

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

## Genotyping Report

Report Date for this Batch: 16 June 2014

FMDV type O

Country: Ethiopia

Period: 2004, 2012-2013

No. of samples: 33

BATCH: WRLFMD/2014/00013



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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: 16/06/2014
WRLFMD Ref No: ETH/9/2004	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 11a ETH 11/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 2003/2004	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH04-09.SEQ
Date received for sequencing: 19/05/2014	Date sequence last updated: 22/05/2014
Species: Bovine	No. of Nt determined: 639
Material used: BTy1 20/03/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 28 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/ETH/10/2004	ETH04-10	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/38/2005 (2003/4)(FJ798108)	ETH05-38	639	637	0	99.69	0.31	EA-3	unnamed
3	O/ETH/54/2006 (FJ798117)	ETH06-54	639	637	0	99.69	0.31	EA-3	unnamed
4	O/YEM/28/2004	YEM04-28	639	635	0	99.37	0.63	EA-3	unnamed
5	O/YEM/35/2004	YEM04-35	639	635	0	99.37	0.63	EA-3	unnamed
6	O/YEM/66/2004	YEM04-66	639	634	0	99.22	0.78	EA-3	unnamed
7	O/ETH/49/2005 (FJ798111)	ETH05-49	639	633	0	99.06	0.94	EA-3	unnamed
8	O/ETH/51/2005 (FJ798112)	ETH05-51	639	633	0	99.06	0.94	EA-3	unnamed
9	O/ETH/52/2005 (FJ798113)	ETH05-52	639	633	0	99.06	0.94	EA-3	unnamed
10	O/ETH/53/2005 (FJ798114)	ETH05-53	639	633	0	99.06	0.94	EA-3	unnamed
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/ETH/3/2004 (FJ798109)	ETH04-03	639	632	0	98.90	1.10	EA-3	unnamed
2	O/ETH/1/2007 (FJ798137)	ETH07-01	639	593	0	92.80	7.20	EA-3	unnamed
3	O/SUD/2/86 (DQ165075)	SUD86-02	639	561	0	87.79	12.21	EA-3	unnamed
4	O/UGA/3/2002 (DQ165077)	UGA02-03	639	550	0	86.07	13.93	EA-2	unnamed
5	O/KEN/5/2002 (DQ165073)	KEN02-05	639	549	0	85.92	14.08	EA-2	Unnamed
6	O/IND/53/79 (AF292107)	IND79A53	639	548	0	85.76	14.24	ME-SA	unnamed
7	O/UKG/35/2001 (AJ539141)	UKG01-35	639	547	0	85.60	14.40	ME-SA	PanAsia
8	O/K83/79* (AJ303511)	KEN79B83	638	546	1	85.58	14.42	EA-1	unnamed
9	O/KUW/3/97 (DQ164904)	KUW97-03	639	546	0	85.45	14.55	ME-SA	Ind-2001a
10	O/ETH/2/2006 (FJ798127)	ETH06-02	639	545	0	85.29	14.71	EA-3	unnamed

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: 16/06/2014
WRLFMD Ref No: ETH/10/2004	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 11b ETH 11/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 2003/2004	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH04-10.SEQ
Date received for sequencing: 19/05/2014	Date sequence last updated: 22/05/2014
Species: Bovine	No. of Nt determined: 639
Material used: BTy1 20/03/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 28 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/ETH/9/2004	ETH04-09	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/38/2005 (2003/4)(FJ798108)	ETH05-38	639	637	0	99.69	0.31	EA-3	unnamed
3	O/ETH/54/2006 (FJ798117)	ETH06-54	639	637	0	99.69	0.31	EA-3	unnamed
4	O/YEM/28/2004	YEM04-28	639	635	0	99.37	0.63	EA-3	unnamed
5	O/YEM/35/2004	YEM04-35	639	635	0	99.37	0.63	EA-3	unnamed
6	O/YEM/66/2004	YEM04-66	639	634	0	99.22	0.78	EA-3	unnamed
7	O/ETH/49/2005 (FJ798111)	ETH05-49	639	633	0	99.06	0.94	EA-3	unnamed
8	O/ETH/51/2005 (FJ798112)	ETH05-51	639	633	0	99.06	0.94	EA-3	unnamed
9	O/ETH/52/2005 (FJ798113)	ETH05-52	639	633	0	99.06	0.94	EA-3	unnamed
10	O/ETH/53/2005 (FJ798114)	ETH05-53	639	633	0	99.06	0.94	EA-3	unnamed
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/ETH/3/2004 (FJ798109)	ETH04-03	639	632	0	98.90	1.10	EA-3	unnamed
2	O/ETH/1/2007 (FJ798137)	ETH07-01	639	593	0	92.80	7.20	EA-3	unnamed
3	O/SUD/2/86 (DQ165075)	SUD86-02	639	561	0	87.79	12.21	EA-3	unnamed
4	O/UGA/3/2002 (DQ165077)	UGA02-03	639	550	0	86.07	13.93	EA-2	unnamed
5	O/KEN/5/2002 (DQ165073)	KEN02-05	639	549	0	85.92	14.08	EA-2	Unnamed
6	O/IND/53/79 (AF292107)	IND79A53	639	548	0	85.76	14.24	ME-SA	unnamed
7	O/UKG/35/2001 (AJ539141)	UKG01-35	639	547	0	85.60	14.40	ME-SA	PanAsia
8	O/K83/79* (AJ303511)	KEN79B83	638	546	1	85.58	14.42	EA-1	unnamed
9	O/KUW/3/97 (DQ164904)	KUW97-03	639	546	0	85.45	14.55	ME-SA	Ind-2001a
10	O/ETH/2/2006 (FJ798127)	ETH06-02	639	545	0	85.29	14.71	EA-3	unnamed

