TO DETERMINE MASS SUSCEPTIBILITY OF MYERS WOOD MW02 TRENCH B CONTEXT 207 ARCHAEOMAGNETIC DATING REMAINDER MATERIAL

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	62.4	4.06	81.2
High alumina cement	50.00	534	35.80	716
Test samples				
B207-1	10.09	72	4.71	466
B207-2	8.11	19.8	1.29	159
B207-3	9.41	9.6	0.62	66
B207-4	14.58	32.7	2.13	146
B207-5	3.14	3.8	0.25	79
B207-6	35.22	226	15.07	428
B207-7A	48.06	286	19.11	398
B207-7B	52.72	224	14.94	283
B207-8	9.04	15.0	0.98	108
B207-9	34.64	51.0	3.32	96
B207-11A	16.82	450	30.15	1792
B207-11B	17.15	648	43.47	2535
B207-11C	14.47	386	25.84	1786
Mean				642
Median				283
Standard Deviation +/-				826

Chart data

Total sus.	Meter	Total sus.	Meter
0	0		
4.06	62.4	4.06	62.4
		35.80	534

Slope & constant values as calculated by data trendline:

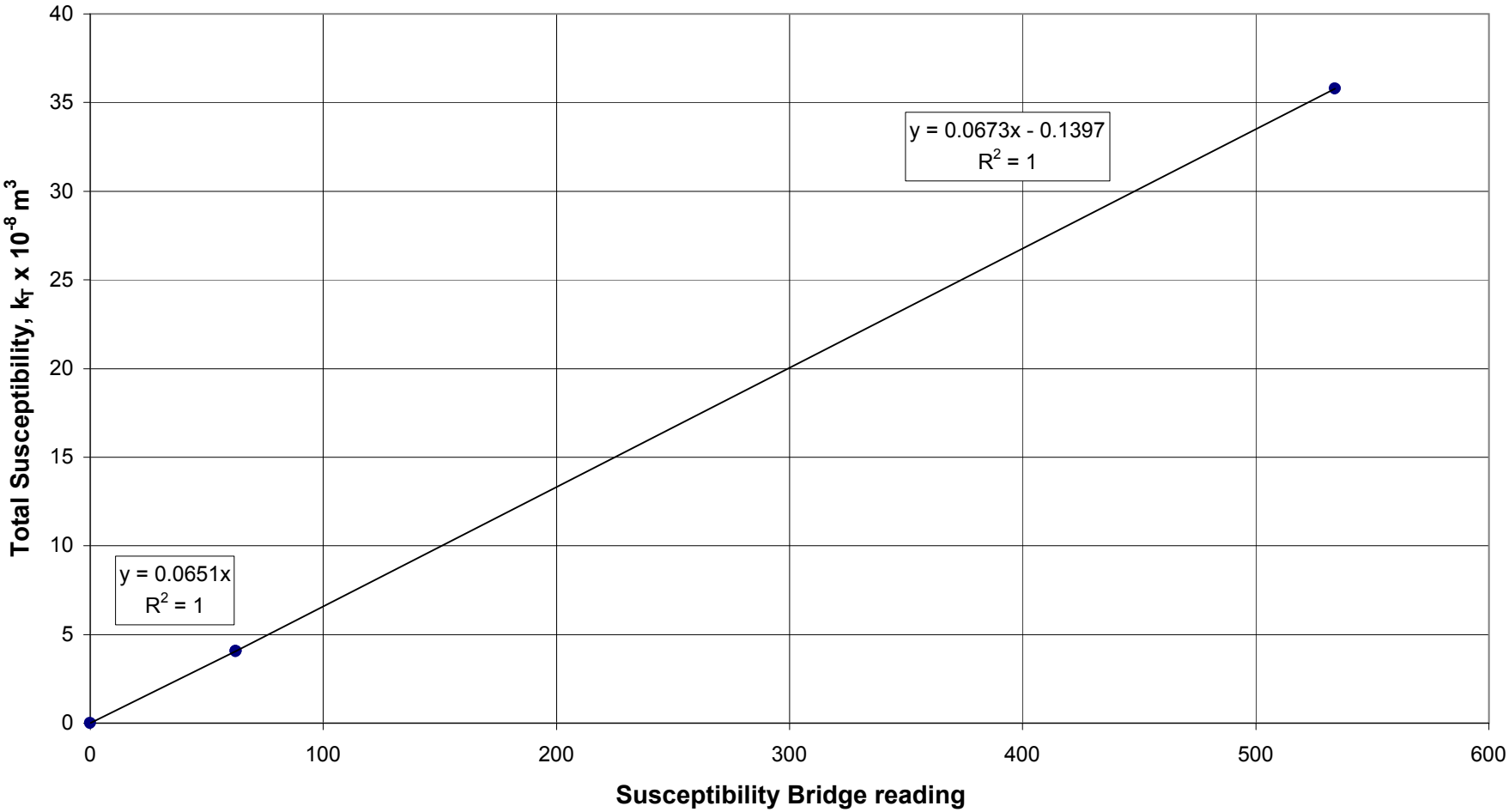
m	c	x	y
0.0651	0	62.4	4.0622
0.0673	-0.1397	62.4	4.0598
0.0673	-0.1397	534	35.7985

