UNITED STATES DEPARTMENT OF INTERIOR

GEOLOGICAL SURVEY

# REMANENT MAGNETIZATION AND MAGNETIC SUSCEPTIBILITY OF TWO ORIENTED CORES, CEMENT OIL FIELD, OKLAHOMA-- A REFERENCE DATA SET

by

Randal L. Forgey and Terrence J. Donovan

OPEN-FILE REPORT 82-848

1982

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## INTRODUCTION

This report is a compilation of data acquired from laboratory measurement of the magnetic properties of shallow subsurface rocks at Cement oil field, Oklahoma. The rocks used for the magnetic measurements were selected from two oriented cores drilled within the boundary of the oil field.

The investigation of the magnetic properties of these rocks was prompted by the discovery of a near-surface magnetic anomaly determined from aeromagnetic survey data (Donovan, et al, 1979). The purpose of these detailed laboratory measurements is to augment the search for genetic relationships that may exist between the observed magnetic anomaly and local chemical alteration of surface rocks due to seeping hydrocarbons (Donovan, 1974).

The Cement oil field is located in the southeast part of the Anadarko basin in Caddo and Grady Counties. The latitude-longitude location for the borehole sites is 34° 56' N., 98° 08' W. (fig. 1).

## SAMPLING METHOD

The two cores were drilled, oriented, and collected with a specially designed coring unit that was leased from a commercial source. The chief constituents of the unit were a camera, magnetic compass, vertical drift meter, and a non-magnetic core barrel. The camera was focused on the directional and vertical drift scales in order to obtain a photographic record of the core orientation before the core was broken off and brought to the

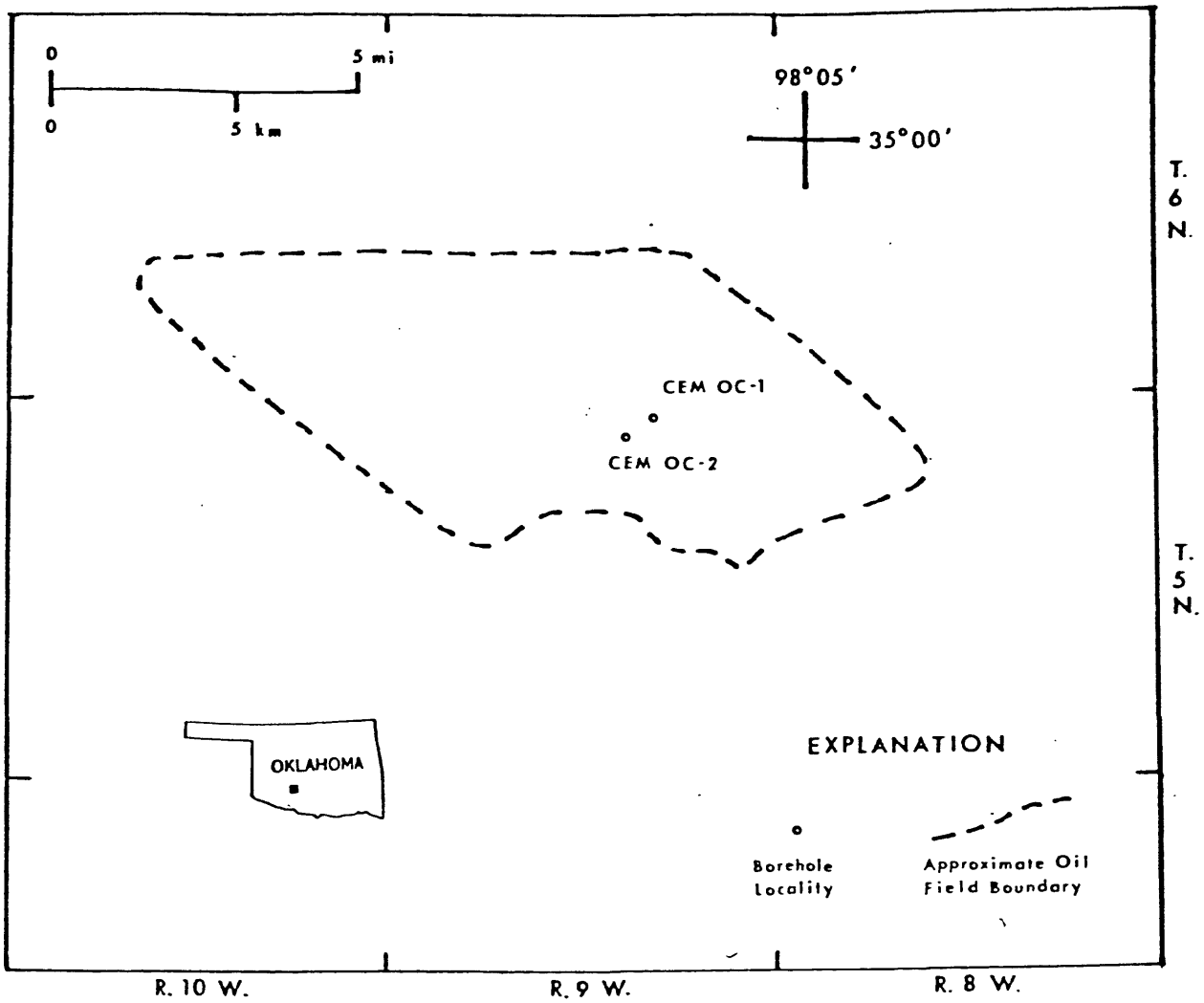


Figure 1.--Location map of Cement field, Oklahoma, and oriented-core boreholes.

surface. This orientation unit was rigidly attached to the core barrel. Three scribe knives, emplaced at the bottom, open end of the core barrel, cut orientation marks into the outside surface of the cored rock.