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 WRLFMD Ref No: ETH/22/2012 Batch No: WRLFMD/2014/00013 Sender Ref: 33a ETH 02/12 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 11/10/2012 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 05/06/2014 Species: Swine Material used: RS1 24/05/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH12-22.SEQ Date sequence last updated: 09/06/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 11 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/ETH/24/2012	ETH12-24	639	638	0	99.84	0.16	EA-3	unnamed
2	O/ETH/25/2012	ETH12-25	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/13/2011	ETH11-13	639	630	0	98.59	1.41	EA-3	unnamed
4	O/ETH/18/2011	ETH11-18	639	629	0	98.44	1.56	EA-3	unnamed
5	O/ETH/38/2011	ETH11-38	639	629	0	98.44	1.56	EA-3	unnamed
6	O/ETH/11/2011	ETH11-11	639	627	0	98.12	1.88	EA-3	unnamed
7	O/ETH/11/2012	ETH12-11	639	627	0	98.12	1.88	EA-3	unnamed
8	O/ETH/12/2012	ETH12-12	639	627	0	98.12	1.88	EA-3	unnamed
9	O/ETH/16/2012	ETH12-16	639	627	0	98.12	1.88	EA-3	unnamed
10	O/ETH/15/2012	ETH12-15	639	626	0	97.97	2.03	EA-3	unnamed
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/ETH/1/2007 (FJ798137)	ETH07-01	639	591	0	92.49	7.51	EA-3	unnamed
2	O/ETH/3/2004 (FJ798109)	ETH04-03	639	583	0	91.24	8.76	EA-3	unnamed
3	O/SUD/2/86 (DQ165075)	SUD86-02	639	559	0	87.48	12.52	EA-3	unnamed
4	O/IND/R2/75* (AF204276)	IND75--A	639	550	0	86.07	13.93	ME-SA	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	543	1	85.11	14.89	EA-1	unnamed
6	O/IND/53/79 (AF292107)	IND79A53	639	543	0	84.98	15.02	ME-SA	unnamed
7	O/UGA/5/96 (AJ296327)	UGA96-05	639	543	0	84.98	15.02	EA-1	unnamed
8	O/BHU/3/2009	BHU09-03	639	542	0	84.82	15.18	ME-SA	Ind-2001d
9	O/ETH/2/2006 (FJ798127)	ETH06-02	639	542	0	84.82	15.18	EA-3	unnamed
10	O/KEN/5/2002 (DQ165073)	KEN02-05	639	537	0	84.04	15.96	EA-2	Unnamed

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 WRLFMD Ref No: ETH/24/2012 Batch No: WRLFMD/2014/00013 Sender Ref: 35a ETH 04/12 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 11/10/2012 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 19/05/2014 Species: Swine Material used: RS1 25/03/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH12-24.SEQ Date sequence last updated: 22/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 28 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/ETH/25/2012	ETH12-25	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/22/2012	ETH12-22	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/13/2011	ETH11-13	639	631	0	98.75	1.25	EA-3	unnamed
4	O/ETH/18/2011	ETH11-18	639	630	0	98.59	1.41	EA-3	unnamed
5	O/ETH/38/2011	ETH11-38	639	630	0	98.59	1.41	EA-3	unnamed
6	O/ETH/11/2011	ETH11-11	639	628	0	98.28	1.72	EA-3	unnamed
7	O/ETH/11/2012	ETH12-11	639	628	0	98.28	1.72	EA-3	unnamed
8	O/ETH/12/2012	ETH12-12	639	628	0	98.28	1.72	EA-3	unnamed
9	O/ETH/16/2012	ETH12-16	639	628	0	98.28	1.72	EA-3	unnamed
10	O/ETH/15/2012	ETH12-15	639	627	0	98.12	1.88	EA-3	unnamed
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/ETH/1/2007 (FJ798137)	ETH07-01	639	592	0	92.64	7.36	EA-3	unnamed
2	O/ETH/3/2004 (FJ798109)	ETH04-03	639	584	0	91.39	8.61	EA-3	unnamed
3	O/SUD/2/86 (DQ165075)	SUD86-02	639	558	0	87.32	12.68	EA-3	unnamed
4	O/IND/R2/75* (AF204276)	IND75--A	639	549	0	85.92	14.08	ME-SA	unnamed
5	O/UGA/5/96 (AJ296327)	UGA96-05	639	544	0	85.13	14.87	EA-1	unnamed
6	O/K83/79* (AJ303511)	KEN79B83	638	542	1	84.95	15.05	EA-1	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/BHU/3/2009	BHU09-03	639	541	0	84.66	15.34	ME-SA	Ind-2001d
9	O/ETH/2/2006 (FJ798127)	ETH06-02	639	541	0	84.66	15.34	EA-3	unnamed
10	O/TAN/2/2004 (KF561679)	TAN04-02	639	538	0	84.19	15.81	EA-2	unnamed

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 WRLFMD Ref No: ETH/25/2012 Batch No: WRLFMD/2014/00013 Sender Ref: 35b ETH 04/12 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 11/10/2012 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 19/05/2014 Species: Swine Material used: BTy1 25/03/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH12-25.SEQ Date sequence last updated: 22/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 28 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/ETH/24/2012	ETH12-24	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/22/2012	ETH12-22	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/13/2011	ETH11-13	639	631	0	98.75	1.25	EA-3	unnamed
4	O/ETH/18/2011	ETH11-18	639	630	0	98.59	1.41	EA-3	unnamed
5	O/ETH/38/2011	ETH11-38	639	630	0	98.59	1.41	EA-3	unnamed
6	O/ETH/11/2011	ETH11-11	639	628	0	98.28	1.72	EA-3	unnamed
7	O/ETH/11/2012	ETH12-11	639	628	0	98.28	1.72	EA-3	unnamed
8	O/ETH/12/2012	ETH12-12	639	628	0	98.28	1.72	EA-3	unnamed
9	O/ETH/16/2012	ETH12-16	639	628	0	98.28	1.72	EA-3	unnamed
10	O/ETH/15/2012	ETH12-15	639	627	0	98.12	1.88	EA-3	unnamed
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/ETH/1/2007 (FJ798137)	ETH07-01	639	592	0	92.64	7.36	EA-3	unnamed
2	O/ETH/3/2004 (FJ798109)	ETH04-03	639	584	0	91.39	8.61	EA-3	unnamed
3	O/SUD/2/86 (DQ165075)	SUD86-02	639	558	0	87.32	12.68	EA-3	unnamed
4	O/IND/R2/75* (AF204276)	IND75--A	639	549	0	85.92	14.08	ME-SA	unnamed
5	O/UGA/5/96 (AJ296327)	UGA96-05	639	544	0	85.13	14.87	EA-1	unnamed
6	O/K83/79* (AJ303511)	KEN79B83	638	542	1	84.95	15.05	EA-1	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/BHU/3/2009	BHU09-03	639	541	0	84.66	15.34	ME-SA	Ind-2001d
9	O/ETH/2/2006 (FJ798127)	ETH06-02	639	541	0	84.66	15.34	EA-3	unnamed
10	O/TAN/2/2004 (KF561679)	TAN04-02	639	538	0	84.19	15.81	EA-2	unnamed

