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Sediment Magnetic Data and Thermomagnetic Determinations of Holocene and Pleistocene Soils and Their Parent Materials From Bellevue, Scarpy County, Nebraska: Contributions to Quaternary Paleoclimate Studies of Midcontinent Loess Deposits

by

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INTRODUCTION

This paper presents sediment magnetic data from Holocene and Pleistocene soil and parent loess material from a borrow pit exposure in the city of Bellevue, Scarpy County, Nebraska. These data were collected as part of a broader study of the magnetic properties of midcontinent soils and loess. The ultimate objective is to better understand the types, properties, and origin of magnetic minerals in midcontinent soils and loess and their relations to past amounts of precipitation. The magnetic data presented here are part of a larger study by the U.S. Geological Survey of North American paleoclimates during the last interglacial period.

The Bellevue borrow pit is located on Maas Drive approximately seven kilometers north of the Platte River Valley, south of Omaha, Nebrasaka. A description of the upper part of the section (the part studied here), along with radiocarbon ages, can be found in Mandel and Bettis (1995). Analyses were conducted on Loveland loess, the Sangamon soil developed in Loveland loess, the Gilman Canyon Formation, Peoria Loess, and the modern soil developed in Peoria loess. Analyses were also conducted on pre-Loveland loesses and paleosols not described in Mandel and Bettis (1995).

METHODS

Sampling

Samples were collected in a single traverse that consisted of samples collected from a modern soil profile developed in the Peoria loess through the Sangamon soil developed in Loveland loess. Samples were collected as representative "channel" samples from each of the major soil units (e.g., the A1 horizon, the Bt horizon, etc.). Each sample was collected from material over the exposed depth range of the interval.

For the analysis of magnetic properties such as magnetic susceptibility and laboratory induced magnetizations, splits of the soil and loess samples were packed into plastic cubes that are capable of holding approximately 3.2 cm^3 of material. Each sample and cube were weighed, and the average weight of an empty sample holder was subtracted from the gross weight in order to get the true weight of the sample.

Magnetic Susceptibility

A susceptibility meter, operating at a sensitivity better than 10^{-5} volume SI at about 600 Hz or 6000 Hz, was used to measure low frequency (LFMS) and high-frequency (HFMS) magnetic susceptibility of soil and loess samples. In addition, useful magnetic parameters, the frequency dependence of magnetic

susceptibility (FDMS) and the percentage of FDMS (%FDMS), were calculated using the following formulas:

$$FDMS = LFMS-HFMS,$$

and

$$\%FDMS = [(LFMS-HFMS)/LFMS] \times 100.$$

Raw and corrected magnetic susceptibility data are listed in Table 1.

Laboratory Induced Magnetizations

An anhysteretic remanent magnetization was imparted to each sample by placing it in a slowly decaying alternating field with a peak field of 100 mT while it was subjected to a DC bias of 0.1 mT. The ARM was then measured using a high-speed spinner magnetometer operating at 90 Hz. Following the ARM acquisition experiments, an impulse magnetizer was used to impart isothermal remanent magnetizations (IRMs) to each specimen. Each specimen was given an initial IRM in an induction of 1.2 T (i.e., $IRM_{1.2T}$), and the resultant magnetization was measured using the spinner magnetometer. Each sample was then given an oppositely directed IRM in an induction of 0.3 T ($IRM_{-0.3T}$) and the remanence was again measured with the magnetometer. The "hard" isothermal remanent magnetization (HIRM) and the S parameter were then calculated as:

$$HIRM = (IRM_{1.2} + IRM_{-0.3})/2,$$

$$\text{and } S = -IRM_{-0.3}/IRM_{1.2},$$

as suggested by King and Channel (1991).

Induced magnetization data and the HIRM and S parameters are listed in Table 1.

Thermomagnetic Determinations

Curie temperatures were determined for magnetic minerals separated from several bulk sediment/soil samples. Separation of the magnetic phases was made by dispersing the soil or loess sample in distilled water, along with a small amount of a surfactant, in an ultrasonic cleaner. The resultant slurry was then pumped past a permanent magnet using a technique similar to that described by Petersen and others (1986). The resultant magnetic separates were rinsed with acetone to remove water and then allowed dry in air.

Curie temperatures of the soil and loess samples were investigated using two different types of thermomagnetic devices. The first consisted of sensitive

electrobalance similar to that described by Larson and others (1975). In this device, saturation magnetization in an applied field of 0.2 to 0.45 T was measured as a function of temperature. The samples were heated in air up to a maximum temperature of about 660°C (approximately 15°C/min) and then allowed to cool to near room temperature. Each sample consisted of about 0.15 to 0.40 mg of magnetic material separated from the magnetic separate using a hand magnet. Thermomagnetic curves obtained using the Curie balance are given in Figure 1.

The second device used in the thermomagnetic experiments measured magnetic susceptibility as a function of temperature. In this device, the magnetic separate was placed in dry Al_2O_3 powder in a quartz tube. A platinum temperature sensor was then inserted into the tube such that the end of the sensor was nearly in contact with the magnetic separate. The sample was then heated in a series of steps to a peak temperature of 630 to 660°C and then cooled. Magnetic susceptibility was measured approximately every 3°C by inserting the furnace assembly into a coil and switching off the furnace current. Thermomagnetic experiments were performed both in an atmospheric environment and by allowing a low flow (approximately 0.05 liters/min) of argon to pass over the sample. The magnetic susceptibility of all samples were corrected for the diamagnetic susceptibility of the quartz tube and Al_2O_3 powder by subtracting the average susceptibility of a "blank" sample consisting of a tube containing an approximately equivalent amount of Al_2O_3 to that used in each experiment.

Experiments at the U.S. Geological Survey sediment magnetism laboratory (Denver) have shown that the Curie temperature of individual samples determined using this device, held in a constant position from experiment to experiment, are reproducible to about 1 to 2°C (assuming no significant phase changes during the experiments). The presence of temperature gradients in the furnace system and inherent uncertainties in the position of samples in individual heating experiments, however, indicates that the uncertainty in the determination of Curie temperatures for individual samples is probably on the order of 4 to 5°C (one standard deviation). Thermomagnetic curves of magnetic susceptibility vs. temperature are shown in Figure 2; analytical data obtained during these experiments are listed in Table 2.

ACKNOWLEDGMENTS

We thank Richard L. Reynolds for a careful review of the manuscript. Willie Rivers assisted in sample preparation and some analyses.

REFERENCES

King, J.W., and Channel, J.E.T., 1991, Sedimentary magnetism, environmental magnetism, and magnetostratigraphy: Reviews of Geophysics, Supplement, p. 358-370.

Larson, E.E., Hoblitt, R.P., and Watson, D.E., 1975, Gas-mixing techniques in thermomagnetic analysis: Geophysical Journal of the Royal Astronomical Society, v. 43, p. 607-620.

Mandel, R.D., and Bettis, E.A., III, 1995, Late Quaternary landscape evolution and stratigraphy in eastern Nebraska. Field Trip No. 7. In Geologic field trips in Nebraska and adjacent parts of Kansas and South Dakota, Parts of the 29th Annual Meetings of the North-Central and South-Central Sections, Geological Society of America, Guidebook No. 10, edited by C.A. Flowerday, p. 77-90.

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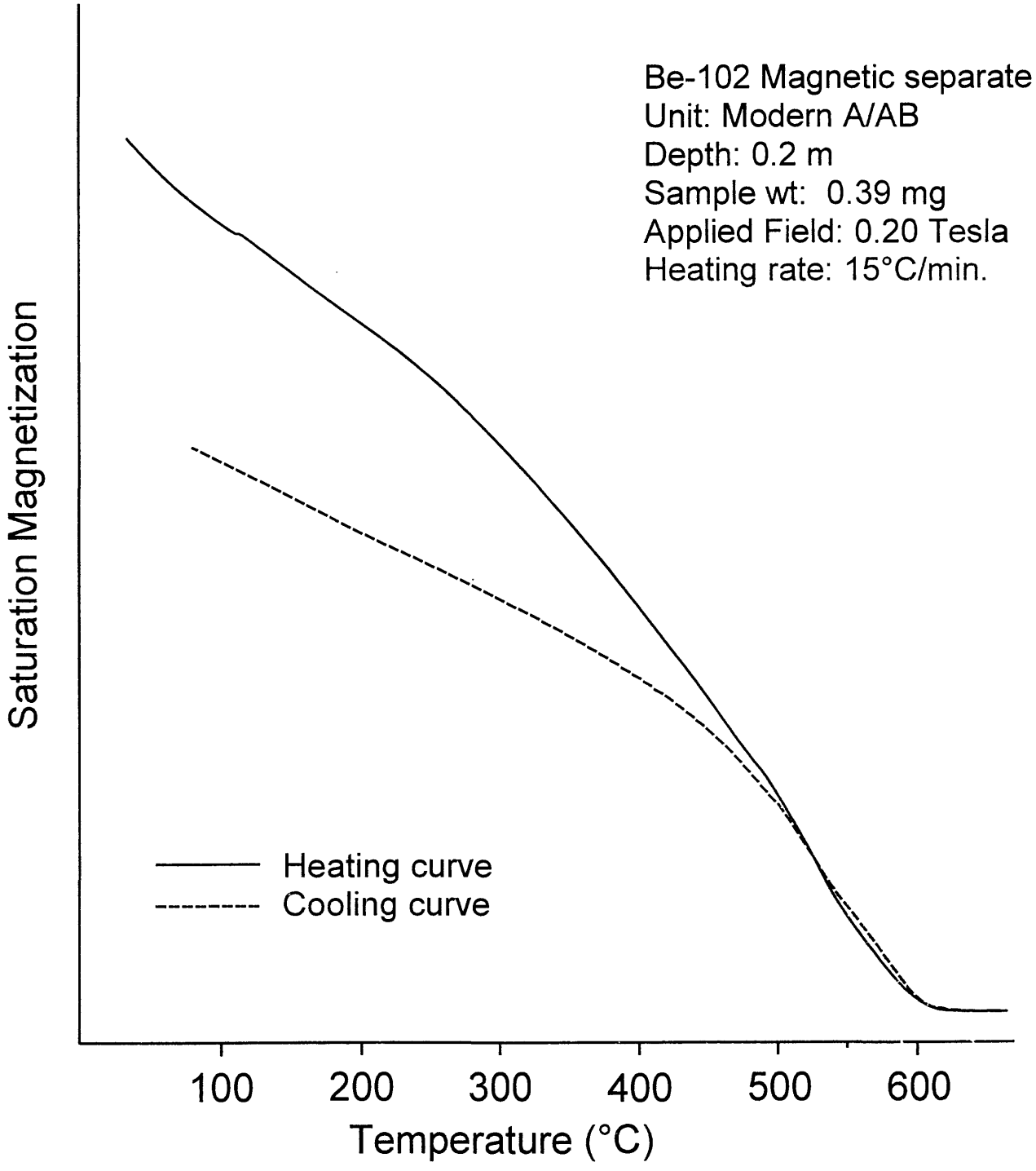
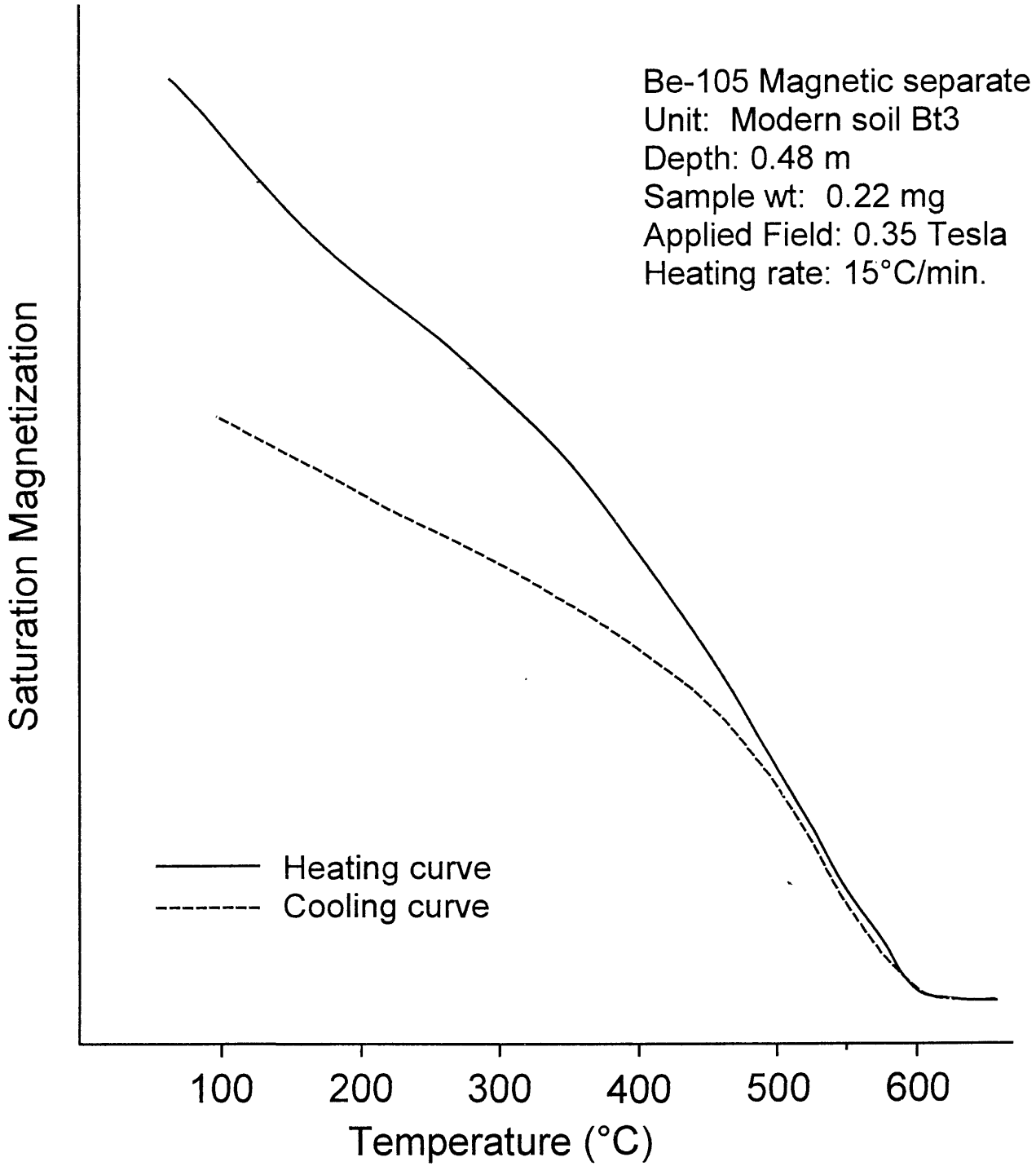
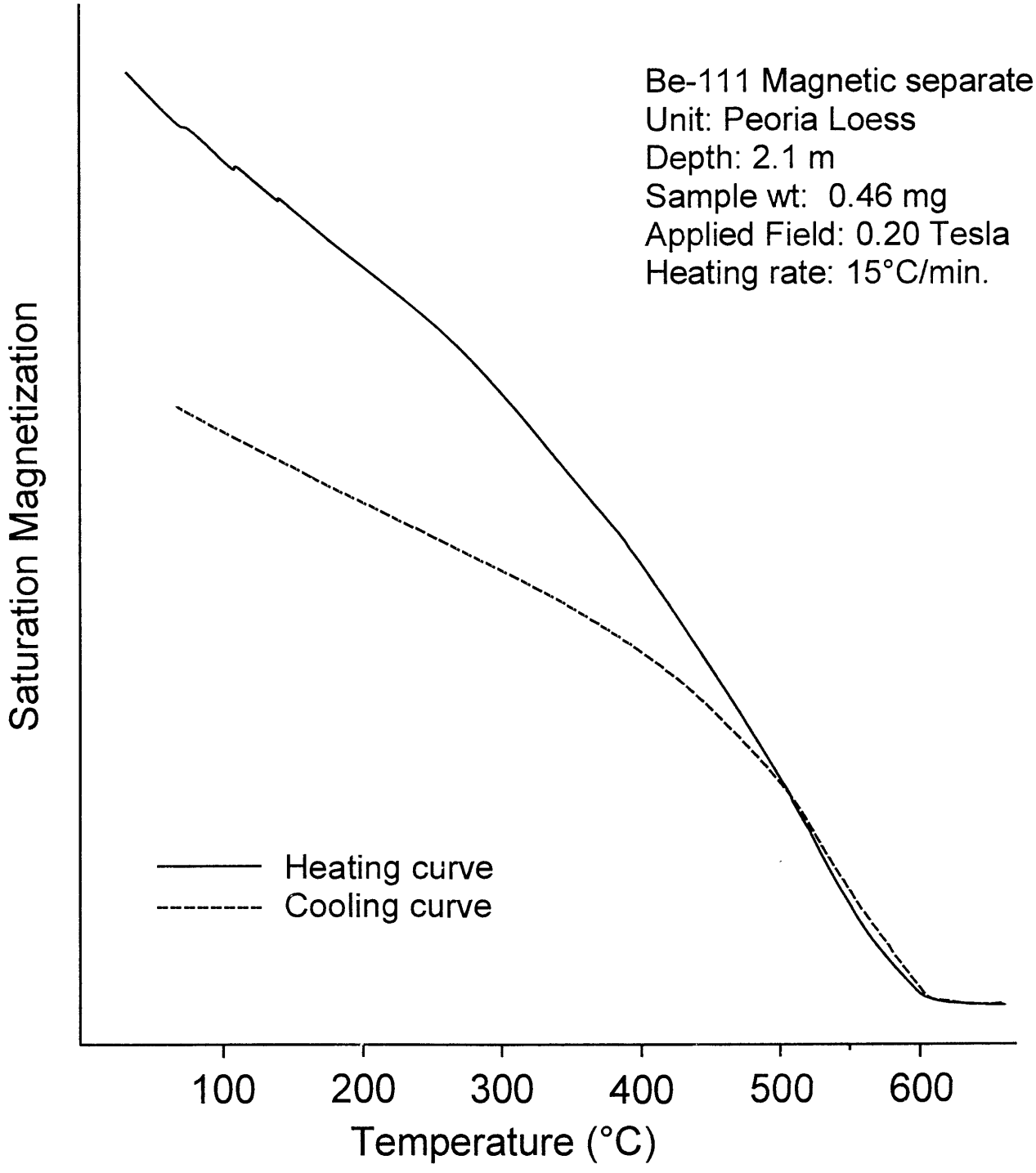
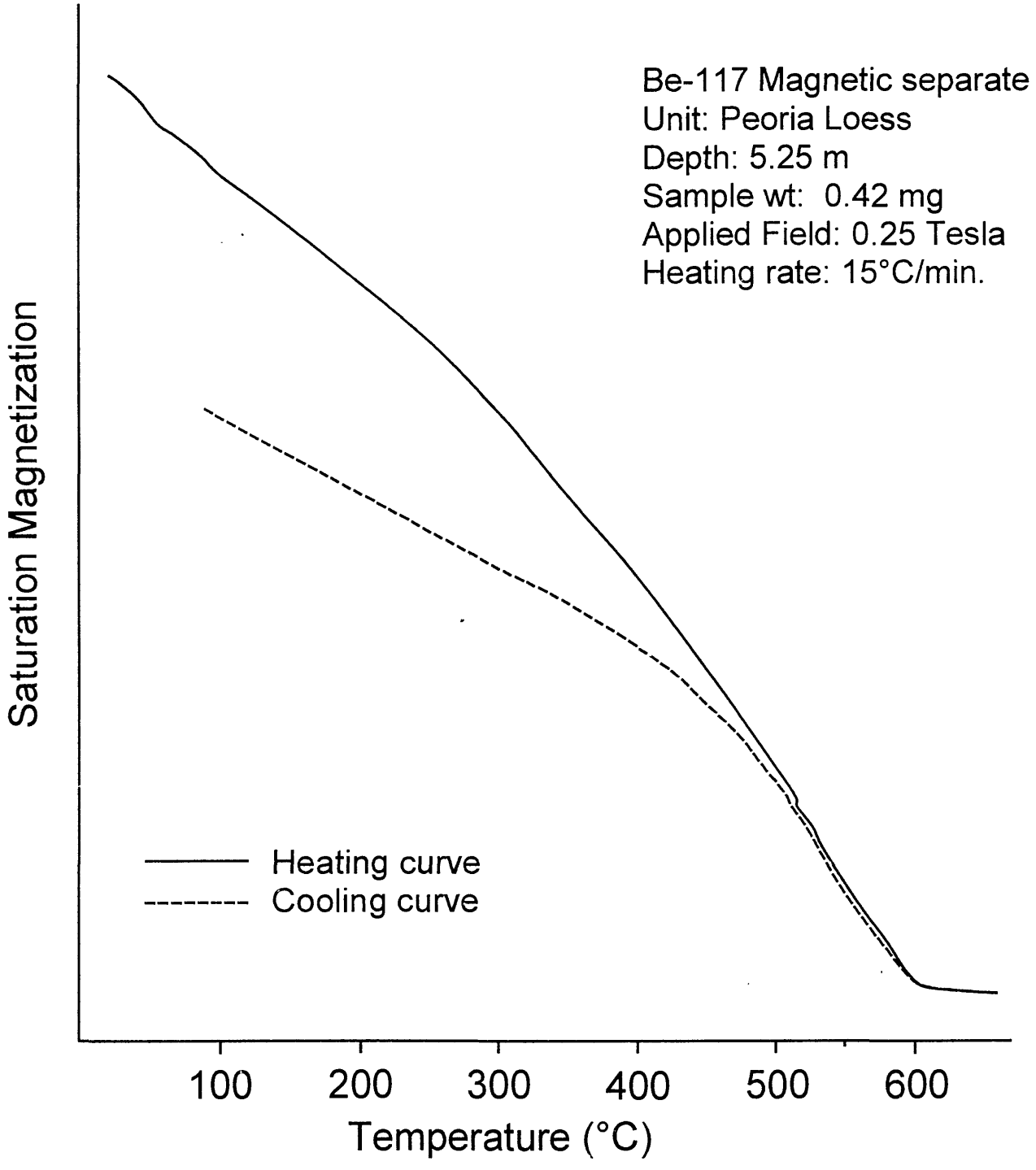
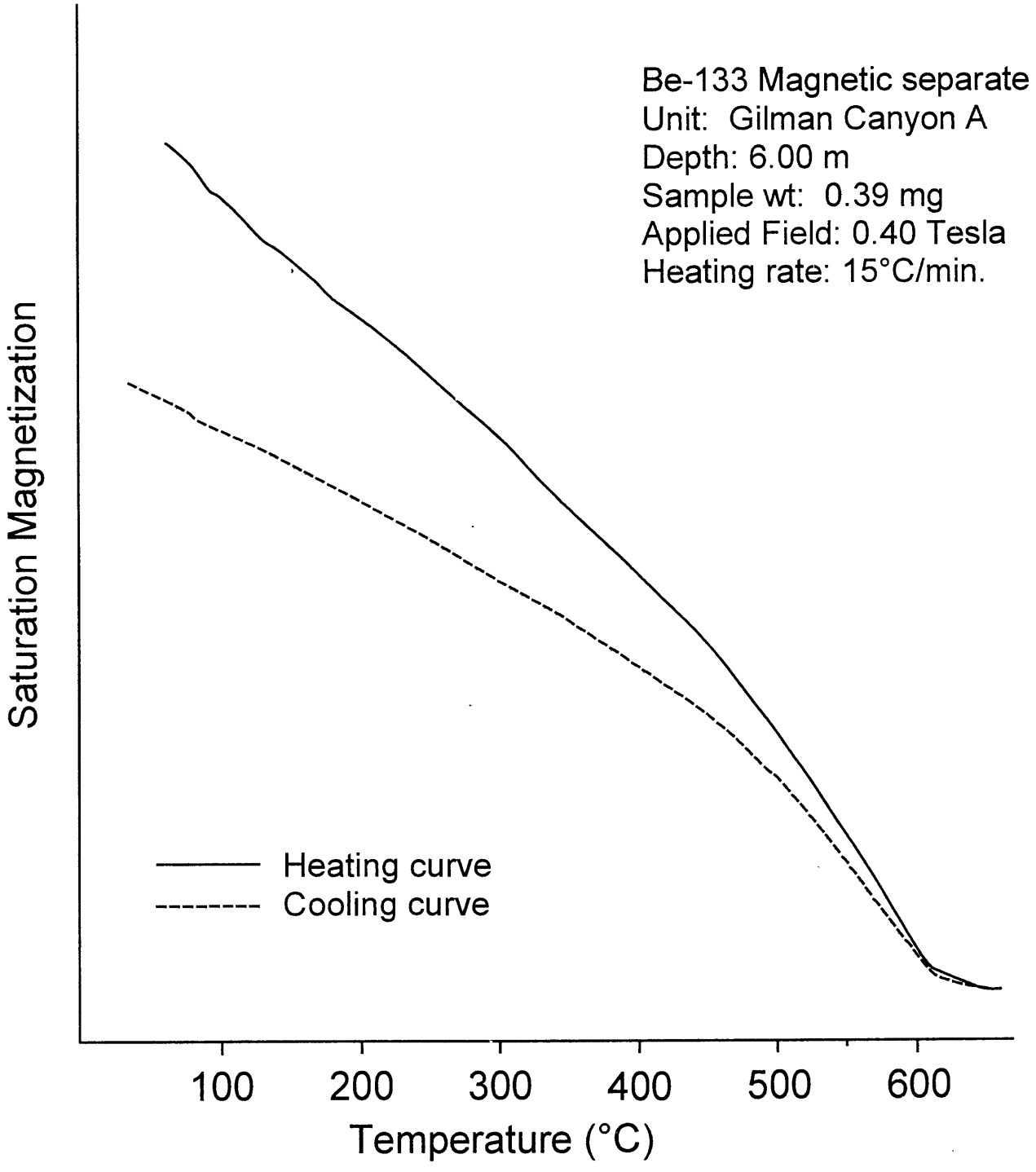
Figure 1. Thermomagnetic curves of saturation magnetization vs. temperature for magnetic separates of soil and loess samples from the Bellevue borrow pit. For each sample the sample depth given is the true depth of the sample midpoint. All thermomagnetic determinations were made in air.

