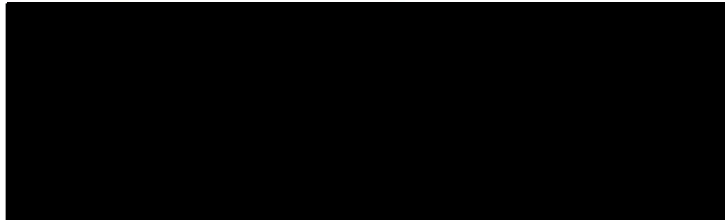




**INSTITUTE FOR ANIMAL HEALTH**  
Director: Professor John Fazakerley BSc, MBA, PhD, FRCPath  
PIRBRIGHT LABORATORY  
Ash Road,  
Pirbright,  
Surrey,  
GU24 0NF  
Intn Tel: 00 44 1483 232441  
Tel: 01483 232441, Fax: 01483 232621

## **FMD Genotyping Report**

**Lab Reference WRL Batch Number:** WRLFMD/2012/00015  
**Sender Details:**

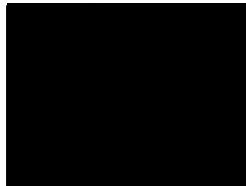


**Date Received:** 28<sup>th</sup> March 2012  
**Country of Origin:** VIETNAM, SOCIALIST REPUBLIC OF  
**Date Reported:** 8<sup>th</sup> May 2012

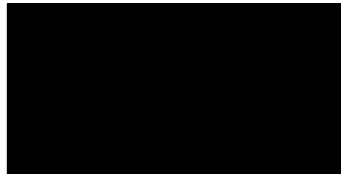
Dear Dr Ngo Thanh Long,

Sequencing work has now been completed in respect of the samples you submitted and the details are as attached. Please note that all of our phylogenetic trees can be accessed via the internet at:  
<http://www.wrlfmd.org/>

**Results Approved By:**



**Official Stamp:**



**Date:**

8/15/12

A UKAS accredited testing laboratory No. 4025.

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](mailto:gareth.shimmon@iah.ac.uk). IAH actively seeks and appreciates feedback, if you would like to offer feedback please complete the WRLFMD survey here: <http://www.surveymonkey.com/s/WRLFMD>