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 WRLFMD Ref No: ETH/8/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 3a ETH 03/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 11/10/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 09/04/2014 Species: Bovine Material used: BTy1 01/04/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-4 Genotype/strain: unnamed Sequence filename: ETH13-08.SEQ Date sequence last updated: 16/04/2014 No. of Nt determined: 642 No. of ambiguities: 0 Gene length: 642 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 68 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/ETH/9/2013	ETH13-09	642	642	0	100.00	0.00	EA-4	unnamed
2	O/ETH/12/2013	ETH13-12	642	636	0	99.07	0.93	EA-4	unnamed
3	O/ETH/13/2013	ETH13-13	642	636	0	99.07	0.93	EA-4	unnamed
4	O/ETH/14/2013	ETH13-14	642	636	0	99.07	0.93	EA-4	unnamed
5	O/ETH/15/2013	ETH13-15	642	636	0	99.07	0.93	EA-4	unnamed
6	O/ETH/4/2013	ETH13-04	642	635	0	98.91	1.09	EA-4	unnamed
7	O/KEN/100/2010 (KF135281)	KEN10100	642	608	0	94.70	5.30	EA-4	unnamed
8	O/UGA/9/98 (HM211072)	UGA98-09	642	575	0	89.56	10.44	EA-4	unnamed
9	O/ETH/59/2005 (FJ798142)	ETH05-59	642	574	0	89.41	10.59	EA-4	unnamed
10	O/ETH/60/2005 (FJ798143)	ETH05-60	642	574	0	89.41	10.59	EA-4	unnamed
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/ETH/58/2005 (FJ798141)	ETH05-58	642	573	0	89.25	10.75	EA-4	unnamed
2	O/UGA/17/98 (HM211075)	UGA98-17	642	572	0	89.10	10.90	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	551	0	86.23	13.77	EA-3	unnamed
4	O/SUD/2/86 (DQ165075)	SUD86-02	639	547	0	85.60	14.40	EA-3	unnamed
5	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	543	0	84.98	15.02	EA-2	Unnamed
7	O/ETH/2/2006 (FJ798127)	ETH06-02	639	541	0	84.66	15.34	EA-3	unnamed
8	O/IND/R2/75* (AF204276)	IND75--A	639	541	0	84.66	15.34	ME-SA	unnamed
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	541	0	84.66	15.34	ME-SA	PanAsia
10	O/K83/79* (AJ303511)	KEN79B83	638	538	1	84.33	15.67	EA-1	unnamed

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 WRLFMD Ref No: ETH/9/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 3b ETH 03/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 11/10/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 09/04/2014 Species: Bovine Material used: BTy1 01/04/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-4 Genotype/strain: unnamed Sequence filename: ETH13-09.SEQ Date sequence last updated: 24/04/2014 No. of Nt determined: 642 No. of ambiguities: 0 Gene length: 642 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 68 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/ETH/8/2013	ETH13-08	642	642	0	100.00	0.00	EA-4	unnamed
2	O/ETH/12/2013	ETH13-12	642	636	0	99.07	0.93	EA-4	unnamed
3	O/ETH/13/2013	ETH13-13	642	636	0	99.07	0.93	EA-4	unnamed
4	O/ETH/14/2013	ETH13-14	642	636	0	99.07	0.93	EA-4	unnamed
5	O/ETH/15/2013	ETH13-15	642	636	0	99.07	0.93	EA-4	unnamed
6	O/ETH/4/2013	ETH13-04	642	635	0	98.91	1.09	EA-4	unnamed
7	O/KEN/100/2010 (KF135281)	KEN10100	642	608	0	94.70	5.30	EA-4	unnamed
8	O/UGA/9/98 (HM211072)	UGA98-09	642	575	0	89.56	10.44	EA-4	unnamed
9	O/ETH/59/2005 (FJ798142)	ETH05-59	642	574	0	89.41	10.59	EA-4	unnamed
10	O/ETH/60/2005 (FJ798143)	ETH05-60	642	574	0	89.41	10.59	EA-4	unnamed
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/ETH/58/2005 (FJ798141)	ETH05-58	642	573	0	89.25	10.75	EA-4	unnamed
2	O/UGA/17/98 (HM211075)	UGA98-17	642	572	0	89.10	10.90	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	551	0	86.23	13.77	EA-3	unnamed
4	O/SUD/2/86 (DQ165075)	SUD86-02	639	547	0	85.60	14.40	EA-3	unnamed
5	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	543	0	84.98	15.02	EA-2	Unnamed
7	O/ETH/2/2006 (FJ798127)	ETH06-02	639	541	0	84.66	15.34	EA-3	unnamed
8	O/IND/R2/75* (AF204276)	IND75--A	639	541	0	84.66	15.34	ME-SA	unnamed
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	541	0	84.66	15.34	ME-SA	PanAsia
10	O/K83/79* (AJ303511)	KEN79B83	638	538	1	84.33	15.67	EA-1	unnamed

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 WRLFMD Ref No: ETH/12/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 6a ETH 06/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 17/10/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 09/04/2014 Species: Bovine Material used: BTy1 01/04/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska  Topotype: EA-4 Genotype/strain: unnamed Sequence filename: ETH13-12.SEQ Date sequence last updated: 24/04/2014 No. of Nt determined: 642 No. of ambiguities: 0 Gene length: 642 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 68 days
Comments:	