Slope & constant values as calculated from raw data:

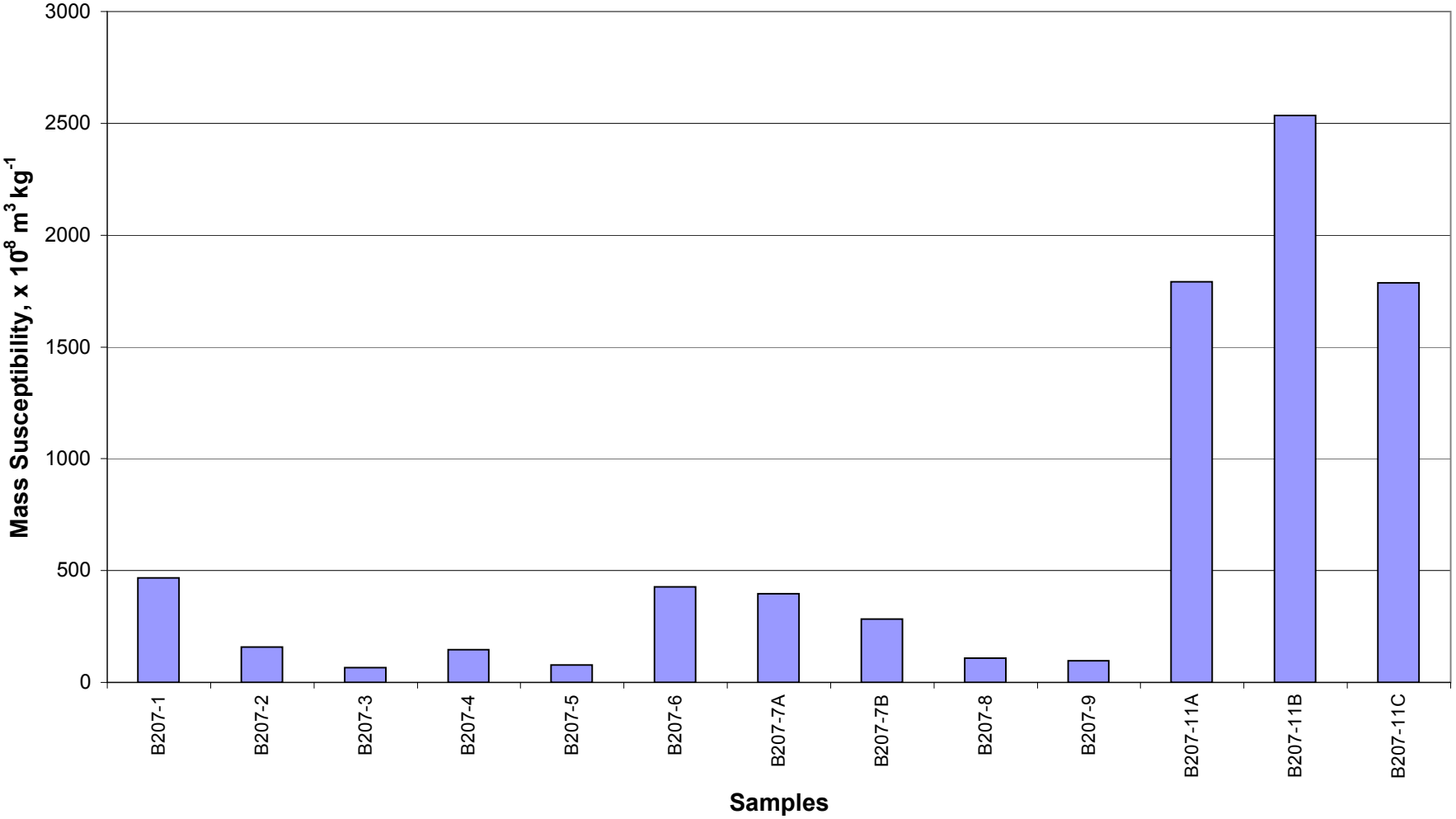
m	c	x	y
0.06506	0	62.4	4.06
0.06730	-0.13969	62.4	4.06
0.06730	-0.13969	534	35.80