# FAO World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD)

## Genotyping Report

Report Date for this Batch: 2 May 2012

FMDV type O

Country: Vietnam

Period: 2012

No. of samples: 13

BATCH: WRLFMD/2012/00015



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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/1/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 1. NCVD-F12-02	
Location: Quang Ninh, Vietnam	Topotype: ME-SA
Date collected: 05/01/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-01.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/7/2012	VIT12-07	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/16/2011	VIT11-16	639	636	0	99.53	0.47	ME-SA	PanAsia
3	O/VIT/29/2011	VIT11-29	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/3/2012	VIT12-03	639	636	0	99.53	0.47	ME-SA	PanAsia
5	O/VIT/31/2011	VIT11-31	639	636	0	99.53	0.47	ME-SA	PanAsia
6	O/VIT/4/2012	VIT12-04	639	636	0	99.53	0.47	ME-SA	PanAsia
7	O/VIT/42/2011	VIT11-42	639	636	0	99.53	0.47	ME-SA	PanAsia
8	O/VIT/5/2011	VIT11-05	639	636	0	99.53	0.47	ME-SA	PanAsia
9	O/VIT/6/2011	VIT11-06	639	636	0	99.53	0.47	ME-SA	PanAsia
10	O/VIT/8/2012	VIT12-08	639	636	0	99.53	0.47	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	598	0	93.58	6.42	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	588	0	92.02	7.98	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	583	0	91.24	8.76	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	583	0	91.24	8.76	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	580	0	90.77	9.23	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	580	0	90.77	9.23	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	578	0	90.45	9.55	ME-SA	Ind-2001d
8	O/UAE/4/2008	UAE08-04	636	574	0	90.25	9.75	ME-SA	Ind-2001c
9	O/TUR/257/2008* (FMDI)	TUR08-AD	639	576	0	90.14	9.86	ME-SA	PanAsia-2 <sup>TER-08</sup>
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/2/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 11.12-949/147	
Location: Ho Chi Minh, Vietnam	Topotype: ME-SA
Date collected: 16/01/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-02.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/42/2011	VIT11-42	639	636	0	99.53	0.47	ME-SA	PanAsia
2	O/VIT/1/2012	VIT12-01	639	635	0	99.37	0.63	ME-SA	PanAsia
3	O/VIT/41/2011	VIT11-41	639	635	0	99.37	0.63	ME-SA	PanAsia
4	O/VIT/16/2011	VIT11-16	639	634	0	99.22	0.78	ME-SA	PanAsia
5	O/VIT/29/2011	VIT11-29	639	634	0	99.22	0.78	ME-SA	PanAsia
6	O/VIT/3/2012	VIT12-03	639	634	0	99.22	0.78	ME-SA	PanAsia
7	O/VIT/31/2011	VIT11-31	639	634	0	99.22	0.78	ME-SA	PanAsia
8	O/VIT/4/2012	VIT12-04	639	634	0	99.22	0.78	ME-SA	PanAsia
9	O/VIT/5/2011	VIT11-05	639	634	0	99.22	0.78	ME-SA	PanAsia
10	O/VIT/6/2011	VIT11-06	639	634	0	99.22	0.78	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	596	0	93.27	6.73	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	586	0	91.71	8.29	ME-SA	Ind-2001a
3	O/IRN/8/2005	IRN05-08	639	582	0	91.08	8.92	ME-SA	PanAsia-2
4	O/IRN/31/2009	IRN09-31	639	581	0	90.92	9.08	ME-SA	PanAsia-2 <sup>FAR-09</sup>
5	O/BHU/3/2009	BHU09-03	639	578	0	90.45	9.55	ME-SA	Ind-2001d
6	O/IRN/18/2010	IRN10-18	639	578	0	90.45	9.55	ME-SA	PanAsia-2 <sup>BAL-09</sup>
7	O/OMN/7/2001 (DQ164941)	OMN01-07	639	578	0	90.45	9.55	ME-SA	Ind-2001b
8	O/UAE/4/2008	UAE08-04	636	573	0	90.09	9.91	ME-SA	Ind-2001c
9	O/TUR/257/2008* (FMDI)	TUR08-AD	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>TER-08</sup>
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	573	0	89.67	10.33	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/3/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 2.NCVD-F12-04	
Location: Thai Binh, Vietnam	Topotype: ME-SA
Date collected: 03/02/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-03.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/8/2012	VIT12-08	639	639	0	100.00	0.00	ME-SA	PanAsia
2	O/VIT/4/2012	VIT12-04	639	637	0	99.69	0.31	ME-SA	PanAsia
3	O/VIT/1/2012	VIT12-01	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/10/2012	VIT12-10	639	636	0	99.53	0.47	ME-SA	PanAsia
5	O/VIT/5/2012	VIT12-05	639	636	0	99.53	0.47	ME-SA	PanAsia
6	O/VIT/9/2012	VIT12-09	639	636	0	99.53	0.47	ME-SA	PanAsia
7	O/VIT/16/2011	VIT11-16	639	635	0	99.37	0.63	ME-SA	PanAsia
8	O/VIT/29/2011	VIT11-29	639	635	0	99.37	0.63	ME-SA	PanAsia
9	O/VIT/31/2011	VIT11-31	639	635	0	99.37	0.63	ME-SA	PanAsia
10	O/VIT/42/2011	VIT11-42	639	635	0	99.37	0.63	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	599	0	93.74	6.26	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	587	0	91.86	8.14	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	583	0	91.24	8.76	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	583	0	91.24	8.76	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	580	0	90.77	9.23	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/BHU/3/2009	BHU09-03	639	579	0	90.61	9.39	ME-SA	Ind-2001d
7	O/OMN/7/2001 (DQ164941)	OMN01-07	639	579	0	90.61	9.39	ME-SA	Ind-2001b
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	576	0	90.14	9.86	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	573	0	90.09	9.91	ME-SA	Ind-2001c
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/4/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 3-NCVD-F12--08	
Location: Thai Binh, Vietnam	Topotype: ME-SA
Date collected: 04/02/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-04.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/9/2012	VIT12-09	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/29/2011	VIT11-29	639	637	0	99.69	0.31	ME-SA	PanAsia
3	O/VIT/3/2012	VIT12-03	639	637	0	99.69	0.31	ME-SA	PanAsia
4	O/VIT/31/2011	VIT11-31	639	637	0	99.69	0.31	ME-SA	PanAsia
5	O/VIT/6/2012	VIT12-06	639	637	0	99.69	0.31	ME-SA	PanAsia
6	O/VIT/8/2012	VIT12-08	639	637	0	99.69	0.31	ME-SA	PanAsia
7	O/VIT/1/2012	VIT12-01	639	636	0	99.53	0.47	ME-SA	PanAsia
8	O/VIT/10/2012	VIT12-10	639	636	0	99.53	0.47	ME-SA	PanAsia
9	O/VIT/11/2012	VIT12-11	639	636	0	99.53	0.47	ME-SA	PanAsia
10	O/VIT/28/2011	VIT11-28	639	636	0	99.53	0.47	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	599	0	93.74	6.26	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	587	0	91.86	8.14	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	583	0	91.24	8.76	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	583	0	91.24	8.76	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	580	0	90.77	9.23	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	579	0	90.61	9.39	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	577	0	90.30	9.70	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	576	0	90.14	9.86	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	573	0	90.09	9.91	ME-SA	Ind-2001c
10	O/PAK/16/2010	PAK10-16	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>PUN-10</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/5/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 4-NCVD-F12-11	
Location: Thai Binh, Vietnam	Topotype: ME-SA
Date collected: 06/02/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-05.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

## Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/10/2012	VIT12-10	639	639	0	100.00	0.00	ME-SA	PanAsia
2	O/VIT/3/2012	VIT12-03	639	636	0	99.53	0.47	ME-SA	PanAsia
3	O/VIT/4/2012	VIT12-04	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/8/2012	VIT12-08	639	636	0	99.53	0.47	ME-SA	PanAsia
5	O/VIT/1/2012	VIT12-01	639	635	0	99.37	0.63	ME-SA	PanAsia
6	O/VIT/9/2012	VIT12-09	639	635	0	99.37	0.63	ME-SA	PanAsia
7	O/VIT/16/2011	VIT11-16	639	634	0	99.22	0.78	ME-SA	PanAsia
8	O/VIT/29/2011	VIT11-29	639	634	0	99.22	0.78	ME-SA	PanAsia
9	O/VIT/31/2011	VIT11-31	639	634	0	99.22	0.78	ME-SA	PanAsia
10	O/VIT/42/2011	VIT11-42	639	634	0	99.22	0.78	ME-SA	PanAsia

## Most Closely Related Reference Viruses

(see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](http://www.wrlfmd.org/fmd_genotyping/prototypes.htm))

Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	598	0	93.58	6.42	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	586	0	91.71	8.29	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	582	0	91.08	8.92	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	582	0	91.08	8.92	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	579	0	90.61	9.39	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	578	0	90.45	9.55	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	576	0	90.14	9.86	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	572	0	89.94	10.06	ME-SA	Ind-2001c
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/6/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 5-NCVD-F12-14	
Location: Ha Nam, Vietnam	Topotype: ME-SA
Date collected: 22/02/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-06.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/11/2012	VIT12-11	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/4/2012	VIT12-04	639	637	0	99.69	0.31	ME-SA	PanAsia
3	O/VIT/9/2012	VIT12-09	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/29/2011	VIT11-29	639	635	0	99.37	0.63	ME-SA	PanAsia
5	O/VIT/3/2012	VIT12-03	639	635	0	99.37	0.63	ME-SA	PanAsia
6	O/VIT/31/2011	VIT11-31	639	635	0	99.37	0.63	ME-SA	PanAsia
7	O/VIT/8/2012	VIT12-08	639	635	0	99.37	0.63	ME-SA	PanAsia
8	O/VIT/1/2012	VIT12-01	639	634	0	99.22	0.78	ME-SA	PanAsia
9	O/VIT/10/2012	VIT12-10	639	634	0	99.22	0.78	ME-SA	PanAsia
10	O/VIT/28/2011	VIT11-28	639	634	0	99.22	0.78	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	597	0	93.43	6.57	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	585	0	91.55	8.45	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	581	0	90.92	9.08	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	581	0	90.92	9.08	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	578	0	90.45	9.55	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	577	0	90.30	9.70	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	575	0	89.98	10.02	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	571	0	89.78	10.22	ME-SA	Ind-2001c
10	O/PAK/16/2010	PAK10-16	639	573	0	89.67	10.33	ME-SA	PanAsia-2 <sup>PUN-10</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/7/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 6-12-2800A	
Location: Quang Ninh, Vietnam	Topotype: ME-SA
Date collected: 14/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-07.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/1/2012	VIT12-01	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/9/2012	VIT12-09	639	636	0	99.53	0.47	ME-SA	PanAsia
3	O/VIT/12/2012	VIT12-12	639	635	0	99.37	0.63	ME-SA	PanAsia
4	O/VIT/16/2011	VIT11-16	639	635	0	99.37	0.63	ME-SA	PanAsia
5	O/VIT/29/2011	VIT11-29	639	635	0	99.37	0.63	ME-SA	PanAsia
6	O/VIT/3/2012	VIT12-03	639	635	0	99.37	0.63	ME-SA	PanAsia
7	O/VIT/31/2011	VIT11-31	639	635	0	99.37	0.63	ME-SA	PanAsia
8	O/VIT/4/2012	VIT12-04	639	635	0	99.37	0.63	ME-SA	PanAsia
9	O/VIT/42/2011	VIT11-42	639	635	0	99.37	0.63	ME-SA	PanAsia
10	O/VIT/5/2011	VIT11-05	639	635	0	99.37	0.63	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	597	0	93.43	6.57	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	587	0	91.86	8.14	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	582	0	91.08	8.92	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	582	0	91.08	8.92	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	579	0	90.61	9.39	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	579	0	90.61	9.39	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	577	0	90.30	9.70	ME-SA	Ind-2001d
8	O/UAE/4/2008	UAE08-04	636	573	0	90.09	9.91	ME-SA	Ind-2001c
9	O/TUR/257/2008* (FMDI)	TUR08-AD	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>TER-08</sup>
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/8/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 7-12-2800B	
Location: Thai Binh, Vietnam	Topotype: ME-SA
Date collected: 14/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-08.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/3/2012	VIT12-03	639	639	0	100.00	0.00	ME-SA	PanAsia
2	O/VIT/4/2012	VIT12-04	639	637	0	99.69	0.31	ME-SA	PanAsia
3	O/VIT/1/2012	VIT12-01	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/10/2012	VIT12-10	639	636	0	99.53	0.47	ME-SA	PanAsia
5	O/VIT/5/2012	VIT12-05	639	636	0	99.53	0.47	ME-SA	PanAsia
6	O/VIT/9/2012	VIT12-09	639	636	0	99.53	0.47	ME-SA	PanAsia
7	O/VIT/16/2011	VIT11-16	639	635	0	99.37	0.63	ME-SA	PanAsia
8	O/VIT/29/2011	VIT11-29	639	635	0	99.37	0.63	ME-SA	PanAsia
9	O/VIT/31/2011	VIT11-31	639	635	0	99.37	0.63	ME-SA	PanAsia