<b>Most Closely Related Viruses</b>									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/ETH/13/2013	ETH13-13	642	642	0	100.00	0.00	EA-4	unnamed
2	O/ETH/14/2013	ETH13-14	642	642	0	100.00	0.00	EA-4	unnamed
3	O/ETH/15/2013	ETH13-15	642	642	0	100.00	0.00	EA-4	unnamed
4	O/ETH/4/2013	ETH13-04	642	637	0	99.22	0.78	EA-4	unnamed
5	O/ETH/8/2013	ETH13-08	642	636	0	99.07	0.93	EA-4	unnamed
6	O/ETH/9/2013	ETH13-09	642	636	0	99.07	0.93	EA-4	unnamed
7	O/KEN/100/2010 (KF135281)	KEN10100	642	610	0	95.02	4.98	EA-4	unnamed
8	O/UGA/9/98 (HM211072)	UGA98-09	642	578	0	90.03	9.97	EA-4	unnamed
9	O/ETH/59/2005 (FJ798142)	ETH05-59	642	576	0	89.72	10.28	EA-4	unnamed
10	O/ETH/60/2005 (FJ798143)	ETH05-60	642	576	0	89.72	10.28	EA-4	unnamed
<b>Most Closely Related Reference Viruses</b>									
(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/ETH/58/2005 (FJ798141)	ETH05-58	642	575	0	89.56	10.44	EA-4	unnamed
2	O/UGA/17/98 (HM211075)	UGA98-17	642	575	0	89.56	10.44	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	551	0	86.23	13.77	EA-3	unnamed
4	O/SUD/2/86 (DQ165075)	SUD86-02	639	548	0	85.76	14.24	EA-3	unnamed
5	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	545	0	85.29	14.71	EA-2	Unnamed
7	O/ETH/2/2006 (FJ798127)	ETH06-02	639	543	0	84.98	15.02	EA-3	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	542	0	84.82	15.18	ME-SA	PanAsia
9	O/K83/79* (AJ303511)	KEN79B83	638	540	1	84.64	15.36	EA-1	unnamed
10	O/TAI/189/87* (TRRL)	TAI87-AC	639	540	0	84.51	15.49	SEA	unnamed

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 WRLFMD Ref No: ETH/13/2013 Batch No: WRLFMD/2014/00013 Sender Ref: ETH 06/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 17/10/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 09/04/2014 Species: Bovine Material used: BTy1 02/04/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-4 Genotype/strain: unnamed Sequence filename: ETH13-13.SEQ Date sequence last updated: 16/04/2014 No. of Nt determined: 642 No. of ambiguities: 0 Gene length: 642 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 68 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/ETH/12/2013	ETH13-12	642	642	0	100.00	0.00	EA-4	unnamed
2	O/ETH/14/2013	ETH13-14	642	642	0	100.00	0.00	EA-4	unnamed
3	O/ETH/15/2013	ETH13-15	642	642	0	100.00	0.00	EA-4	unnamed
4	O/ETH/4/2013	ETH13-04	642	637	0	99.22	0.78	EA-4	unnamed
5	O/ETH/8/2013	ETH13-08	642	636	0	99.07	0.93	EA-4	unnamed
6	O/ETH/9/2013	ETH13-09	642	636	0	99.07	0.93	EA-4	unnamed
7	O/KEN/100/2010 (KF135281)	KEN10100	642	610	0	95.02	4.98	EA-4	unnamed
8	O/UGA/9/98 (HM211072)	UGA98-09	642	578	0	90.03	9.97	EA-4	unnamed
9	O/ETH/59/2005 (FJ798142)	ETH05-59	642	576	0	89.72	10.28	EA-4	unnamed
10	O/ETH/60/2005 (FJ798143)	ETH05-60	642	576	0	89.72	10.28	EA-4	unnamed
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/ETH/58/2005 (FJ798141)	ETH05-58	642	575	0	89.56	10.44	EA-4	unnamed
2	O/UGA/17/98 (HM211075)	UGA98-17	642	575	0	89.56	10.44	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	551	0	86.23	13.77	EA-3	unnamed
4	O/SUD/2/86 (DQ165075)	SUD86-02	639	548	0	85.76	14.24	EA-3	unnamed
5	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	545	0	85.29	14.71	EA-2	Unnamed
7	O/ETH/2/2006 (FJ798127)	ETH06-02	639	543	0	84.98	15.02	EA-3	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	542	0	84.82	15.18	ME-SA	PanAsia
9	O/K83/79* (AJ303511)	KEN79B83	638	540	1	84.64	15.36	EA-1	unnamed
10	O/TAI/189/87* (TRRL)	TAI87-AC	639	540	0	84.51	15.49	SEA	unnamed

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 WRLFMD Ref No: ETH/14/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 7a ETH 07/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 17/10/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 05/06/2014 Species: Bovine Material used: BTy1 20/05/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-4 Genotype/strain: unnamed Sequence filename: ETH13-14.SEQ Date sequence last updated: 09/06/2014 No. of Nt determined: 642 No. of ambiguities: 0 Gene length: 642 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 11 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/ETH/12/2013	ETH13-12	642	642	0	100.00	0.00	EA-4	unnamed
2	O/ETH/13/2013	ETH13-13	642	642	0	100.00	0.00	EA-4	unnamed
3	O/ETH/15/2013	ETH13-15	642	642	0	100.00	0.00	EA-4	unnamed
4	O/ETH/4/2013	ETH13-04	642	637	0	99.22	0.78	EA-4	unnamed
5	O/ETH/8/2013	ETH13-08	642	636	0	99.07	0.93	EA-4	unnamed
6	O/ETH/9/2013	ETH13-09	642	636	0	99.07	0.93	EA-4	unnamed
7	O/KEN/100/2010 (KF135281)	KEN10100	642	610	0	95.02	4.98	EA-4	unnamed
8	O/UGA/9/98 (HM211072)	UGA98-09	642	578	0	90.03	9.97	EA-4	unnamed
9	O/ETH/59/2005 (FJ798142)	ETH05-59	642	576	0	89.72	10.28	EA-4	unnamed
10	O/ETH/60/2005 (FJ798143)	ETH05-60	642	576	0	89.72	10.28	EA-4	unnamed
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/ETH/58/2005 (FJ798141)	ETH05-58	642	575	0	89.56	10.44	EA-4	unnamed
2	O/UGA/17/98 (HM211075)	UGA98-17	642	575	0	89.56	10.44	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	551	0	86.23	13.77	EA-3	unnamed
4	O/SUD/2/86 (DQ165075)	SUD86-02	639	548	0	85.76	14.24	EA-3	unnamed
5	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	545	0	85.29	14.71	EA-2	Unnamed
7	O/ETH/2/2006 (FJ798127)	ETH06-02	639	543	0	84.98	15.02	EA-3	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	542	0	84.82	15.18	ME-SA	PanAsia
9	O/K83/79* (AJ303511)	KEN79B83	638	540	1	84.64	15.36	EA-1	unnamed
10	O/TAI/189/87* (TRRL)	TAI87-AC	639	540	0	84.51	15.49	SEA	unnamed