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

MW02 TRENCH B CONTEXT 207 A.M.D. MATERIAL SUSCEPTIBILITY CALIBRATION CURVE



MW02 TRENCH B CONTEXT 207 A.M.D. MATERIAL MASS SUSCEPTIBILITY



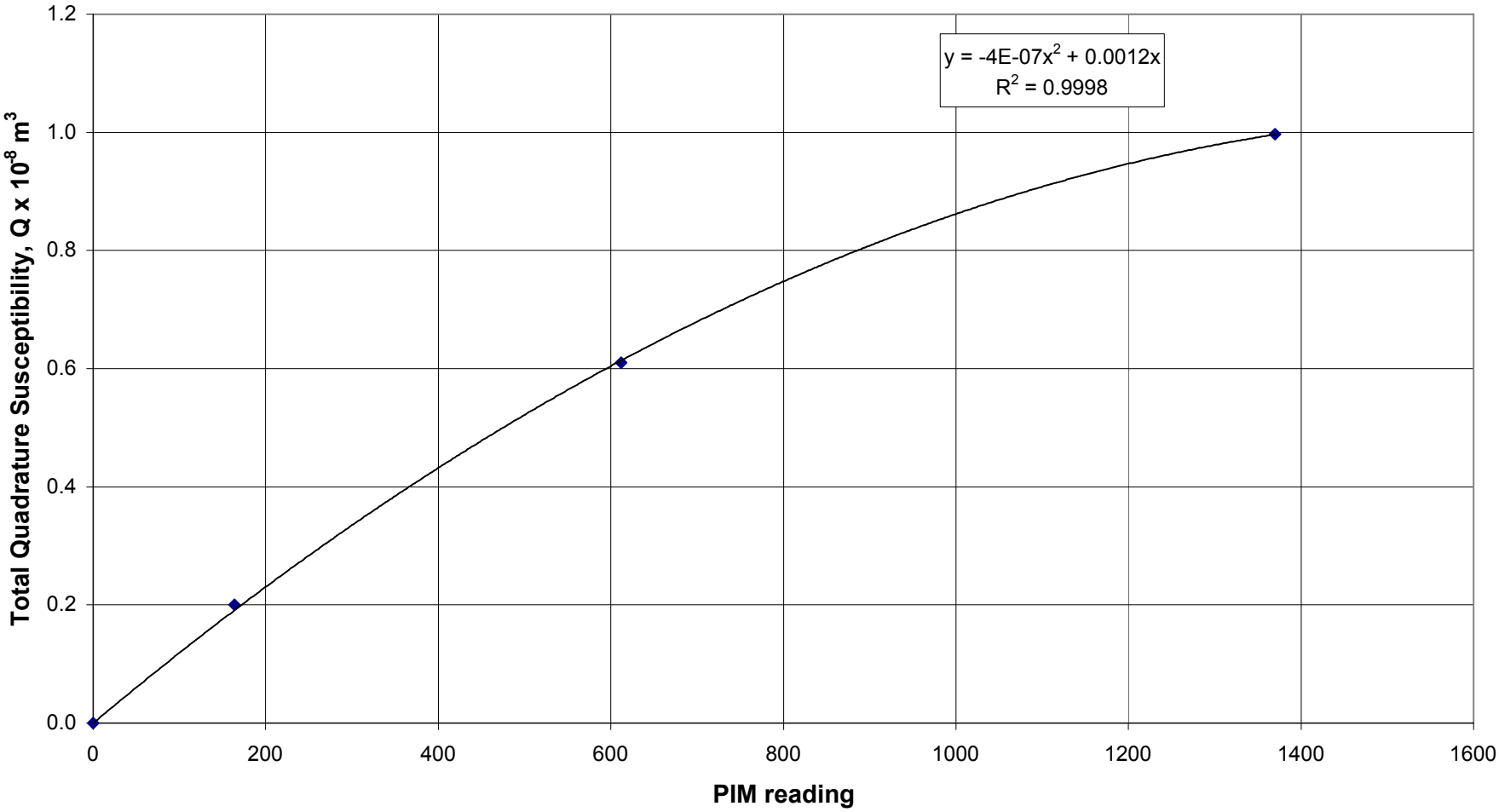
TO DETERMINE MASS QUADRATURE SUSCEPTIBILITY AND MAGNETIC VISCOSITY OF MYERS WOOD MW02 TRENCH B CONTEXT 207 ARCHAEOMAGNETIC DATING REMAINDER MATERIAL