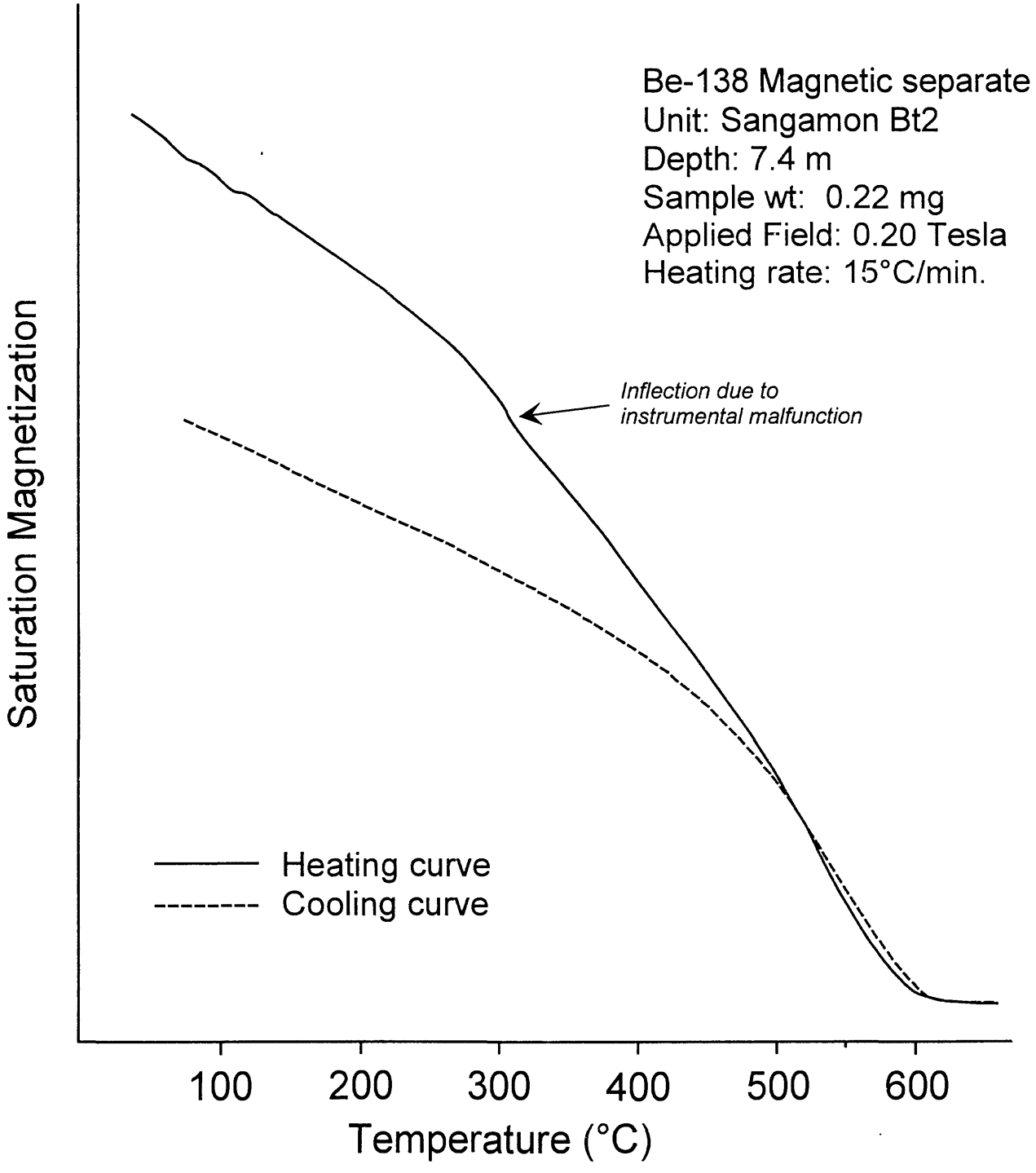

Be-102 Magnetic separate
Unit: Modern A/AB
Depth: 0.2 m
Sample wt: 0.39 mg
Applied Field: 0.20 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)

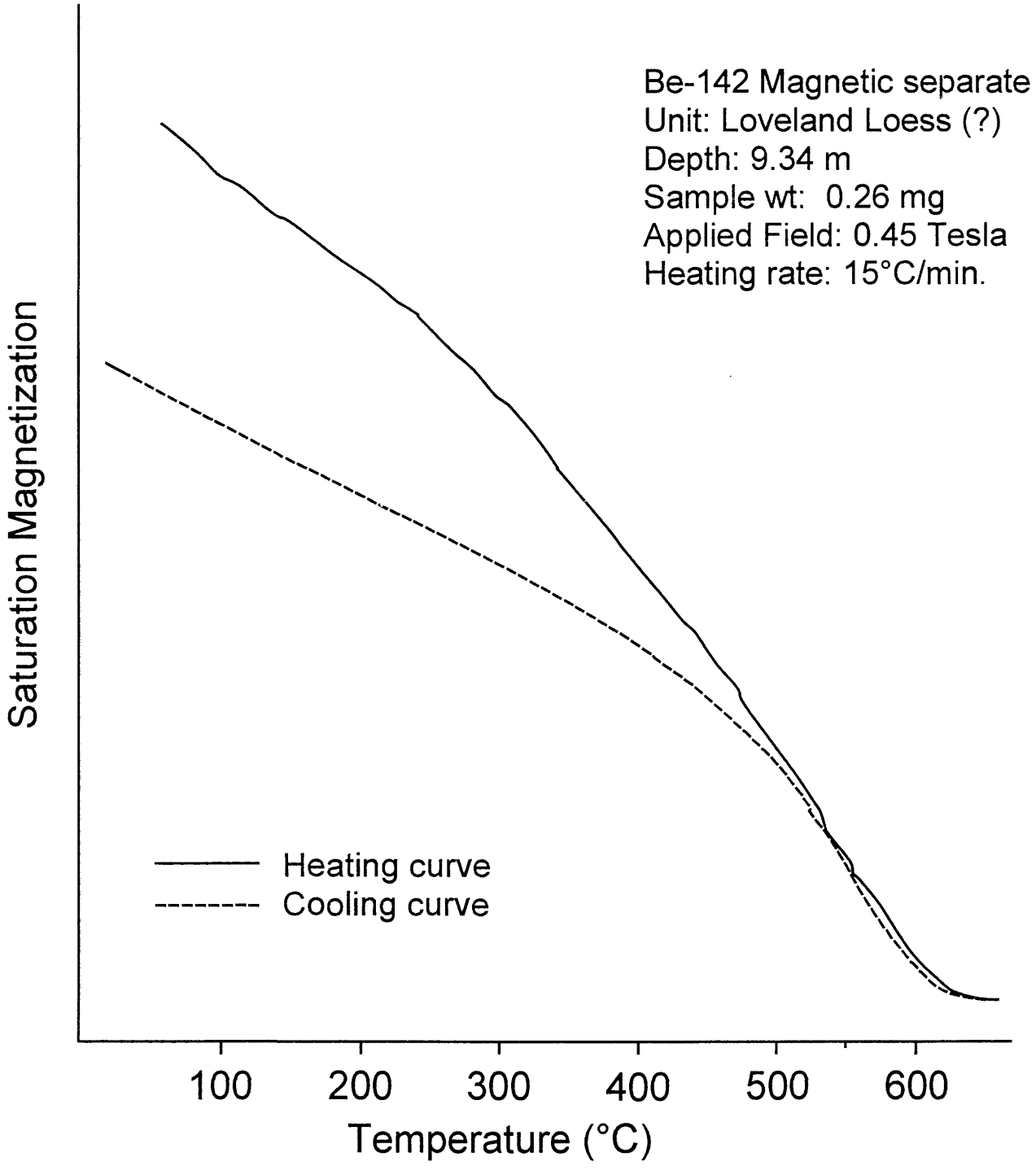

Be-105 Magnetic separate
Unit: Modern soil Bt3
Depth: 0.48 m
Sample wt: 0.22 mg
Applied Field: 0.35 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)

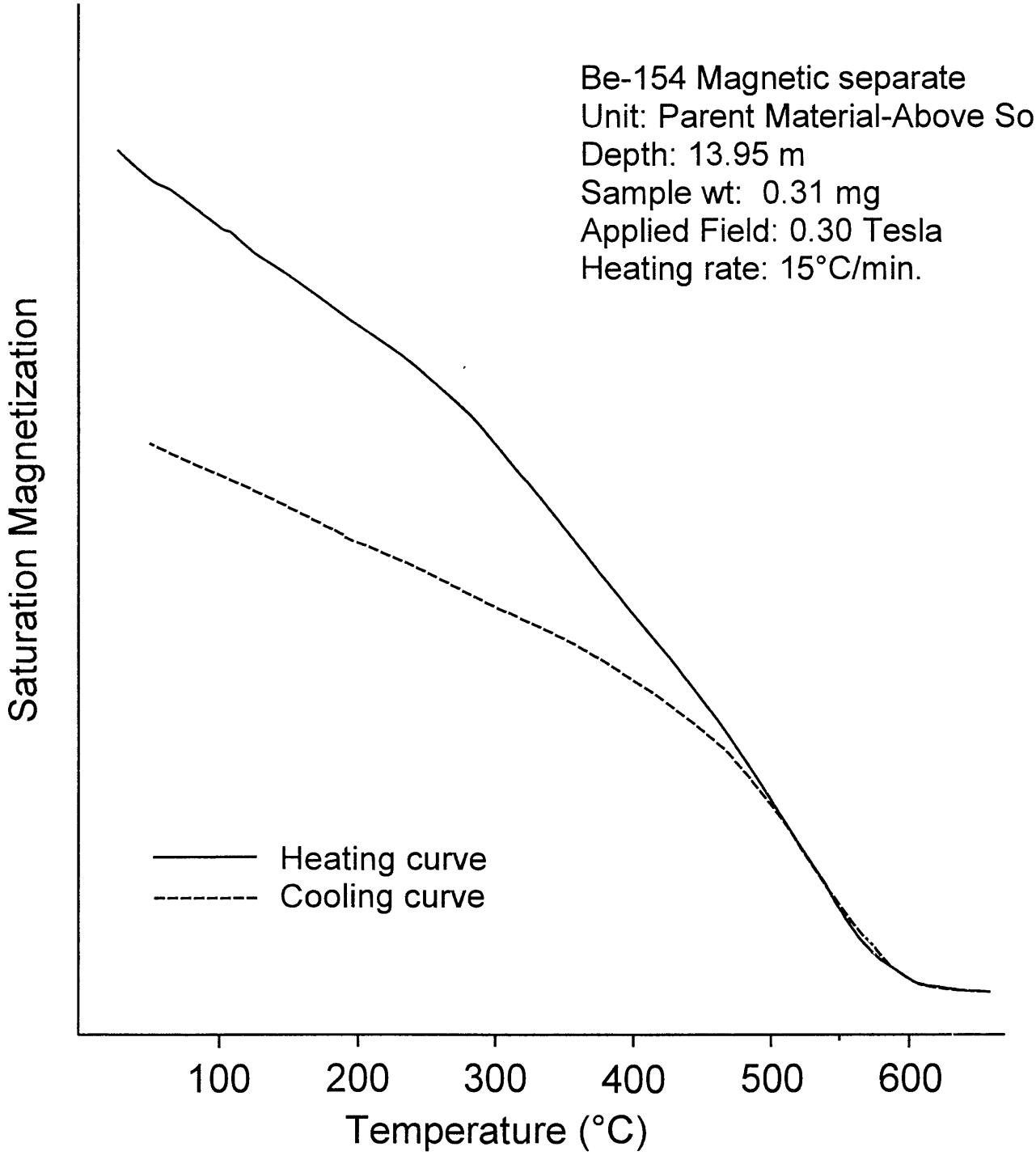

Be-111 Magnetic separate
Unit: Peoria Loess
Depth: 2.1 m
Sample wt: 0.46 mg
Applied Field: 0.20 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)

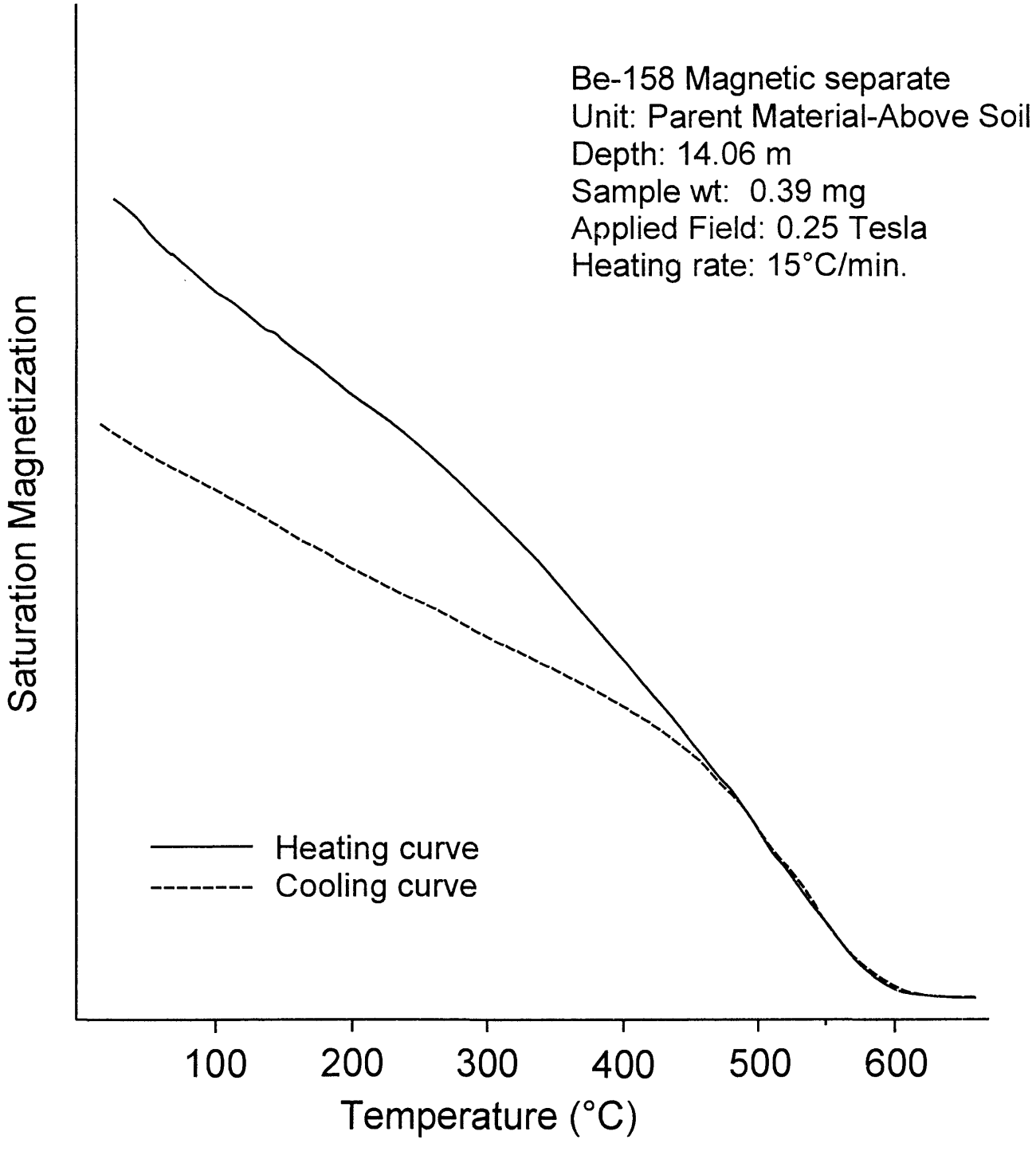

Be-117 Magnetic separate
Unit: Peoria Loess
Depth: 5.25 m
Sample wt: 0.42 mg
Applied Field: 0.25 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)


Be-133 Magnetic separate
Unit: Gilman Canyon A
Depth: 6.00 m
Sample wt: 0.39 mg
Applied Field: 0.40 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)


Be-138 Magnetic separate
Unit: Sangamon Bt2
Depth: 7.4 m
Sample wt: 0.22 mg
Applied Field: 0.20 Tesla
Heating rate: 15°C/min.
Inflection due to instrumental malfunction
Heating curve
Cooling curve
Saturation Magnetization
100
200
300
400
500
600
Temperature (°C)


Be-142 Magnetic separate
Unit: Loveland Loess (?)
Depth: 9.34 m
Sample wt: 0.26 mg
Applied Field: 0.45 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)


Be-154 Magnetic separate
Unit: Parent Material-Above Soil
Depth: 13.95 m
Sample wt: 0.31 mg
Applied Field: 0.30 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)


Be-158 Magnetic separate
Unit: Parent Material-Above Soil
Depth: 14.06 m
Sample wt: 0.39 mg
Applied Field: 0.25 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)

