

TO DETERMINE MASS SUSCEPTIBILITY OF ORE SAMPLES FROM ROSEDALE

<u>Calibration samples</u>	Mass g	Bridge reading	Total susceptibility $k_T \times 10^{-8} \text{ m}^3$	Mass susceptibility $\chi \times 10^{-8} \text{ m}^3 \text{ kg}^{-1}$
Manganese sulphate	50.00	61.4	4.06	81.2
High alumina cement	50.00	538	35.80	716
<u>Samples</u>				
ROSE-A	51.87	11.8	0.78	15
ROSE-B	26.49	15.4	1.02	38
ROSE-C	26.43	10.6	0.70	27
ROSE-D	24.30	6.6	0.44	18
ROSE-E	21.13	5.5	0.36	17
ROSE-F	24.42	7.7	0.51	21
ROSE-G	12.25	2.6	0.17	14
ROSE-H	10.02	2.2	0.15	15
Mean	)			21
Median	)			18
Standard Deviation	+/-)			8

Chart data

Total sus.	Meter	Total sus.	Meter
0	0		
4.06	61.4	4.06	61.4
		35.80	538

Slope & constant values as calculated by data trendline:

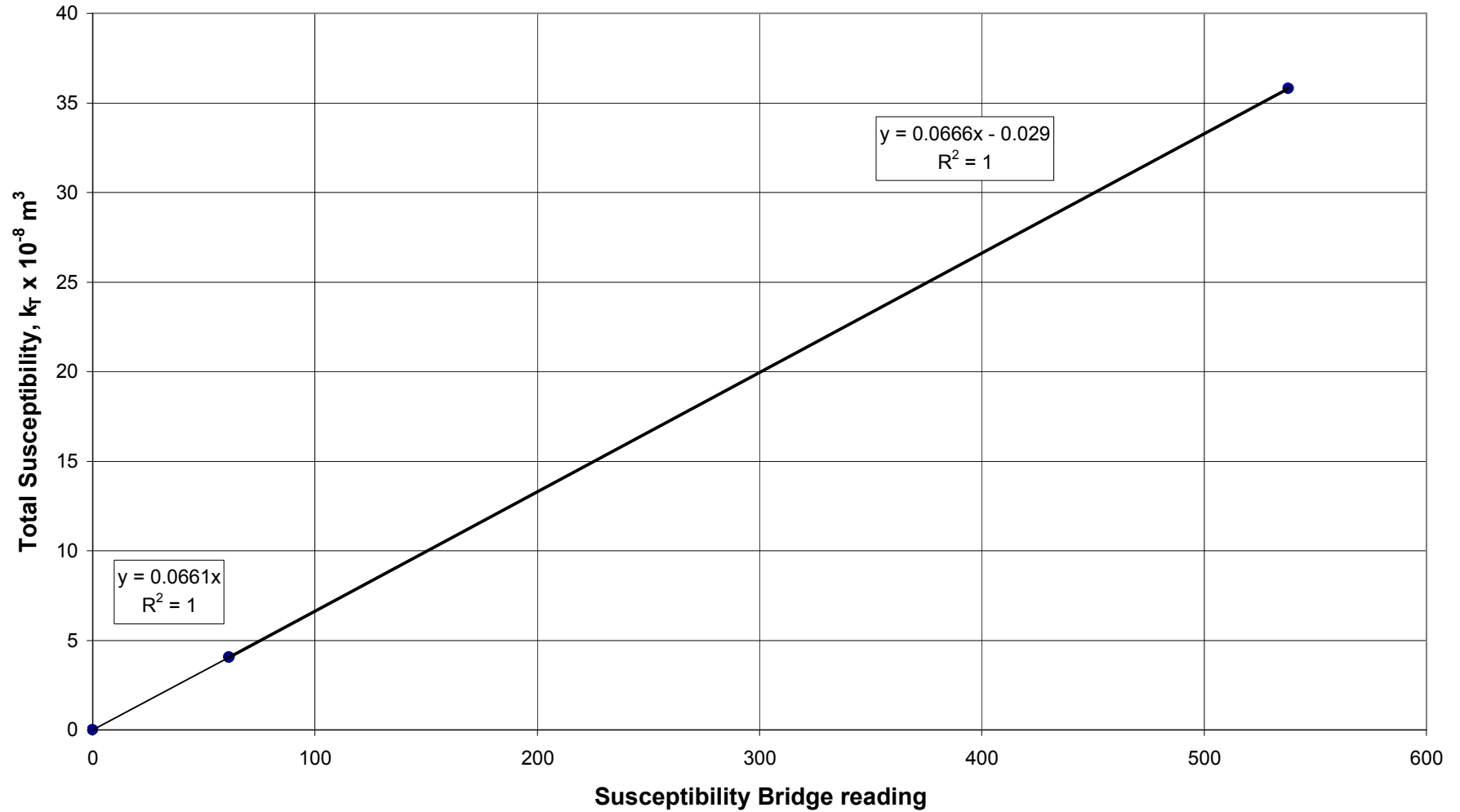
m	c	x	y
0.0661	0	61.4	4.0585
0.0666	-0.029	61.4	4.0602
0.0666	-0.029	538	35.8018