The individual cores and their respective boreholes will be herein referred to as "CEM OC-1" and "CEM OC-2". "CEM OC-1" is located in NW 1/4, SW 1/4, NW 1/4, Sec. 2, T5N, R9W (fig. 1). The well was drilled to a depth of 36.6 m (120 ft) from a ground level elevation of 440 m (1445 ft) above mean sea level. "CEM OC-2" is located in NE 1/4, NW 1/4, SE 1/4, Sec. 3, T5N, R9W (fig. 1). It was drilled to a depth of 22.9 m (75 ft) from a ground level elevation of 475 m (1560 ft) above mean sea level.

In the laboratory, samples taken for directional magnetic measurements were cut from core sections whose associated orientation data were deemed reliable.

## MEASUREMENT METHODS

The magnetic measurements were made with a helium-cooled, superconducting magnetometer. The sensing region of the magnetometer is shielded from external magnetic fields and maintained field-free during remanent magnetization measurements. During the measurement of the induced components necessary to calculate magnetic susceptibilities, a magnetic field approximating the strength of the earth's main magnetic field is applied across the sensing region.

The samples were subjected to stepwise demagnetization by either the thermal method or the alternating field method. The remanent magnetic intensities and directions were measured after each demagnetization step.

## MAGNETIC DATA

Table 1 displays the depth of the samples below ground level as measured when "CEM OC-1" was sampled. The depth is given in meters and feet. This

table also presents the approximate volume and mass of the cut samples. Because CGS units have been used for all parameters entering into calculations of magnetic properties, volume is given in cubic centimeters and mass in grams. Table 4 presents the same information for "CEM OC-2".

The natural remanent magnetization (NRM) data for "CEM OC-1" is given in table 2. Table 5 shows the NRM data for "CEM OC-2". The column headed with "TOTAL REM MAG" presents the magnetic dipole moment of the sample. The column "REM MAG /VOL" presents the intensity of magnetization, or magnetic dipole moment per unit volume. This is given in the CGS-EMU unit of oersted (numerically equivalent to gauss). The column "REM MAG /MASS" gives the specific intensity of magnetization, or magnetic dipole moment per unit mass.

Table 3 and table 6 give the susceptibility measurements for "CEM OC-1" and "CEM OC-2", respectively. The column "MEAN SUSC" presents the average of three susceptibility values measured along three mutually perpendicular axes of each sample. The values are the ratio of the intensity of magnetization due to the applied field to the magnitude of that applied field. "SUSC /VOL" gives the unitless magnetic susceptibility as defined for the CGS-EMU system. This is sometimes referred to as the volume susceptibility. "SUSC /MASS" gives the value referred to as mass susceptibility or specific susceptibility. "Q-RATIO" presents the ratio of the NRM intensity to the intensity of the magnetization induced by an applied field approximating the strength of the earth's main magnetic field.

Table 7 gives alternating field demagnetization (AFD) data. Magnetic intensity, magnetic declination (azimuth degrees), and magnetic inclination (positive for downward directions) are presented for each demagnetization step of each sample. This data is from "CEM OC-1". Table 10 gives the AFD data for "CEM OC-2".

Table 8 and table 11 present the thermal demagnetization data for "CEM OC-1" and "CEM OC-2", respectively, in the same format as table 7.

Table 9 presents the thermal demagnetization data for samples from "CEM OC-1" that were first subjected to the AFD treatment in a peak field of 900 oersteds.

## REFERENCES CITED

Donovan, T. J., 1974, Petroleum microseepage at Cement, Oklahoma--evidence and mechanism: American Association of Petroleum Geologists Bulletin, v. 58, p. 429-446.

Donovan, T. J., Forgey, R. L., and Roberts, A. A., 1979, Aeromagnetic detection of diagenetic magnetite over oil fields: American Association of Petroleum Geologists Bulletin, v. 63, p. 245-248.

TABLE 1. CORE# CEM 0C-1. SAMPLE DEPTH, VOLUME AND MASS.

