TO DETERMINE MASS SUSCEPTIBILITY OF MYERS WOOD MW03 TRENCH A LINEAR SUSCEPTIBILITY SAMPLES

Calibration samples	Mass g	Bridge reading	Total susceptibility $k_T \times 10^{-8}$ m^3	Mass susceptibility $\chi \times 10^{-8}$ m^3 kg^{-1}
Manganese sulphate	50.00	62.0	4.06	81.2
High alumina cement	50.00	535	35.80	716
Test samples				
0 cm	24.41	223	14.86	609
10 cm	26.01	178	11.84	455
20 cm	28.93	261	17.41	602
30 cm	35.38	388	25.94	733
40 cm	36.68	412	27.55	751
50 cm	35.33	416.0	27.81	787
60 cm	32.27	406.0	27.14	841
70 cm	35.91	400.0	26.74	745
80 cm	30.75	132.0	8.76	285
90 cm	43.97	370	24.73	562
100 cm	33.39	300	20.03	600
110 cm	36.98	127	8.42	228
120 cm	44.14	53	3.47	79
130 cm	49.99	247	16.47	330
140 cm	48.36	134	8.89	184
150 cm	49.79	210	13.99	281
Mean	)			504
Median	)			581
Standard Deviation +/-	)			243

Chart data

Total sus.	Meter	Total sus.	Meter
0	0		
4.06	62.0	4.06	62.0
		35.80	535

Slope & constant values as calculated by data trendline:

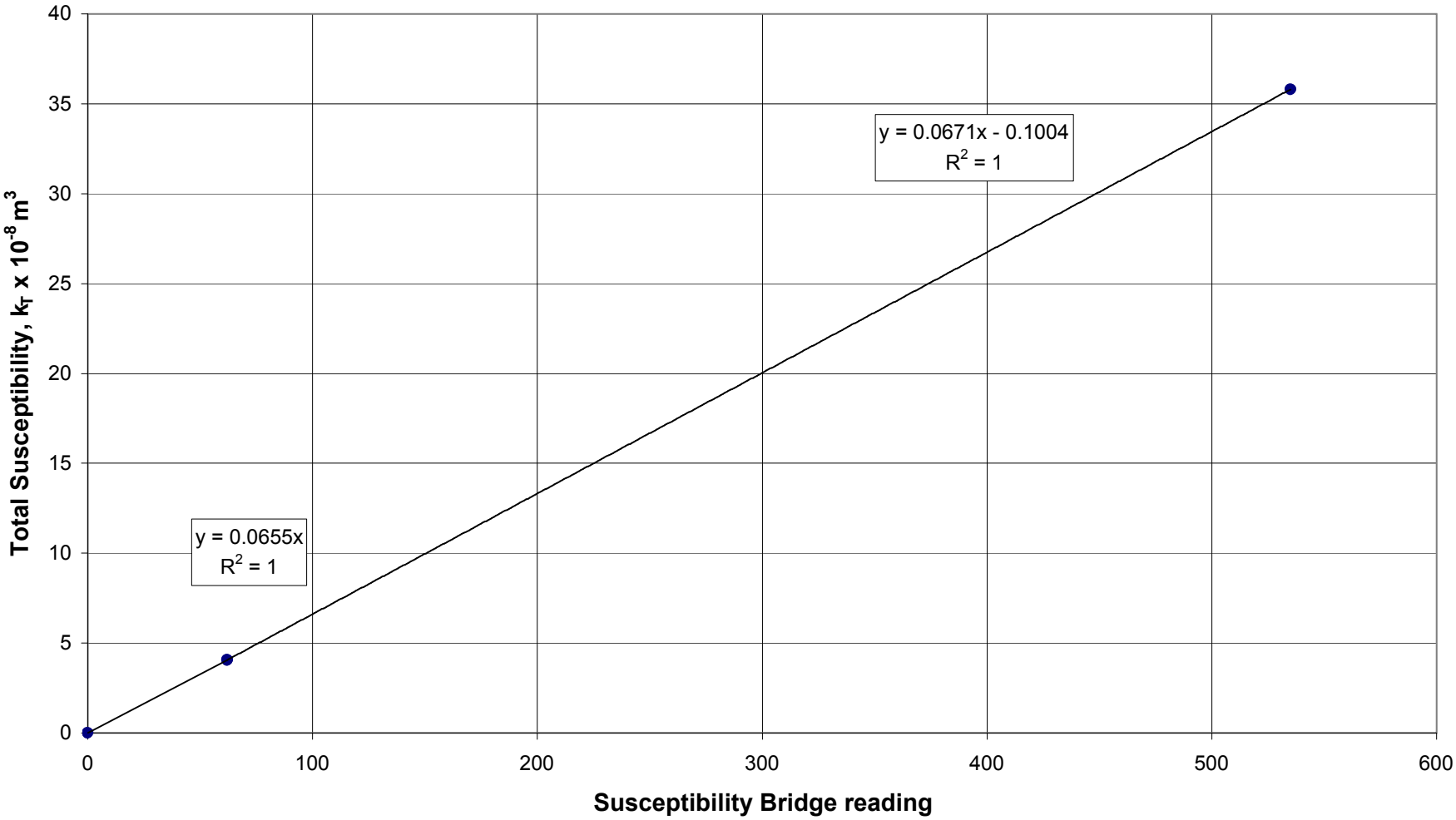
m	c	x	y
0.0655	0	62.0	4.0610
0.0671	-0.1004	62.0	4.0598
0.0671	-0.1004	535	35.7981