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 WRLFMD Ref No: ETH/15/2013 Batch No: WRLFMD/2014/00013 Sender Ref: ETH 07/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 17/10/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 05/06/2014 Species: Bovine Material used: BTy1 20/05/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-4 Genotype/strain: unnamed Sequence filename: ETH13-15.SEQ Date sequence last updated: 11/06/2014 No. of Nt determined: 642 No. of ambiguities: 0 Gene length: 642 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 11 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/ETH/12/2013	ETH13-12	642	642	0	100.00	0.00	EA-4	unnamed
2	O/ETH/13/2013	ETH13-13	642	642	0	100.00	0.00	EA-4	unnamed
3	O/ETH/14/2013	ETH13-14	642	642	0	100.00	0.00	EA-4	unnamed
4	O/ETH/4/2013	ETH13-04	642	637	0	99.22	0.78	EA-4	unnamed
5	O/ETH/8/2013	ETH13-08	642	636	0	99.07	0.93	EA-4	unnamed
6	O/ETH/9/2013	ETH13-09	642	636	0	99.07	0.93	EA-4	unnamed
7	O/KEN/100/2010 (KF135281)	KEN10100	642	610	0	95.02	4.98	EA-4	unnamed
8	O/UGA/9/98 (HM211072)	UGA98-09	642	578	0	90.03	9.97	EA-4	unnamed
9	O/ETH/59/2005 (FJ798142)	ETH05-59	642	576	0	89.72	10.28	EA-4	unnamed
10	O/ETH/60/2005 (FJ798143)	ETH05-60	642	576	0	89.72	10.28	EA-4	unnamed
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/ETH/58/2005 (FJ798141)	ETH05-58	642	575	0	89.56	10.44	EA-4	unnamed
2	O/UGA/17/98 (HM211075)	UGA98-17	642	575	0	89.56	10.44	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	551	0	86.23	13.77	EA-3	unnamed
4	O/SUD/2/86 (DQ165075)	SUD86-02	639	548	0	85.76	14.24	EA-3	unnamed
5	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
6	O/KEN/5/2002 (DQ165073)	KEN02-05	639	545	0	85.29	14.71	EA-2	Unnamed
7	O/ETH/2/2006 (FJ798127)	ETH06-02	639	543	0	84.98	15.02	EA-3	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	542	0	84.82	15.18	ME-SA	PanAsia
9	O/K83/79* (AJ303511)	KEN79B83	638	540	1	84.64	15.36	EA-1	unnamed
10	O/TAI/189/87* (TRRL)	TAI87-AC	639	540	0	84.51	15.49	SEA	unnamed

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 WRLFMD Ref No: ETH/21/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 8a ETH 08/13 Location: Debre Berhan, North Shewa, Amhara, Ethiopia Date collected: 12/11/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 11/04/2014 Species: Bovine Material used: RS1 08/04/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH13-21.SEQ Date sequence last updated: 24/04/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 66 days
Comments:	

<b>Most Closely Related Viruses</b>									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/ETH/22/2013	ETH13-22	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/23/2013	ETH13-23	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/38/2013	ETH13-38	639	634	0	99.22	0.78	EA-3	unnamed
4	O/ETH/42/2013	ETH13-42	639	634	0	99.22	0.78	EA-3	unnamed
5	O/ETH/43/2013	ETH13-43	639	634	0	99.22	0.78	EA-3	unnamed
6	O/ETH/45/2013	ETH13-45	639	634	0	99.22	0.78	EA-3	unnamed
7	O/ETH/46/2013	ETH13-46	639	634	0	99.22	0.78	EA-3	unnamed
8	O/ETH/32/2013	ETH13-32	639	633	0	99.06	0.94	EA-3	unnamed
9	O/ETH/33/2013	ETH13-33	639	633	0	99.06	0.94	EA-3	unnamed
10	O/ETH/34/2013	ETH13-34	639	633	0	99.06	0.94	EA-3	unnamed
<b>Most Closely Related Reference Viruses</b>									
(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/ETH/2/2006 (FJ798127)	ETH06-02	639	608	0	95.15	4.85	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	554	0	86.70	13.30	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	552	0	86.38	13.62	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	549	0	85.92	14.08	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	543	1	85.11	14.89	EA-1	unnamed
6	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
7	O/ETH/58/2005 (FJ798141)	ETH05-58	639	540	0	84.51	15.49	EA-4	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	538	0	84.19	15.81	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	536	0	83.88	16.12	ME-SA	Ind-2001d

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 WRLFMD Ref No: ETH/22/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 8b ETH 08/13 Location: Debre Berhan, North Shewa, Amhara, Ethiopia Date collected: 12/11/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 11/04/2014 Species: Bovine Material used: RS1 08/04/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH13-22.SEQ Date sequence last updated: 24/04/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 66 days
Comments:	

<b>Most Closely Related Viruses</b>									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/ETH/21/2013	ETH13-21	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/23/2013	ETH13-23	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/38/2013	ETH13-38	639	634	0	99.22	0.78	EA-3	unnamed
4	O/ETH/42/2013	ETH13-42	639	634	0	99.22	0.78	EA-3	unnamed
5	O/ETH/43/2013	ETH13-43	639	634	0	99.22	0.78	EA-3	unnamed
6	O/ETH/45/2013	ETH13-45	639	634	0	99.22	0.78	EA-3	unnamed
7	O/ETH/46/2013	ETH13-46	639	634	0	99.22	0.78	EA-3	unnamed
8	O/ETH/32/2013	ETH13-32	639	633	0	99.06	0.94	EA-3	unnamed
9	O/ETH/33/2013	ETH13-33	639	633	0	99.06	0.94	EA-3	unnamed
10	O/ETH/34/2013	ETH13-34	639	633	0	99.06	0.94	EA-3	unnamed
<b>Most Closely Related Reference Viruses</b>									
(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/ETH/2/2006 (FJ798127)	ETH06-02	639	608	0	95.15	4.85	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	554	0	86.70	13.30	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	552	0	86.38	13.62	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	549	0	85.92	14.08	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	543	1	85.11	14.89	EA-1	unnamed
6	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
7	O/ETH/58/2005 (FJ798141)	ETH05-58	639	540	0	84.51	15.49	EA-4	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	538	0	84.19	15.81	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	536	0	83.88	16.12	ME-SA	Ind-2001d