| SAMPLE# | DEPTH (M) | DEPTH (FT) | SAMPLE VOLUME (CGS) | SAMPLE MASS (CGS) |
|---|---|---|---|---|
| 0.1A | 7.01 | 23.00 | 4.0 | 8.0 |
| 0.1B | 7.01 | 23.00 | 4.0 | 7.6 |
| 0.2A | 7.62 | 25.00 | 3.8 | 7.9 |
| 0.2B | 7.62 | 25.00 | 4.3 | 8.6 |
| 0.3A | 8.53 | 28.00 | 3.7 | 7.5 |
| 0.3B | 8.53 | 28.00 | 4.0 | 7.9 |
| 1.1A | 10.87 | 35.67 | 4.2 | 12.1 |
| 1.1B | 10.87 | 35.67 | . | 11.5 |
| 1.2A | 10.91 | 35.80 | . | 13.7 |
| 1.2B | 10.91 | 35.80 | 5.6 | 13.0 |
| 1.4A | 11.05 | 36.25 | . | 12.8 |
| 1.4B | 11.05 | 36.25 | 4.6 | 12.3 |
| 2.2A | 14.63 | 48.00 | 4.8 | 10.1 |
| 2.2B | 14.63 | 48.00 | 4.5 | 10.0 |
| 2.3A | 14.73 | 48.33 | 4.4 | 9.9 |
| 2.3B | 14.73 | 48.33 | 4.5 | 9.8 |
| 2.1A | 15.09 | 49.50 | 4.0 | 9.1 |
| 2.1B | 15.09 | 49.50 | . | 10.4 |
| 3.2A | 15.62 | 51.25 | . | 9.8 |
| 3.2B | 15.62 | 51.25 | 5.0 | 9.4 |
| 3.3A | 15.85 | 52.00 | 4.6 | 10.1 |
| 3.3B | 15.85 | 52.00 | 3.9 | 9.1 |
| 3.1A | 15.88 | 52.10 | 4.2 | 8.1 |
| 3.1B | 15.88 | 52.10 | . | 9.8 |
| 4.3A | 19.81 | 65.00 | 5.0 | 9.4 |
| 4.3B | 19.81 | 65.00 | 4.3 | 8.4 |
| 4.1A | 20.32 | 66.67 | 4.3 | 8.6 |
| 4.1B | 20.32 | 66.67 | . | 7.5 |
| 4.2A | 20.36 | 66.80 | . | 8.3 |
| 4.2B | 20.36 | 66.80 | 4.1 | 7.6 |
| 5.2A | 21.03 | 69.00 | 3.7 | 7.1 |
| 5.2B | 21.03 | 69.00 | 4.3 | 7.9 |
| 5.1A | 21.34 | 70.00 | 4.3 | 7.3 |
| 5.1B | 21.34 | 70.00 | 4.2 | 8.1 |
| 6.3A | 21.95 | 72.00 | . | 7.4 |
| 6.3B | 21.95 | 72.00 | 4.0 | 8.0 |
| 6.2A | 24.08 | 79.00 | . | 8.1 |
| 6.2B | 24.08 | 79.00 | 4.0 | 8.4 |
| 6.1A | 24.18 | 79.33 | 3.7 | 9.9 |
| 6.1B | 24.18 | 79.33 | . | 10.9 |

TABLE 1. CONTINUED

| SAMPLE# | DEPTH (M) | DEPTH (FT) | SAMPLE VOLUME (CCS) | SAMPLE MASS (CCS) |
|---|---|---|---|---|
| 7.2A | 24.79 | 81.33 | . | 8.2 |
| 7.2B | 24.79 | 81.33 | 4.2 | 9.3 |
| 7.1A | 24.99 | 82.00 | 3.8 | 8.7 |
| 7.1B | 24.99 | 82.00 | . | 8.9 |
| 7.3A | 25.91 | 85.00 | . | 9.6 |
| 7.3B | 25.91 | 85.00 | 4.2 | 9.1 |
| 8.2A | 28.65 | 94.00 | 4.7 | 8.3 |
| 8.2B | 28.65 | 94.00 | 3.5 | 8.3 |
| 8.1A | 29.46 | 96.67 | 4.4 | 8.5 |
| 8.1B | 29.46 | 96.67 | . | 8.7 |
| 8.3A | 30.18 | 99.00 | 5.4 | 9.0 |
| 8.3B | 30.18 | 99.00 | 4.1 | 8.7 |
| 9.2A | 30.78 | 101.00 | 4.7 | 12.9 |
| 9.2B | 30.78 | 101.00 | 3.4 | 9.2 |
| 9.1A | 31.39 | 103.00 | 4.2 | 13.0 |
| 9.1B | 31.39 | 103.00 | . | 12.2 |
| 10.1A | 35.43 | 116.25 | 4.7 | 10.0 |
| 10.1B | 35.43 | 116.25 | . | 9.7 |

TABLE 2. CORE# CEM 0C-1. REMANENT MAGNETIZATION DATA.

