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ERRATA 3

(includes Errata 1 dated August 2014, and Errata 2, dated May 2015)

Page 10, **Section 5.2.9.2.2, Example 2**, *Example title shall be replaced by the following:*

EXAMPLE 2 Corrected test concentration

Page 17, **Section 7.7, Equation (5)**, *the equation shall be replaced by the following:*

$$m_1 = 400 \left(\frac{V_3}{V_4} \right) - C_c \quad (5)$$

where

m_1 is the mass of water-soluble alkaline-earths as calcium, expressed in milligrams per kilogram;

V_3 is the volume EDTA used, expressed in millilitres;

V_4 is the volume of filtrate used, expressed in millilitres;

C_c is the calibration correction determined as per section 5.2.9.2, expressed in millilitres.

Page 21, Section 7.13.6, Table 3, the table shall be replaced with the following:

Table 3—Viscosity of water at various temperatures

Temperature θ °C	Viscosity η mPa·s	Temperature θ °F	Viscosity η mPa·s
15,0	1,137 5	59,0	1,137 5
15,5	1,122 7	60,0	1,121 1
16,0	1,108 2	61,0	1,105 0
16,5	1,094 0	62,0	1,089 3
17,0	1,080 0	63,0	1,073 9
17,5	1,066 4	64,0	1,058 9
18,0	1,053 0	65,0	1,044 2
18,5	1,039 9	66,0	1,029 8
19,0	1,027 0	67,0	1,015 8
19,5	1,014 4	68,0	1,002 0
20,0	1,002 0	69,0	0,988 5
20,5	0,989 9	70,0	0,975 3
21,0	0,978 0	71,0	0,962 4
21,5	0,966 3	72,0	0,949 8
22,0	0,954 8	73,0	0,937 4
22,5	0,943 6	74,0	0,925 3
23,0	0,932 5	75,0	0,913 4
23,5	0,921 7	76,0	0,901 8
24,0	0,911 1	77,0	0,890 4
24,5	0,900 6	78,0	0,879 2
25,0	0,890 4	79,0	0,868 3
25,5	0,880 3	80,0	0,857 6
26,0	0,870 5	81,0	0,847 0
26,5	0,860 7	82,0	0,836 7
27,0	0,851 2	83,0	0,826 6
27,5	0,841 9	84,0	0,816 7
28,0	0,832 7	85,0	0,807 0
28,5	0,823 6	86,0	0,797 4
29,0	0,814 7	87,0	0,788 1
29,5	0,806 0	88,0	0,778 9
30,0	0,797 4	89,0	0,769 9
30,5	0,789 0	90,0	0,761 0
31,0	0,780 7	91,0	0,752 3

Note Water viscosity values are calculated using Equation (11).

Page 27, **Section 8.7, Equation (13)**, the *equation shall be replaced by the following*:

$$m_1 = 400 \left(\frac{V_3}{V_4} \right) - C_c \quad (13)$$

where

m_1 is the mass of water-soluble alkaline-earths as calcium, expressed in milligrams per kilogram;

V_3 is the volume EDTA used, expressed in millilitres;

V_4 is the volume of filtrate used, expressed in millilitres;

C_c is the calibration correction determined as per section 5.2.9.2, expressed in millilitres.

Page 88, **Section 20.7, Equation (54)**, *Equation shall be replaced by the following*:

$$m_1 = 400 \left(\frac{V_3}{V_4} \right) - C_c \quad (54)$$

where

m_1 is the mass of water-soluble alkaline-earths as calcium, expressed in milligrams per kilogram;

V_3 is the volume EDTA used, expressed in millilitres;

V_4 is the volume of filtrate used, expressed in millilitres;

C_c is the calibration correction determined as per section 5.2.9.2, expressed in millilitres.

Page 89, **Section 20.9.3**, the 3rd sentence shall be replaced by the following:

Wash the material on the sieve with water controlled to 69 kPa ± 7 kPa (10 psi ± 1 psi) from a spray nozzle for 2 min ± 15 s.

Page 93 Section 20.13.6, Table 20, the table shall be replaced with the following:

Table 20—Viscosity of water at various temperatures

Temperature θ °C	Viscosity η mPa·s	Temperature θ °F	Viscosity η mPa·s
15,0	1,137 5	59,0	1,137 5
15,5	1,122 7	60,0	1,121 1
16,0	1,108 2	61,0	1,105 0
16,5	1,094 0	62,0	1,089 3
17,0	1,080 0	63,0	1,073 9
17,5	1,066 4	64,0	1,058 9
18,0	1,053 0	65,0	1,044 2
18,5	1,039 9	66,0	1,029 8
19,0	1,027 0	67,0	1,015 8
19,5	1,014 4	68,0	1,002 0
20,0	1,002 0	69,0	0,988 5
20,5	0,989 9	70,0	0,975 3
21,0	0,978 0	71,0	0,962 4
21,5	0,966 3	72,0	0,949 8
22,0	0,954 8	73,0	0,937 4
22,5	0,943 6	74,0	0,925 3
23,0	0,932 5	75,0	0,913 4
23,5	0,921 7	76,0	0,901 8
24,0	0,911 1	77,0	0,890 4
24,5	0,900 6	78,0	0,879 2
25,0	0,890 4	79,0	0,868 3
25,5	0,880 3	80,0	0,857 6
26,0	0,870 5	81,0	0,847 0
26,5	0,860 7	82,0	0,836 7
27,0	0,851 2	83,0	0,826 6
27,5	0,841 9	84,0	0,816 7
28,0	0,832 7	85,0	0,807 0
28,5	0,823 6	86,0	0,797 4
29,0	0,814 7	87,0	0,788 1
29,5	0,806 0	88,0	0,778 9
30,0	0,797 4	89,0	0,769 9
30,5	0,789 0	90,0	0,761 0
31,0	0,780 7	91,0	0,752 3

Note Water viscosity values are calculated using Equation (60).

Page 103, **Section C.2.1**, the example data sheet shall be replaced by the following:

Time <i>t</i> min	Temperature <i>θ</i> °C (°F)	Hydrometer reading <i>R</i>	Water viscosity <i>η</i> mPa·s	Effective depth <i>L</i> cm	Particle diameter <i>D_e</i> μm	% Finer <i>W</i>	% Finer <i>w_a</i>
10	26,0 (78,8)	1,028 0	0,870 5	8,9	8,5	42,9	
20	26,0 (78,8)	1,021 0	0,870 5	10,7	6,6	31,5	
30	26,0 (78,8)	1,017 0	0,870 5	11,8	5,6	25,0	
40	26,0 (78,8)	1,014 0	0,870 5	12,6	5,0	20,1	
							27,5

NOTE Water viscosity value is given by Table 3

Page 103, **Section C.2.3**, the second equation shall be replaced with the following:

$$D_e = 17,5 \sqrt{\frac{0,870\ 5 \times 10,7}{(4,30 - 1) \times 20}} = 6,6\ \mu\text{m}$$

Page 104, **Section C.2.4**, the definitions and equation shall be replaced with the following:

$$w_2 = 31,5$$

$$w_3 = 25,0$$

$$D_1 = 6,6$$

$$D_2 = 5,6$$

$$w_4 = \left[\left(\frac{31,5 - 25,0}{6,6 - 5,6} \right) \right] (6 - 5,6) + 25,0 = 27,5\ \%$$