Slope & constant values as calculated from raw data:

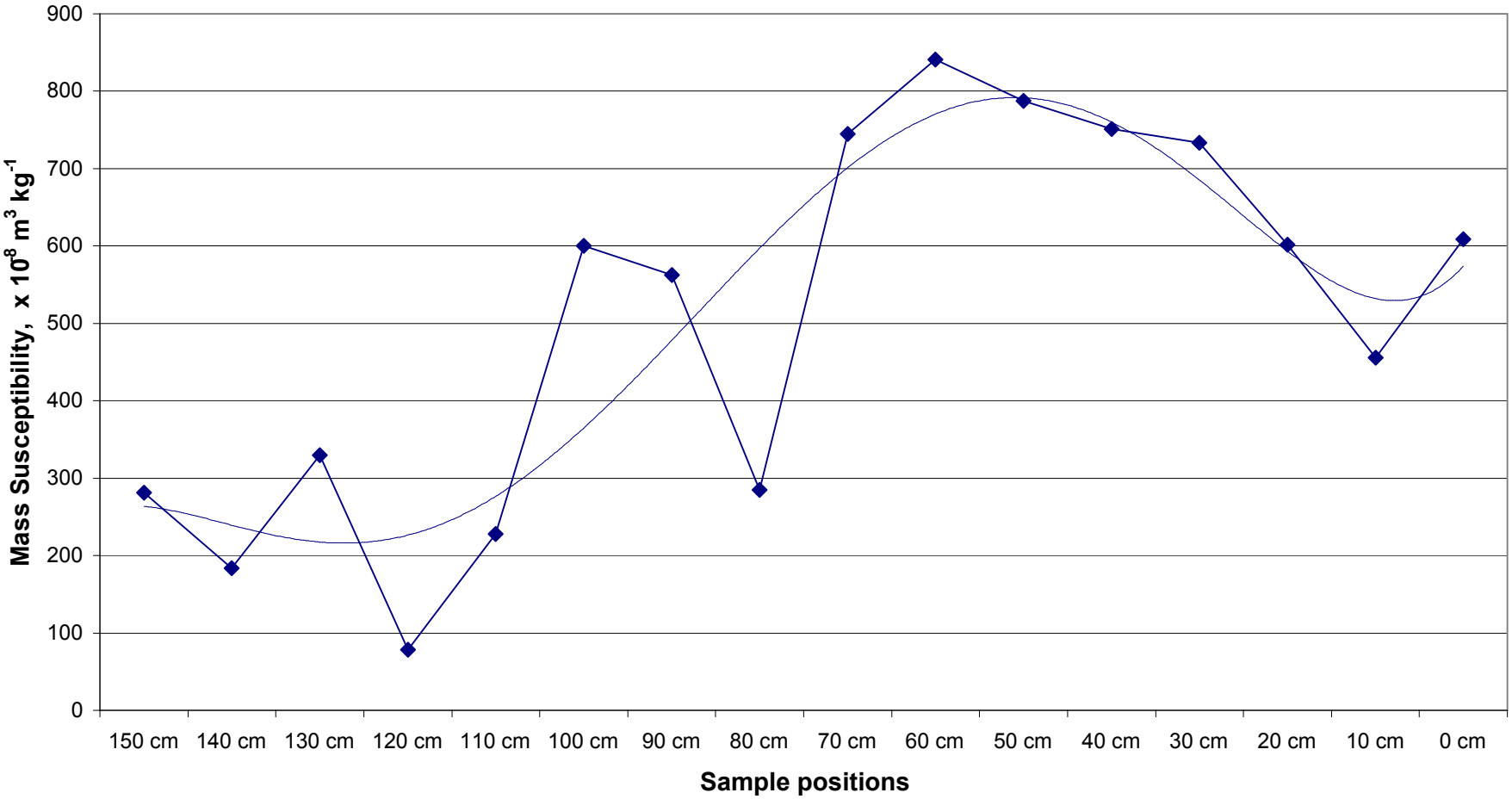
m	c	x	y
0.06548	0	62.0	4.06
0.06710	-0.100423	62.0	4.06
0.06710	-0.100423	535	35.80