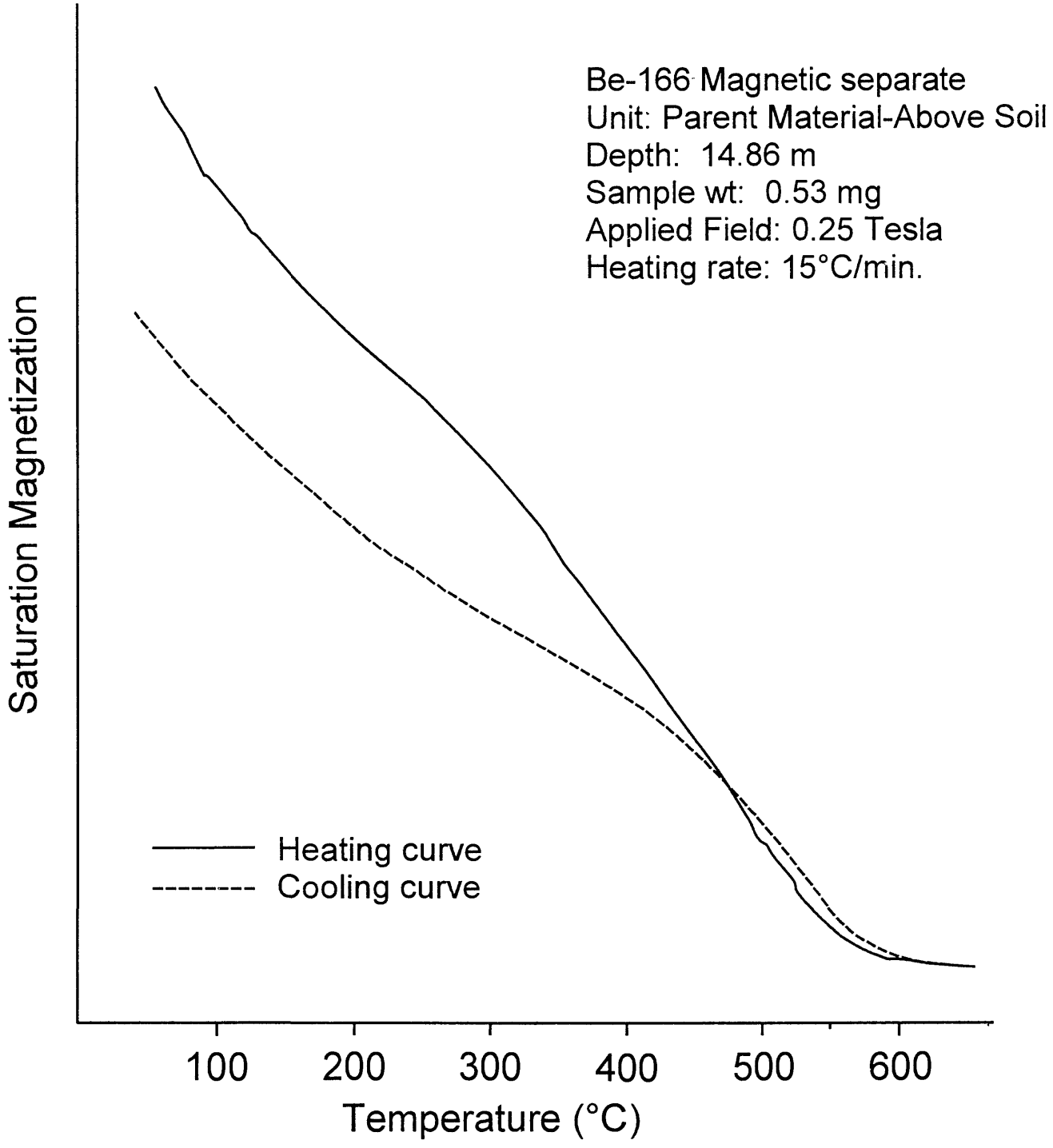
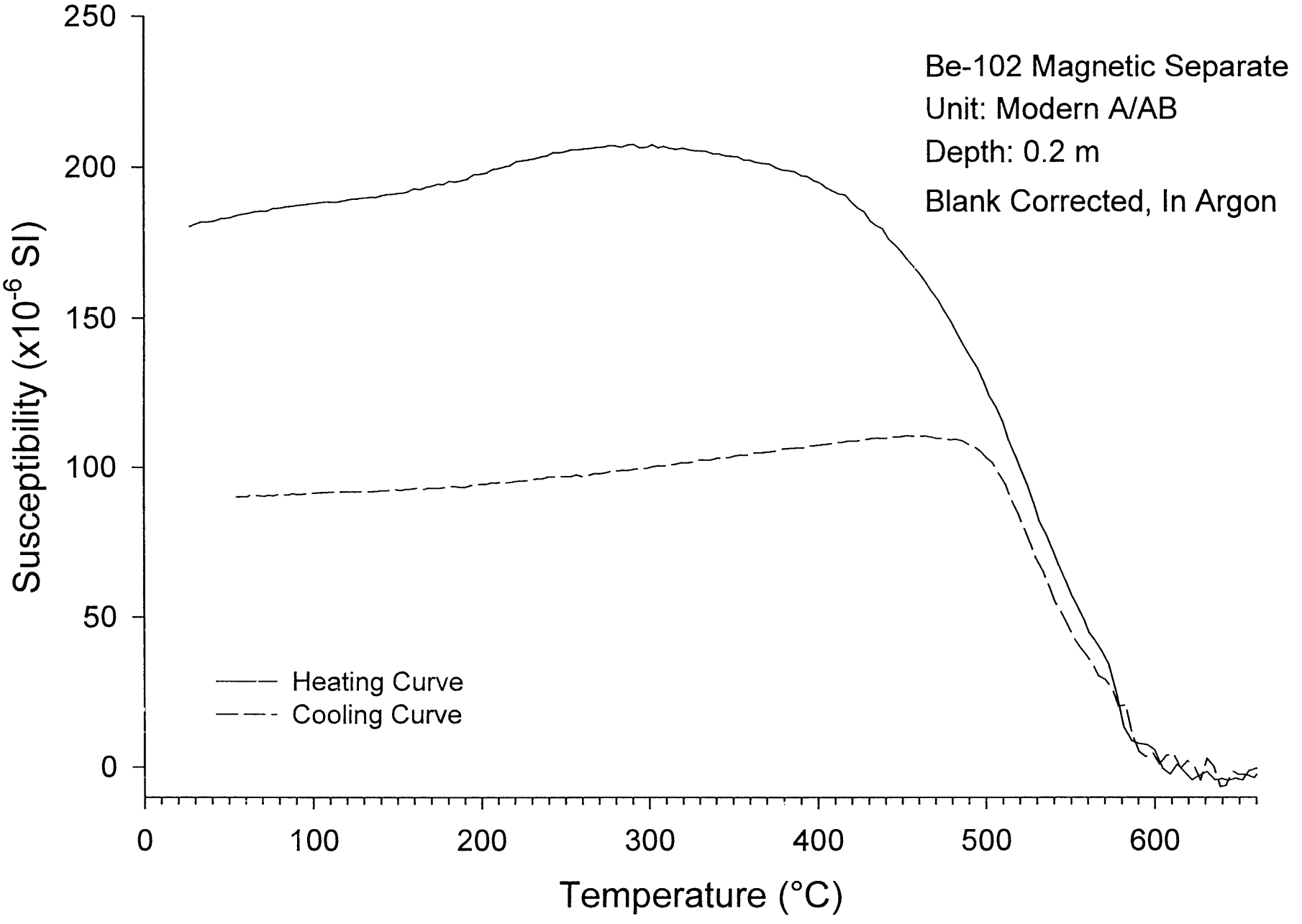
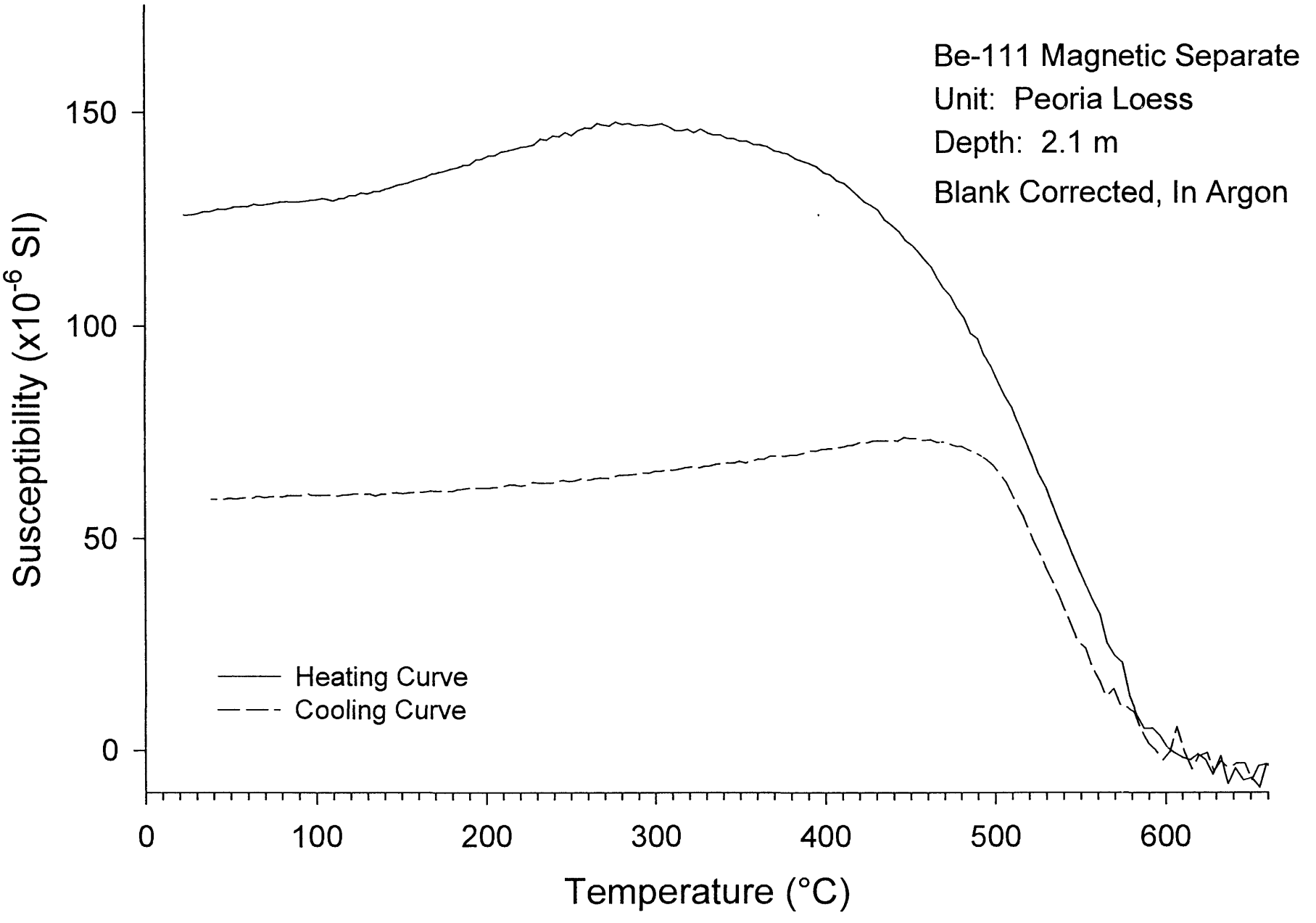
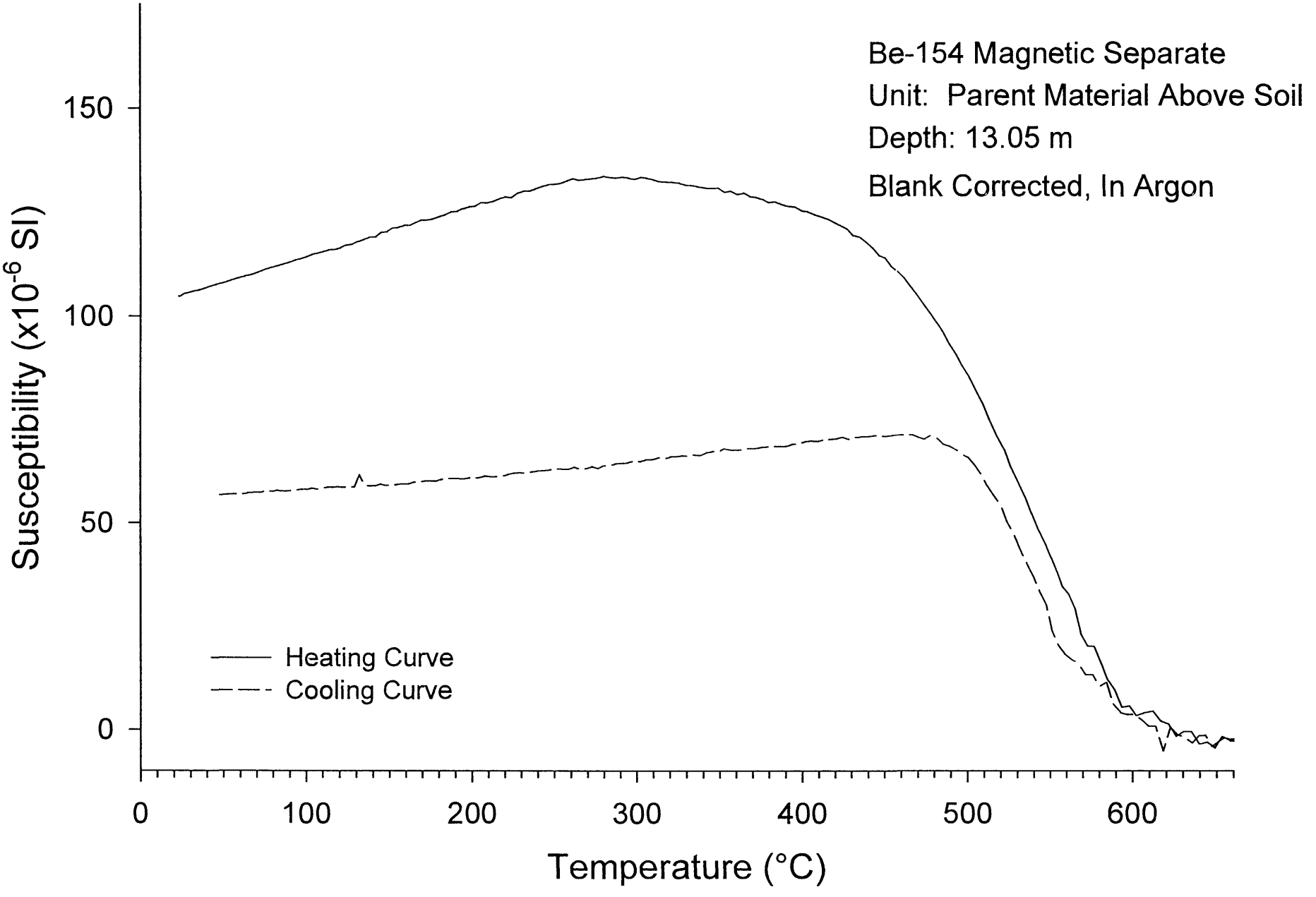
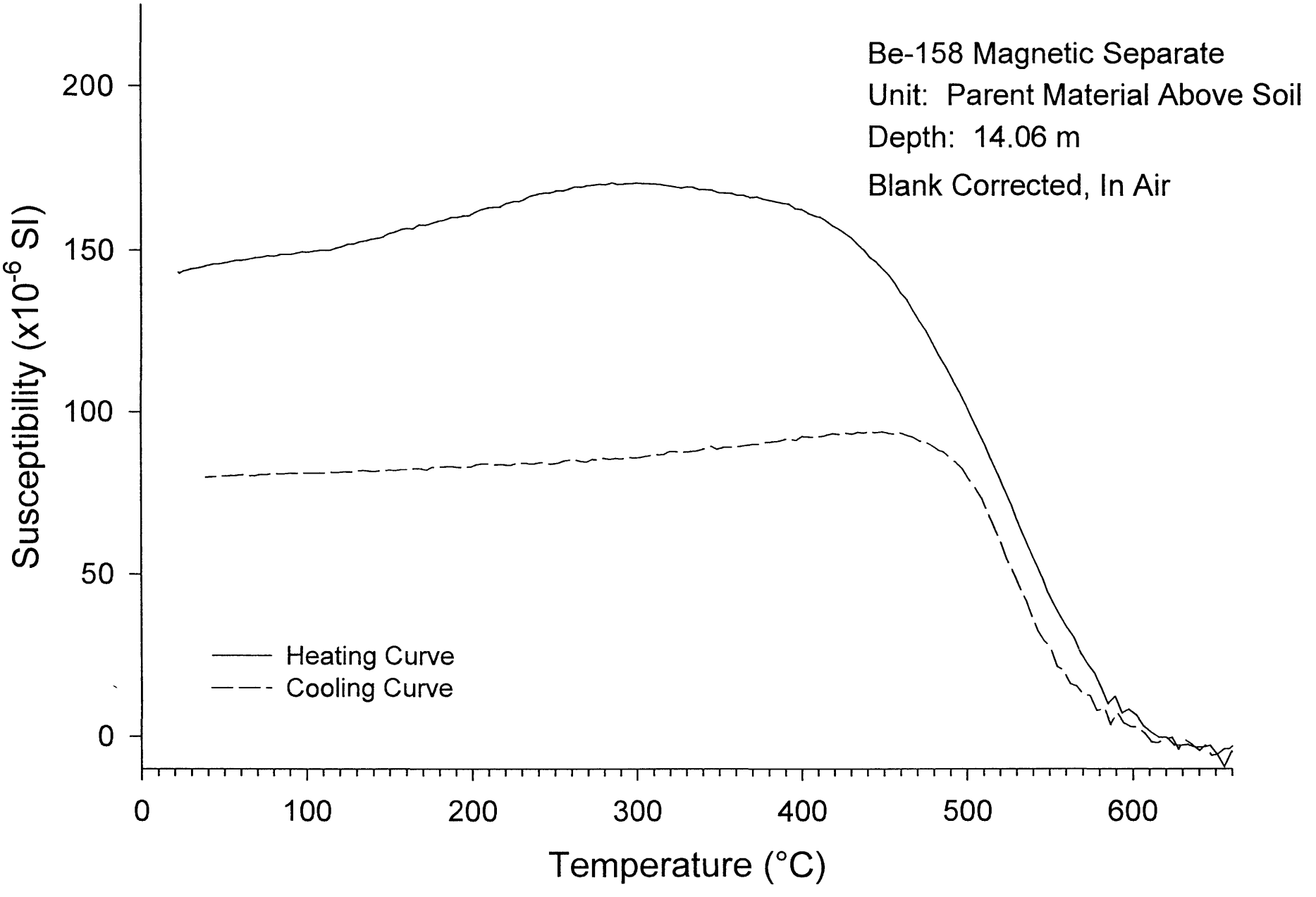

Be-166 Magnetic separate
Unit: Parent Material-Above Soil
Depth: 14.86 m
Sample wt: 0.53 mg
Applied Field: 0.25 Tesla
Heating rate: 15°C/min.
Saturation Magnetization
Heating curve
Cooling curve
100
200
300
400
500
600
Temperature (°C)

Figure 2. Thermomagnetic curves of magnetic susceptibility vs. temperature for magnetic separates of soil and loess samples from the Bellevue borrow pit. Thermomagnetic experiments were either conducted in air or in a flowing argon environment as specified on each plot. Depth measurements as in Fig. 1.


Be-102 Magnetic Separate
Unit: Modern A/AB
Depth: 0.2 m
Blank Corrected, In Argon
Susceptibility (x10-6 SI)
250
200
150
100
50
0
Heating Curve
Cooling Curve
0
100
200
300
400
500
600
Temperature (°C)


Be-111 Magnetic Separate
Unit: Peoria Loess
Depth: 2.1 m
Blank Corrected, In Argon
Susceptibility (x10-6 SI)
150
100
50
0
Heating Curve
Cooling Curve
0
100
200
300
400
500
600
Temperature (°C)


Be-154 Magnetic Separate
Unit: Parent Material Above Soil
Depth: 13.05 m
Blank Corrected, In Argon
Susceptibility (x10-6 SI)
150
100
50
0
Heating Curve
Cooling Curve
0
100
200
300
400
500
600
Temperature (°C)


Be-158 Magnetic Separate
Unit: Parent Material Above Soil
Depth: 14.06 m
Blank Corrected, In Air
Susceptibility (x10-6 SI)
200
150
100
50
0
Heating Curve
Cooling Curve
0
100
200
300
400
500
600
Temperature (°C)

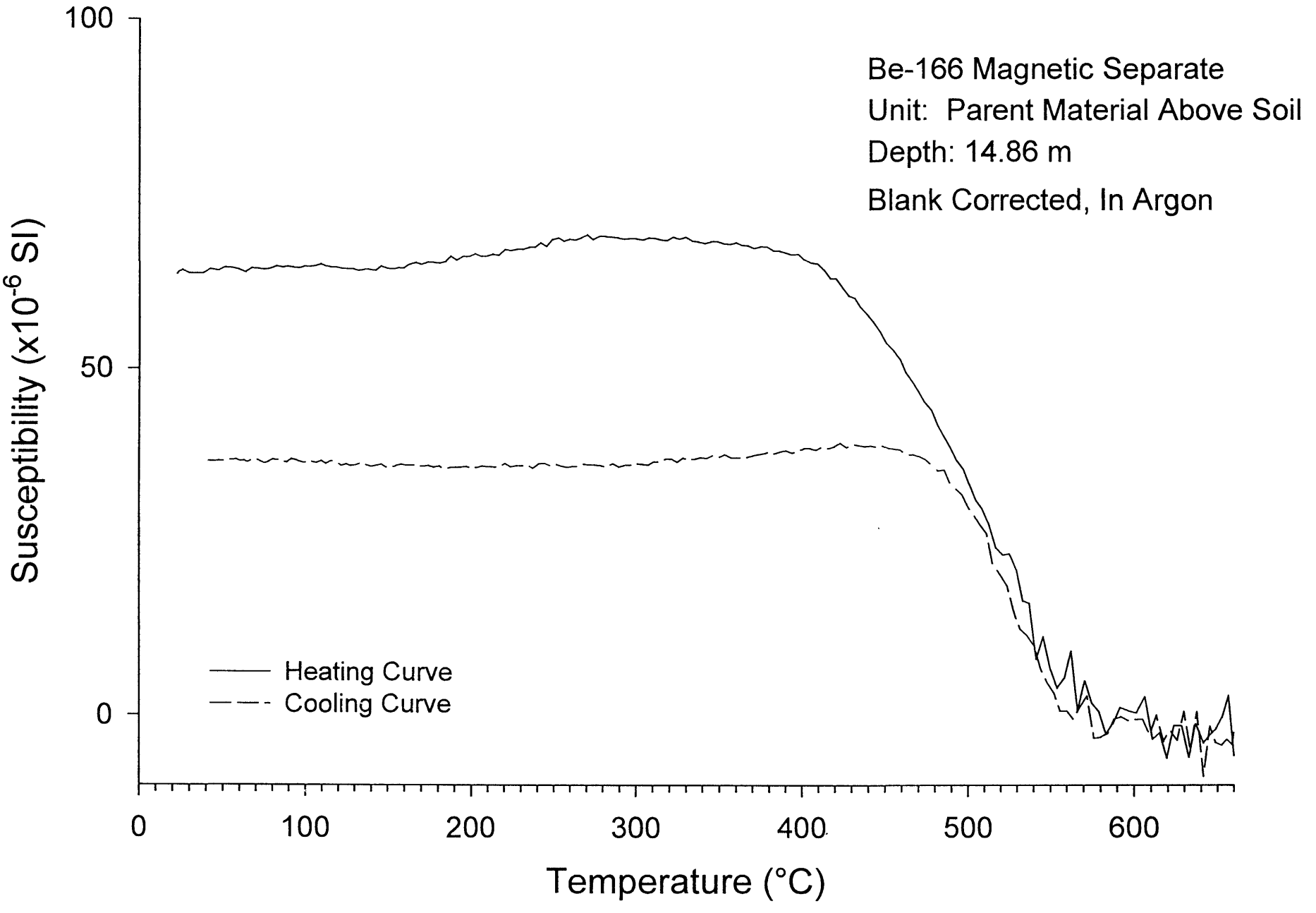

Be-166 Magnetic Separate
Unit: Parent Material Above Soil
Depth: 14.86 m
Blank Corrected, In Argon
Susceptibility (x10-6 SI)
100
50
0
Heating Curve
Cooling Curve
0
100
200
300
400
500
600
Temperature (°C)

Table 1. Sediment Magnetic Data from the Bellevue Borrow Pit, Scarpy County, Nebraska.

Sample No: A unique number assigned to loess and/or sediment samples that are placed in approximately 3.2 cm^3 plastic boxes.

Unit: The lithologic unit from which the sample was derived.

Depth (m): The original depth in the section from which the sample was obtained. In general, this number represents the midpoint of the interval over which the sample was collected.

Com. Depth (m): The depth obtained after combining the Elba Modern soil with the other two sampling profiles. Because there is a break in section, the composite depth for the loess sections was calculated by arbitrarily adding 1.8 m to the true sampling depth for both the detailed section and the "bulk" section.

Mass (g): Sample mass after correction for weight of the empty sample box.

LFMS (m3/kg): the low frequency magnetic susceptibility obtained by multiplying the LFMS (emu/g) by $4\Pi/1000$ to obtain units of m^3/kg.

HFMS (m3/kg): the high frequency magnetic susceptibility (in m^3/kg) obtained by multiplying the HFMS (emu/g) by $4\Pi/1000$ to obtain units of m^3/kg.

FDMS (m3/kg): Frequency dependent magnetic susceptibility = LFMS-HFMS in units of m^3/kg.

%FDMS: The percent frequency dependent magnetic susceptibility = [(LFMS-HFMS)/LFMS] × 100.

ARM (Am2/kg): the raw moment of the anhysteretic remanent magnetization divided by the sample mass to obtain units of Am^2/kg.

IRM 1.2T (Am2/kg): the raw moment of the isothermal remanent magnetization acquired in an induction of 1.2 T, divided by the sample mass to obtain units of Am^2/kg.

IRM-0.3T (Am2/kg): the raw moment of the isothermal remanent magnetization acquired after first exposing the sample to an induction of 1.2 T, followed by the application of an oppositely directed induction of 0.3T. The moment of the IRM has been divided by the sample mass to obtain units of Am^2/kg.

HIRM: the "hard" isothermal remanent magnetization obtained by the formula: $(IRM_{1.2T}+IRM_{-0.3T})/2$, in units of Am^2/kg.

S: the S parameter defined as: $-IRM_{-0.3T}/IRM_{1.2T}$ (dimensionless).

ARM/MS: The ratio of the anhysteretic remanent magnetization divided by the low frequency magnetic susceptibility, in A/m

SIRM/MS: the ratio of the isothermal remanent magnetization at 1.2T divided by the low frequency magnetic susceptibility, in A/m.

MS/SIRM: the inverse of the SIRM/MS, in m/A.

