	Direct Antigen ELISA	Cell Culture / ELISA BTY RS	Other	PCR Result	Final Result
3748/10	MAY 15/2010	CATTLE, os in trizol Collected 21/12/2010				31.29, 30.53	FMDV GD
3688/10	MAY 16/2010	CATTLE, os in trizol Collected 22/12/2010				13.29, 12.41	FMDV GD
3694/10	MAY 17/2010	CATTLE, os in trizol Collected 23/12/2010				16.85	FMDV GD
3695/10	MAY 18/2010	CATTLE, os in trizol Collected 23/12/2010				16.85, 16.66	FMDV GD
3696/10	MAY 19/2010	CATTLE, os in trizol Collected 23/12/2010				14.95	FMDV GD
3723/10	MAY 20/2010	CATTLE, os in trizol Collected 24/12/2010				12.82, 12.72	FMDV GD

NVD - No Virus Detected POS - FMDV Genome Detected NEG - No FMDV Genome Detected FMDVGD - FMDV Genome Detected

WRLFMD/2011/00048

IAHB/2011/00944

21 December 2011

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Your Reference	WRL Reference	Description of Sample	Direct Antigen			PCR Result	Final Result
			ELISA	Cell Culture / ELISA BTY	RS		
3704/10	MAY 21/2010	CATTLE, os in trizol Collected 27/12/2010				18.14, 18.59	FMDV GD
47/11	MAY 22/2010	CATTLE, epithelial suspension Collected 29/12/2010		-ve	-ve	23.25	FMDV GD
08/11	MAY 23/2010	CATTLE, os in trizol Collected 30/12/2010				16.76	FMDV GD
572/11	MAY 1/2011	CATTLE, os in trizol Collected 28/01/2011				15.89	FMDV GD
2447/11	MAY 2/2011	CATTLE, fluid/cell culture Collected 03/05/2011		A	A	14.04, 13.91	A
2814/11	MAY 3/2011	CATTLE, os in trizol Collected 23/05/2011				14.88, 15.77	FMDV GD
2814/11	MAY 4/2011	CATTLE, fluid/cell culture Collected 23/05/2011		A	A	21.83, 22.34	A
3055/11	MAY 5/2011	NOT KNOWN, os in trizol Collected 07/06/2011				22.67	FMDV GD
3306/11-1 3306/11-1	MAY 6/2011	SHEEP, os in trizol Collected 22/06/2011				36.15, 35.86	NVD

NVD - No Virus Detected

POS - FMDV Genome Detected

NEG - No FMDV Genome Detected

FMDVGD - FMDV Genome Detected

WRLFMD/2011/00048

IAHB/2011/00944

21 December 2011

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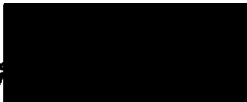
Created by IAH Informatics FMD serotyping Full Results Report

Your Reference	WRL Reference	Description of Sample	Direct Antigen ELISA	Cell Culture / ELISA BTY RS	Other	PCR Result	Final Result
2206/11-2 3306-2	MAY 7/2011	SHEEP, os in trizol Collected 22/06/2011				50, 50	NVD
2206/11-3 3306-3	MAY 8/2011	SHEEP, os in trizol Collected 22/06/2011				50, 50	NVD
2206/11-4 3306-4	MAY 9/2011	SHEEP, os in trizol Collected 22/06/2011				36.72, 50	NVD
2206/11-5 3306-5	MAY 10/2011	SHEEP, os in trizol Collected 22/06/2011				36.44, 37.921	NVD
2206/11-6 3306-6	MAY 11/2011	SHEEP, os in trizol Collected 22/06/2011				50, 50	NVD
3641/11	MAY 12/2011	CATTLE, os in trizol Collected 07/07/2011				18.67, 18.71	FMDV GD
3641/11	MAY 13/2011	CATTLE, fluid/cell culture Collected 07/07/2011		O	O	16.71, 16.81	O
4013/11	MAY 14/2011	CATTLE, os in trizol Collected 27/07/2011				16.81, 16.53	FMDV GD
4013/11	MAY 15/2011	CATTLE, fluid/cell culture Collected 27/07/2011		A	A	12.92, 12.99	A

NVD - No Virus Detected POS - FMDV Genome Detected NEG - No FMDV Genome Detected FMDVGD - FMDV Genome Detected
WRLFMD/2011/00048 LAHB/2011/00944 21 December 2011

Your Reference	WRL Reference	Description of Sample	Direct Antigen ELISA	Cell Culture / ELISA			PCR Result	Final Result
				BTY	RS	Other		
4181/11	MAY 16/2011	CATTLE, os in trizol Collected 09/08/2011					18.25, 18.26	FMDV GD
4181/11	MAY 17/2011	CATTLE, fluid/cell culture Collected 09/08/2011		A	A		13.94, 13.57	A
5000/11	MAY 18/2011	CATTLE, os in trizol Collected 26/10/2011					34.81, 35.26	NVD
5000/11	MAY 19/2011	CATTLE, fluid/cell culture Collected 26/10/2011		-ve	A		13.92, 13.27	A
5490/11	MAY 20/2011	CATTLE, epithelium Collected 05/10/2011	NEG	A	-ve		50, 50	A

Validated by



Date

22/12/11

NVD - No Virus Detected

POS - FMDV Genome Detected

NEG - No FMDV Genome Detected

FMDVGD - FMDV Genome Detected

WRLFMD/2011/00048

IAHB/2011/00944

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