Slope & constant values as calculated from raw data:

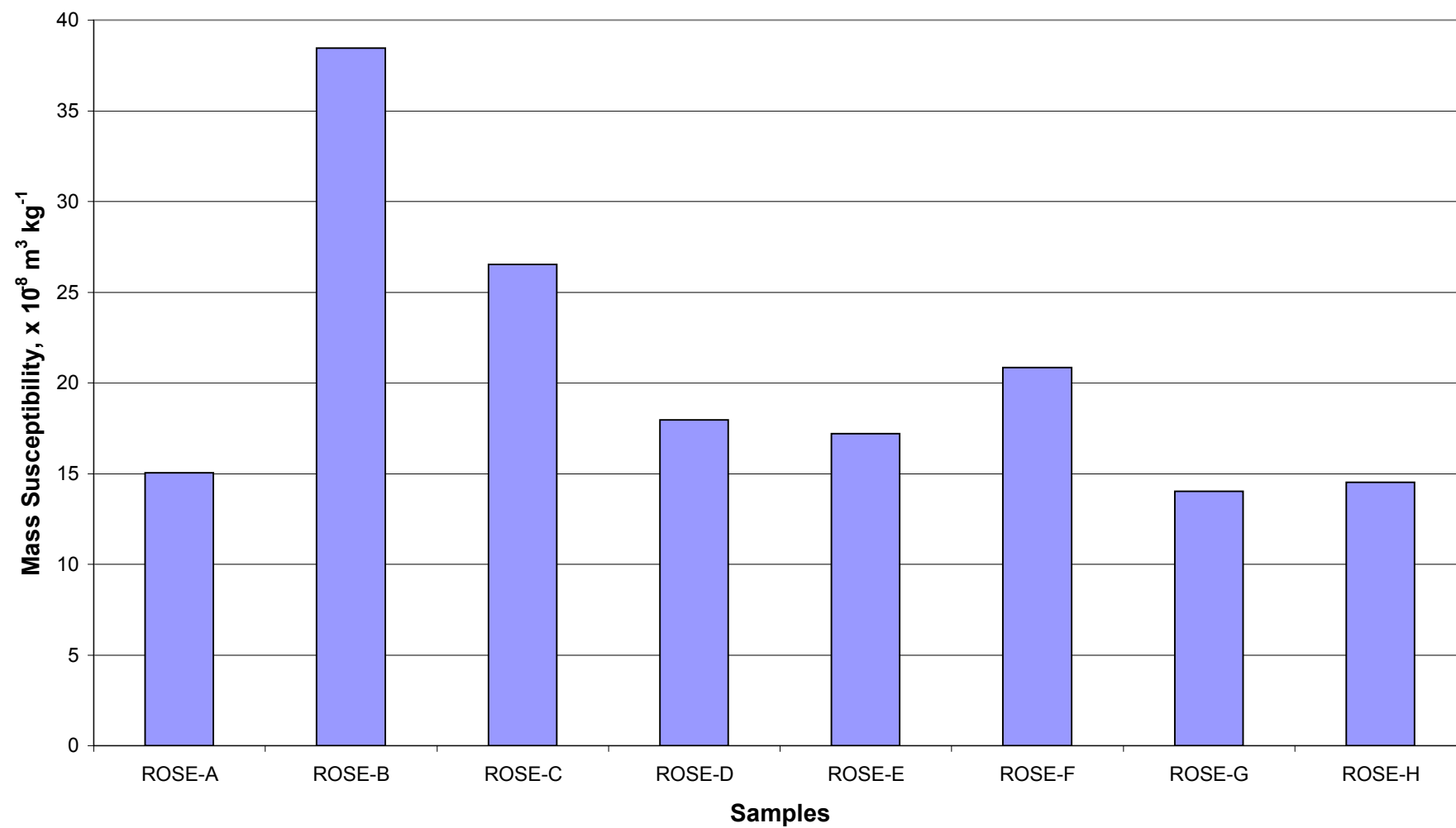
m	c	x	y
0.06612	0	61.4	4.06
0.06660	-0.02904	61.4	4.06
0.06660	-0.02904	538	35.80