Table 1. Sediment Magnetic Data from Bellview, Nebraska

Sample No.	Soil Unit	Depth Range (cm)	Depth (m)	Mass (g)	LFMS (m3/kg)
BE-101	Modern A	15	0.08	3.6293	8.1739E-07
BE-102	A/AB	15-25	0.20	4.0674	8.2491E-07
BE-103	Bt1	25-35	0.30	3.799	7.1750E-07
BE-104	Bt2	35-45	0.40	3.864	5.9176E-07
BE-105	Bt3	45-50	0.48	3.9262	5.4033E-07
BE-106	Bt4	50-60	0.55	4.3311	4.9963E-07
BE-107	BC	60-70	0.65	3.9896	4.8825E-07
BE-108	C	70-80	0.75	4.0455	4.8125E-07
BE-109	Peoria	110-120	1.15	3.7303	4.8779E-07
BE-110	Peoria	150-160	1.55	3.4593	5.0505E-07
BE-111	Peoria	205-215	2.10	4.0044	4.5004E-07
BE-112	Peoria	255-265	2.60	3.8197	4.7364E-07
BE-113	Peoria	310-320	3.15	3.9749	4.3293E-07
BE-114	Peoria	380-390	3.85	3.5975	4.2637E-07
BE-115	Peoria	425-435	4.30	3.8343	4.4513E-07
BE-116	Peoria	470-480	4.75	3.574	4.3610E-07
BE-117	Peoria	520-530	5.25	3.7196	4.5436E-07
BE-131	Peoria	550	5.50	3.4172	5.1557E-07
BE-118	Peoria/GC?	550-560	5.55	3.7764	4.8220E-07
BE-119	GC?	570-580	5.75	3.8349	4.9664E-07
BE-132	Peoria/GC mix zone	555-595	5.75	3.3241	8.0723E-07
BE-120	GC?	580-590	5.85	3.6483	4.8150E-07
BE-121	GC	590-600	5.95	3.6591	4.6720E-07
BE-133	GC A horizon	595-605	6.00	3.4247	1.6796E-06
BE-122	GC	600-610	6.05	3.7054	4.8371E-07
BE-134	GC C horizon	605-650	6.28	3.8683	8.7061E-07
BE-123	GC	630-635	6.33	3.775	4.3272E-07
BE-124	GC	635-645	6.40	3.8353	4.5982E-07
BE-125	GC	645-655	6.50	3.7529	4.9821E-07
BE-126	GC	655-665	6.60	3.7171	4.7154E-07
BE-135	GC/Sangamon Mixing zone?	650-679	6.65	4.1967	9.1678E-07
BE-127	GC	665-675	6.70	3.7317	4.7148E-07
BE-128	GC	675-685	6.80	3.6824	4.9035E-07
BE-129	GC	685-695	6.90	3.9524	5.0623E-07
BE-136	Sangamon AB	679-709	6.94	3.8985	9.1618E-07
BE-130	GC	695-705	7.00	3.7826	5.0693E-07
BE-137	Sangamon Bt1	709-726	7.18	3.9238	9.3442E-07
BE-138	Sangmaon Bt2	726-754	7.40	3.6733	1.0119E-06
BE-139	Sangamon Bt3	754-810	7.82	3.9064	1.0093E-06
BE-140	Sangamon Bt4	810-885	8.48	3.9543	1.0984E-06
BE-141	Loveland?	885-918	9.02	4.1313	8.4822E-07
BE-142	Loveland?	918-950	9.34	4.0089	8.7998E-07
BE-143	Mixing zone	950-981	9.66	3.6758	1.0394E-06
BE-144	Weak Pre-loveland soil in Pre-Loveland Loess	981-1020	10.01	3.7574	1.0988E-06
BE-145	ditto	1020-106	10.40	4.2465	9.3701E-07
BE-146	Bt1 of older soil	1060-107	10.67	3.8504	8.4972E-07
BE-147	Bt2	1074-111	10.95	3.9358	9.1357E-07
BE-148	C or BC?	1165-117	11.70	4.1885	8.4705E-07
BE-149	Part of above B horizon?	1190-120	11.95	4.289	8.3795E-07

Table 1. Sediment Magnetic Data from Bellview, Nebraska

Sample No.	Soil Unit	Depth Range (cm)	Depth (m)	Mass (g)	LFMS (m3/kg)
BE-150	Bt	1205-121	12.10	4.2627	8.7057E-07
BE-151	Parent material-above soil	1237-124	12.45	4.0567	7.6386E-07
BE-152	Parent material-above soil	1257-126	12.62	3.5668	7.4215E-07
BE-153	Parent material-above soil	1279-128	12.84	4.0451	8.3107E-07
BE-154	Parent material-above soil	1300-131	13.05	3.9838	9.0833E-07
BE-155	Parent material-above soil	1336-134	13.41	4.1116	8.8019E-07
BE-156	Parent material-above soil	1381-1391	13.86	4.5225	7.3826E-07
BE-157	Parent material-above soil	1391-1401	13.96	3.9566	7.7642E-07
BE-158	Parent material-above soil	1401-1411	14.06	4.2486	7.6207E-07
BE-159	Parent material-above soil	1411-1421	14.16	4.0979	6.7403E-07
BE-160	Parent material-above soil	1421-1431	14.26	3.8326	4.7707E-07
BE-161	Parent material-above soil	1431-1441	14.36	3.5669	3.6034E-07
BE-162	Parent material-above soil	1441-1451	14.46	3.859	3.5315E-07
BE-163	Parent material-above soil	1451-1461	14.56	4.1192	3.8594E-07
BE-164	Parent material-above soil	1461-1471	14.66	3.6962	3.7432E-07
BE-165	Parent material-above soil	1471-1481	14.76	4.2045	3.8038E-07
BE-166	Parent material-above soil	1481-1491	14.86	3.8386	3.8305E-07
BE-167	Parent material-above soil	1491-149	14.96	4.2038	3.1217E-07
BE-168	Parent material-above soil	1495-150	15.00	3.3758	2.9238E-07
BE-169	Parent material-above soil	1505-151	15.08	4.2126	2.7821E-07

Table 1. Sediment Magnetic Data from Bellview, Nebraska

Sample No.	HFMS (m3/kg)	FDMS (m3/kg)	%FDMS	ARM (Am2/kg)	IRM 1.2T (Am2/kg)	IRM-0.3T (Am2/kg)	HIRM (Am2/kg)	S
BE-101	7.7213E-07	4.5255E-08	5.54	2.1630E-04	5.1250E-03	-4.8494E-03	1.3777E-04	0.95
BE-102	7.7547E-07	4.9433E-08	5.99	2.2029E-04	4.7696E-03	-4.4254E-03	1.7210E-04	0.93
BE-103	6.7810E-07	3.9396E-08	5.49	1.7926E-04	4.0800E-03	-3.8168E-03	1.3161E-04	0.94
BE-104	5.6588E-07	2.5887E-08	4.37	1.3587E-04	3.4420E-03	-3.1832E-03	1.2940E-04	0.92
BE-105	5.1850E-07	2.1828E-08	4.04	1.1563E-04	3.1837E-03	-2.9800E-03	1.0188E-04	0.94
BE-106	4.8454E-07	1.5087E-08	3.02	9.8358E-05	3.0246E-03	-2.8168E-03	1.0390E-04	0.93
BE-107	4.7562E-07	1.2631E-08	2.59	8.6224E-05	3.0329E-03	-2.8324E-03	1.0026E-04	0.93
BE-108	4.7215E-07	9.1013E-09	1.89	8.2561E-05	3.0404E-03	-2.8427E-03	9.8875E-05	0.93
BE-109	4.8173E-07	6.0637E-09	1.24	7.4793E-05	3.2169E-03	-3.0292E-03	9.3826E-05	0.94
BE-110	4.9767E-07	7.3742E-09	1.46	7.3714E-05	3.3533E-03	-3.1509E-03	1.0118E-04	0.94
BE-111	4.4248E-07	7.5629E-09	1.68	6.7676E-05	3.0466E-03	-2.8469E-03	9.9890E-05	0.93
BE-112	4.6387E-07	9.7710E-09	2.06	6.7283E-05	3.2463E-03	-3.0631E-03	9.1630E-05	0.94
BE-113	4.2679E-07	6.1332E-09	1.42	6.0882E-05	2.9938E-03	-2.8177E-03	8.8053E-05	0.94
BE-114	4.1917E-07	7.1958E-09	1.69	6.0042E-05	3.0021E-03	-2.8353E-03	8.3391E-05	0.94
BE-115	4.3917E-07	5.9648E-09	1.34	6.2071E-05	3.1818E-03	-2.9732E-03	1.0432E-04	0.93
BE-116	4.2896E-07	7.1376E-09	1.64	6.4913E-05	3.0498E-03	-3.0218E-03	1.3990E-05	0.99
BE-117	4.4595E-07	8.4123E-09	1.85	6.8287E-05	3.0380E-03	-2.7960E-03	1.2098E-04	0.92
BE-131	5.1116E-07	4.4129E-09	0.86	7.9597E-05	3.6872E-03	-3.4531E-03	1.1705E-04	0.94
BE-118	4.7252E-07	9.6833E-09	2.01	7.0967E-05	3.3100E-03	-3.0717E-03	1.1916E-04	0.93
BE-119	4.9153E-07	5.1119E-09	1.03	7.4578E-05	3.4160E-03	-3.1813E-03	1.1734E-04	0.93
BE-132	7.8632E-07	2.0906E-08	2.59	1.5162E-04	5.5353E-03	-5.2646E-03	1.3537E-04	0.95
BE-120	4.7189E-07	9.6100E-09	2.00	6.6058E-05	3.2892E-03	-3.0699E-03	1.0964E-04	0.93
BE-121	4.7393E-07	-6.7312E-09	-1.44	7.0236E-05	3.2795E-03	-3.0609E-03	1.0932E-04	0.93
BE-133	1.5778E-06	1.0179E-07	6.06	3.3872E-04	1.0045E-02	-9.4315E-03	3.0660E-04	0.94
BE-122	4.7479E-07	8.9193E-09	1.84	7.5835E-05	3.5084E-03	-3.2385E-03	1.3494E-04	0.92
BE-134	8.4462E-07	2.5988E-08	2.99	2.7661E-04	5.7390E-03	-5.3512E-03	1.9388E-04	0.93
BE-123	4.2609E-07	6.6244E-09	1.53	6.7285E-05	2.9854E-03	-2.7470E-03	1.1921E-04	0.92
BE-124	4.4888E-07	1.0944E-08	2.38	6.9356E-05	3.2331E-03	-3.0245E-03	1.0429E-04	0.94
BE-125	4.8887E-07	9.3422E-09	1.88	7.1944E-05	3.6772E-03	-3.4107E-03	1.3323E-04	0.93
BE-126	4.7330E-07	-1.7580E-09	-0.37	6.5912E-05	3.3359E-03	-3.0938E-03	1.2106E-04	0.93
BE-135	8.7435E-07	4.2430E-08	4.63	2.5973E-04	6.1239E-03	-5.7903E-03	1.6680E-04	0.95
BE-127	4.6471E-07	6.7686E-09	1.44	7.0477E-05	3.4301E-03	-3.1889E-03	1.2059E-04	0.93
BE-128	4.8458E-07	5.7672E-09	1.18	7.3050E-05	3.6389E-03	-3.3674E-03	1.3578E-04	0.93
BE-129	4.9917E-07	7.0583E-09	1.39	7.7674E-05	3.8458E-03	-3.5928E-03	1.2651E-04	0.93
BE-136	8.7031E-07	4.5869E-08	5.01	2.8729E-04	6.1306E-03	-5.6432E-03	2.4368E-04	0.92
BE-130	4.9832E-07	8.6044E-09	1.70	7.5874E-05	3.7540E-03	-3.5161E-03	1.1897E-04	0.94
BE-137	8.7751E-07	5.6910E-08	6.09	3.1347E-04	6.1420E-03	-5.6833E-03	2.2937E-04	0.93
BE-138	9.5446E-07	5.7439E-08	5.68	2.8040E-04	6.5336E-03	-6.0708E-03	2.3140E-04	0.93
BE-139	9.5219E-07	5.7067E-08	5.65	2.5855E-04	6.3998E-03	-5.9646E-03	2.1759E-04	0.93
BE-140	1.0360E-06	6.2446E-08	5.68	2.8829E-04	7.4602E-03	-6.9797E-03	2.4024E-04	0.94
BE-141	8.1215E-07	3.6075E-08	4.25	2.3649E-04	6.5839E-03	-6.1482E-03	2.1785E-04	0.93
BE-142	8.4008E-07	3.9904E-08	4.53	2.4171E-04	6.5853E-03	-6.1613E-03	2.1203E-04	0.94
BE-143	9.8458E-07	5.4801E-08	5.27	3.1558E-04	7.3997E-03	-6.9101E-03	2.4484E-04	0.93
BE-144	1.0368E-06	6.2006E-08	5.64	3.4865E-04	7.5850E-03	-7.0794E-03	2.5283E-04	0.93
BE-145	8.8777E-07	4.9242E-08	5.26	3.1084E-04	6.7821E-03	-6.3111E-03	2.3549E-04	0.93
BE-146	8.0939E-07	4.0339E-08	4.75	2.5296E-04	6.2591E-03	-5.8176E-03	2.2076E-04	0.93
BE-147	8.6526E-07	4.8308E-08	5.29	2.3756E-04	6.1741E-03	-5.7930E-03	1.9056E-04	0.94
BE-148	8.0706E-07	3.9993E-08	4.72	2.0294E-04	5.8971E-03	-5.4912E-03	2.0294E-04	0.93
BE-149	7.9693E-07	4.1019E-08	4.90	2.0751E-04	5.8988E-03	-5.5024E-03	1.9818E-04	0.93

Table 1. Sediment Magnetic Data from Bellview, Nebraska

Sample No.	HFMS (m3/kg)	FDMS (m3/kg)	%FDMS	ARM (Am2/kg)	IRM 1.2T (Am2/kg)	IRM-0.3T (Am2/kg)	HIRM (Am2/kg)	S
BE-150	8.2838E-07	4.2186E-08	4.85	2.1794E-04	6.1229E-03	-5.7006E-03	2.1113E-04	0.93
BE-151	7.3415E-07	2.9707E-08	3.89	1.9153E-04	5.6450E-03	-5.2752E-03	1.8488E-04	0.93
BE-152	7.1520E-07	2.6952E-08	3.63	1.9065E-04	5.5792E-03	-5.1306E-03	2.2429E-04	0.92
BE-153	7.8596E-07	4.5107E-08	5.43	2.3287E-04	6.0320E-03	-5.6117E-03	2.1013E-04	0.93
BE-154	8.5799E-07	5.0344E-08	5.54	2.5604E-04	6.3758E-03	-5.9240E-03	2.2591E-04	0.93
BE-155	8.3438E-07	4.5814E-08	5.21	2.4808E-04	5.9831E-03	-5.5453E-03	2.1889E-04	0.93
BE-156	7.0299E-07	3.5261E-08	4.78	2.1846E-04	5.0193E-03	-4.5771E-03	2.2112E-04	0.91
BE-157	7.3684E-07	3.9574E-08	5.10	2.3808E-04	5.1307E-03	-4.6757E-03	2.2747E-04	0.91
BE-158	7.2170E-07	4.0374E-08	5.30	2.5185E-04	4.8957E-03	-4.4485E-03	2.2360E-04	0.91
BE-159	6.3171E-07	4.2318E-08	6.28	2.3890E-04	4.0020E-03	-3.6604E-03	1.7082E-04	0.91
BE-160	4.4920E-07	2.7870E-08	5.84	1.6438E-04	2.6875E-03	-2.3274E-03	1.8003E-04	0.87
BE-161	3.3962E-07	2.0716E-08	5.75	1.1999E-04	1.8531E-03	-1.5420E-03	1.5560E-04	0.83
BE-162	3.3541E-07	1.7747E-08	5.03	1.1117E-04	1.7906E-03	-1.4797E-03	1.5548E-04	0.83
BE-163	3.6608E-07	1.9860E-08	5.15	1.2308E-04	2.0174E-03	-1.7042E-03	1.5658E-04	0.84
BE-164	3.6038E-07	1.3939E-08	3.72	1.0173E-04	1.9642E-03	-1.6449E-03	1.5962E-04	0.84
BE-165	3.6463E-07	1.5751E-08	4.14	9.7515E-05	2.0471E-03	-1.7334E-03	1.5686E-04	0.85
BE-166	3.6993E-07	1.3127E-08	3.43	8.6490E-05	2.1042E-03	-1.7952E-03	1.5448E-04	0.85
BE-167	3.0790E-07	4.2747E-09	1.37	6.2562E-05	1.6820E-03	-1.4082E-03	1.3690E-04	0.84
BE-168	2.8477E-07	7.6088E-09	2.60	5.7468E-05	1.5102E-03	-1.2465E-03	1.3182E-04	0.83
BE-169	2.7116E-07	7.0519E-09	2.53	5.4123E-05	1.4250E-03	-1.1703E-03	1.2736E-04	0.82

Table 1. Sediment Magnetic Data from Bellview, Nebraska

Sample No.	ARM/MS (A/m)	SIRM/MS (A/m)	MS/SIRM (m/A)
BE-101	264.6	6270	1.5949E-04
BE-102	267.0	5782	1.7295E-04
BE-103	249.8	5686	1.7586E-04
BE-104	229.6	5817	1.7192E-04
BE-105	214.0	5892	1.6972E-04
BE-106	196.9	6054	1.6519E-04
BE-107	176.6	6212	1.6098E-04
BE-108	171.6	6318	1.5829E-04
BE-109	153.3	6595	1.5163E-04
BE-110	146.0	6640	1.5061E-04
BE-111	150.4	6770	1.4772E-04
BE-112	142.1	6854	1.4590E-04
BE-113	140.6	6915	1.4461E-04
BE-114	140.8	7041	1.4202E-04
BE-115	139.4	7148	1.3990E-04
BE-116	148.9	6993	1.4299E-04
BE-117	150.3	6686	1.4956E-04
BE-131	154.4	7152	1.3983E-04
BE-118	147.2	6864	1.4568E-04
BE-119	150.2	6878	1.4539E-04
BE-132	187.8	6857	1.4583E-04
BE-120	137.2	6831	1.4639E-04
BE-121	150.3	7019	1.4246E-04
BE-133	201.7	5980	1.6721E-04
BE-122	156.8	7253	1.3787E-04
BE-134	317.7	6592	1.5170E-04
BE-123	155.5	6899	1.4494E-04
BE-124	150.8	7031	1.4222E-04
BE-125	144.4	7381	1.3549E-04
BE-126	139.8	7075	1.4135E-04
BE-135	283.3	6680	1.4971E-04
BE-127	149.5	7275	1.3745E-04
BE-128	149.0	7421	1.3475E-04
BE-129	153.4	7597	1.3163E-04
BE-136	313.6	6691	1.4945E-04
BE-130	149.7	7405	1.3504E-04
BE-137	335.5	6573	1.5214E-04
BE-138	277.1	6457	1.5488E-04
BE-139	256.2	6341	1.5770E-04
BE-140	262.5	6792	1.4724E-04
BE-141	278.8	7762	1.2883E-04
BE-142	274.7	7484	1.3363E-04
BE-143	303.6	7119	1.4046E-04
BE-144	317.3	6903	1.4486E-04
BE-145	331.7	7238	1.3816E-04
BE-146	297.7	7366	1.3576E-04
BE-147	260.0	6758	1.4797E-04
BE-148	239.6	6962	1.4364E-04
BE-149	247.6	7040	1.4205E-04

Table 1. Sediment Magnetic Data from Bellview, Nebraska

Sample No.	ARM/MS (A/m)	SIRM/MS (A/m)	MS/SIRM (m/A)
BE-150	250.3	7033	1.4218E-04
BE-151	250.7	7390	1.3532E-04
BE-152	256.9	7518	1.3302E-04
BE-153	280.2	7258	1.3778E-04
BE-154	281.9	7019	1.4247E-04
BE-155	281.8	6797	1.4711E-04
BE-156	295.9	6799	1.4708E-04
BE-157	306.6	6608	1.5133E-04
BE-158	330.5	6424	1.5566E-04
BE-159	354.4	5938	1.6842E-04
BE-160	344.6	5633	1.7752E-04
BE-161	333.0	5143	1.9445E-04
BE-162	314.8	5070	1.9722E-04
BE-163	318.9	5227	1.9131E-04
BE-164	271.8	5247	1.9057E-04
BE-165	256.4	5382	1.8582E-04
BE-166	225.8	5493	1.8205E-04
BE-167	200.4	5388	1.8559E-04
BE-168	196.6	5165	1.9361E-04
BE-169	194.5	5122	1.9523E-04

Table 2. Magnetic Susceptibility vs. Temperature Data For Some Samples From the Bellevue Borrow Pit, Scarpy County, Nebraska.

Sample No: A unique number assigned to loess and/or sediment samples.

Heating time (sec): The time in seconds during the progressive heating experiment.

Heating susceptibility: The raw susceptibility value (x 10^{-6} SI) for the sample during the progressive heating experiment.

Heating susceptibility corrected: The corrected susceptibility value (x 10^{-6} SI) during progressive heating after subtracting out the diamagnetic effects of the quartz tube and Al_2O_3 powder.

Cooling time (sec): The time in seconds during the progressive cooling of the sample following the attainment of peak heating temperatures.

Cooling susceptibility: The raw susceptibility value (x 10^{-6} SI) for the sample during progressive cooling.

Cooling susceptibility corrected: The corrected susceptibility value (x 10^{-6} SI) during cooling after subtracting out the diamagnetic effects of the quartz tube and Al_2O_3 powder.

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-102	0	26.7	39.64	180.7118	2744	671.2	-151.30	-5.0215
Be-102	16	27.4	39.57	180.6475	2761	670.1	-150.60	-4.3303
Be-102	32	29.7	40.29	181.3860	2778	668.7	-149.80	-3.5416
Be-102	47	32.9	41.01	182.1319	2795	666.9	-148.60	-2.3562
Be-102	63	37.0	40.91	182.0650	2812	664.3	-153.40	-7.1772
Be-102	78	41.0	41.35	182.5373	2829	661.5	-147.60	-1.3998
Be-102	93	45.0	42.04	183.2596	2846	658.6	-149.60	-3.4232
Be-102	108	49.1	42.15	183.4028	2863	655.7	-148.90	-2.7467
Be-102	124	53.1	42.88	184.1651	2880	652.8	-148.50	-2.3701
Be-102	139	57.0	43.34	184.6566	2897	649.3	-148.50	-2.3984
Be-102	154	60.8	43.61	184.9573	2914	646.0	-147.40	-1.3250
Be-102	170	64.6	44.11	185.4880	2932	642.1	-152.00	-5.9565
Be-102	185	68.2	44.33	185.7371	2949	638.6	-152.50	-6.4848
Be-102	200	72.0	44.23	185.6678	2966	634.7	-145.60	0.3837
Be-102	216	75.6	45.16	186.6268	2983	630.8	-142.90	3.0522
Be-102	231	79.2	45.26	186.7559	3000	626.9	-150.10	-4.1793
Be-102	246	82.6	45.60	187.1234	3017	623.0	-145.20	0.6892
Be-102	262	85.9	45.79	187.3401	3034	619.2	-143.70	2.1585
Be-102	277	89.3	46.10	187.6775	3051	615.3	-146.00	-0.1730
Be-102	292	92.4	46.19	187.7926	3068	611.2	-141.40	4.3938
Be-102	308	95.7	46.40	188.0292	3085	607.0	-141.80	3.9599
Be-102	323	98.8	46.65	188.3043	3102	602.5	-144.60	1.1235
Be-102	338	102.2	46.87	188.5517	3119	598.7	-140.90	4.7928
Be-102	353	105.6	47.01	188.7192	3136	594.5	-142.10	3.5589
Be-102	369	108.7	47.07	188.8043	3153	590.4	-140.30	5.3258
Be-102	384	111.9	46.93	188.6901	3170	586.6	-135.10	10.4951
Be-102	399	115.3	47.18	188.9676	3187	582.5	-124.80	20.7620
Be-102	415	118.7	47.54	189.3550	3205	578.1	-125.20	20.3264
Be-102	430	122.1	47.90	189.7425	3222	574.0	-118.90	26.5933
Be-102	446	125.2	47.95	189.8176	3238	570.3	-116.20	29.2634
Be-102	461	128.7	48.21	190.1058	3254	566.5	-115.00	30.4327
Be-102	476	132.1	48.36	190.2833	3269	562.8	-110.80	34.6028
Be-102	491	135.5	48.33	190.2808	3285	559.5	-108.30	37.0762
Be-102	507	139.0	48.86	190.8390	3300	555.4	-105.30	40.0430
Be-102	522	142.2	49.21	191.2149	3316	551.7	-102.10	43.2131
Be-102	537	145.6	49.22	191.2524	3331	548.1	-97.70	47.5841
Be-102	552	148.8	49.55	191.6082	3347	544.4	-93.47	51.7842
Be-102	568	152.3	49.70	191.7865	3362	540.7	-89.92	55.3043
Be-102	583	155.5	50.14	192.2523	3378	537.1	-84.63	60.5652
Be-102	598	158.9	51.04	193.1798	3394	533.4	-79.51	65.6553
Be-102	614	162.2	50.73	192.8965	3409	529.8	-75.80	69.3362
Be-102	629	165.7	51.44	193.6348	3425	526.2	-70.54	74.5671
Be-102	644	169.1	51.77	193.9922	3440	522.2	-64.99	80.0848
Be-102	659	172.6	52.39	194.6405	3456	518.6	-60.15	84.8957
Be-102	675	176.2	52.17	194.4496	3471	514.7	-55.45	89.5642
Be-102	690	179.9	53.26	195.5695	3487	511.1	-50.36	94.6252
Be-102	705	183.5	53.07	195.4085	3502	507.1	-46.71	98.2428
Be-102	720	187.3	53.58	195.9492	3518	503.6	-43.24	101.6846
Be-102	736	190.8	54.07	196.4675	3534	499.7	-41.35	103.5431