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	164	0.20	4.0	
BS87	50.00	612	0.61	12.2	
BS62	38.20	1370	1.00	26.1	
Test samples					
B207-1	10.09	270	0.29	29	6.3
B207-2	8.11	82	0.10	12	7.4
B207-3	9.41	40	0.05	5	7.6
B207-4	14.58	100	0.12	8	5.5
B207-5	3.14	15	0.02	6	7.2
B207-6	35.22	690	0.64	18	4.2
B207-7A	48.06	770	0.69	14	3.6
B207-7B	52.72	605	0.58	11	3.9
B207-8	9.04	45	0.05	6	5.5
B207-9	34.64	122	0.14	4	4.2
B207-11A	16.82	1999	0.80	48	2.7
B207-11B	17.15	1999	0.80	47	1.8
B207-11C	14.47	1900	0.84	58	3.2
Mean				20	4.9
Median				12	4.2
Standard Deviation +/-				19	1.9

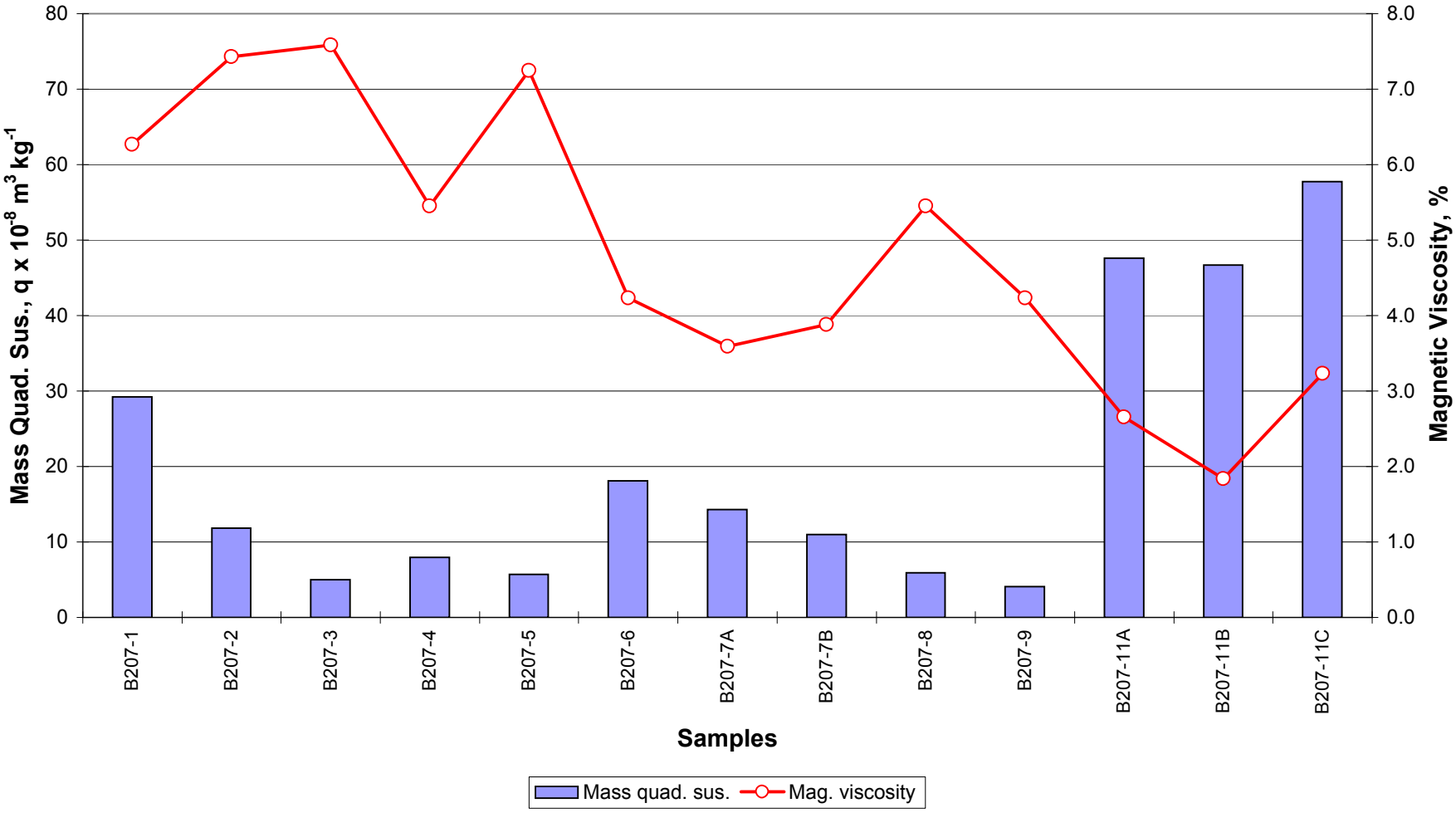
Chart data

Total quad.	PIM
0	0
0.20	164
0.61	612
1.00	1370

MW02 TRENCH B CONTEXT 207 A.M.D. MATERIAL
QUADRATURE SUSCEPTIBILITY CALIBRATION CURVE



MW02 TRENCH B CONTEXT 207 A.M.D. MATERIAL
MASS QUADRATURE SUSCEPTIBILITY & MAGNETIC VISCOSITY



As-measured results

	Mass	Total susceptibility	Total quad. sus.
	g	k_T x 10^{-8} m^3	Q x 10-8 m3