| SAMPLE# | TOTAL REM MAG ( X E-05 ) (CGS-EMU) | REM MAG /VOL ( X E-06 ) (CGS-EMU) | REM MAG /MASS ( X E-06 ) (CGS-EMU) |
|---|---|---|---|
| 0.1A | 2.550 | 6.370 | 3.150 |
| 0.1B | . | . | . |
| 0.2A | 2.850 | 7.500 | 3.600 |
| 0.2B | . | . | . |
| 0.3A | 2.850 | 7.700 | 3.800 |
| 0.3B | . | . | . |
| 1.1A | 7.880 | 18.800 | 6.510 |
| 1.1B | 6.640 | . | 5.770 |
| 1.2A | 13.400 | . | 9.760 |
| 1.2B | 14.100 | 25.200 | 10.800 |
| 1.4A | 12.600 | . | 9.820 |
| 1.4B | 10.300 | 22.400 | 8.370 |
| 2.2A | 1.960 | 4.080 | 1.940 |
| 2.2B | 2.050 | 4.560 | 2.050 |
| 2.3A | 2.320 | 5.270 | 2.340 |
| 2.3B | 1.980 | 4.400 | 2.020 |
| 2.1A | 6.800 | 17.000 | 7.470 |
| 2.1B | 8.250 | . | 7.930 |
| 3.2A | 6.470 | . | 6.600 |
| 3.2B | 6.920 | 13.800 | 7.360 |
| 3.3A | 4.790 | 10.400 | 4.740 |
| 3.3B | 4.230 | 10.800 | 4.650 |
| 3.1A | 5.980 | 14.200 | 7.380 |
| 3.1B | 6.460 | . | 6.590 |
| 4.3A | 1.730 | 3.460 | 1.840 |
| 4.3B | 2.240 | 5.210 | 2.670 |
| 4.1A | .619 | 1.440 | .720 |
| 4.1B | .571 | . | .761 |
| 4.2A | 1.890 | . | 2.280 |
| 4.2B | 1.900 | 4.630 | 2.500 |
| 5.2A | 2.290 | 6.190 | 3.230 |
| 5.2B | 1.720 | 4.000 | 2.180 |
| 5.1A | 2.660 | 6.190 | 3.640 |
| 5.1B | 2.670 | 6.360 | 3.300 |
| 6.3A | 1.670 | . | 2.260 |
| 6.3B | 1.400 | 3.500 | 1.750 |
| 6.2A | .748 | . | .924 |
| 6.2B | 1.760 | 4.400 | 2.100 |
| 6.1A | .787 | 2.130 | .795 |
| 6.1B | 1.680 | . | 1.540 |

TABLE 2. CONTINUED

| SAMPLE# | TOTAL REM MAG ( X E-05 ) (CGS-EMU) | REM MAG /VOL ( X E-06 ) (CGS-EMU) | REM MAG /MASS ( X E-06 ) (CGS-EMU) |
|---|---|---|---|
| 7.2A | 2.980 | . | 3.640 |
| 7.2B | 3.870 | 9.210 | 4.160 |
| 7.1A | 4.110 | 10.800 | 4.720 |
| 7.1B | 4.250 | . | 4.780 |
| 7.3A | 9.010 | . | 9.390 |
| 7.3B | 8.530 | 20.300 | 9.370 |
| 8.2A | 2.030 | 4.320 | 2.440 |
| 8.2B | 1.850 | 5.290 | 2.230 |
| 8.1A | 11.800 | 26.800 | 13.900 |
| 8.1B | 3.630 | . | 4.170 |
| 8.3A | 1.240 | 2.300 | 1.380 |
| 8.3B | 1.600 | 3.900 | 1.840 |
| 9.2A | 1.020 | 2.170 | .791 |
| 9.2B | .904 | 2.660 | .983 |
| 9.1A | .313 | .745 | .241 |
| 9.1B | .325 | . | .266 |
| 10.1A | .503 | 1.070 | .503 |
| 10.1B | .643 | . | .663 |

TABLE 3. CORE# CEM OC-1. SUSCEPTIBILITY DATA AND Q-RATIOS.

| SAMPLE# | MEAN SUSC ( X E-05 ) (CGS-EMU) | SUSC /VOL ( X E-06 ) (CGS-EMU) | SUSC /MASS ( X E-06 ) (CGS-EMU) | Q-RATIO: REM /IND MAG (@ .54 OE) |
|---|---|---|---|---|
| 0.1A | 3.600 | 9.000 | 4.450 | 1.30 |
| 0.1B | . | . | . | . |
| 0.2A | 4.830 | 12.700 | 6.120 | 1.09 |
| 0.2B | . | . | . | . |
| 0.3A | 4.930 | 13.300 | 6.570 | 1.07 |
| 0.3B | . | . | . | . |
| 1.1A | . | . | . | . |
| 1.1B | . | . | . | . |
| 1.2A | 11.100 | . | 8.100 | 2.24 |
| 1.2B | 12.600 | 22.500 | 9.690 | 2.07 |
| 1.4A | 19.900 | . | 15.600 | 1.17 |
| 1.4B | 13.700 | 29.800 | 11.100 | 1.39 |
| 2.2A | 11.400 | 23.800 | 11.300 | .32 |
| 2.2B | 15.000 | 33.300 | 15.000 | .25 |
| 2.3A | 17.900 | 40.700 | 18.100 | .24 |
| 2.3B | 18.200 | 40.400 | 18.500 | .20 |
| 2.1A | . | . | . | . |
| 2.1B | . | . | . | . |
| 3.2A | 13.300 | . | 13.600 | .90 |
| 3.2B | 10.800 | 21.600 | 11.400 | 1.19 |
| 3.3A | 11.800 | 25.600 | 11.700 | .75 |
| 3.3B | 8.810 | 22.500 | 9.690 | .89 |
| 3.1A | . | . | . | . |
| 3.1B | . | . | . | . |
| 4.3A | 8.760 | 17.500 | 9.320 | .36 |
| 4.3B | 5.000 | 11.600 | 5.950 | .83 |
| 4.1A | . | . | . | . |
| 4.1B | . | . | . | . |
| 4.2A | 6.720 | . | 8.100 | .52 |
| 4.2B | 7.070 | 17.200 | 9.300 | .50 |
| 5.2A | 5.800 | 15.700 | 8.170 | .73 |
| 5.2B | 5.510 | 12.800 | 6.980 | .58 |
| 5.1A | 5.370 | 12.500 | 7.360 | .92 |
| 5.1B | 6.290 | 16.400 | 7.760 | .79 |
| 6.3A | 9.690 | . | 13.100 | .32 |
| 6.3B | 13.800 | 34.500 | 17.200 | .19 |
| 6.2A | 10.300 | . | 12.700 | .13 |
| 6.2B | 15.100 | 37.800 | 17.900 | .22 |
| 6.1A | . | . | . | . |
| 6.1B | . | . | . | . |