10	O/VIT/42/2011	VIT11-42	639	635	0	99.37	0.63	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	599	0	93.74	6.26	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	587	0	91.86	8.14	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	583	0	91.24	8.76	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	583	0	91.24	8.76	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	580	0	90.77	9.23	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/BHU/3/2009	BHU09-03	639	579	0	90.61	9.39	ME-SA	Ind-2001d
7	O/OMN/7/2001 (DQ164941)	OMN01-07	639	579	0	90.61	9.39	ME-SA	Ind-2001b
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	576	0	90.14	9.86	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	573	0	90.09	9.91	ME-SA	Ind-2001c
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/9/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 8-12-2800C	
Location: Thai Binh, Vietnam	Topotype: ME-SA
Date collected: 14/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-09.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/4/2012	VIT12-04	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/29/2011	VIT11-29	639	636	0	99.53	0.47	ME-SA	PanAsia
3	O/VIT/3/2012	VIT12-03	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/31/2011	VIT11-31	639	636	0	99.53	0.47	ME-SA	PanAsia
5	O/VIT/6/2012	VIT12-06	639	636	0	99.53	0.47	ME-SA	PanAsia
6	O/VIT/7/2012	VIT12-07	639	636	0	99.53	0.47	ME-SA	PanAsia
7	O/VIT/8/2012	VIT12-08	639	636	0	99.53	0.47	ME-SA	PanAsia
8	O/VIT/1/2012	VIT12-01	639	635	0	99.37	0.63	ME-SA	PanAsia
9	O/VIT/10/2012	VIT12-10	639	635	0	99.37	0.63	ME-SA	PanAsia
10	O/VIT/11/2012	VIT12-11	639	635	0	99.37	0.63	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	598	0	93.58	6.42	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	586	0	91.71	8.29	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	582	0	91.08	8.92	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	582	0	91.08	8.92	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	579	0	90.61	9.39	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	578	0	90.45	9.55	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	576	0	90.14	9.86	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	572	0	89.94	10.06	ME-SA	Ind-2001c
10	O/PAK/16/2010	PAK10-16	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>PUN-10</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/10/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 9-12-2800D	
Location: Thai Binh, Vietnam	Topotype: ME-SA
Date collected: 14/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-10.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/5/2012	VIT12-05	639	639	0	100.00	0.00	ME-SA	PanAsia
2	O/VIT/3/2012	VIT12-03	639	636	0	99.53	0.47	ME-SA	PanAsia
3	O/VIT/4/2012	VIT12-04	639	636	0	99.53	0.47	ME-SA	PanAsia
4	O/VIT/8/2012	VIT12-08	639	636	0	99.53	0.47	ME-SA	PanAsia
5	O/VIT/1/2012	VIT12-01	639	635	0	99.37	0.63	ME-SA	PanAsia
6	O/VIT/9/2012	VIT12-09	639	635	0	99.37	0.63	ME-SA	PanAsia
7	O/VIT/16/2011	VIT11-16	639	634	0	99.22	0.78	ME-SA	PanAsia
8	O/VIT/29/2011	VIT11-29	639	634	0	99.22	0.78	ME-SA	PanAsia
9	O/VIT/31/2011	VIT11-31	639	634	0	99.22	0.78	ME-SA	PanAsia
10	O/VIT/42/2011	VIT11-42	639	634	0	99.22	0.78	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	598	0	93.58	6.42	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	586	0	91.71	8.29	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	582	0	91.08	8.92	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	582	0	91.08	8.92	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	579	0	90.61	9.39	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	578	0	90.45	9.55	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	576	0	90.14	9.86	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	572	0	89.94	10.06	ME-SA	Ind-2001c
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/11/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 10-12-2800E	
Location: Ha Nam, Vietnam	Topotype: ME-SA
Date collected: 14/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-11.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/6/2012	VIT12-06	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/4/2012	VIT12-04	639	636	0	99.53	0.47	ME-SA	PanAsia
3	O/VIT/9/2012	VIT12-09	639	635	0	99.37	0.63	ME-SA	PanAsia
4	O/VIT/29/2011	VIT11-29	639	634	0	99.22	0.78	ME-SA	PanAsia
5	O/VIT/3/2012	VIT12-03	639	634	0	99.22	0.78	ME-SA	PanAsia
6	O/VIT/31/2011	VIT11-31	639	634	0	99.22	0.78	ME-SA	PanAsia
7	O/VIT/8/2012	VIT12-08	639	634	0	99.22	0.78	ME-SA	PanAsia
8	O/VIT/1/2012	VIT12-01	639	633	0	99.06	0.94	ME-SA	PanAsia
9	O/VIT/10/2012	VIT12-10	639	633	0	99.06	0.94	ME-SA	PanAsia
10	O/VIT/28/2011	VIT11-28	639	633	0	99.06	0.94	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	596	0	93.27	6.73	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	584	0	91.39	8.61	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	582	0	91.08	8.92	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	580	0	90.77	9.23	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	577	0	90.30	9.70	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	576	0	90.14	9.86	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	574	0	89.83	10.17	ME-SA	Ind-2001d
8	O/PAK/16/2010	PAK10-16	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>PUN-10</sup>
9	O/TUR/257/2008* (FMDI)	TUR08-AD	639	573	0	89.67	10.33	ME-SA	PanAsia-2 <sup>TER-08</sup>
10	O/UAE/4/2008	UAE08-04	636	570	0	89.62	10.38	ME-SA	Ind-2001c