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 WRLFMD Ref No: ETH/23/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 9a ETH 09/13 Location: Debre Berhan, North Shewa, Amhara, Ethiopia Date collected: 12/11/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 09/06/2014 Species: Bovine Material used: BTy1 03/06/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH13-23.SEQ Date sequence last updated: 11/06/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 7 days
Comments:	

<b>Most Closely Related Viruses</b>									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/ETH/21/2013	ETH13-21	639	638	0	99.84	0.16	EA-3	unnamed
2	O/ETH/22/2013	ETH13-22	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/38/2013	ETH13-38	639	635	0	99.37	0.63	EA-3	unnamed
4	O/ETH/42/2013	ETH13-42	639	635	0	99.37	0.63	EA-3	unnamed
5	O/ETH/43/2013	ETH13-43	639	635	0	99.37	0.63	EA-3	unnamed
6	O/ETH/45/2013	ETH13-45	639	635	0	99.37	0.63	EA-3	unnamed
7	O/ETH/46/2013	ETH13-46	639	635	0	99.37	0.63	EA-3	unnamed
8	O/ETH/32/2013	ETH13-32	639	634	0	99.22	0.78	EA-3	unnamed
9	O/ETH/33/2013	ETH13-33	639	634	0	99.22	0.78	EA-3	unnamed
10	O/ETH/34/2013	ETH13-34	639	634	0	99.22	0.78	EA-3	unnamed
<b>Most Closely Related Reference Viruses</b>									
(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/ETH/2/2006 (FJ798127)	ETH06-02	639	609	0	95.31	4.69	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
7	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia
9	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	537	0	84.04	15.96	ME-SA	unnamed

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 WRLFMD Ref No: ETH/32/2013 Batch No: WRLFMD/2014/00013 Sender Ref: 17a ETH 17/13 Location: Debre Zeit (Bishoftu), East Shewa, Oromia, Ethiopia Date collected: 13/11/2013 Date received by WRLFMD: 27/02/2014 Date received for sequencing: 19/05/2014 Species: Swine Material used: RS1 25/03/2014 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 16/06/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: EA-3 Genotype/strain: unnamed Sequence filename: ETH13-32.SEQ Date sequence last updated: 22/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3891 Min. no. of nt for comparison: 600 Total turn-around time: 109 days Sequencing time: 28 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/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/33/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 21a ETH 21/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-33.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 20/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/34/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: ETH 21/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-34.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS2 24/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/35/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 22a ETH 22/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-35.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 22/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/36/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 22b ETH 22/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-36.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 22/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/37/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: ETH 22/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-37.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 24/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/38/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 23a ETH 23/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-38.SEQ
Date received for sequencing: 02/05/2014	Date sequence last updated: 08/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 23/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 45 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/ETH/42/2013	ETH13-42	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/43/2013	ETH13-43	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/45/2013	ETH13-45	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/46/2013	ETH13-46	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/32/2013	ETH13-32	639	638	0	99.84	0.16	EA-3	unnamed
6	O/ETH/33/2013	ETH13-33	639	638	0	99.84	0.16	EA-3	unnamed
7	O/ETH/34/2013	ETH13-34	639	638	0	99.84	0.16	EA-3	unnamed
8	O/ETH/35/2013	ETH13-35	639	638	0	99.84	0.16	EA-3	unnamed
9	O/ETH/36/2013	ETH13-36	639	638	0	99.84	0.16	EA-3	unnamed
10	O/ETH/37/2013	ETH13-37	639	638	0	99.84	0.16	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	606	0	94.84	5.16	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	556	0	87.01	12.99	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	554	0	86.70	13.30	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	551	0	86.23	13.77	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	545	1	85.42	14.58	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	542	0	84.82	15.18	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia
9	O/BHU/3/2009	BHU09-03	639	538	0	84.19	15.81	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	538	0	84.19	15.81	ME-SA	unnamed

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: 16/06/2014
WRLFMD Ref No: ETH/39/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 23b ETH 23/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-39.SEQ
Date received for sequencing: 02/05/2014	Date sequence last updated: 08/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 24/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 45 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/40/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 24a ETH 24/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-40.SEQ
Date received for sequencing: 19/05/2014	Date sequence last updated: 22/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 25/03/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 28 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/41/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 25a ETH 25/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-41.SEQ
Date received for sequencing: 19/05/2014	Date sequence last updated: 22/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 25/03/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 28 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/42/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 26a ETH 26/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-42.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 22/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/38/2013	ETH13-38	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/43/2013	ETH13-43	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/45/2013	ETH13-45	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/46/2013	ETH13-46	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/32/2013	ETH13-32	639	638	0	99.84	0.16	EA-3	unnamed
6	O/ETH/33/2013	ETH13-33	639	638	0	99.84	0.16	EA-3	unnamed
7	O/ETH/34/2013	ETH13-34	639	638	0	99.84	0.16	EA-3	unnamed
8	O/ETH/35/2013	ETH13-35	639	638	0	99.84	0.16	EA-3	unnamed
9	O/ETH/36/2013	ETH13-36	639	638	0	99.84	0.16	EA-3	unnamed
10	O/ETH/37/2013	ETH13-37	639	638	0	99.84	0.16	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	606	0	94.84	5.16	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	556	0	87.01	12.99	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	554	0	86.70	13.30	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	551	0	86.23	13.77	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	545	1	85.42	14.58	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	542	0	84.82	15.18	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia
9	O/BHU/3/2009	BHU09-03	639	538	0	84.19	15.81	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	538	0	84.19	15.81	ME-SA	unnamed