B207-1	10.09	4.71	0.29
B207-2	8.11	1.29	0.10
B207-3	9.41	0.62	0.05
B207-4	14.58	2.13	0.12
B207-5	3.14	0.25	0.02
B207-6	35.22	15.07	0.64
B207-7A	48.06	19.11	0.69
B207-7B	52.72	14.94	0.58
B207-8	9.04	0.98	0.05
B207-9	34.64	3.32	0.14
B207-11A	16.82	30.15	0.80
B207-11B	17.15	43.47	0.80
B207-11C	14.47	25.84	0.84

Recalculated results

	Mass	Total susceptibility	Mass susceptibility	Total quad. sus.	Mass quad. sus.	Magnetic
	g	k_T x 10^{-8} m^3	χ x 10^{-8} m^3 kg^{-1}	Q x 10^{-8} m^3	q x 10^{-8} m^3 kg^{-1}	viscosity %
B207-1	10.09	4.71	466	0.29	29	6.3
B207-2	8.11	1.29	159	0.10	12	7.4
B207-3	9.41	0.62	66	0.05	5	7.6
B207-4	14.58	2.13	146	0.12	8	5.5
B207-5	3.14	0.25	79	0.02	6	7.2
B207-6	35.22	15.07	428	0.64	18	4.2
B207-7	100.78	34.05	338	1.27	13	3.7
B207-8	9.04	0.98	108	0.05	6	5.5
B207-9	34.64	3.32	96	0.14	4	4.2
B207-11	48.44	99.46	2053	2.44	50	2.5
Mean		)	394		15	5.4
Median		) All samples	152		10	5.5
Standard Deviation	+/-	)	602		15	1.7