## **Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to the Head of the World Reference Laboratory for FMD** (Non-QAU Form)

Serotype: O	Report date: 12/05/2004
WRL Ref No: SAU/1/2004	
Date collected: 03/03/2004	
Date received: 29/03/2004	Topotype: ME-SA
Species: Bovine	Genotype/strain: PanAsia
Material used: 10% epith. susp.	Sequence filename: SAU04-01.SEQ
Region sequenced: VP1	Date sequence last updated: 11/05/2004
RT-PCR primers: FMD-VP1UF/NK61	Total no. of comparisons: 1400
No. of Nt determined: 142	
No. of ambiguities: 0	

Gene length: 639

Comments: This sample was reported as NVD, although FMDV-specific RNA was detected by RT-PCR. Sequencing of a small fragment of the VP1 gene has given the following results.

Ten Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference		
1	O/ISR/4/2004	ISR04-04	142	141	0	99.30	0.70		
2	O/ISR/2/2004	ISR04-02	142	141	0	99.30	0.70		
3	O/ISR/3/2004	ISR04-03	142	141	0	99.30	0.70		
4	O/LEB/1/2003	LEB03-01	142	139	0	97.89	2.11		
5	O/TUR/6/2003	TUR03-06	134	131	2	97.76	2.24		
6	O/BHU/2/98	BHU98-02	120	116	2	96.67	3.33		
7	O/AFG/55/2003	AFG03-55	141	136	1	96.45	3.55		
8	O/BHU/1/98	BHU98-01	136	131	0	96.32	3.68		
9	O/VIT/7/2002	VIT02-07	136	131	0	96.32	3.68		
10	O/IRN/12/98	IRN98-12	121	116	0	95.87	4.13		

## **Relationships to Reference Virus Strains**

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference	
1	O/TAW/2/99	TAW99-02	142	136	0	95.77	4.23	
2	O/IND/R2/75*	IND75A	142	130	0	91.55	8.45	
3	O/IND/53/79	IND79A53	142	128	0	90.14	9.86	
4	O/MOR/1/91	MOR91-01	139	124	3	89.21	10.79	
5	O1/Manisa/TUR/69	TUR69E	142	126	0	88.73	11.27	
6	O/ISR/1/88	ISR88-01	139	123	3	88.49	11.51	
7	O/TAI/189/87*	TAI87-AC	142	122	0	85.92	14.08	
8	O/HKN/6/83	HKN83-06	142	114	0	80.28	19.72	
9	O/PHI/5/95	PHI95-05	142	112	0	78.87	21.13	
10	O1/BFS 1860/UK/67	UKG67A	142	110	0	77.46	22.54	
nt, nucleotides *, not a WRLFMD reference number								