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: 16/06/2014
WRLFMD Ref No: ETH/43/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 26b ETH 26/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-43.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 22/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/38/2013	ETH13-38	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/42/2013	ETH13-42	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/45/2013	ETH13-45	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/46/2013	ETH13-46	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/32/2013	ETH13-32	639	638	0	99.84	0.16	EA-3	unnamed
6	O/ETH/33/2013	ETH13-33	639	638	0	99.84	0.16	EA-3	unnamed
7	O/ETH/34/2013	ETH13-34	639	638	0	99.84	0.16	EA-3	unnamed
8	O/ETH/35/2013	ETH13-35	639	638	0	99.84	0.16	EA-3	unnamed
9	O/ETH/36/2013	ETH13-36	639	638	0	99.84	0.16	EA-3	unnamed
10	O/ETH/37/2013	ETH13-37	639	638	0	99.84	0.16	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	606	0	94.84	5.16	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	556	0	87.01	12.99	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	554	0	86.70	13.30	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	551	0	86.23	13.77	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	545	1	85.42	14.58	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	542	0	84.82	15.18	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia
9	O/BHU/3/2009	BHU09-03	639	538	0	84.19	15.81	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	538	0	84.19	15.81	ME-SA	unnamed

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: 16/06/2014
WRLFMD Ref No: ETH/44/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: ETH 26/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-44.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 25/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/48/2013	ETH13-48	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/45/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 27a ETH 27/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-45.SEQ
Date received for sequencing: 02/05/2014	Date sequence last updated: 08/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 23/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 45 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/ETH/38/2013	ETH13-38	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/42/2013	ETH13-42	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/43/2013	ETH13-43	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/46/2013	ETH13-46	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/32/2013	ETH13-32	639	638	0	99.84	0.16	EA-3	unnamed
6	O/ETH/33/2013	ETH13-33	639	638	0	99.84	0.16	EA-3	unnamed
7	O/ETH/34/2013	ETH13-34	639	638	0	99.84	0.16	EA-3	unnamed
8	O/ETH/35/2013	ETH13-35	639	638	0	99.84	0.16	EA-3	unnamed
9	O/ETH/36/2013	ETH13-36	639	638	0	99.84	0.16	EA-3	unnamed
10	O/ETH/37/2013	ETH13-37	639	638	0	99.84	0.16	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	606	0	94.84	5.16	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	556	0	87.01	12.99	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	554	0	86.70	13.30	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	551	0	86.23	13.77	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	545	1	85.42	14.58	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	542	0	84.82	15.18	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia
9	O/BHU/3/2009	BHU09-03	639	538	0	84.19	15.81	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	538	0	84.19	15.81	ME-SA	unnamed

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: 16/06/2014
WRLFMD Ref No: ETH/46/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 27b ETH 27/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-46.SEQ
Date received for sequencing: 02/05/2014	Date sequence last updated: 07/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 24/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 45 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/ETH/38/2013	ETH13-38	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/42/2013	ETH13-42	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/43/2013	ETH13-43	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/45/2013	ETH13-45	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/32/2013	ETH13-32	639	638	0	99.84	0.16	EA-3	unnamed
6	O/ETH/33/2013	ETH13-33	639	638	0	99.84	0.16	EA-3	unnamed
7	O/ETH/34/2013	ETH13-34	639	638	0	99.84	0.16	EA-3	unnamed
8	O/ETH/35/2013	ETH13-35	639	638	0	99.84	0.16	EA-3	unnamed
9	O/ETH/36/2013	ETH13-36	639	638	0	99.84	0.16	EA-3	unnamed
10	O/ETH/37/2013	ETH13-37	639	638	0	99.84	0.16	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	606	0	94.84	5.16	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	556	0	87.01	12.99	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	554	0	86.70	13.30	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	551	0	86.23	13.77	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	545	1	85.42	14.58	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	542	0	84.82	15.18	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	542	0	84.82	15.18	ME-SA	unnamed
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia
9	O/BHU/3/2009	BHU09-03	639	538	0	84.19	15.81	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	538	0	84.19	15.81	ME-SA	unnamed

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: 16/06/2014
WRLFMD Ref No: ETH/47/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 28a ETH 28/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-47.SEQ
Date received for sequencing: 05/06/2014	Date sequence last updated: 10/06/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 23/05/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 11 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/ETH/32/2013	ETH13-32	639	638	0	99.84	0.16	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	638	0	99.84	0.16	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	638	0	99.84	0.16	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	638	0	99.84	0.16	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	638	0	99.84	0.16	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	638	0	99.84	0.16	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	638	0	99.84	0.16	EA-3	unnamed
8	O/ETH/40/2013	ETH13-40	639	638	0	99.84	0.16	EA-3	unnamed
9	O/ETH/41/2013	ETH13-41	639	638	0	99.84	0.16	EA-3	unnamed
10	O/ETH/44/2013	ETH13-44	639	638	0	99.84	0.16	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	606	0	94.84	5.16	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	554	0	86.70	13.30	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	552	0	86.38	13.62	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	549	0	85.92	14.08	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	543	1	85.11	14.89	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	540	0	84.51	15.49	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	540	0	84.51	15.49	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	538	0	84.19	15.81	ME-SA	Ind-2001a
9	O/IRN/31/2009	IRN09-31	639	537	0	84.04	15.96	ME-SA	PanAsia-2 <sup>FAR-09</sup>
10	O/UKG/35/2001 (AJ539141)	UKG01-35	639	537	0	84.04	15.96	ME-SA	PanAsia

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: 16/06/2014
WRLFMD Ref No: ETH/48/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 29a ETH 29/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-48.SEQ
Date received for sequencing: 02/05/2014	Date sequence last updated: 07/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 23/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 45 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/49/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 29b ETH 29/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-49.SEQ
Date received for sequencing: 02/05/2014	Date sequence last updated: 07/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 24/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 45 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