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-102	751	194.6	55.30	197.7282	3549	496.1	-39.10	105.7640
Be-102	766	198.4	55.55	198.0089	3565	492.6	-37.67	107.1657
Be-102	781	202.3	55.91	198.4004	3580	489.0	-36.79	108.0166
Be-102	797	205.8	56.94	199.4587	3595	485.5	-35.55	109.2283
Be-102	812	209.1	57.32	199.8654	3611	481.6	-34.94	109.8068
Be-102	827	212.7	57.82	200.3944	3626	478.4	-35.26	109.4610
Be-102	843	216.3	58.16	200.7635	3642	474.6	-34.64	110.0503
Be-102	858	220.1	59.42	202.0542	3657	471.1	-34.85	109.8120
Be-102	873	223.7	59.75	202.4133	3672	467.3	-34.13	110.5013
Be-102	889	227.3	60.01	202.7024	3688	463.4	-33.85	110.7498
Be-102	904	230.9	60.35	203.0715	3703	459.6	-33.96	110.6091
Be-102	919	234.6	60.93	203.6814	3718	456.2	-33.91	110.6316
Be-102	934	238.2	61.24	204.0205	3734	452.4	-33.56	110.9509
Be-102	950	241.8	62.13	204.9395	3749	448.9	-33.92	110.5627
Be-102	965	245.4	62.13	204.9686	3765	445.5	-34.06	110.3952
Be-102	980	249.1	62.49	205.3585	3780	442.0	-34.20	110.2269
Be-102	995	252.7	63.18	206.0776	3795	438.3	-34.47	109.9270
Be-102	1010	256.1	62.98	205.9051	3811	434.5	-34.27	110.0963
Be-102	1025	259.8	63.31	206.2650	3826	431.1	-34.35	109.9889
Be-102	1041	263.5	63.39	206.3748	3842	427.4	-34.81	109.4990
Be-102	1056	267.1	63.64	206.6539	3857	423.7	-35.10	109.1791
Be-102	1071	270.8	63.75	206.7938	3872	420.0	-35.19	109.0592
Be-102	1086	274.5	64.13	207.2037	3888	416.2	-35.30	108.9185
Be-102	1101	278.2	64.20	207.3036	3903	412.6	-35.61	108.5794
Be-102	1116	282.2	63.70	206.8359	3918	409.2	-35.69	108.4719
Be-102	1131	285.9	64.36	207.5258	3933	405.2	-36.11	108.0196
Be-102	1146	289.7	64.49	207.6865	3949	401.8	-36.19	107.9121
Be-102	1161	293.1	63.38	206.6040	3964	397.9	-36.55	107.5206
Be-102	1177	296.8	63.47	206.7239	3980	393.9	-36.70	107.3383
Be-102	1192	300.6	64.33	207.6146	3995	390.2	-37.36	106.6484
Be-102	1207	304.1	63.30	206.6129	4010	386.6	-37.27	106.7093
Be-102	1222	307.5	63.82	207.1603	4025	383.0	-37.42	106.5303
Be-102	1237	311.3	63.09	206.4610	4041	379.0	-37.50	106.4179
Be-102	1252	315.4	62.67	206.0741	4056	375.4	-38.22	105.6689
Be-102	1267	318.9	63.12	206.5524	4071	371.8	-38.41	105.4498
Be-102	1282	322.7	62.49	205.9531	4087	368.5	-38.56	105.2731
Be-102	1297	326.2	62.11	205.6014	4102	364.6	-38.77	105.0316
Be-102	1312	330.0	62.07	205.5921	4117	361.0	-38.68	105.0925
Be-102	1327	333.8	61.84	205.3928	4133	357.5	-39.49	104.2542
Be-102	1342	337.3	61.12	204.7010	4148	353.6	-39.35	104.3627
Be-102	1357	341.2	61.03	204.6426	4164	350.0	-39.71	103.9737
Be-102	1372	344.7	60.36	204.0008	4179	346.5	-40.19	103.4654
Be-102	1387	348.5	60.19	203.8615	4194	342.9	-40.45	103.1763
Be-102	1402	352.1	59.92	203.6206	4209	339.7	-40.29	103.3104
Be-102	1417	355.7	58.86	202.5897	4225	336.1	-40.85	102.7214
Be-102	1432	359.6	58.80	202.5612	4240	332.6	-40.98	102.5631
Be-102	1447	363.1	58.08	201.8695	4255	329.1	-40.90	102.6148
Be-102	1462	366.7	57.71	201.5286	4270	325.6	-41.37	102.1165
Be-102	1477	370.6	57.47	201.3201	4286	322.1	-41.83	101.6283

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-102	1492	374.2	56.31	200.1892	4301	318.6	-41.63	101.8000
Be-102	1507	377.8	55.55	199.4583	4316	315.1	-42.06	101.3417
Be-102	1522	381.8	55.26	199.2006	4331	311.6	-42.42	100.9534
Be-102	1537	385.4	54.87	198.8396	4346	307.8	-42.62	100.7227
Be-102	1552	389.0	53.60	197.5987	4362	304.6	-42.75	100.5669
Be-102	1567	393.0	53.17	197.2010	4377	300.9	-42.95	100.3370
Be-102	1582	396.6	51.92	195.9801	4392	297.4	-43.31	99.9487
Be-102	1597	400.3	51.04	195.1300	4408	293.7	-43.38	99.8488
Be-102	1612	404.0	49.37	193.4899	4423	290.2	-43.65	99.5505
Be-102	1628	407.6	48.38	192.5290	4438	286.5	-44.02	99.1507
Be-102	1643	411.3	47.44	191.6189	4454	283.1	-43.89	99.2532
Be-102	1658	415.0	46.96	191.1688	4469	279.6	-44.16	98.9549
Be-102	1673	418.7	44.80	189.0387	4484	276.2	-44.17	98.9175
Be-102	1688	422.7	42.63	186.9010	4499	272.8	-44.68	98.3800
Be-102	1703	426.4	41.33	185.6309	4514	269.4	-44.96	98.0725
Be-102	1718	430.2	38.33	182.6616	4529	266.0	-44.97	98.0351
Be-102	1733	433.6	36.86	181.2190	4544	262.6	-45.49	97.4876
Be-102	1748	437.3	35.78	180.1689	4560	259.2	-45.84	97.1101
Be-102	1763	441.1	32.33	176.7496	4575	255.8	-45.15	97.7726
Be-102	1779	444.8	30.41	174.8595	4590	252.5	-45.79	97.1060
Be-102	1794	448.6	27.97	172.4502	4605	248.8	-45.73	97.1361
Be-102	1809	452.4	25.35	169.8609	4620	245.4	-45.80	97.0386
Be-102	1824	456.5	22.81	167.3540	4635	242.1	-45.88	96.9320
Be-102	1839	460.0	20.34	164.9123	4651	238.5	-45.89	96.8929
Be-102	1855	463.4	17.75	162.3498	4666	235.1	-46.39	96.3654
Be-102	1870	467.3	14.43	159.0613	4681	231.8	-46.42	96.3088
Be-102	1885	471.1	11.47	156.1320	4696	228.2	-46.73	95.9697
Be-102	1900	474.9	7.66	152.3507	4711	224.8	-47.02	95.6522
Be-102	1915	478.7	4.36	149.0814	4726	221.5	-47.01	95.6355
Be-102	1931	482.9	-0.18	144.5781	4741	218.2	-47.21	95.4089
Be-102	1946	486.8	-4.15	140.6368	4756	214.9	-47.58	95.0122
Be-102	1961	490.6	-7.68	137.1365	4771	211.6	-47.15	95.4156
Be-102	1977	494.2	-10.97	133.8786	4786	208.3	-47.58	94.9589
Be-102	1992	497.7	-15.32	129.5569	4801	205.0	-47.42	95.0922
Be-102	2007	501.6	-20.88	124.0284	4816	201.7	-48.03	94.4556
Be-102	2022	505.5	-24.51	120.4299	4831	198.4	-47.97	94.4889
Be-102	2038	509.1	-29.19	115.7790	4846	195.4	-48.25	94.1847
Be-102	2053	513.0	-35.70	109.3005	4861	192.2	-48.36	94.0488
Be-102	2068	517.0	-40.85	104.1828	4876	188.9	-48.96	93.4222
Be-102	2084	520.6	-45.99	99.0719	4891	185.9	-48.78	93.5779
Be-102	2099	523.8	-50.34	94.7478	4906	182.6	-48.47	93.8613
Be-102	2115	527.8	-56.52	88.6001	4921	179.7	-48.90	93.4078
Be-102	2130	531.4	-63.04	82.1091	4937	176.4	-48.92	93.3612
Be-102	2145	535.1	-67.10	78.0790	4952	173.2	-49.22	93.0353
Be-102	2161	538.7	-72.02	73.1881	4967	170.2	-49.08	93.1511
Be-102	2176	542.7	-77.59	67.6504	4982	167.0	-49.09	93.1153
Be-102	2192	546.7	-82.70	62.5728	4997	163.8	-49.45	92.7294
Be-102	2207	550.4	-87.74	57.5626	5012	160.6	-48.95	93.2036
Be-102	2222	553.7	-91.38	53.9493	5028	157.3	-49.20	92.9269

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-102	2238	557.4	-95.82	49.5392	5043	154.1	-49.37	92.7310
Be-102	2253	560.8	-100.50	44.8867	5058	150.9	-49.65	92.4252
Be-102	2268	564.2	-103.10	42.3141	5073	147.7	-49.16	92.8893
Be-102	2284	568.2	-106.60	38.8464	5089	144.8	-49.58	92.4459
Be-102	2299	572.3	-110.90	34.5796	5104	141.6	-49.75	92.2501
Be-102	2318	577.1	-121.00	24.5183	5119	138.7	-49.70	92.2766
Be-102	2335	581.5	-132.30	13.2539	5134	135.5	-49.88	92.0708
Be-102	2352	585.9	-136.60	8.9894	5149	132.4	-49.97	91.9557
Be-102	2369	590.4	-137.60	8.0258	5165	129.2	-49.74	92.1599
Be-102	2386	595.2	-138.10	7.5646	5180	126.3	-49.96	91.9164
Be-102	2403	599.7	-139.80	5.9009	5195	123.1	-49.90	91.9506
Be-102	2420	604.6	-146.10	-0.3595	5211	120.3	-49.84	91.9880
Be-102	2437	609.1	-145.80	-2.3132	5226	117.1	-49.89	91.9121
Be-102	2454	613.2	-144.90	0.9100	5241	114.0	-49.73	92.0471
Be-102	2471	617.4	-147.30	-1.4561	5256	111.1	-49.92	91.8337
Be-102	2488	622.0	-150.10	-4.2189	5272	108.0	-49.95	91.7786
Be-102	2505	626.6	-148.50	-2.5818	5287	104.8	-50.03	91.6727
Be-102	2522	630.8	-147.40	-1.4478	5303	101.7	-50.10	91.5777
Be-102	2539	635.4	-150.20	-4.2107	5318	98.8	-50.23	91.4243
Be-102	2556	639.6	-149.70	-3.6767	5333	95.7	-50.31	91.3192
Be-102	2573	643.5	-150.30	-4.2452	5348	92.9	-50.49	91.1166
Be-102	2590	647.5	-149.60	-3.5129	5364	90.0	-50.51	91.0732
Be-102	2607	651.8	-150.30	-4.1782	5379	87.2	-50.13	91.4306
Be-102	2624	655.7	-147.20	-1.0467	5395	84.4	-50.59	90.9480
Be-102	2641	659.7	-146.40	-0.2143	5410	81.5	-50.43	91.0845
Be-102	2658	663.3	-149.70	-3.4853	5425	78.7	-50.45	91.0419
Be-102	2675	666.1	-153.10	-6.8627	5441	75.9	-50.85	90.6193
Be-102	2692	668.7	-150.30	-4.0416	5456	73.3	-50.58	90.8683
Be-102	2709	670.1	-148.80	-2.5303	5472	70.7	-50.95	90.4773
Be-102	2727	671.2	-149.10	-2.8215	5487	68.2	-50.74	90.6671
Be-102					5502	65.9	-50.74	90.6485
Be-102					5518	63.3	-50.31	91.0575
Be-102					5533	61.0	-51.10	90.2489
Be-102					5548	59.0	-51.12	90.2128
Be-102					5564	56.4	-51.10	90.2117
Be-102					5579	54.2	-51.18	90.1140
Be-105	0	21.9	28.91	169.9430	2736	672.3	-150.80	-4.5126
Be-105	16	22.6	28.69	169.7287	2753	671.2	-151.00	-4.7215
Be-105	32	25.7	28.85	169.9137	2770	669.8	-152.30	-6.0328
Be-105	47	29.7	29.24	170.3360	2787	667.6	-148.50	-2.2505
Be-105	62	33.9	29.52	170.6500	2804	665.1	-149.50	-3.2707
Be-105	78	38.5	29.53	170.6971	2821	662.2	-152.70	-6.4942
Be-105	93	42.8	29.66	170.8619	2838	659.3	-147.60	-1.4176
Be-105	108	47.1	29.89	171.1266	2855	656.4	-151.20	-5.0410
Be-105	124	51.4	30.26	171.5313	2872	652.8	-150.80	-4.6701
Be-105	139	55.4	30.72	172.0237	2890	649.3	-152.30	-6.1984
Be-105	154	59.5	30.44	171.7768	2906	645.7	-145.60	0.4725
Be-105	170	63.3	30.66	172.0275	2924	641.8	-147.90	-1.8589

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-105	185	67.2	30.86	172.2590	2941	637.9	-146.60	-0.5905
Be-105	201	71.0	30.95	172.3797	2958	634.3	-149.00	-3.0195
Be-105	216	74.8	30.66	172.1204	2975	630.4	-144.60	1.3489
Be-105	231	78.2	31.02	172.5079	2992	626.6	-145.60	0.3182
Be-105	247	81.8	30.66	172.1769	3009	622.7	-146.00	-0.1133
Be-105	262	85.1	30.83	172.3736	3026	618.5	-147.20	-1.3472
Be-105	277	88.7	30.54	172.1127	3043	614.3	-146.90	-1.0811
Be-105	293	92.1	30.87	172.4701	3060	609.8	-145.00	0.7825
Be-105	308	95.2	30.63	172.2552	3078	605.9	-146.90	-1.1490
Be-105	324	98.6	30.58	172.2327	3095	601.8	-142.50	3.2179
Be-105	339	102.0	30.92	172.6001	3112	597.3	-143.20	2.4815
Be-105	354	105.1	30.77	172.4752	3129	593.2	-142.20	3.4484
Be-105	370	108.5	30.73	172.4626	3146	589.4	-143.70	1.9177
Be-105	385	111.6	30.89	172.6477	3163	585.6	-141.20	4.3870
Be-105	400	115.0	31.05	172.8352	3180	581.5	-137.20	8.3539
Be-105	416	118.7	31.32	173.1350	3197	577.4	-131.80	13.7208
Be-105	431	122.1	30.94	172.7825	3214	573.3	-130.30	15.1876
Be-105	446	125.5	31.37	173.2400	3232	569.3	-127.90	17.5553
Be-105	462	128.9	31.47	173.3674	3249	565.2	-128.50	16.9222
Be-105	477	132.4	31.57	173.4957	3266	561.1	-119.80	25.5891
Be-105	492	135.8	31.89	173.8432	3283	557.1	-124.00	21.3568
Be-105	508	139.2	32.66	174.6407	3301	553.1	-117.90	27.4245
Be-105	523	142.4	32.63	174.6365	3317	549.1	-114.30	30.9921
Be-105	538	145.9	33.12	175.1548	3332	545.7	-110.00	35.2647
Be-105	554	149.3	33.59	175.6523	3348	541.7	-106.20	39.0324
Be-105	569	152.8	34.03	176.1205	3363	538.4	-103.10	42.1057
Be-105	584	156.0	34.35	176.4664	3378	534.7	-98.81	46.3658
Be-105	600	159.5	34.65	176.7946	3394	530.8	-94.65	50.4943
Be-105	615	163.0	34.94	177.1129	3410	527.1	-90.41	54.7044
Be-105	630	166.5	35.60	177.8012	3425	523.5	-85.59	59.4953
Be-105	646	170.0	35.97	178.1995	3441	519.6	-81.35	63.7038
Be-105	661	173.5	36.19	178.4478	3456	516.0	-76.44	68.5847
Be-105	676	177.0	37.05	179.3360	3472	512.0	-71.87	73.1224
Be-105	692	180.5	37.39	179.7043	3487	508.5	-69.17	75.7941
Be-105	707	184.0	37.56	179.9026	3503	504.9	-65.38	79.5551
Be-105	722	187.8	38.15	180.5233	3518	501.0	-62.56	82.3436
Be-105	738	191.3	38.54	180.9416	3534	497.4	-60.60	84.2745
Be-105	753	195.2	39.05	181.4831	3550	493.2	-59.27	85.5705
Be-105	768	199.0	39.69	182.1538	3565	489.3	-57.30	87.5090
Be-105	784	202.8	39.94	182.4345	3581	485.8	-56.60	88.1808
Be-105	799	206.1	40.79	183.3111	3596	482.3	-55.83	88.9225
Be-105	814	209.9	41.17	183.7218	3612	478.7	-55.18	89.5434
Be-105	829	213.5	41.51	184.0909	3627	475.2	-54.65	90.0451
Be-105	845	217.1	42.47	185.0800	3643	471.4	-53.46	91.2044
Be-105	860	220.7	43.08	185.7191	3658	467.9	-53.81	90.8261
Be-105	875	224.6	43.60	186.2706	3674	464.1	-52.94	91.6654
Be-105	891	228.2	44.41	187.1097	3689	460.6	-52.88	91.6972
Be-105	906	231.8	44.90	187.6288	3705	456.8	-52.46	92.0865
Be-105	921	235.4	45.55	188.3078	3720	453.0	-52.48	92.0358

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-105	936	239.0	45.67	188.4569	3736	449.6	-52.82	91.6683
Be-105	952	242.6	46.47	189.2860	3751	445.5	-52.43	92.0252
Be-105	967	246.3	46.79	189.6359	3767	442.0	-52.27	92.1569
Be-105	982	249.9	47.04	189.9150	3782	438.3	-51.92	92.4770
Be-105	997	253.6	47.03	189.9349	3798	434.5	-52.92	91.4463
Be-105	1013	257.0	47.71	190.6423	3813	430.8	-52.92	91.4164
Be-105	1028	260.6	47.83	190.7914	3829	427.1	-52.95	91.3565
Be-105	1043	264.6	48.42	191.4137	3844	423.7	-53.31	90.9691
Be-105	1058	268.3	48.45	191.4736	3859	420.0	-53.17	91.0792
Be-105	1073	272.0	48.58	191.6335	3875	416.2	-53.71	90.5085
Be-105	1088	275.7	48.41	191.4934	3891	412.6	-53.85	90.3394
Be-105	1103	279.4	48.45	191.5633	3906	408.9	-54.06	90.0995
Be-105	1119	283.4	48.31	191.4556	3921	405.2	-54.17	89.9596
Be-105	1134	287.1	48.36	191.5355	3937	401.2	-54.64	89.4573
Be-105	1149	290.8	47.83	191.0354	3952	397.5	-54.77	89.2974
Be-105	1164	294.5	47.71	190.9453	3968	393.9	-55.15	88.8883
Be-105	1179	298.3	47.18	190.4460	3983	390.2	-55.47	88.5384
Be-105	1195	302.0	47.61	190.9059	3999	386.6	-55.83	88.1493
Be-105	1210	305.5	46.82	190.1442	4014	382.7	-55.84	88.1078
Be-105	1225	309.0	47.16	190.5124	4030	379.0	-56.24	87.6779
Be-105	1240	312.7	46.26	189.6423	4045	375.4	-56.49	87.3989
Be-105	1255	316.2	46.06	189.4706	4061	371.8	-56.39	87.4698
Be-105	1270	320.0	45.62	189.0613	4076	368.2	-56.49	87.3407
Be-105	1285	323.8	46.07	189.5420	4092	364.3	-56.65	87.1492
Be-105	1300	327.6	45.56	189.0627	4107	360.7	-57.02	86.7501
Be-105	1316	331.4	43.74	187.2734	4123	356.9	-57.33	86.4094
Be-105	1330	335.0	44.64	188.2025	4138	353.3	-57.36	86.3503
Be-105	1346	338.5	44.24	187.8308	4154	349.7	-57.96	85.7212
Be-105	1361	342.3	43.88	187.5015	4169	346.5	-57.94	85.7154
Be-105	1376	345.9	42.58	186.2305	4184	342.9	-57.96	85.6663
Be-105	1391	349.7	41.93	185.6112	4200	339.4	-58.18	85.4180
Be-105	1406	353.3	41.20	184.9103	4215	335.8	-58.47	85.0989
Be-105	1421	357.2	41.49	185.2318	4231	332.3	-58.75	84.7907
Be-105	1436	361.0	41.16	184.9325	4246	328.5	-59.04	84.4700
Be-105	1451	364.6	39.46	183.2616	4261	325.0	-59.06	84.4217
Be-105	1466	368.2	38.64	182.4707	4277	321.2	-59.08	84.3710
Be-105	1481	372.1	38.14	182.0022	4292	317.7	-59.40	84.0227
Be-105	1496	376.0	37.19	181.0837	4308	313.9	-59.31	84.0820
Be-105	1511	379.7	36.91	180.8336	4323	310.7	-59.24	84.1262
Be-105	1526	383.6	35.66	179.6151	4338	307.2	-60.04	83.2979
Be-105	1541	387.5	34.98	178.9666	4354	303.5	-60.00	83.3080
Be-105	1556	391.2	33.53	177.5465	4369	300.0	-59.83	83.4497
Be-105	1571	395.1	33.52	177.5680	4385	296.3	-59.89	83.3598
Be-105	1586	398.8	32.71	176.7879	4400	292.5	-60.16	83.0591
Be-105	1601	402.7	31.43	175.5394	4415	289.1	-60.76	82.4317
Be-105	1616	406.4	30.31	174.4493	4431	285.4	-60.88	82.2818
Be-105	1631	410.4	29.01	173.1816	4446	281.6	-60.83	82.3011
Be-105	1646	414.1	27.84	172.0415	4462	278.2	-60.97	82.1336
Be-105	1662	417.5	25.99	170.2190	4477	274.8	-61.05	82.0261