TABLE 3. CONTINUED

| SAMPLE# | MEAN SUSC ( X E-05 ) (CGS-EMU) | SUSC /VOL ( X E-06 ) (CGS-EMU) | SUSC /MASS ( X E-06 ) (CGS-EMU) | Q-RATIO: REM /IND MAG (@ .54 OE) |
|---|---|---|---|---|
| 7.2A | 12.400 | . | 15.400 | .44 |
| 7.2B | 12.700 | 30.200 | 13.700 | .56 |
| 7.1A | . | . | . | . |
| 7.1B | . | . | . | . |
| 7.3A | 12.400 | . | 12.900 | 1.34 |
| 7.3B | 11.500 | 27.400 | 12.600 | 1.37 |
| 8.2A | 12.800 | 27.200 | 15.400 | .29 |
| 8.2B | 12.000 | 34.300 | 14.400 | .28 |
| 8.1A | . | . | . | . |
| 8.1B | . | . | . | . |
| 8.3A | 12.400 | 23.000 | 13.800 | .18 |
| 8.3B | 15.300 | 37.300 | 17.600 | .19 |
| 9.2A | 13.800 | 29.400 | 10.700 | .14 |
| 9.2B | 10.600 | 31.200 | 11.500 | .16 |
| 9.1A | . | . | . | . |
| 9.1B | . | . | . | . |
| 10.1A | . | . | . | . |
| 10.1B | . | . | . | . |

TABLE 4. CORE# CEM OC-2. SAMPLE DEPTH, VOLUME AND MASS.

| SAMPLE# | DEPTH (M) | DEPTH (FT) | SAMPLE VOLUME (CCS) | SAMPLE MASS (CCS) |
|---|---|---|---|---|
| 11.1A | 4.57 | 15.00 | 4.5 | 12.1 |
| 11.1B | 4.57 | 15.00 | . | 13.0 |
| 11.2A | 6.10 | 20.00 | 4.5 | 11.4 |
| 11.2B | 6.10 | 20.00 | . | 12.5 |
| 12.1A | 8.20 | 26.90 | 3.5 | 9.0 |
| 12.1B | 8.20 | 26.90 | . | 8.8 |
| 12.2A | 8.38 | 27.50 | 3.3 | 8.7 |
| 12.2B | 8.38 | 27.50 | . | 8.8 |
| 12.3A | 9.45 | 31.00 | 3.7 | 9.9 |
| 12.3B | 9.45 | 31.00 | . | 8.8 |
| 12.4A | 9.68 | 31.75 | 3.3 | 9.1 |
| 12.4B | 9.68 | 31.75 | . | 10.2 |
| 12.5A | 9.75 | 32.00 | 3.5 | 9.0 |
| 12.5B | 9.75 | 32.00 | . | 8.9 |
| 12.6A | 9.83 | 32.25 | 3.9 | 10.2 |
| 12.6B | 9.83 | 32.25 | . | 10.3 |
| 12.7A | 9.91 | 32.50 | 4.0 | 10.9 |
| 12.7B | 9.91 | 32.50 | . | 10.2 |
| 13.1A | 11.34 | 37.20 | 4.0 | 8.9 |
| 13.1B | 11.34 | 37.20 | . | 9.2 |
| 13.2A | 11.99 | 39.33 | 3.7 | 6.8 |
| 13.2B | 11.99 | 39.33 | . | 6.9 |
| 13.3A | 13.04 | 42.80 | 4.8 | 10.2 |
| 13.3B | 13.04 | 42.80 | . | 9.7 |
| 14.1A | 14.33 | 47.00 | 5.1 | 9.0 |
| 14.1B | 14.33 | 47.00 | . | 8.3 |
| 14.2A | 15.24 | 50.00 | 5.6 | 13.2 |
| 14.2B | 15.24 | 50.00 | . | 13.2 |
| 14.3A | 16.26 | 53.33 | 5.0 | 9.0 |
| 14.3B | 16.26 | 53.33 | . | 9.4 |
| 15.1A | 17.58 | 57.67 | 4.8 | 9.2 |
| 15.1B | 17.58 | 57.67 | . | 9.3 |
| 15.2A | 19.28 | 63.25 | 4.8 | 10.9 |
| 15.2B | 19.28 | 63.25 | . | 10.8 |
| 15.3A | 19.41 | 63.67 | 5.5 | 13.5 |
| 15.3B | 19.41 | 63.67 | . | 12.1 |
| 16.1A | 19.57 | 64.20 | 4.8 | 11.8 |
| 16.1B | 19.57 | 64.20 | . | 12.2 |
| 16.2A | 19.66 | 64.50 | 5.7 | 12.7 |
| 16.2B | 19.66 | 64.50 | . | 13.0 |
| 16.3A | 19.81 | 65.00 | 5.7 | 11.7 |
| 16.3B | 19.81 | 65.00 | . | 10.6 |
| 16.4A | 20.42 | 57.00 | 4.4 | 9.5 |
| 16.4B | 20.42 | 67.00 | . | 10.4 |
| 16.5A | 21.34 | 70.00 | 5.1 | 9.8 |
| 16.5B | 21.34 | 70.00 | . | 9.9 |