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: 16/06/2014
WRLFMD Ref No: ETH/50/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00013	Checked by: K. Bachanek-Bankowska
Sender Ref: 30a ETH 30/13	
Location: Addis Ababa, Ethiopia	Topotype: EA-3
Date collected: 14/11/2013	Genotype/strain: unnamed
Date received by WRLFMD: 27/02/2014	Sequence filename: ETH13-50.SEQ
Date received for sequencing: 19/05/2014	Date sequence last updated: 22/05/2014
Species: Swine	No. of Nt determined: 639
Material used: RS1 25/03/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 3891
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 109 days
	Sequencing time: 28 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/ETH/32/2013	ETH13-32	639	639	0	100.00	0.00	EA-3	unnamed
2	O/ETH/33/2013	ETH13-33	639	639	0	100.00	0.00	EA-3	unnamed
3	O/ETH/34/2013	ETH13-34	639	639	0	100.00	0.00	EA-3	unnamed
4	O/ETH/35/2013	ETH13-35	639	639	0	100.00	0.00	EA-3	unnamed
5	O/ETH/36/2013	ETH13-36	639	639	0	100.00	0.00	EA-3	unnamed
6	O/ETH/37/2013	ETH13-37	639	639	0	100.00	0.00	EA-3	unnamed
7	O/ETH/39/2013	ETH13-39	639	639	0	100.00	0.00	EA-3	unnamed
8	O/ETH/40/2013	ETH13-40	639	639	0	100.00	0.00	EA-3	unnamed
9	O/ETH/41/2013	ETH13-41	639	639	0	100.00	0.00	EA-3	unnamed
10	O/ETH/44/2013	ETH13-44	639	639	0	100.00	0.00	EA-3	unnamed
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/ETH/2/2006 (FJ798127)	ETH06-02	639	607	0	94.99	5.01	EA-3	unnamed
2	O/SUD/2/86 (DQ165075)	SUD86-02	639	555	0	86.85	13.15	EA-3	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	553	0	86.54	13.46	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	550	0	86.07	13.93	EA-3	unnamed
5	O/K83/79* (AJ303511)	KEN79B83	638	544	1	85.27	14.73	EA-1	unnamed
6	O/ETH/58/2005 (FJ798141)	ETH05-58	639	541	0	84.66	15.34	EA-4	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed
8	O/KUW/3/97 (DQ164904)	KUW97-03	639	539	0	84.35	15.65	ME-SA	Ind-2001a
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	538	0	84.19	15.81	ME-SA	PanAsia
10	O/BHU/3/2009	BHU09-03	639	537	0	84.04	15.96	ME-SA	Ind-2001d

nt, nucleotides

\*, not a WRLFMD reference number

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# Report on FMDV O in Ethiopia in 2004 & 2012-2013

Batch: WRLFMD/2014/00013

◆ indicates viruses in this batch

Software: MEGA 6.06

Analysis

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 & K. Bachanek-Bankowska,  
16 June 2014

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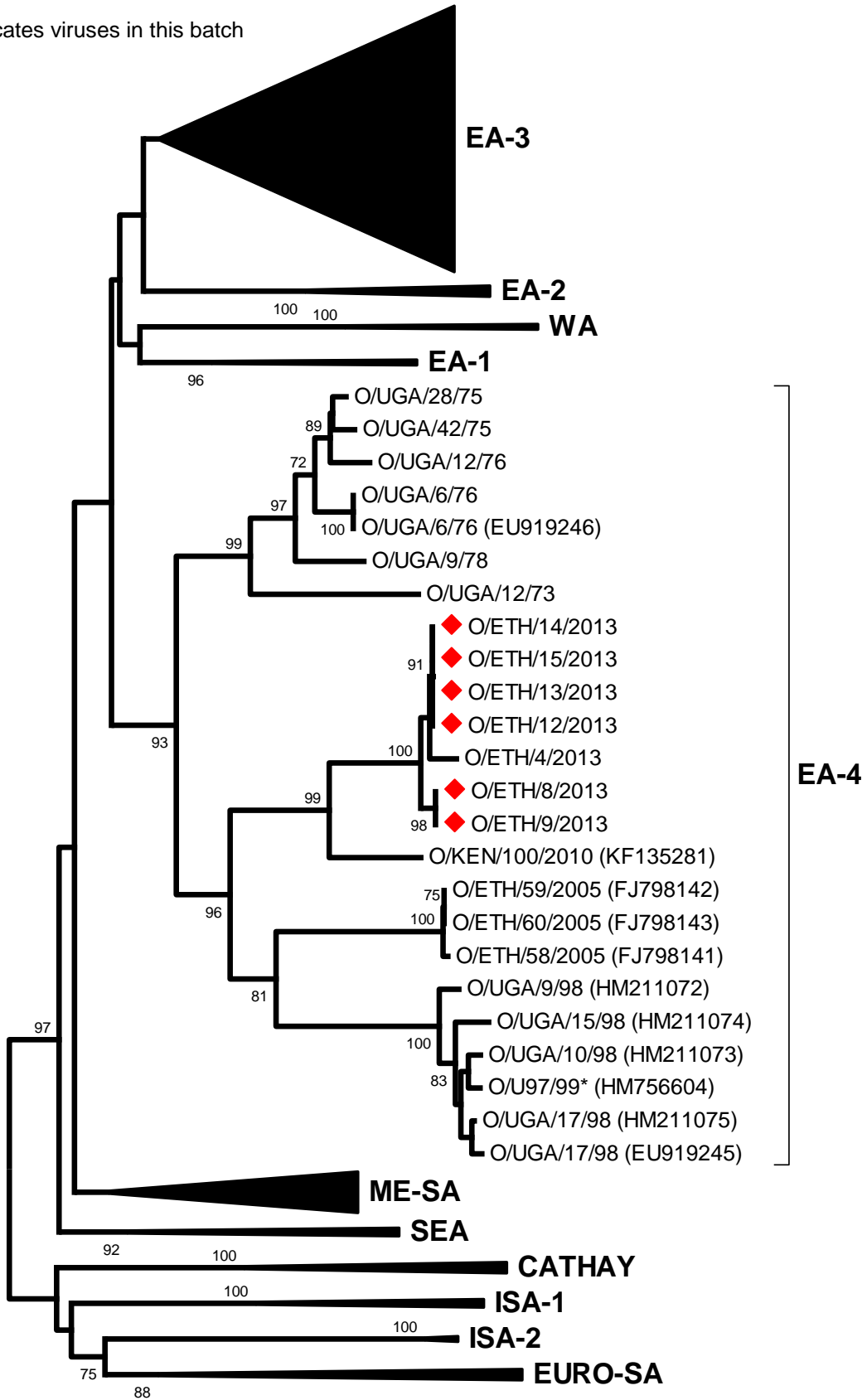


EA-3

# Report on FMDV O in Ethiopia in 2004 & 2012-2013

Batch: WRLFMD/2014/00013

◆ indicates viruses in this batch



0.02