nt, nucleotides

\*, not a WRLFMD reference number

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Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/12/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 13-12-3155A	
Location: Quang Ngai, Vietnam	Topotype: ME-SA
Date collected: 24/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-12.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/13/2012	VIT12-13	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/7/2012	VIT12-07	639	635	0	99.37	0.63	ME-SA	PanAsia
3	O/VIT/1/2012	VIT12-01	639	634	0	99.22	0.78	ME-SA	PanAsia
4	O/VIT/9/2012	VIT12-09	639	632	0	98.90	1.10	ME-SA	PanAsia
5	O/VIT/16/2011	VIT11-16	639	631	0	98.75	1.25	ME-SA	PanAsia
6	O/VIT/29/2011	VIT11-29	639	631	0	98.75	1.25	ME-SA	PanAsia
7	O/VIT/3/2012	VIT12-03	639	631	0	98.75	1.25	ME-SA	PanAsia
8	O/VIT/31/2011	VIT11-31	639	631	0	98.75	1.25	ME-SA	PanAsia
9	O/VIT/4/2012	VIT12-04	639	631	0	98.75	1.25	ME-SA	PanAsia
10	O/VIT/42/2011	VIT11-42	639	631	0	98.75	1.25	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	594	0	92.96	7.04	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	585	0	91.55	8.45	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	581	0	90.92	9.08	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	581	0	90.92	9.08	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	578	0	90.45	9.55	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	577	0	90.30	9.70	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	575	0	89.98	10.02	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	571	0	89.78	10.22	ME-SA	Ind-2001c
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	573	0	89.67	10.33	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