TABLE 5. CORE# CEM OC-2, REMANENT MAGNETIZATION DATA.

| SAMPLE# | TOTAL REM MAG ( X E-06 ) (CGS-EMU) | REM MAG /VOL ( X E-07 ) (CGS-EMU) | REM MAG /MASS ( X E-07 ) (CGS-EMU) |
|---|---|---|---|
| 11.1A | 8.590 | 19.100 | 7.100 |
| 11.1B | . | . | . |
| 11.2A | 5.300 | 11.800 | 4.650 |
| 11.2B | . | . | . |
| 12.1A | .855 | 2.440 | .950 |
| 12.1B | 1.800 | . | 2.040 |
| 12.2A | .748 | 2.270 | .860 |
| 12.2B | .738 | . | .839 |
| 12.3A | 1.020 | 2.760 | 1.030 |
| 12.3B | 1.140 | . | 1.300 |
| 12.4A | 2.110 | 6.390 | 2.320 |
| 12.4B | 5.000 | . | 4.900 |
| 12.5A | 2.140 | 6.110 | 2.380 |
| 12.5B | 4.700 | . | 5.280 |
| 12.6A | 3.020 | 7.740 | 2.960 |
| 12.6B | 5.030 | . | 4.880 |
| 12.7A | 4.150 | 10.400 | 3.810 |
| 12.7B | 3.650 | . | 3.580 |
| 13.1A | 7.370 | 18.400 | 8.280 |
| 13.1B | . | . | . |
| 13.2A | 10.900 | 29.500 | 16.000 |
| 13.2B | . | . | . |
| 13.3A | 14.100 | 29.400 | 13.800 |
| 13.3B | . | . | . |
| 14.1A | 20.000 | 39.200 | 22.300 |
| 14.1B | . | . | . |
| 14.2A | 19.600 | 35.000 | 14.800 |
| 14.2B | . | . | . |
| 14.3A | 20.900 | 41.800 | 23.200 |
| 14.3B | . | . | . |
| 15.1A | 27.000 | 56.200 | 29.300 |
| 15.1B | . | . | . |
| 15.2A | 11.500 | 24.000 | 10.600 |
| 15.2B | 23.500 | . | 21.800 |
| 15.3A | 13.300 | 24.200 | 9.850 |
| 15.3B | 12.000 | . | 9.920 |
| 16.1A | 17.000 | 35.400 | 14.400 |
| 16.1B | 21.400 | . | 17.500 |
| 16.2A | 30.500 | 53.500 | 24.000 |
| 16.2B | 29.900 | . | 23.000 |
| 16.3A | 20.700 | 36.300 | 17.700 |
| 16.3B | 22.700 | . | 21.400 |
| 16.4A | 22.200 | 50.400 | 23.400 |
| 16.4B | . | . | . |
| 16.5A | 14.500 | 28.400 | 14.800 |
| 16.5B | . | . | . |

TABLE 6. CORE# CEM OC-2. SUSCEPTIBILITY DATA AND Q-RATIOS.

| SAMPLE# | MEAN SUSC ( X E-05 ) (CGS-EMU) | SUSC /VOL ( X E-06 ) (CGS-EMU) | SUSC /MASS ( X E-06 ) (CGS-EMU) | Q-RATIO: REM /IND MAG (@ .54 OE) |
|---|---|---|---|---|
| 11.1A | .618 | 1.370 | .511 | 2.57 |
| 11.1B | . | . | . | . |
| 11.2A | .348 | .773 | .305 | 2.82 |
| 11.2B | . | . | . | . |
| 12.1A | .651 | 1.860 | .723 | .24 |
| 12.1B | . | . | . | . |
| 12.2A | .829 | 2.510 | .952 | .17 |
| 12.2B | . | . | . | . |
| 12.3A | .185 | .500 | .187 | 1.02 |
| 12.3B | . | . | . | . |
| 12.4A | 1.240 | 3.760 | 1.370 | .32 |
| 12.4B | . | . | . | . |
| 12.5A | .723 | 2.060 | .804 | .55 |
| 12.5B | . | . | . | . |
| 12.6A | 1.120 | 2.870 | 1.090 | .50 |
| 12.6B | . | . | . | . |
| 12.7A | .917 | 2.290 | .841 | .84 |
| 12.7B | . | . | . | . |
| 13.1A | 7.660 | 19.200 | 8.610 | .18 |
| 13.1B | . | . | . | . |
| 13.2A | 5.820 | 15.700 | 8.550 | .35 |
| 13.2B | . | . | . | . |
| 13.3A | 13.100 | 27.300 | 12.800 | .20 |
| 13.3B | . | . | . | . |
| 14.1A | 8.970 | 17.600 | 9.960 | .41 |
| 14.1B | . | . | . | . |
| 14.2A | 16.900 | 30.200 | 12.700 | .21 |
| 14.2B | . | . | . | . |
| 14.3A | 11.300 | 22.600 | 12.600 | .34 |
| 14.3B | . | . | . | . |
| 15.1A | 13.500 | 28.100 | 14.700 | .37 |
| 15.1B | . | . | . | . |
| 15.2A | 12.300 | 25.600 | 11.300 | .17 |
| 15.2B | . | . | . | . |
| 15.3A | 8.840 | 16.100 | 6.550 | .28 |
| 15.3B | . | . | . | . |
| 16.1A | 9.170 | 19.100 | 7.710 | .34 |
| 16.1B | . | . | . | . |
| 16.2A | 17.000 | 29.800 | 13.400 | .33 |
| 16.2B | . | . | . | . |
| 16.3A | 8.850 | 15.500 | 7.570 | .43 |
| 16.3B | . | . | . | . |
| 16.4A | 13.400 | 30.400 | 14.100 | .31 |
| 16.4B | . | . | . | . |
| 16.5A | 5.640 | 11.100 | 5.750 | .48 |
| 16.5B | . | . | . | . |