Above slope & constant values used in formula to calculate total susceptibility from the corresponding meter reading.

MW03 TRENCH A LINEAR SAMPLES
SUSCEPTIBILITY CALIBRATION CURVE



MW03 TRENCH A LINEAR SAMPLING SUSCEPTIBILITY VARIATION



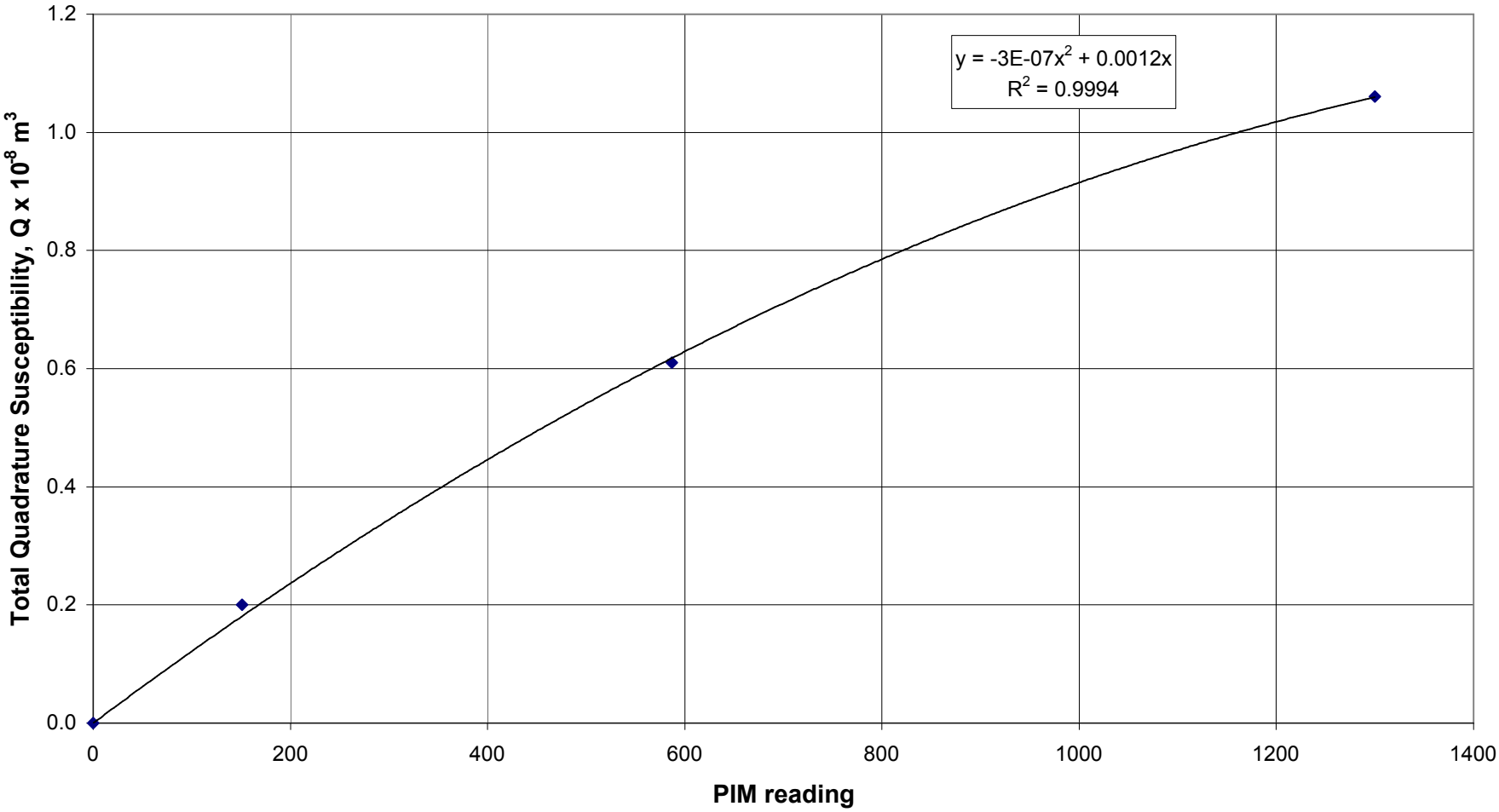
TO DETERMINE MASS QUADRATURE SUSCEPTIBILITY AND MAGNETIC VISCOSITY OF MYERS WOOD MW03 TRENCH A LINEAR SUSCEPTIBILITY SAMPLES

Calibration samples	Mass g	PIM reading	Total quad. sus. Q x 10^{-8} m^3	Mass quad. sus. q x 10^{-8} m^3 kg^{-1}	Magnetic viscosity %
High alumina cement	50.00	151	0.20	4.0	
BS87	50.00	587	0.61	12.2	
BS62	40.64	1300	1.06	26.1	
Test samples					
0 cm	24.41	1335	1.07	44	7.2
10 cm	26.01	1020	0.91	35	7.7
20 cm	28.93	1300	1.05	36	6.0
30 cm	35.38	1820	1.19	34	4.6
40 cm	36.68	1930	1.20	33	4.4
50 cm	35.33	1940	1.20	34	4.3
60 cm	32.27	1930	1.20	37	4.4
70 cm	35.91	1880	1.20	33	4.5
80 cm	30.75	600	0.61	20	7.0
90 cm	43.97	1620	1.16	26	4.7
100 cm	33.39	1430	1.10	33	5.5
110 cm	36.98	536	0.56	15	6.6
120 cm	44.14	218	0.25	6	7.1
130 cm	49.99	970	0.88	18	5.4
140 cm	48.36	586	0.60	12	6.8
150 cm	49.79	850	0.80	16	5.7
Mean)				27	5.7
Median)				33	5.6
Standard Deviation +/-)				11	1.2

Chart data

Total quad.	PIM
0	0
0.20	151
0.61	587
1.06	1300

MW03 TRENCH A LINEAR SAMPLES
QUADRATURE SUSCEPTIBILITY CALIBRATION CURVE



MW03 TRENCH A LINEAR SAMPLES
MASS QUADRATURE SUSCEPTIBILITY & MAGNETIC VISCOSITY