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Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-105	1677	421.2	24.51	168.7689	4492	271.4	-60.87	82.1787
Be-105	1692	425.2	22.64	166.9312	4508	268.0	-61.48	81.5412
Be-105	1708	428.9	21.62	165.9411	4523	264.6	-61.20	81.7937
Be-105	1722	432.7	19.06	163.4118	4538	261.2	-61.47	81.4963
Be-105	1738	436.7	16.39	160.7741	4554	257.8	-61.59	81.3488
Be-105	1753	440.5	14.98	159.3948	4569	254.1	-61.48	81.4289
Be-105	1768	444.5	11.94	156.3871	4584	250.5	-61.58	81.2998
Be-105	1783	448.3	10.14	154.6178	4600	246.8	-62.05	80.7999
Be-105	1799	451.8	7.13	151.6381	4615	243.2	-62.11	80.7109
Be-105	1814	455.9	5.32	149.8582	4630	239.9	-62.02	80.7742
Be-105	1830	459.6	3.01	147.5791	4646	236.2	-62.05	80.7143
Be-105	1845	463.4	0.33	144.9316	4661	232.6	-62.26	80.4752
Be-105	1860	467.3	-2.49	142.1453	4676	229.3	-62.66	80.0486
Be-105	1875	471.1	-4.66	140.0030	4691	225.9	-63.19	79.4911
Be-105	1891	474.9	-7.96	136.7317	4707	222.3	-63.08	79.5720
Be-105	1906	478.7	-10.73	133.9934	4722	219.0	-62.93	79.6953
Be-105	1922	482.6	-13.89	130.8649	4737	215.4	-63.02	79.5763
Be-105	1937	486.4	-17.82	126.9656	4752	212.1	-63.16	79.4096
Be-105	1952	490.3	-20.91	123.9071	4768	208.6	-63.24	79.3013
Be-105	1968	494.2	-23.64	121.2086	4783	205.5	-63.08	79.4363
Be-105	1983	497.7	-27.89	116.9869	4798	202.3	-63.53	78.9604
Be-105	1998	501.6	-31.44	113.4684	4813	199.0	-63.15	79.3138
Be-105	2014	505.5	-35.08	109.8599	4828	195.7	-63.42	79.0171
Be-105	2029	509.4	-39.22	105.7514	4843	192.4	-63.63	78.7804
Be-105	2045	513.0	-43.67	101.3305	4859	189.2	-64.27	78.1146
Be-105	2060	517.0	-47.89	97.1428	4874	185.9	-63.69	78.6679
Be-105	2076	520.9	-52.39	92.6743	4889	182.6	-63.36	78.9713
Be-105	2091	524.5	-56.78	88.3134	4904	179.4	-63.76	78.5454
Be-105	2106	528.1	-62.17	82.9525	4919	176.2	-64.05	78.2296
Be-105	2122	532.1	-66.76	78.3948	4934	173.2	-64.06	78.1953
Be-105	2137	535.7	-70.96	74.2239	4949	170.0	-63.83	78.3995
Be-105	2152	539.4	-75.65	69.5638	4965	166.7	-64.05	78.1528
Be-105	2168	543.1	-80.04	65.2037	4980	163.5	-63.96	78.2170
Be-105	2183	546.7	-84.38	60.8928	4995	160.3	-64.42	77.7311
Be-105	2199	550.4	-89.20	56.1027	5010	157.1	-64.03	78.0953
Be-105	2214	554.1	-93.67	51.6625	5025	153.9	-64.49	77.6094
Be-105	2230	558.5	-97.83	47.5381	5040	150.7	-63.96	78.1136
Be-105	2245	562.5	-102.40	43.0004	5055	147.5	-63.91	78.1377
Be-105	2261	566.2	-105.80	39.6303	5070	144.3	-64.12	77.9019
Be-105	2276	569.9	-109.60	35.8602	5085	141.4	-64.20	77.7984
Be-105	2292	573.7	-112.90	32.5909	5101	138.2	-63.72	78.2526
Be-105	2309	578.1	-118.00	27.5264	5116	135.0	-64.28	77.6667
Be-105	2326	582.2	-125.90	19.6595	5131	131.8	-64.32	77.6009
Be-105	2343	586.3	-135.50	10.0927	5146	128.7	-64.10	77.7958
Be-105	2360	590.8	-135.00	10.6290	5161	125.8	-64.54	77.3324
Be-105	2377	595.6	-138.80	6.8678	5176	122.6	-64.30	77.5465
Be-105	2394	600.1	-142.50	3.2042	5191	119.5	-64.28	77.5415
Be-105	2411	604.6	-140.90	4.8405	5206	116.6	-64.10	77.6981
Be-105	2428	609.1	-143.10	2.6769	5221	113.4	-63.99	77.7822

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-105	2446	613.6	-145.80	1.3214	5236	110.3	-64.13	77.6172
Be-105	2463	617.8	-143.10	2.7471	5251	107.4	-64.36	77.3638
Be-105	2480	622.3	-144.60	1.2835	5266	104.3	-64.16	77.5387
Be-105	2497	626.9	-149.40	-3.4793	5282	101.2	-64.28	77.3937
Be-105	2514	631.5	-148.30	-2.3422	5297	98.1	-64.04	77.6086
Be-105	2531	635.7	-148.20	-2.2082	5312	95.2	-63.98	77.6452
Be-105	2548	640.3	-149.70	-3.6711	5327	92.4	-63.89	77.7126
Be-105	2565	644.3	-148.90	-2.8388	5342	89.3	-64.16	77.4175
Be-105	2582	648.2	-147.80	-1.7073	5357	86.4	-64.17	77.3841
Be-105	2599	652.5	-150.30	-4.1725	5373	83.6	-63.81	77.7215
Be-105	2616	656.4	-150.70	-4.5410	5388	80.8	-64.13	77.3789
Be-105	2633	660.4	-150.70	-4.5087	5403	78.2	-64.27	77.2179
Be-105	2650	664.3	-147.30	-1.0772	5418	75.4	-64.08	77.3852
Be-105	2667	667.6	-147.10	-0.8505	5434	72.8	-64.35	77.0942
Be-105	2684	670.1	-151.30	-5.0303	5449	70.2	-64.11	77.3132
Be-105	2701	671.9	-150.00	-3.7158	5464	67.7	-64.21	77.1930
Be-105	2719	672.7	-149.60	-3.3093	5480	65.1	-64.24	77.1420
Be-105					5495	62.8	-64.34	77.0234
Be-105					5510	60.3	-64.13	77.2133
Be-105					5526	58.0	-64.30	77.0247
Be-105					5541	55.7	-64.20	77.1061
Be-105					5557	52.9	-64.23	77.0535
Be-105					5572	50.4	-64.21	77.0533
Be-105					5587	47.8	-64.24	77.0023
Be-105					5602	45.5	-64.32	76.9037
Be-105					5618	43.3	-64.34	76.8659
Be-105					5633	41.2	-64.44	76.7489
					5648	39.5	-64.40	76.7752
Be-111	0	22.4	-14.77	126.2671	2698	674.5	-149.30	-2.9948
Be-111	16	22.9	-14.88	126.1611	2715	672.7	-152.10	-5.8093
Be-111	31	25.1	-14.80	126.2589	2733	670.5	-152.00	-5.7271
Be-111	46	28.9	-14.71	126.3796	2750	668.0	-153.70	-7.4473
Be-111	61	33.2	-14.11	127.0143	2767	664.7	-150.10	-3.8740
Be-111	76	37.5	-14.14	127.0190	2785	661.8	-150.50	-4.2974
Be-111	91	42.0	-13.58	127.6154	2802	658.6	-149.30	-3.1232
Be-111	106	46.3	-13.67	127.5602	2819	654.6	-149.80	-3.6555
Be-111	121	50.9	-13.19	128.0773	2836	650.7	-153.10	-6.9871
Be-111	136	55.2	-13.08	128.2220	2854	646.4	-149.10	-3.0218
Be-111	151	59.0	-13.13	128.2027	2871	641.8	-149.10	-3.0590
Be-111	166	62.8	-12.57	128.7934	2888	637.2	-150.30	-4.2961
Be-111	181	66.6	-12.88	128.5141	2905	632.9	-148.50	-2.5309
Be-111	196	70.5	-12.70	128.7256	2922	628.7	-151.00	-5.0648
Be-111	211	74.3	-12.44	129.0163	2940	624.5	-146.30	-0.3987
Be-111	226	77.9	-12.19	129.2954	2957	619.9	-147.10	-1.2359
Be-111	241	81.8	-12.13	129.3869	2975	615.7	-150.20	-4.3698
Be-111	256	85.4	-12.27	129.2760	2992	611.2	-146.10	-0.3062
Be-111	271	89.0	-12.25	129.3251	3009	606.6	-145.70	5.6671
Be-111	286	92.4	-12.11	129.4926	3026	602.5	-146.00	-0.2765

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-111	301	95.7	-11.90	129.7292	3044	598.3	-147.90	-2.2104
Be-111	316	99.1	-11.79	129.8667	3061	593.8	-145.50	0.1533
Be-111	331	102.5	-11.49	130.1942	3078	589.7	-143.90	1.7201
Be-111	346	105.6	-11.74	129.9692	3095	585.6	-140.80	4.7870
Be-111	361	108.7	-12.14	129.5943	3112	581.2	-136.40	9.1515
Be-111	376	111.9	-11.64	130.1201	3130	577.1	-135.30	10.2183
Be-111	391	115.3	-11.63	130.1576	3147	573.0	-134.70	10.7852
Be-111	407	118.7	-10.96	130.8550	3164	569.3	-130.90	14.5553
Be-111	422	122.1	-10.98	130.8625	3181	564.9	-132.70	12.7198
Be-111	437	125.5	-10.39	131.4800	3198	560.8	-128.90	16.4867
Be-111	452	128.9	-10.66	131.2374	3216	556.8	-125.70	19.6543
Be-111	467	132.4	-10.20	131.7257	3233	552.7	-121.10	24.2212
Be-111	482	135.8	-10.12	131.8332	3251	548.4	-119.70	25.5865
Be-111	497	139.2	-9.64	132.3447	3267	544.4	-115.70	29.5542
Be-111	512	142.7	-9.24	132.7699	3282	540.7	-112.10	33.1243
Be-111	528	146.1	-8.79	133.2494	3298	537.1	-108.40	36.7952
Be-111	543	149.6	-8.56	133.5087	3313	533.1	-104.80	40.3629
Be-111	558	153.1	-8.26	133.8380	3329	529.5	-101.80	43.3338
Be-111	573	156.8	-7.66	134.4678	3345	525.5	-97.86	47.2415
Be-111	588	160.3	-7.34	134.8131	3360	521.5	-94.66	50.4092
Be-111	604	163.8	-7.00	135.1814	3376	517.9	-90.96	54.0801
Be-111	619	167.3	-6.33	135.8787	3392	514.0	-87.81	57.1986
Be-111	634	170.8	-5.95	136.2820	3407	510.1	-84.81	60.1671
Be-111	649	174.3	-5.76	136.5012	3423	506.5	-81.80	63.1480
Be-111	665	177.8	-5.31	136.9815	3439	502.3	-79.51	65.4041
Be-111	680	181.6	-5.03	137.2902	3454	498.4	-77.54	67.3426
Be-111	695	185.4	-4.44	137.9189	3470	494.8	-76.32	68.5335
Be-111	710	189.2	-4.37	138.0176	3486	491.3	-75.38	69.4452
Be-111	725	193.0	-3.29	139.1253	3501	487.4	-74.51	70.2837
Be-111	741	196.5	-3.14	139.3026	3517	483.9	-73.85	70.9154
Be-111	756	200.3	-2.46	140.0123	3532	480.0	-73.07	71.6639
Be-111	771	204.2	-2.36	140.1418	3548	476.5	-72.94	71.7656
Be-111	786	208.0	-1.61	140.9285	3564	472.7	-72.38	72.2949
Be-111	802	211.9	-1.27	141.2960	3579	468.5	-71.84	72.8010
Be-111	817	215.7	-0.89	141.7095	3595	465.0	-71.98	72.6327
Be-111	833	219.3	-0.50	142.1271	3610	461.2	-71.24	73.3420
Be-111	848	223.2	-0.37	142.2942	3626	457.1	-71.46	73.0889
Be-111	863	227.3	0.03	142.7184	3642	453.3	-70.97	73.5482
Be-111	879	230.9	1.25	143.9705	3657	449.6	-70.97	73.5183
Be-111	894	234.8	0.97	143.7223	3673	445.8	-70.63	73.8276
Be-111	910	238.5	1.91	144.6879	3688	442.0	-71.50	72.9269
Be-111	925	242.1	1.67	144.4840	3704	438.3	-71.09	73.3070
Be-111	940	245.7	2.61	145.4480	3719	434.8	-71.38	72.9888
Be-111	956	249.4	1.88	144.7509	3735	431.1	-71.37	72.9689
Be-111	971	253.3	3.05	145.9545	3750	427.4	-71.22	73.0890
Be-111	986	257.2	3.61	146.5439	3766	423.7	-71.75	72.5291
Be-111	1002	260.9	3.45	146.4158	3781	420.0	-71.50	72.7492
Be-111	1017	264.6	4.58	147.5727	3797	415.9	-72.13	72.0861
Be-111	1033	268.3	4.21	147.2306	3813	412.2	-72.29	71.8962

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Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-111	1048	272.0	3.96	147.0115	3828	408.6	-72.65	71.5071
Be-111	1064	275.7	4.84	147.9274	3844	404.6	-72.97	71.1548
Be-111	1079	279.4	4.25	147.3593	3859	400.6	-72.96	71.1324
Be-111	1094	283.4	4.45	147.5966	3875	396.9	-73.07	70.9926
Be-111	1110	287.4	3.93	147.1049	3891	393.3	-73.39	70.6435
Be-111	1125	291.1	4.17	147.3808	3906	389.6	-73.29	70.7136
Be-111	1140	294.8	3.83	147.0637	3921	386.0	-73.95	70.0245
Be-111	1156	298.9	4.01	147.2768	3937	382.4	-74.26	69.6854
Be-111	1171	302.9	4.22	147.5191	3953	378.7	-74.32	69.5955
Be-111	1187	306.7	3.54	146.8718	3968	374.8	-74.51	69.3740
Be-111	1202	310.4	2.66	146.0197	3984	371.2	-74.52	69.3349
Be-111	1218	314.2	2.47	145.8654	3999	367.3	-74.46	69.3634
Be-111	1233	318.0	2.78	146.2091	4014	363.7	-75.19	68.6043
Be-111	1249	321.8	1.96	145.4138	4030	360.1	-75.04	68.7253
Be-111	1264	325.9	2.71	146.1970	4046	356.6	-75.46	68.2770
Be-111	1279	329.7	1.88	145.3987	4061	352.7	-75.92	67.7855
Be-111	1295	333.5	1.43	144.9754	4077	349.1	-75.43	68.2464
Be-111	1310	337.6	1.34	144.9225	4092	345.9	-75.93	67.7205
Be-111	1325	341.5	0.47	144.0886	4108	342.3	-75.81	67.8115
Be-111	1341	345.6	0.44	144.0907	4123	338.5	-75.99	67.6008
Be-111	1356	349.1	-0.18	143.4991	4139	335.0	-76.11	67.4525
Be-111	1372	353.3	-0.25	143.4606	4154	331.4	-76.47	67.0634
Be-111	1387	357.2	-1.03	142.7108	4170	327.6	-76.64	66.8627
Be-111	1403	361.0	-1.14	142.6375	4185	324.1	-76.94	66.5344
Be-111	1418	364.9	-1.53	142.2780	4201	320.3	-76.60	66.8437
Be-111	1433	368.8	-2.50	141.3345	4216	316.8	-76.81	66.6055
Be-111	1449	373.0	-2.91	140.9645	4232	313.0	-77.13	66.2548
Be-111	1464	376.9	-3.30	140.6060	4247	309.6	-77.34	66.0173
Be-111	1480	381.2	-4.38	139.5607	4263	305.8	-77.22	66.1066
Be-111	1495	385.4	-5.04	138.9267	4278	302.0	-77.57	65.7259
Be-111	1511	389.6	-5.60	138.4066	4294	298.6	-77.51	65.7584
Be-111	1526	393.6	-6.34	137.6979	4309	295.1	-77.92	65.3201
Be-111	1542	397.9	-7.75	136.3176	4325	291.4	-77.89	65.3203
Be-111	1557	401.8	-8.35	135.7561	4340	287.9	-78.08	65.1020
Be-111	1573	405.8	-9.68	134.4585	4356	284.5	-78.21	64.9445
Be-111	1588	410.1	-10.37	133.7992	4371	280.8	-78.24	64.8846
Be-111	1604	414.1	-11.78	132.4215	4387	277.4	-78.26	64.8371
Be-111	1619	418.1	-13.22	131.0138	4402	273.7	-78.72	64.3472
Be-111	1635	422.1	-14.87	129.3961	4418	270.0	-78.95	64.0874
Be-111	1650	426.1	-15.72	128.5784	4433	266.6	-78.75	64.2599
Be-111	1666	429.9	-16.81	127.5191	4448	262.9	-78.98	64.0000
Be-111	1681	433.9	-19.15	125.2115	4464	259.2	-79.26	63.6901
Be-111	1697	438.3	-20.47	123.9270	4480	255.8	-78.82	64.1026
Be-111	1712	442.3	-21.91	122.5193	4495	252.2	-79.28	63.6136
Be-111	1728	446.1	-24.09	120.3700	4510	248.5	-79.49	63.3737
Be-111	1743	450.2	-25.36	119.1331	4526	244.9	-79.16	63.6746
Be-111	1759	453.6	-26.90	117.6206	4541	241.2	-79.43	63.3747
Be-111	1774	457.8	-28.94	115.6145	4557	237.9	-79.75	63.0280
Be-111	1790	461.5	-30.50	114.0844	4572	234.3	-79.77	62.9790

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-111	1806	465.0	-33.28	111.3327	4588	230.7	-79.72	62.9999
Be-111	1821	468.8	-35.59	109.0534	4603	227.1	-79.42	63.2708
Be-111	1837	473.0	-37.43	107.2474	4619	223.4	-79.96	62.7009
Be-111	1852	476.8	-40.34	104.3680	4634	219.9	-80.35	62.2826
Be-111	1868	480.7	-42.46	102.2795	4649	216.5	-80.00	62.6052
Be-111	1883	484.8	-46.28	98.4927	4665	213.0	-79.88	62.6969
Be-111	1899	489.0	-47.53	97.2766	4680	209.7	-80.28	62.2702
Be-111	1914	492.9	-51.53	93.3081	4696	206.4	-80.55	61.9735
Be-111	1930	497.1	-54.25	90.6220	4711	203.1	-80.51	61.9869
Be-111	1945	501.6	-58.09	86.8184	4727	199.8	-80.70	61.7702
Be-111	1961	505.5	-61.38	83.5599	4742	196.2	-80.60	61.8412
Be-111	1977	509.4	-63.95	81.0214	4758	193.0	-80.54	61.8753
Be-111	1992	513.0	-67.46	77.5405	4773	189.4	-80.47	61.9162
Be-111	2008	517.3	-71.60	73.4352	4788	186.2	-80.72	61.6404
Be-111	2023	521.2	-75.41	69.6567	4804	182.6	-80.78	61.5513
Be-111	2039	525.2	-79.87	65.2291	4819	179.4	-81.23	61.0754
Be-111	2054	529.5	-82.98	62.1538	4835	176.2	-81.18	61.0996
Be-111	2070	533.4	-87.09	58.0753	4850	172.9	-81.14	61.1129
Be-111	2086	537.4	-91.24	53.9576	4865	169.7	-81.09	61.1371
Be-111	2101	541.4	-95.20	50.0299	4881	166.5	-81.02	61.1812
Be-111	2117	545.4	-99.13	46.1323	4896	163.0	-81.25	60.9229
Be-111	2133	549.4	-103.00	42.2946	4912	159.8	-81.23	60.9171
Be-111	2148	553.4	-106.70	38.6269	4927	156.5	-81.30	60.8204
Be-111	2164	557.1	-110.00	35.3568	4942	153.1	-81.35	60.7430
Be-111	2180	561.1	-113.10	32.2891	4958	149.9	-81.49	60.5771
Be-111	2199	565.5	-120.20	25.2246	4973	146.7	-81.25	60.7912
Be-111	2216	569.9	-123.10	22.3602	4989	143.5	-81.42	60.5954
Be-111	2233	574.3	-124.70	20.7957	5004	140.3	-81.56	60.4296
Be-111	2250	578.8	-132.90	12.6321	5019	137.1	-81.53	60.4337
Be-111	2267	582.9	-137.20	8.3652	5035	133.9	-81.95	59.9878
Be-111	2284	587.3	-140.40	5.2008	5050	130.8	-81.41	60.5028
Be-111	2302	592.1	-140.30	5.3395	5065	127.6	-81.53	60.3570
Be-111	2319	596.6	-142.20	3.4759	5081	124.5	-81.42	60.4419
Be-111	2336	600.7	-144.90	0.8090	5096	121.3	-81.36	60.4760
Be-111	2353	605.2	-146.30	-0.5546	5111	118.2	-81.53	60.2810
Be-111	2370	609.8	-147.30	-1.5175	5127	115.0	-81.56	60.2252
Be-111	2388	614.6	-148.00	-2.1787	5142	111.9	-81.83	59.9301
Be-111	2405	619.2	-146.70	-0.8415	5157	108.7	-81.57	60.1643
Be-111	2422	623.7	-148.10	-2.2052	5173	105.6	-81.61	60.0992
Be-111	2439	628.0	-151.50	-5.5705	5188	102.5	-81.55	60.1342
Be-111	2457	632.6	-147.20	-1.2333	5203	99.6	-81.60	60.0607
Be-111	2474	636.8	-153.90	-7.8994	5218	96.5	-81.47	60.1657
Be-111	2491	641.1	-150.20	-4.1646	5234	93.7	-80.94	60.6731
Be-111	2509	645.7	-153.10	-7.0275	5249	90.6	-81.55	60.0380
Be-111	2526	650.3	-152.50	-6.3903	5264	87.7	-81.58	59.9846
Be-111	2543	655.0	-154.90	-8.7523	5279	84.9	-81.45	60.0920
Be-111	2560	658.9	-149.40	-3.2208	5294	82.0	-81.53	59.9886
Be-111	2577	663.3	-149.80	-3.5853	5309	79.5	-81.75	59.7484
Be-111	2595	667.2	-153.00	-6.7538	5325	76.9	-81.63	59.8474

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-111	2612	670.5	-148.50	-2.2271	5340	74.3	-81.65	59.8063
Be-111	2629	673.0	-152.20	-5.9069	5355	71.8	-81.70	59.7362
Be-111	2646	674.8	-150.00	-3.6924	5370	69.2	-81.85	59.5652
Be-111	2664	675.6	-146.70	-0.3859	5385	66.6	-81.57	59.8241
Be-111	2681	675.9	-150.40	-4.0835	5400	64.3	-81.61	59.7656
Be-111					5416	61.8	-81.97	59.3854
Be-111					5431	59.5	-81.78	59.5568
Be-111					5446	57.2	-81.82	59.4982
Be-111					5461	54.9	-81.92	59.3796
Be-111					5476	52.4	-82.03	59.2494
Be-111					5491	50.1	-81.85	59.4108
Be-111					5506	47.8	-81.92	59.3223
Be-111					5521	45.8	-82.08	59.1461
Be-111					5536	43.8	-81.96	59.2500
Be-111					5551	41.7	-82.01	59.1830
Be-111					5566	40.2	-82.02	59.1609
Be-111					5581	38.7	-82.04	59.1288
Be-154	0	22.6	-36.12	104.9187	2664	675.6	-148.70	-2.3859
Be-154	17	23.1	-36.23	104.8127	2681	674.5	-149.20	-2.8948
Be-154	33	26.4	-35.45	105.6194	2698	673.0	-149.50	-3.2069
Be-154	48	30.9	-34.99	106.1157	2715	670.9	-148.60	-2.3239
Be-154	63	35.4	-34.62	106.5221	2732	668.0	-150.00	-3.7473
Be-154	78	40.2	-33.98	107.2009	2750	665.1	-149.00	-2.7707
Be-154	94	45.0	-33.38	107.8396	2767	661.8	-148.30	-2.0974
Be-154	109	49.3	-33.02	108.2344	2784	658.2	-148.40	-2.2265
Be-154	124	53.9	-32.42	108.8715	2801	654.6	-148.00	-1.8555
Be-154	139	58.2	-31.92	109.4063	2818	651.0	-149.00	-2.8846
Be-154	154	62.3	-31.49	109.8694	2835	647.1	-150.10	-4.0161
Be-154	170	66.4	-31.18	110.2125	2853	643.2	-147.30	-1.2477
Be-154	185	70.2	-30.62	110.8032	2870	639.3	-147.50	-1.4792
Be-154	200	74.3	-29.95	111.5063	2887	635.4	-149.10	-3.1107
Be-154	216	78.2	-29.53	111.9579	2904	630.8	-147.70	-1.7478
Be-154	231	81.8	-29.15	112.3669	2921	626.6	-147.00	-1.0818
Be-154	246	85.4	-28.77	112.7760	2938	622.3	-145.20	0.6835
Be-154	261	89.0	-28.33	113.2451	2955	618.1	-145.90	-5.0415
Be-154	276	92.4	-27.90	113.7026	2973	613.6	-144.90	0.9132
Be-154	292	95.7	-27.54	114.0892	2990	609.4	-144.80	0.9793
Be-154	307	99.4	-27.10	114.5591	3007	605.6	-143.40	2.3486
Be-154	322	102.5	-26.60	115.0842	3024	601.4	-142.00	3.7147
Be-154	337	105.9	-26.29	115.4216	3041	596.9	-141.90	3.7783
Be-154	352	109.3	-25.91	115.8291	3059	592.8	-141.40	4.2452
Be-154	368	112.7	-25.57	116.1966	3076	588.3	-139.40	6.2088
Be-154	383	116.1	-25.47	116.3240	3094	584.2	-134.10	11.4757
Be-154	398	119.5	-25.14	116.6815	3111	580.1	-135.10	10.4426
Be-154	413	122.9	-24.52	117.3290	3128	576.0	-132.20	13.3095
Be-154	428	126.6	-24.33	117.5489	3145	571.6	-132.10	13.3739
Be-154	444	130.0	-23.69	118.2163	3162	567.6	-129.70	15.7416
Be-154	459	133.4	-23.22	118.7138	3180	563.5	-128.50	16.9085