TABLE 7. CORE# CEM OC-1. ALTERNATING FIELD DEMAGNETIZATION DATA.

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 1.1A | NRM | 78.800 | 212.4 | -54.2 |
| 1.1A | 25 | 78.900 | 210.9 | -54.6 |
| 1.1A | 50 | 79.600 | 210.8 | -54.5 |
| 1.1A | 100 | 80.200 | 211.3 | -54.6 |
| 1.1A | 150 | 82.200 | 210.3 | -55.3 |
| 1.1A | 200 | 82.200 | 211.1 | -55.0 |
| 1.1A | 300 | 82.300 | 211.7 | -54.9 |
| 1.1A | 400 | 82.500 | 211.6 | -54.6 |
| 1.1A | 500 | 82.300 | 210.9 | -55.2 |
| 1.1A | 700 | 81.700 | 212.2 | -54.5 |
| 1.1A | 800 | 82.200 | 211.5 | -55.3 |
| 1.1A | 900 | 82.800 | 212.9 | -55.3 |
| 1.2A | NRM | 134.000 | 191.7 | -36.8 |
| 1.2A | 50 | 134.000 | 190.0 | -38.2 |
| 1.2A | 100 | 149.000 | 197.2 | -37.6 |
| 1.2A | 150 | 142.000 | 193.4 | -38.4 |
| 1.2A | 200 | 136.000 | 190.4 | -38.8 |
| 1.2A | 300 | 137.000 | 190.0 | -39.0 |
| 1.2A | 400 | 138.000 | 190.8 | -39.1 |
| 1.2A | 500 | 137.000 | 190.4 | -39.5 |
| 1.2A | 600 | 137.000 | 190.7 | -39.5 |
| 1.2A | 700 | 136.000 | 190.5 | -39.7 |
| 1.2A | 800 | 137.000 | 190.8 | -39.9 |
| 1.2A | 900 | 137.000 | 190.7 | -39.8 |
| 1.4A | NRM | 126.000 | 186.1 | -44.9 |
| 1.4A | 50 | 129.000 | 183.8 | -47.3 |
| 1.4A | 100 | 133.000 | 184.9 | -46.9 |
| 1.4A | 150 | 134.000 | 184.7 | -47.1 |
| 1.4A | 200 | 136.000 | 185.0 | -47.4 |
| 1.4A | 300 | 138.000 | 184.9 | -48.1 |
| 1.4A | 400 | 138.000 | 185.4 | -48.0 |
| 1.4A | 500 | 137.000 | 185.1 | -48.5 |
| 1.4A | 600 | 140.000 | 185.0 | -49.0 |
| 1.4A | 700 | 138.000 | 185.2 | -49.2 |
| 1.4A | 800 | 140.000 | 185.6 | -49.4 |
| 1.4A | 900 | 140.000 | 185.9 | -49.2 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 2.2A | NRM | 19.600 | 173.2 | -11.5 |
| 2.2A | 50 | 20.300 | 170.8 | -24.4 |
| 2.2A | 100 | 21.800 | 176.8 | -29.8 |
| 2.2A | 150 | 21.800 | 175.0 | -30.9 |
| 2.2A | 200 | 22.200 | 179.9 | -33.5 |
| 2.2A | 300 | 22.600 | 181.0 | -34.6 |
| 2.2A | 400 | 22.100 | 182.8 | -33.4 |
| 2.2A | 500 | 22.000 | 182.7 | -35.5 |
| 2.2A | 600 | 21.400 | 181.7 | -38.8 |
| 2.2A | 700 | 21.300 | 185.2 | -36.0 |
| 2.2A | 800 | 21.400 | 183.7 | -38.3 |
| 2.2A | 900 | 21.100 | 186.9 | -37.3 |
| 2.3A | NRM | 23.200 | 216.2 | -5.6 |
| 2.3A | 50 | 25.000 | 211.2 | -24.8 |
| 2.3A | 100 | 28.600 | 208.6 | -32.0 |
| 2.3A | 150 | 29.000 | 203.7 | -37.1 |
| 2.3A | 200 | 29.800 | 203.5 | -37.7 |
| 2.3A | 300 | 30.300 | 201.4 | -39.3 |
| 2.3A | 400 | 27.000 | 202.1 | -45.0 |
| 2.3A | 500 | 30.500 | 207.4 | -45.9 |
| 2.3A | 600 | 31.600 | 202.7 | -46.1 |
| 2.3A | 700 | 31.300 | 204.9 | -49.5 |
| 2.3A | 800 | 30.900 | 205.1 | -49.1 |
| 2.3A | 900 | 30.600 | 200.2 | -50.4 |
| 2.1A | NRM | 68.000 | 202.0 | -21.8 |
| 2.1A | 25 | 68.000 | 202.0 | -21.7 |
| 2.1A | 50 | 68.100 | 201.4 | -22.1 |
| 2.1A | 100 | 67.700 | 201.3 | -22.7 |