Assembled with Report Generator v4.1

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: O	Report date: 02/05/2012
WRLFMD Ref No: VIT/13/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00015	Checked by: D.P. King
Sender Ref: 14-12-3155B	
Location: Quang Ngai, Vietnam	Topotype: ME-SA
Date collected: 24/03/2012	Genotype/strain: PanAsia
Date received by WRLFMD: 28/03/2012	Sequence filename: VIT12-13.SEQ
Date received for sequencing: 24/04/2012	Date sequence last updated: 02/05/2012
Species: Pig	No. of Nt determined: 639
Material used: RS1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3271
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 35 days
	Sequencing time: 8 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/12/2012	VIT12-12	639	638	0	99.84	0.16	ME-SA	PanAsia
2	O/VIT/1/2012	VIT12-01	639	635	0	99.37	0.63	ME-SA	PanAsia
3	O/VIT/7/2012	VIT12-07	639	634	0	99.22	0.78	ME-SA	PanAsia
4	O/VIT/16/2011	VIT11-16	639	632	0	98.90	1.10	ME-SA	PanAsia
5	O/VIT/29/2011	VIT11-29	639	632	0	98.90	1.10	ME-SA	PanAsia
6	O/VIT/3/2012	VIT12-03	639	632	0	98.90	1.10	ME-SA	PanAsia
7	O/VIT/31/2011	VIT11-31	639	632	0	98.90	1.10	ME-SA	PanAsia
8	O/VIT/4/2012	VIT12-04	639	632	0	98.90	1.10	ME-SA	PanAsia
9	O/VIT/42/2011	VIT11-42	639	632	0	98.90	1.10	ME-SA	PanAsia
10	O/VIT/5/2011	VIT11-05	639	632	0	98.90	1.10	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	595	0	93.11	6.89	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	586	0	91.71	8.29	ME-SA	Ind-2001a
3	O/IRN/31/2009	IRN09-31	639	582	0	91.08	8.92	ME-SA	PanAsia-2 <sup>FAR-09</sup>
4	O/IRN/8/2005	IRN05-08	639	582	0	91.08	8.92	ME-SA	PanAsia-2
5	O/IRN/18/2010	IRN10-18	639	579	0	90.61	9.39	ME-SA	PanAsia-2 <sup>BAL-09</sup>
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	578	0	90.45	9.55	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	576	0	90.14	9.86	ME-SA	Ind-2001d
8	O/TUR/257/2008* (FMDI)	TUR08-AD	639	575	0	89.98	10.02	ME-SA	PanAsia-2 <sup>TER-08</sup>
9	O/UAE/4/2008	UAE08-04	636	572	0	89.94	10.06	ME-SA	Ind-2001c
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	574	0	89.83	10.17	ME-SA	PanAsia-2 <sup>SAN-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

Assembled with Report Generator v4.1

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# Report on FMDV O in Vietnam in 2012

Batch: WRLFMD/2012/00015

◆ indicates viruses in this batch

Software: MEGA 5.0

Analysis ----- Phylogeny Reconstruction  
 Scope ----- All Selected Taxa  
 Statistical Method ----- Neighbor-joining  
 Phylogeny Test  
 Test of Phylogeny ----- Bootstrap method  
 No. of Bootstrap Replications ----- 1000  
 Substitution Model  
 Substitutions Type ----- Nucleotide  
 Model/Method ----- Kimura 2-parameter model  
 Substitutions to Include ----- d: Transitions + Transversions  
 Rates and Patterns  
 Rates among Sites ----- Uniform rates  
 Pattern among Lineages ----- Same (Homogeneous)  
 Data Subset to Use  
 Gaps/Missing Data Treatment ----- Pairwise deletion  
 Codons Included ----- 1st+2nd+3rd+Non-Coding  
 No. of Sites : 642  
 No Of Bootstrap Reps = 1000  
 Only bootstrap values of 70% and above are shown

\*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 02 May 2012

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