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-154	474	136.9	-22.64	119.3221	3197	559.1	-127.10	18.2729
Be-154	489	140.6	-22.63	119.3620	3214	555.1	-125.00	20.3406
Be-154	504	144.0	-21.58	120.4394	3231	551.1	-121.50	23.8083
Be-154	519	147.5	-21.44	120.6077	3247	547.4	-115.00	30.2784
Be-154	534	150.9	-20.53	121.5452	3262	543.4	-111.70	33.5461
Be-154	549	154.4	-20.37	121.7335	3278	539.4	-108.00	37.2138
Be-154	564	157.9	-19.91	122.2217	3294	535.4	-104.70	40.4815
Be-154	580	161.4	-19.98	122.1800	3309	531.4	-101.30	43.8491
Be-154	595	164.8	-19.32	122.8675	3325	527.5	-97.49	47.6277
Be-154	610	168.1	-18.80	123.4141	3341	523.5	-94.53	50.5553
Be-154	625	171.8	-18.75	123.4940	3356	519.9	-90.72	54.3362
Be-154	640	175.3	-18.52	123.7523	3372	516.0	-88.53	56.4947
Be-154	655	179.1	-17.93	124.3730	3387	512.0	-86.10	58.8924
Be-154	670	182.6	-17.55	124.7813	3403	508.5	-83.39	61.5741
Be-154	685	186.4	-16.91	125.4520	3419	504.5	-81.11	63.8218
Be-154	700	190.0	-16.76	125.6311	3434	500.3	-79.03	65.8679
Be-154	715	193.5	-16.14	126.2793	3450	496.8	-78.35	66.5196
Be-154	730	197.1	-15.75	126.6984	3465	492.9	-77.11	67.7281
Be-154	745	200.9	-15.58	126.8991	3481	489.0	-76.14	68.6666
Be-154	760	204.4	-14.84	127.6674	3496	485.2	-75.62	69.1559
Be-154	775	208.3	-14.81	127.7289	3512	481.0	-74.05	70.6920
Be-154	790	211.9	-14.44	128.1280	3527	477.5	-73.56	71.1537
Be-154	805	215.4	-13.89	128.7063	3543	473.9	-74.35	70.3346
Be-154	820	219.0	-13.50	129.1253	3559	470.1	-73.80	70.8539
Be-154	836	222.9	-13.72	128.9368	3574	466.6	-73.20	71.4256
Be-154	851	226.5	-12.70	129.9859	3590	462.8	-73.27	71.3249
Be-154	866	230.1	-12.24	130.4750	3605	459.0	-73.25	71.3142
Be-154	881	233.7	-12.26	130.4841	3621	454.9	-73.30	71.2311
Be-154	896	237.6	-11.66	131.1156	3636	451.4	-73.45	71.0528
Be-154	911	241.5	-11.18	131.6271	3652	447.4	-73.46	71.0105
Be-154	926	245.2	-10.76	132.0770	3667	443.3	-73.21	71.2274
Be-154	941	248.8	-10.73	132.1361	3683	439.5	-73.52	70.8867
Be-154	956	252.5	-10.54	132.3560	3698	435.8	-73.42	70.9568
Be-154	971	256.4	-9.95	132.9735	3714	431.7	-73.60	70.7437
Be-154	986	260.1	-9.44	133.5164	3729	428.0	-74.00	70.3138
Be-154	1002	263.7	-9.84	133.1435	3745	424.0	-73.38	70.9015
Be-154	1017	267.4	-9.71	133.3083	3760	420.3	-73.80	70.4516
Be-154	1032	271.1	-9.56	133.4863	3776	416.2	-73.96	70.2585
Be-154	1048	275.1	-9.38	133.6996	3791	412.6	-73.91	70.2794
Be-154	1062	278.8	-9.02	134.0854	3807	408.9	-74.34	69.8195
Be-154	1078	282.5	-9.35	133.7863	3822	404.9	-74.15	69.9772
Be-154	1093	286.5	-9.53	133.6407	3838	401.2	-74.36	69.7373
Be-154	1108	290.2	-9.31	133.8955	3853	397.2	-74.73	69.3350
Be-154	1123	293.7	-9.56	133.6648	3869	393.3	-74.96	69.0735
Be-154	1139	297.4	-9.88	133.3837	3885	389.6	-75.38	68.6236
Be-154	1154	301.5	-9.41	133.8828	3900	385.7	-75.43	68.5421
Be-154	1169	305.2	-9.72	133.6017	3915	381.8	-75.34	68.6006
Be-154	1184	309.3	-10.10	133.2549	3931	378.1	-75.43	68.4807
Be-154	1199	313.0	-10.59	132.7948	3946	374.2	-75.56	68.3192

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-154	1215	317.1	-10.73	132.6879	3962	370.3	-75.83	68.0177
Be-154	1230	320.9	-10.79	132.6586	3978	366.7	-75.82	67.9986
Be-154	1245	324.7	-11.01	132.4693	3993	363.1	-76.00	67.7895
Be-154	1260	328.5	-11.54	131.9700	4009	359.6	-76.17	67.5912
Be-154	1276	332.6	-11.63	131.9131	4024	356.0	-75.99	67.7421
Be-154	1291	336.4	-12.05	131.5238	4040	352.4	-75.67	68.0331
Be-154	1306	340.3	-12.31	131.2953	4055	348.5	-76.57	67.1015
Be-154	1321	344.1	-12.48	131.1560	4071	345.0	-76.32	67.3233
Be-154	1337	348.0	-12.35	131.3175	4086	341.5	-76.62	66.9950
Be-154	1352	351.8	-13.40	130.2982	4101	337.6	-77.31	66.2735
Be-154	1367	355.7	-13.19	130.5397	4117	334.1	-77.01	66.5452
Be-154	1383	359.9	-13.99	129.7736	4132	330.3	-77.37	66.1545
Be-154	1398	363.7	-13.66	130.1343	4148	326.7	-77.19	66.3054
Be-154	1413	367.6	-14.59	129.2359	4163	323.2	-77.39	66.0772
Be-154	1428	371.2	-14.78	129.0749	4178	319.7	-77.38	66.0589
Be-154	1444	375.1	-15.30	128.5864	4194	316.2	-77.77	65.6406
Be-154	1459	378.7	-16.11	127.8055	4209	312.5	-77.56	65.8207
Be-154	1474	382.7	-15.93	128.0178	4225	308.7	-77.97	65.3800
Be-154	1490	386.6	-16.62	127.3593	4240	304.9	-78.02	65.2993
Be-154	1505	390.5	-17.04	126.9708	4256	301.2	-78.40	64.8894
Be-154	1520	394.5	-17.24	126.8032	4271	297.4	-78.18	65.0787
Be-154	1536	398.5	-18.16	125.9155	4287	293.4	-78.66	64.5664
Be-154	1551	402.4	-18.46	125.6470	4302	289.9	-78.76	64.4381
Be-154	1566	406.7	-19.24	124.9017	4317	286.2	-78.86	64.3082
Be-154	1582	410.7	-19.74	124.4340	4333	282.8	-79.23	63.9108
Be-154	1597	414.7	-20.37	123.8364	4348	279.1	-79.26	63.8509
Be-154	1612	418.4	-21.19	123.0462	4364	275.7	-79.88	63.2034
Be-154	1628	422.1	-21.89	122.3761	4379	272.0	-79.36	63.6935
Be-154	1643	426.1	-22.72	121.5784	4394	268.6	-79.83	63.1960
Be-154	1658	429.9	-24.34	119.9892	4410	264.9	-79.98	63.0162
Be-154	1674	433.9	-24.82	119.5415	4425	261.2	-79.39	63.5763
Be-154	1689	438.0	-26.11	118.2846	4440	257.5	-79.96	62.9764
Be-154	1705	442.0	-27.56	116.8669	4456	253.9	-79.87	63.0373
Be-154	1720	445.8	-29.43	115.0276	4471	249.9	-79.82	63.0550
Be-154	1735	449.6	-30.03	114.4583	4487	246.6	-79.98	62.8683
Be-154	1751	453.3	-32.03	112.4882	4502	242.9	-80.17	62.6484
Be-154	1766	457.4	-33.52	111.0313	4518	239.0	-80.15	62.6369
Be-154	1782	461.2	-35.09	109.4920	4533	235.4	-80.46	62.2978
Be-154	1797	465.0	-37.16	107.4527	4548	232.0	-80.82	61.9104
Be-154	1812	468.8	-39.12	105.5234	4564	228.4	-80.48	62.2213
Be-154	1828	473.0	-41.51	103.1674	4579	224.8	-80.62	62.0522
Be-154	1843	477.1	-43.81	100.9005	4594	221.2	-80.86	61.7831
Be-154	1858	481.0	-46.15	98.5920	4610	217.6	-81.38	61.2340
Be-154	1874	484.8	-48.49	96.2827	4625	214.1	-81.39	61.1958
Be-154	1889	488.7	-51.49	93.3142	4641	210.8	-81.38	61.1791
Be-154	1905	492.6	-53.96	90.8757	4656	207.2	-81.15	61.3800
Be-154	1920	496.4	-56.81	88.0564	4671	203.9	-81.52	60.9834
Be-154	1936	500.6	-59.40	85.5003	4687	200.6	-81.66	60.8167
Be-154	1951	504.9	-63.04	81.8951	4702	197.3	-81.56	60.8900

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-154	1967	508.8	-65.96	79.0066	4717	193.8	-81.78	60.6418
Be-154	1982	513.0	-69.93	75.0705	4733	190.2	-81.59	60.8027
Be-154	1998	517.3	-73.80	71.2352	4748	187.0	-81.63	60.7368
Be-154	2013	521.9	-77.15	67.9224	4764	183.7	-81.62	60.7202
Be-154	2029	525.8	-81.37	63.7339	4779	180.5	-81.83	60.4843
Be-154	2044	530.1	-85.01	60.1286	4794	177.2	-82.11	60.1776
Be-154	2060	534.4	-88.77	56.4034	4809	174.0	-82.14	60.1218
Be-154	2075	538.4	-92.78	52.4257	4825	170.8	-82.09	60.1460
Be-154	2091	542.4	-96.47	48.7680	4840	167.3	-82.40	59.8077
Be-154	2107	546.4	-99.89	45.3803	4855	164.0	-82.32	59.8610
Be-154	2122	550.4	-103.60	41.7026	4871	160.6	-82.73	59.4236
Be-154	2138	554.1	-107.00	38.3325	4886	157.1	-82.60	59.5253
Be-154	2153	557.4	-110.70	34.6592	4901	153.9	-82.87	59.2294
Be-154	2169	561.1	-112.50	32.8891	4917	150.4	-82.86	59.2111
Be-154	2184	564.9	-115.90	29.5198	4932	147.2	-82.98	59.0653
Be-154	2202	568.9	-122.40	23.0521	4947	144.0	-82.56	59.4594
Be-154	2219	572.6	-125.10	20.3820	4962	140.8	-83.05	58.9436
Be-154	2236	576.7	-125.30	20.2151	4978	137.7	-83.05	58.9185
Be-154	2253	581.2	-129.60	15.9515	4993	134.5	-82.76	59.1827
Be-154	2270	584.9	-133.40	12.1814	5008	131.3	-80.30	61.6168
Be-154	2287	589.0	-135.80	9.8145	5023	128.1	-83.24	58.6510
Be-154	2304	593.5	-140.10	5.5508	5039	125.0	-83.05	58.8159
Be-154	2322	598.0	-139.90	5.7872	5054	121.8	-83.25	58.5901
Be-154	2339	602.1	-142.20	3.5203	5069	118.7	-83.04	58.7751
Be-154	2356	607.0	-141.50	4.2599	5085	115.5	-83.21	58.5792
Be-154	2373	611.9	-141.20	4.5995	5100	112.4	-83.10	58.6642
Be-154	2390	616.4	-143.60	2.2358	5115	109.5	-83.34	58.4007
Be-154	2407	621.3	-144.40	1.4754	5130	106.1	-83.58	58.1333
Be-154	2424	625.9	-147.50	-1.5874	5146	103.0	-83.25	58.4382
Be-154	2441	630.4	-146.30	-0.3511	5161	99.9	-83.61	58.0532
Be-154	2458	634.7	-146.40	-0.4163	5176	96.8	-83.46	58.1781
Be-154	2475	639.6	-149.40	-3.3767	5191	93.7	-83.73	57.8831
Be-154	2493	644.3	-149.00	-2.9388	5206	90.8	-83.71	57.8797
Be-154	2510	648.9	-150.50	-4.4016	5221	87.7	-83.88	57.6846
Be-154	2527	653.2	-147.70	-1.5669	5237	84.9	-83.86	57.6820
Be-154	2544	657.9	-148.80	-2.6289	5252	82.0	-83.56	57.9586
Be-154	2561	662.2	-148.90	-2.6942	5267	79.2	-83.92	57.5759
Be-154	2578	666.1	-150.70	-4.4626	5282	76.6	-83.73	57.7449
Be-154	2595	669.8	-147.10	-0.8328	5297	73.8	-83.81	57.6423
Be-154	2613	672.7	-151.00	-4.7093	5312	71.3	-84.08	57.3521
Be-154	2630	674.5	-150.20	-3.8948	5327	68.9	-83.94	57.4727
Be-154	2647	675.6	-150.20	-3.8859	5342	66.4	-84.11	57.2825
Be-154					5357	64.1	-84.13	57.2440
Be-154					5372	61.8	-84.33	57.0254
Be-154					5387	59.5	-84.17	57.1668
Be-154					5403	57.2	-84.27	57.0482
Be-154					5418	54.7	-84.34	56.9580
Be-154					5433	52.1	-84.39	56.8870
Be-154					5448	49.6	-84.45	56.8068

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-154					5463	47.3	-84.51	56.7282
Be-158	0	22.1	2.18	143.2126	2684	669.8	-150.50	-4.2328
Be-158	16	22.9	1.90	142.9361	2701	668.3	-147.80	-1.5449
Be-158	32	25.4	2.60	143.6633	2718	666.1	-152.80	-6.5627
Be-158	47	29.2	3.15	144.2410	2735	664.0	-149.00	-2.7796
Be-158	62	33.4	3.43	144.5589	2752	661.1	-148.60	-2.4030
Be-158	78	38.0	4.00	145.1641	2770	658.2	-150.00	-3.8265
Be-158	93	42.5	4.56	145.7544	2787	655.0	-150.00	-3.8523
Be-158	109	46.8	4.72	145.9552	2804	651.0	-151.60	-5.4846
Be-158	124	51.4	5.09	146.3643	2821	647.5	-152.00	-5.9129
Be-158	140	55.7	5.54	146.8461	2838	643.5	-148.70	-2.6452
Be-158	155	59.8	5.62	146.9542	2855	640.0	-150.40	-4.3735
Be-158	171	63.8	5.96	147.3265	2872	635.7	-148.40	-2.4082
Be-158	186	67.7	6.39	147.7960	2890	631.5	-147.00	-1.0422
Be-158	201	71.5	6.45	147.8827	2907	627.6	-149.90	-3.9737
Be-158	217	75.4	6.94	148.4052	2924	623.7	-146.20	-0.3052
Be-158	232	79.2	6.78	148.2719	2941	619.9	-146.50	-0.6359
Be-158	248	82.8	7.22	148.7450	2958	615.3	-147.80	-1.9731
Be-158	263	86.2	7.31	148.8585	2975	611.2	-147.40	-1.6062
Be-158	279	89.8	7.25	148.8266	2992	607.0	-144.70	1.0599
Be-158	294	93.1	7.64	149.2502	3009	602.5	-142.90	2.8235
Be-158	309	96.5	8.08	149.7107	3026	598.3	-142.60	3.0896
Be-158	325	99.9	7.83	149.4892	3043	594.5	-141.50	4.1589
Be-158	340	103.3	8.17	149.8596	3061	590.4	-138.30	7.3258
Be-158	355	106.7	8.25	149.9691	3078	586.6	-141.90	3.6951
Be-158	371	110.0	8.29	150.0378	3095	582.5	-136.70	8.8620
Be-158	386	113.2	8.37	150.1356	3112	578.1	-137.60	7.9264
Be-158	402	116.6	8.98	150.7781	3129	574.0	-132.90	12.5933
Be-158	417	120.3	9.44	151.2660	3146	569.9	-132.50	12.9602
Be-158	432	123.7	10.10	151.9554	3163	565.9	-130.00	15.4279
Be-158	448	127.1	10.16	152.0429	3180	562.2	-129.20	16.1980
Be-158	463	130.5	10.76	152.6704	3197	558.5	-125.30	20.0681
Be-158	478	134.2	11.08	153.0203	3214	554.4	-123.90	21.4350
Be-158	494	137.9	11.51	153.4801	3231	550.4	-117.90	27.4026
Be-158	509	141.6	11.78	153.7800	3247	546.7	-115.90	29.3728
Be-158	525	145.3	12.18	154.2099	3262	542.7	-112.70	32.5404
Be-158	540	149.1	13.23	155.2906	3278	539.1	-108.20	37.0114
Be-158	555	152.5	13.71	155.7981	3293	535.4	-103.20	41.9815
Be-158	571	156.0	14.34	156.4564	3309	531.4	-98.88	46.2691
Be-158	586	159.5	14.62	156.7646	3325	527.8	-94.58	50.5401
Be-158	602	163.2	14.51	156.6845	3340	523.8	-90.33	54.7578
Be-158	617	166.7	15.70	157.9028	3356	519.9	-84.92	60.1363
Be-158	632	170.5	15.55	157.7835	3371	516.0	-79.76	65.2647
Be-158	648	174.3	16.18	158.4442	3387	512.4	-76.15	68.8457
Be-158	663	177.8	16.68	158.9725	3402	508.5	-71.53	73.4341
Be-158	678	181.8	17.08	159.4048	3418	504.5	-68.21	76.7218
Be-158	694	185.6	17.83	160.1855	3433	500.6	-65.51	79.3903
Be-158	709	189.4	17.79	160.1762	3449	496.8	-62.24	82.6296

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-158	724	193.2	18.26	160.6769	3465	492.9	-60.28	84.5581
Be-158	740	197.1	18.26	160.7084	3480	489.0	-58.79	86.0166
Be-158	755	200.9	19.28	161.7591	3495	485.5	-56.96	87.8183
Be-158	771	204.7	20.16	162.6698	3511	482.3	-56.43	88.3225
Be-158	786	208.6	20.73	163.2713	3527	478.4	-55.02	89.7010
Be-158	801	212.4	20.78	163.3520	3542	474.6	-53.97	90.7203
Be-158	816	216.0	20.87	163.4711	3558	471.1	-53.63	91.0320
Be-158	832	219.9	21.92	164.5526	3573	466.9	-52.30	92.3281
Be-158	847	223.7	22.45	165.1133	3589	463.1	-51.65	92.9474
Be-158	863	227.3	22.47	165.1624	3604	459.3	-50.88	93.6867
Be-158	878	230.9	23.19	165.9115	3620	455.9	-51.43	93.1092
Be-158	893	234.8	24.11	166.8630	3635	451.8	-50.97	93.5361
Be-158	909	238.5	24.57	167.3529	3651	448.3	-50.53	93.9478
Be-158	924	242.1	24.87	167.6820	3666	444.5	-50.83	93.6171
Be-158	939	245.7	24.85	167.6911	3682	440.8	-50.48	93.9372
Be-158	955	249.6	25.55	168.4226	3697	437.0	-50.90	93.4865
Be-158	970	253.6	25.49	168.3949	3712	433.6	-50.49	93.8690
Be-158	986	257.2	26.03	168.9639	3728	429.9	-51.16	93.1691
Be-158	1001	260.9	26.70	169.6638	3743	426.1	-50.72	93.5785
Be-158	1017	264.6	26.55	169.5437	3759	422.7	-51.17	93.1010
Be-158	1032	268.3	26.97	169.9936	3774	418.7	-50.82	93.4187
Be-158	1047	272.0	27.09	170.1435	3790	415.0	-51.22	92.9888
Be-158	1063	275.7	27.33	170.4134	3805	411.3	-51.68	92.4989
Be-158	1078	279.6	27.14	170.2549	3821	407.6	-51.87	92.2790
Be-158	1093	283.6	27.73	170.8772	3836	403.7	-51.73	92.3875
Be-158	1108	287.4	27.21	170.3879	3852	399.7	-51.58	92.5052
Be-158	1124	291.4	27.33	170.5403	3867	396.0	-52.77	91.2853
Be-158	1139	295.1	27.29	170.5302	3883	392.4	-52.22	91.8062
Be-158	1154	298.9	27.55	170.8208	3898	388.7	-52.42	91.5763
Be-158	1170	302.9	27.25	170.5531	3913	385.1	-52.90	91.0672
Be-158	1185	306.7	27.21	170.5439	3929	381.2	-53.13	90.8057
Be-158	1200	310.4	27.09	170.4537	3944	377.5	-53.24	90.6658
Be-158	1216	314.2	26.87	170.2644	3960	373.9	-53.86	90.0167
Be-158	1231	318.0	26.49	169.9151	3975	370.0	-53.62	90.2252
Be-158	1246	322.1	26.21	169.6683	3990	366.4	-54.03	89.7862
Be-158	1262	325.9	25.70	169.1890	4006	362.5	-54.30	89.4846
Be-158	1277	329.7	26.11	169.6297	4021	358.7	-54.51	89.2440
Be-158	1292	333.5	25.86	169.4104	4037	355.1	-54.56	89.1649
Be-158	1307	337.3	25.15	168.7310	4052	351.8	-54.60	89.0982
Be-158	1323	341.2	25.14	168.7526	4068	348.0	-55.10	88.5675
Be-158	1338	345.0	24.99	168.6333	4083	344.7	-54.17	89.4708
Be-158	1353	348.8	24.18	167.8540	4098	341.2	-54.59	89.0226
Be-158	1369	352.7	24.00	167.7055	4114	337.6	-55.28	88.3035
Be-158	1384	356.6	23.94	167.6770	4129	333.8	-55.60	87.9528
Be-158	1399	360.4	23.28	167.0477	4144	330.0	-55.75	87.7721
Be-158	1414	364.0	23.18	166.9768	4160	326.5	-55.89	87.6038
Be-158	1429	367.9	22.52	166.3483	4175	322.9	-55.61	87.8547
Be-158	1444	372.1	22.71	166.5722	4191	319.2	-55.58	87.8548
Be-158	1459	376.0	21.95	165.8437	4206	315.7	-56.56	86.8466