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

ROSEDALE ORE SAMPLES SUSCEPTIBILITY CALIBRATION CURVE



ROSEDALE ORE SAMPLES MASS SUSCEPTIBILITY



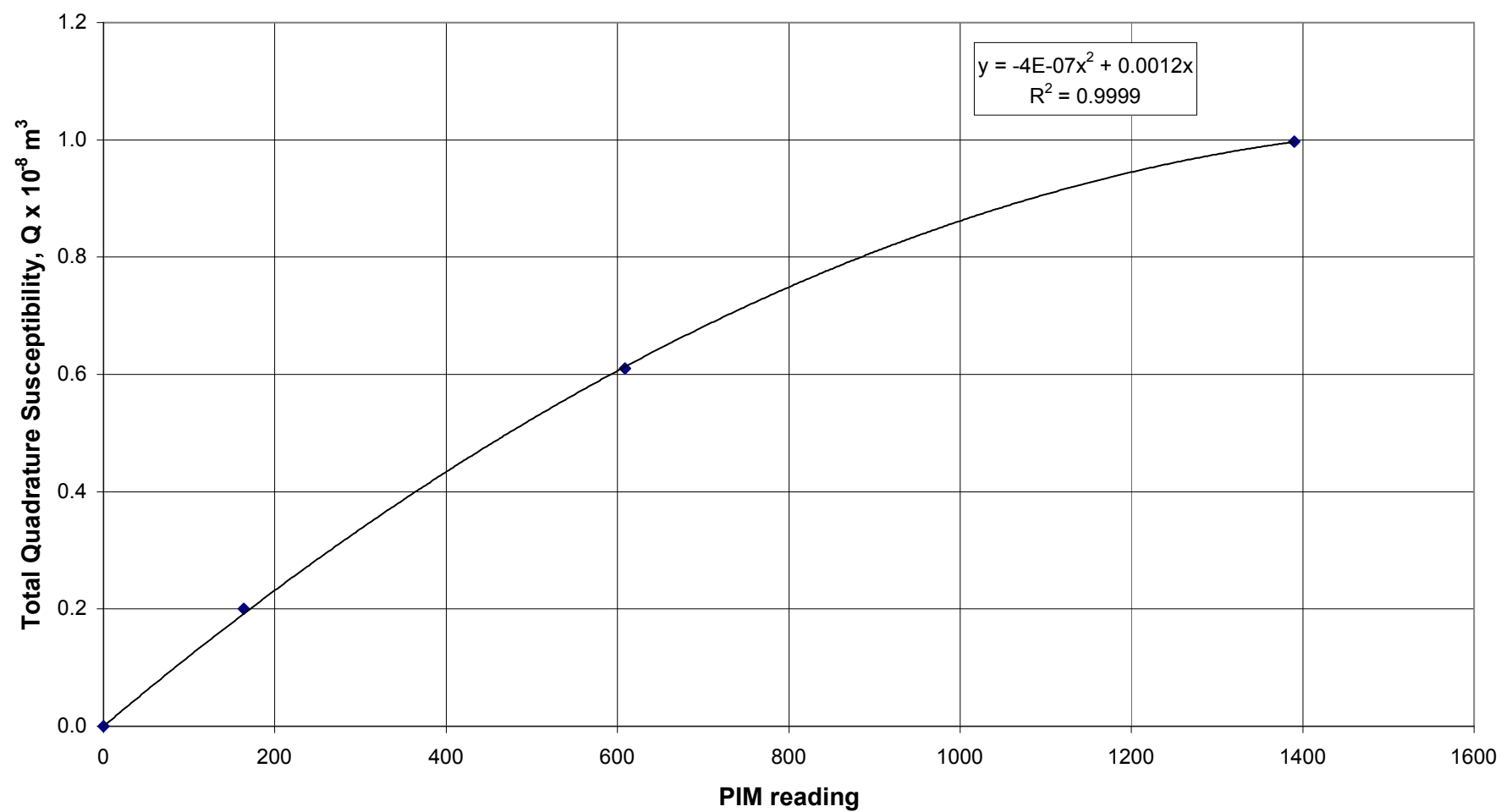
**TO DETERMINE MASS QUADRATURE SUSCEPTIBILITY AND MAGNETIC VISCOSITY
OF ORE SAMPLES FROM ROSEDALE**

<u>Calibration samples</u>	Mass g	PIM reading	Total quad. sus. $Q \times 10^{-8} \text{ m}^3$	Mass quad. sus. $q \times 10^{-8} \text{ m}^3 \text{ kg}^{-1}$	Magnetic viscosity %
High alumina cement	50.00	164	0.20	4.0	
BS87	50.00	609	0.61	12.2	
BS62	38.20	1390	1.00	26.1	
<u>Samples</u>					
ROSE-A	51.87	12	0.01	0.3	1.8
ROSE-B	26.49	9	0.01	0.4	1.1
ROSE-C	26.43	5	0.01	0.2	0.9
ROSE-D	24.30	7	0.01	0.3	1.9
ROSE-E	21.13	4	0.00	0.2	1.3
ROSE-F	24.42	7	0.01	0.3	1.6
ROSE-G	12.25	2	0.00	0.2	1.4
ROSE-H	10.02	4	0.00	0.5	3.3
Mean	)			0.3	1.7
Median	)			0.3	1.5
Standard Deviation	+/-)			0.1	0.8

Chart data

Total quad.	PIM
0	0
0.20	164
0.61	609
1.00	1390

ROSEDALE ORE SAMPLES QUADRATURE SUSCEPTIBILITY CALIBRATION CURVE



ROSEDALE ORE SAMPLES MASS QUADRATURE SUSCEPTIBILITY & MAGNETIC VISCOSITY