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-158	1475	379.7	21.56	165.4836	4222	312.2	-56.48	86.8983
Be-158	1490	383.6	21.11	165.0651	4237	308.7	-56.60	86.7500
Be-158	1505	387.5	20.61	164.5966	4253	304.9	-56.93	86.3893
Be-158	1520	391.2	20.36	164.3765	4268	301.2	-57.30	85.9894
Be-158	1535	395.1	18.91	162.9580	4283	297.4	-57.36	85.8987
Be-158	1550	399.1	18.59	162.6703	4299	293.7	-56.97	86.2588
Be-158	1566	403.0	17.50	161.6118	4314	289.9	-57.63	85.5681
Be-158	1581	407.0	16.62	160.7641	4330	286.2	-57.34	85.8282
Be-158	1596	410.4	16.12	160.2916	4345	282.8	-57.67	85.4708
Be-158	1611	414.1	14.96	159.1615	4360	279.1	-57.24	85.8709
Be-158	1626	418.1	13.46	157.6938	4376	275.7	-57.81	85.2734
Be-158	1641	421.8	12.41	156.6737	4391	272.2	-57.58	85.4751
Be-158	1656	425.5	11.18	155.4736	4406	268.6	-58.43	84.5961
Be-158	1671	429.2	9.81	154.1305	4422	265.2	-58.16	84.8386
Be-158	1686	433.0	7.80	152.1502	4437	261.8	-57.62	85.3511
Be-158	1701	437.0	5.99	150.3755	4453	258.1	-57.72	85.2212
Be-158	1716	440.5	3.70	148.1138	4468	254.4	-57.97	84.9413
Be-158	1732	444.2	2.20	146.6437	4483	250.8	-58.63	84.2522
Be-158	1747	448.3	-0.02	144.4619	4499	246.8	-58.88	83.9699
Be-158	1762	452.1	-1.98	142.5245	4514	243.5	-58.29	84.5333
Be-158	1777	455.9	-4.58	139.9622	4529	239.9	-58.37	84.4242
Be-158	1792	459.3	-7.52	137.0517	4545	235.9	-58.76	84.0019
Be-158	1807	463.1	-9.71	134.8874	4560	232.6	-58.51	84.2252
Be-158	1823	466.9	-13.12	131.5081	4575	229.0	-58.41	84.2961
Be-158	1838	470.8	-16.42	128.2396	4591	225.7	-58.44	84.2395
Be-158	1853	474.6	-19.25	125.4403	4606	222.1	-59.04	83.6104
Be-158	1868	478.4	-23.03	121.6910	4621	218.5	-58.80	83.8213
Be-158	1883	482.3	-26.85	117.9025	4637	214.9	-58.80	83.7922
Be-158	1899	486.4	-30.44	114.3456	4652	211.3	-58.86	83.7031
Be-158	1914	490.6	-34.36	110.4595	4667	208.0	-58.44	84.0965
Be-158	1929	494.8	-38.35	106.5035	4683	204.4	-58.48	84.0274
Be-158	1945	498.7	-42.22	102.6650	4698	201.2	-58.77	83.7115
Be-158	1960	502.3	-46.25	98.6641	4713	197.9	-59.44	83.0149
Be-158	1975	506.2	-50.37	94.5756	4728	194.9	-59.20	83.2307
Be-158	1991	510.1	-54.70	90.2771	4744	191.3	-59.52	82.8816
Be-158	2006	514.3	-59.70	85.3110	4759	187.8	-59.14	83.2333
Be-158	2021	518.3	-64.24	80.8033	4774	184.5	-59.06	83.2866
Be-158	2037	522.2	-68.76	76.3148	4789	181.3	-59.21	83.1108
Be-158	2052	526.2	-73.36	71.7471	4805	178.0	-59.38	82.9141
Be-158	2067	529.8	-78.35	66.7862	4820	174.8	-59.40	82.8683
Be-158	2083	533.8	-83.04	62.1285	4835	171.8	-60.17	82.0740
Be-158	2098	537.4	-87.12	58.0776	4850	168.6	-59.74	82.4782
Be-158	2114	541.7	-92.05	53.1824	4865	165.4	-59.66	82.5323
Be-158	2129	545.4	-96.24	49.0223	4880	161.9	-59.76	82.4041
Be-158	2144	548.7	-100.70	44.5889	4895	158.7	-59.99	82.1482
Be-158	2160	552.7	-104.70	40.6212	4910	155.5	-60.00	82.1123
Be-158	2175	556.8	-108.70	36.6543	4926	152.3	-60.20	81.8865
Be-158	2191	560.5	-112.00	33.3842	4941	149.1	-59.91	82.1506
Be-158	2206	564.2	-114.60	30.8141	4956	145.9	-60.20	81.8348

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-158	2224	568.6	-119.90	25.5497	4971	142.7	-60.26	81.7489
Be-158	2240	572.6	-123.20	22.2820	4986	139.5	-60.44	81.5431
Be-158	2257	576.7	-126.00	19.5151	5001	136.6	-60.24	81.7197
Be-158	2275	580.5	-130.30	15.2458	5016	133.2	-59.93	82.0022
Be-158	2292	584.9	-135.50	10.0814	5031	130.0	-60.22	81.6863
Be-158	2308	589.0	-133.30	12.3145	5047	126.8	-60.50	81.3805
Be-158	2325	593.2	-138.40	7.2484	5062	123.9	-60.31	81.5471
Be-158	2342	597.3	-137.30	8.3815	5077	120.8	-60.44	81.3920
Be-158	2360	601.8	-139.10	6.6179	5092	117.6	-60.59	81.2162
Be-158	2376	606.3	-142.50	3.2542	5107	114.5	-60.49	81.2911
Be-158	2393	610.8	-144.40	1.3906	5122	111.6	-60.60	81.1577
Be-158	2411	615.7	-146.10	-0.2698	5137	108.5	-60.67	81.0626
Be-158	2428	620.2	-146.10	-0.2335	5152	105.3	-60.68	81.0268
Be-158	2445	624.8	-148.50	-2.5963	5167	102.2	-60.70	80.9818
Be-158	2462	629.0	-148.60	-2.6624	5182	99.1	-60.62	81.0367
Be-158	2479	633.3	-148.40	-2.4276	5197	96.0	-60.27	81.3617
Be-158	2496	637.5	-149.30	-3.2937	5212	93.1	-60.73	80.8782
Be-158	2513	642.1	-149.30	-3.2565	5228	90.3	-60.48	81.1056
Be-158	2530	646.4	-148.80	-2.7218	5243	87.2	-60.54	81.0206
Be-158	2547	651.0	-151.80	-5.6846	5258	84.1	-60.67	80.8655
Be-158	2564	655.3	-155.60	-9.4499	5273	81.3	-60.54	80.9729
Be-158	2581	659.7	-150.70	-4.5143	5288	78.4	-60.54	80.9495
Be-158	2598	663.6	-154.80	-8.5828	5303	75.9	-60.79	80.6793
Be-158	2616	666.9	-143.90	2.3438	5319	73.0	-60.88	80.5658
Be-158	2633	669.0	-152.80	-6.5392	5334	70.5	-60.84	80.5857
Be-158	2650	670.1	-148.30	-2.0303	5349	67.9	-61.10	80.3047
Be-158	2667	670.5	-148.40	-2.1271	5364	65.4	-61.09	80.2945
Be-158					5380	62.8	-60.94	80.4234
Be-158					5395	60.5	-60.78	80.5649
Be-158					5410	58.2	-60.89	80.4363
Be-158					5426	55.7	-61.03	80.2761
Be-158					5441	52.9	-61.08	80.2035
Be-158					5456	49.8	-61.12	80.1384
Be-158					5472	47.1	-61.20	80.0366
Be-158					5487	44.5	-61.21	80.0056
Be-158					5502	42.3	-61.30	79.8978
Be-158					5517	40.2	-61.36	79.8209
Be-158					5533	38.5	-61.41	79.7571
Be-166	0	22.4	-77.43	63.6071	2739	671.9	-148.40	-2.1158
Be-166	16	23.1	-77.16	63.8827	2756	671.2	-150.20	-3.9214
Be-166	31	25.4	-76.87	64.1913	2773	669.4	-151.80	-5.5360
Be-166	47	29.2	-77.38	63.7120	2790	667.2	-151.20	-4.9538
Be-166	62	33.4	-77.40	63.7259	2808	664.7	-147.90	-1.6740
Be-166	77	37.7	-77.42	63.7407	2825	661.8	-145.80	0.4026
Be-166	93	42.0	-76.90	64.2954	2842	658.9	-150.40	-4.2208
Be-166	108	46.6	-77.11	64.1226	2859	655.7	-149.60	-3.4467
Be-166	123	50.6	-76.71	64.5549	2876	652.5	-150.40	-4.2725
Be-166	138	54.9	-76.81	64.4896	2893	648.9	-150.00	-3.9016

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-166	154	58.7	-77.03	64.3003	2910	645.3	-147.60	-1.5307
Be-166	169	62.8	-77.47	63.8934	2928	641.4	-154.80	-8.7622
Be-166	184	66.6	-76.94	64.4541	2945	637.5	-145.40	0.6063
Be-166	200	70.5	-77.02	64.4057	2962	633.6	-150.90	-4.9252
Be-166	215	74.3	-77.20	64.2564	2979	629.7	-145.30	0.6433
Be-166	230	77.9	-77.02	64.4654	2996	625.5	-149.50	-3.5906
Be-166	245	81.3	-76.71	64.8029	3014	621.3	-148.00	-2.1246
Be-166	260	84.9	-76.94	64.6020	3031	617.4	-149.60	-3.7561
Be-166	276	88.2	-76.84	64.7286	3048	613.2	-145.70	0.1100
Be-166	291	91.6	-77.01	64.5861	3065	609.1	-148.50	-2.7231
Be-166	306	94.7	-77.11	64.5112	3082	604.9	-146.20	-0.4571
Be-166	321	98.1	-76.89	64.7586	3099	600.4	-146.30	-0.5934
Be-166	337	101.2	-76.97	64.7037	3116	596.3	-146.40	-0.7265
Be-166	352	104.6	-76.88	64.8211	3134	592.1	-145.80	-0.1605
Be-166	367	108.0	-76.63	65.0986	3151	588.0	-146.10	-0.4936
Be-166	382	111.1	-76.97	64.7837	3168	584.2	-148.20	-2.6243
Be-166	397	114.5	-77.14	64.6411	3185	580.1	-148.70	-3.1574
Be-166	412	117.9	-77.21	64.5986	3202	576.0	-148.80	-3.2905
Be-166	428	121.3	-77.39	64.4460	3219	572.0	-142.60	2.8771
Be-166	443	124.7	-77.46	64.4035	3236	567.9	-144.20	1.2440
Be-166	458	128.1	-77.53	64.3610	3253	563.8	-145.90	-0.4891
Be-166	473	131.3	-77.77	64.1468	3270	559.8	-144.70	0.6786
Be-166	488	134.5	-77.64	64.3027	3288	555.8	-144.70	0.6463
Be-166	504	137.9	-77.67	64.3002	3305	552.1	-142.00	3.3164
Be-166	519	141.4	-77.81	64.1884	3322	548.1	-140.50	4.7841
Be-166	534	144.8	-77.22	64.8059	3339	544.1	-138.40	6.8517
Be-166	549	148.3	-77.53	64.5242	3356	540.1	-135.00	10.2194
Be-166	564	151.7	-77.70	64.3816	3373	535.7	-133.50	11.6839
Be-166	579	155.2	-77.53	64.5799	3390	531.8	-132.60	12.5524
Be-166	594	158.4	-77.61	64.5258	3407	527.8	-129.90	15.2201
Be-166	609	161.9	-77.10	65.0641	3424	523.8	-126.30	18.7878
Be-166	624	165.4	-76.86	65.3323	3441	519.6	-124.70	20.3538
Be-166	640	168.9	-77.17	65.0506	3458	515.0	-123.00	22.0167
Be-166	655	172.4	-76.87	65.3789	3474	511.4	-118.80	26.1876
Be-166	670	175.9	-76.94	65.3371	3491	507.5	-117.50	27.4561
Be-166	685	179.7	-77.06	65.2479	3506	503.6	-116.00	28.9246
Be-166	700	183.2	-76.87	65.4661	3522	500.0	-114.80	30.0955
Be-166	715	186.7	-76.13	66.2344	3537	496.4	-113.00	31.8664
Be-166	730	190.2	-76.76	65.6327	3553	492.6	-112.10	32.7357
Be-166	745	193.8	-76.27	66.1518	3568	489.0	-111.30	33.5066
Be-166	760	197.3	-76.30	66.1500	3584	485.5	-109.30	35.4783
Be-166	775	201.2	-75.90	66.5815	3599	481.6	-109.40	35.3468
Be-166	790	204.7	-76.29	66.2198	3615	478.1	-108.60	36.1186
Be-166	805	208.3	-76.28	66.2589	3630	474.3	-107.70	36.9879
Be-166	821	211.9	-76.02	66.5480	3646	470.4	-107.20	37.4563
Be-166	836	215.4	-76.25	66.3463	3661	466.6	-106.90	37.7256
Be-166	851	219.3	-75.41	67.2178	3677	462.8	-107.00	37.5949
Be-166	866	222.9	-75.62	67.0368	3692	459.0	-106.20	38.3642
Be-166	881	226.5	-75.43	67.2559	3708	455.5	-106.00	38.5360

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-166	896	230.1	-75.46	67.2550	3723	452.1	-105.90	38.6085
Be-166	911	234.0	-75.20	67.5465	3739	448.6	-105.50	38.9802
Be-166	926	237.6	-75.22	67.5556	3754	444.8	-105.60	38.8495
Be-166	941	241.0	-74.64	68.1631	3769	441.4	-105.40	39.0221
Be-166	956	244.6	-75.21	67.6222	3785	437.7	-105.50	38.8922
Be-166	971	248.2	-74.22	68.6412	3800	433.9	-105.30	39.0615
Be-166	986	251.9	-74.01	68.8811	3816	430.5	-105.10	39.2340
Be-166	1001	255.3	-74.51	68.4086	3831	426.8	-105.60	38.7041
Be-166	1016	258.7	-74.25	68.6961	3847	423.0	-104.90	39.3734
Be-166	1031	262.3	-74.41	68.5652	3862	419.3	-105.40	38.8435
Be-166	1046	266.0	-74.10	68.9051	3877	415.6	-105.60	38.6136
Be-166	1061	269.7	-73.75	69.2849	3893	411.9	-105.40	38.7837
Be-166	1076	273.1	-74.46	68.6024	3908	408.3	-105.80	38.3546
Be-166	1092	277.1	-74.01	69.0847	3924	404.6	-105.50	38.6248
Be-166	1107	280.8	-74.03	69.0946	3939	401.2	-105.50	38.5973
Be-166	1122	284.8	-74.16	68.9969	3954	397.2	-105.80	38.2650
Be-166	1137	288.5	-74.27	68.9168	3970	393.6	-106.10	37.9359
Be-166	1152	292.0	-74.52	68.6951	3985	389.9	-105.70	38.3060
Be-166	1167	295.7	-74.42	68.8250	4001	386.0	-105.90	38.0745
Be-166	1182	299.4	-74.50	68.7749	4016	382.4	-106.10	37.8454
Be-166	1198	303.5	-74.70	68.6080	4031	378.4	-105.90	38.0131
Be-166	1213	306.9	-74.44	68.8955	4047	374.8	-106.10	37.7840
Be-166	1228	310.7	-74.53	68.8362	4062	371.2	-106.20	37.6549
Be-166	1243	314.8	-74.78	68.6193	4077	367.6	-106.40	37.4259
Be-166	1259	318.3	-74.93	68.4976	4093	363.7	-106.60	37.1943
Be-166	1274	322.1	-74.47	68.9883	4108	360.1	-106.50	37.2653
Be-166	1289	325.6	-74.74	68.7465	4124	356.6	-106.50	37.2370
Be-166	1304	329.4	-74.52	68.9973	4139	353.0	-106.00	37.7079
Be-166	1319	333.2	-75.07	68.4779	4155	349.1	-106.40	37.2764
Be-166	1335	337.0	-75.22	68.3586	4170	345.6	-106.10	37.5481
Be-166	1350	340.9	-75.49	68.1201	4185	342.0	-106.50	37.1190
Be-166	1365	344.7	-75.26	68.3808	4201	338.5	-106.30	37.2908
Be-166	1380	348.5	-75.24	68.4315	4216	335.0	-106.50	37.0625
Be-166	1396	352.1	-75.57	68.1306	4232	331.4	-106.60	36.9334
Be-166	1411	356.0	-75.76	67.9721	4247	327.9	-106.30	37.2051
Be-166	1426	359.6	-75.51	68.2512	4263	324.4	-106.90	36.5768
Be-166	1441	363.1	-75.90	67.8895	4278	320.9	-106.40	37.0486
Be-166	1457	367.0	-76.01	67.8110	4293	317.4	-106.40	37.0203
Be-166	1472	370.6	-76.41	67.4401	4309	313.9	-106.80	36.5920
Be-166	1487	374.5	-76.18	67.7016	4324	310.4	-106.70	36.6637
Be-166	1502	378.4	-76.28	67.6331	4340	306.9	-107.20	36.1355
Be-166	1518	382.4	-76.87	67.0754	4355	303.2	-107.00	36.3056
Be-166	1533	386.3	-76.91	67.0669	4371	299.4	-106.90	36.3749
Be-166	1548	389.9	-77.18	66.8260	4386	295.7	-107.10	36.1450
Be-166	1564	393.6	-77.50	66.5359	4401	292.2	-107.10	36.1167
Be-166	1579	397.5	-77.45	66.6174	4417	288.8	-107.30	35.8892
Be-166	1594	401.2	-78.27	65.8273	4432	285.4	-106.80	36.3618
Be-166	1609	405.2	-78.76	65.3696	4447	281.6	-107.30	35.8311
Be-166	1625	409.2	-78.93	65.2319	4463	278.2	-107.00	36.1036

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-166	1640	413.2	-79.85	64.3442	4478	274.8	-106.90	36.1761
Be-166	1656	416.9	-81.06	63.1641	4493	271.4	-106.90	36.1487
Be-166	1671	420.3	-81.12	63.1316	4509	267.7	-106.70	36.3188
Be-166	1686	424.0	-82.34	61.9415	4524	264.3	-107.10	35.8913
Be-166	1702	428.0	-83.62	60.6938	4540	260.6	-107.00	35.9614
Be-166	1717	431.7	-83.98	60.3637	4555	257.5	-107.10	35.8364
Be-166	1733	435.5	-85.44	58.9344	4570	254.1	-106.90	36.0089
Be-166	1748	439.2	-86.45	57.9543	4585	250.5	-106.60	36.2798
Be-166	1763	443.0	-87.59	56.8450	4601	247.1	-106.80	36.0524
Be-166	1779	447.0	-89.01	55.4573	4616	243.5	-106.40	36.4233
Be-166	1794	450.8	-90.72	53.7780	4631	240.1	-106.50	36.2958
Be-166	1809	454.9	-91.75	52.7811	4646	236.5	-107.10	35.6667
Be-166	1825	459.0	-93.08	51.4842	4661	232.9	-106.60	36.1376
Be-166	1840	462.5	-95.01	49.5825	4677	229.5	-106.70	36.0102
Be-166	1856	466.3	-96.31	48.3132	4692	226.2	-106.60	36.0835
Be-166	1871	469.8	-97.68	46.9715	4707	222.9	-106.80	35.8568
Be-166	1886	473.6	-99.36	45.3222	4722	219.6	-106.30	36.3302
Be-166	1902	477.8	-100.60	44.1161	4737	216.0	-106.80	35.8011
Be-166	1917	481.6	-102.80	41.9468	4752	212.7	-106.70	35.8745
Be-166	1932	485.5	-104.50	40.2783	4768	209.1	-106.70	35.8454
Be-166	1948	489.7	-106.30	38.5123	4783	205.8	-106.50	36.0187
Be-166	1963	493.2	-108.00	36.8405	4798	202.5	-106.70	35.7921
Be-166	1978	497.1	-109.30	35.5720	4813	199.2	-106.80	35.6654
Be-166	1994	500.6	-111.40	33.5003	4828	196.2	-106.50	35.9412
Be-166	2009	504.9	-113.90	31.0351	4843	193.0	-106.60	35.8153
Be-166	2024	508.5	-115.10	29.8641	4859	189.7	-106.60	35.7886
Be-166	2040	512.4	-117.20	27.7957	4874	186.4	-106.60	35.7620
Be-166	2058	517.0	-120.80	24.2328	4889	182.9	-106.90	35.4337
Be-166	2075	521.2	-121.90	23.1667	4904	179.9	-106.30	36.0095
Be-166	2091	525.2	-121.70	23.3991	4919	176.7	-106.50	35.7836
Be-166	2108	529.5	-124.10	21.0338	4934	173.5	-106.20	36.0578
Be-166	2125	533.4	-128.50	16.6653	4949	170.2	-106.30	35.9311
Be-166	2143	537.4	-128.90	16.2976	4964	167.0	-106.30	35.9052
Be-166	2160	541.4	-137.00	8.2299	4979	164.0	-106.10	36.0810
Be-166	2176	545.7	-133.80	11.4647	4994	160.8	-106.10	36.0552
Be-166	2193	550.1	-138.60	6.7002	5009	157.3	-105.90	36.2269
Be-166	2210	554.1	-141.30	4.0325	5024	154.1	-106.10	36.0010
Be-166	2227	558.5	-139.90	5.4681	5039	151.2	-106.30	35.7776
Be-166	2244	562.5	-136.00	9.4004	5055	148.0	-106.30	35.7518
Be-166	2261	566.2	-144.70	0.7303	5069	145.1	-105.80	36.2283
Be-166	2278	570.6	-140.40	5.0658	5084	141.9	-106.00	36.0025
Be-166	2295	574.7	-143.70	1.7990	5099	139.0	-106.10	35.8790
Be-166	2312	578.8	-144.90	0.6321	5115	135.8	-105.80	36.1532
Be-166	2330	583.2	-148.30	-2.7324	5130	132.9	-105.50	36.4298
Be-166	2347	587.3	-146.80	-1.1992	5145	130.0	-105.80	36.1063
Be-166	2363	591.8	-144.40	1.2371	5159	126.8	-105.90	35.9805
Be-166	2380	596.9	-145.00	0.6783	5174	123.9	-105.60	36.2571
Be-166	2397	601.4	-145.30	0.4147	5189	120.8	-105.80	36.0320
Be-166	2415	606.3	-143.00	2.7542	5204	117.6	-105.30	36.5062

Table 2. Magnetic Susceptibility vs. Temperature of Selected Bellevue Samples, Scarpy County, Nebraska

Sample No.	Heating Time (sec)	Heating Temperature (°C)	Heating Susceptibility (raw)	Heating Susceptibility (corrected)	Cooling Time (sec)	Cooling Temperature (°C)	Cooling Susceptibility (raw)	Cooling Susceptibility (corrected)
Be-166	2432	610.8	-149.20	-3.4094	5219	114.7	-105.10	36.6827
Be-166	2449	615.0	-148.30	-2.4755	5234	111.6	-105.50	36.2577
Be-166	2466	619.2	-152.00	-6.1415	5249	108.7	-105.00	36.7343
Be-166	2483	623.7	-147.30	-1.4052	5265	105.9	-105.30	36.4116
Be-166	2500	628.3	-147.40	-1.4680	5280	102.7	-105.10	36.5858
Be-166	2517	632.6	-152.00	-6.0333	5295	99.6	-105.20	36.4607
Be-166	2534	636.8	-147.20	-1.1994	5310	96.8	-105.10	36.5381
Be-166	2551	641.4	-150.00	-3.9622	5325	93.7	-104.80	36.8131
Be-166	2568	645.7	-146.10	-2.7466	5340	90.8	-104.60	36.9897
Be-166	2585	649.3	-148.00	-1.8984	5355	88.0	-105.10	36.4670
Be-166	2602	652.8	-146.40	-0.2701	5370	85.1	-104.90	36.6436
Be-166	2619	656.8	-143.20	2.9622	5386	82.3	-104.70	36.8210
Be-166	2636	660.7	-153.90	-7.7063	5401	79.7	-104.60	36.9000
Be-166	2654	664.3	-150.40	-4.1772	5416	76.9	-104.90	36.5774
Be-166	2671	667.6	-150.10	-3.8505	5431	74.3	-105.10	36.3564
Be-166	2688	669.8	-151.40	-5.1328	5446	71.8	-104.80	36.6361
Be-166	2705	671.6	-147.00	-0.7182	5462	69.2	-104.50	36.9152
Be-166	2722	672.3	-147.90	-1.6125	5477	66.9	-104.60	36.7966
Be-166					5492	64.3	-104.90	36.4756
Be-166					5508	62.0	-104.60	36.7570
Be-166					5523	59.8	-104.70	36.6392
Be-166					5539	57.5	-104.40	36.9206
Be-166					5554	54.9	-104.50	36.7996
Be-166					5569	52.1	-104.50	36.7770
Be-166					5584	49.6	-104.60	36.6568
Be-166					5600	47.1	-104.50	36.7366
Be-166					5615	44.8	-104.60	36.6180
Be-166					5630	42.8	-104.60	36.6019
Be-166					5645	41.0	-104.50	36.6873