| 2.1A | 150 | 69.100 | 200.5 | -22.5 |
| 2.1A | 200 | 69.700 | 201.0 | -22.7 |
| 2.1A | 300 | 69.700 | 200.7 | -23.0 |
| 2.1A | 400 | 70.000 | 200.8 | -22.8 |
| 2.1A | 500 | 68.700 | 200.9 | -23.5 |
| 2.1A | 700 | 67.700 | 200.7 | -23.0 |
| 2.1A | 800 | 67.100 | 201.2 | -24.1 |
| 2.1A | 900 | 65.200 | 201.4 | -24.0 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 3.2A | NRM | 64.700 | 170.4 | -31.9 |
| 3.2A | 50 | 66.600 | 171.2 | -32.6 |
| 3.2A | 100 | 67.500 | 170.9 | -33.3 |
| 3.2A | 150 | 67.500 | 171.1 | -33.6 |
| 3.2A | 200 | 68.200 | 171.9 | -34.1 |
| 3.2A | 300 | 69.300 | 172.8 | -35.7 |
| 3.2A | 400 | 69.200 | 173.4 | -35.5 |
| 3.2A | 500 | 68.500 | 173.0 | -35.7 |
| 3.2A | 600 | 68.500 | 172.9 | -34.9 |
| 3.2A | 700 | 66.400 | 172.7 | -35.0 |
| 3.2A | 800 | 64.800 | 173.3 | -35.0 |
| 3.2A | 900 | 63.100 | 173.7 | -35.0 |
| 3.3A | NRM | 47.900 | 187.2 | -50.4 |
| 3.3A | 50 | 42.800 | 204.4 | -68.6 |
| 3.3A | 100 | 48.200 | 190.0 | -57.9 |
| 3.3A | 150 | 53.800 | 183.2 | -52.9 |
| 3.3A | 200 | 54.800 | 184.3 | -53.7 |
| 3.3A | 300 | 55.700 | 184.3 | -55.0 |
| 3.3A | 400 | 55.900 | 185.4 | -53.7 |
| 3.3A | 500 | 56.300 | 185.5 | -52.5 |
| 3.3A | 600 | 55.900 | 182.7 | -53.8 |
| 3.3A | 700 | 55.000 | 181.4 | -54.1 |
| 3.3A | 800 | 53.500 | 183.8 | -53.8 |
| 3.3A | 900 | 52.700 | 184.1 | -53.7 |
| 3.1A | NRM | 59.800 | 187.0 | -22.4 |
| 3.1A | 25 | 59.500 | 185.9 | -22.5 |
| 3.1A | 50 | 59.000 | 185.3 | -22.2 |
| 3.1A | 100 | 57.100 | 184.3 | -22.5 |
| 3.1A | 150 | 58.600 | 184.0 | -22.4 |
| 3.1A | 200 | 58.600 | 184.9 | -22.3 |
| 3.1A | 300 | 58.400 | 184.8 | -22.5 |
| 3.1A | 400 | 58.600 | 187.1 | -21.5 |
| 3.1A | 500 | 58.300 | 186.2 | -21.9 |
| 3.1A | 700 | 56.900 | 183.1 | -23.0 |
| 3.1A | 800 | 55.500 | 184.5 | -22.9 |
| 3.1A | 900 | 54.700 | 183.3 | -23.5 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 4.3A | NRM | 17.300 | 203.1 | -2.4 |
| 4.3A | 50 | 41.500 | 185.4 | -39.4 |
| 4.3A | 100 | 27.000 | 194.1 | -29.1 |
| 4.3A | 150 | 24.300 | 198.1 | -25.1 |
| 4.3A | 200 | 23.200 | 199.5 | -18.2 |
| 4.3A | 300 | 24.300 | 199.9 | -20.0 |
| 4.3A | 400 | 25.200 | 203.1 | -21.1 |
| 4.3A | 500 | 25.700 | 203.6 | -21.4 |
| 4.3A | 600 | 25.200 | 202.2 | -25.6 |
| 4.3A | 700 | 25.100 | 201.4 | -25.9 |
| 4.3A | 800 | 25.900 | 202.0 | -25.5 |
| 4.3A | 900 | 26.300 | 202.8 | -25.9 |
| 4.1A | NRM | 6.190 | 214.0 | -41.1 |
| 4.1A | 25 | 6.210 | 213.0 | -41.8 |
| 4.1A | 50 | 6.300 | 214.2 | -45.4 |
| 4.1A | 100 | 6.080 | 205.3 | -43.5 |
| 4.1A | 150 | 6.370 | 209.6 | -46.8 |
| 4.1A | 200 | 6.390 | 209.8 | -48.0 |
| 4.1A | 300 | 6.620 | 199.7 | -48.3 |
| 4.1A | 400 | 6.840 | 204.6 | -47.0 |
| 4.1A | 500 | 6.530 | 211.8 | -46.1 |
| 4.1A | 700 | 6.380 | 208.2 | -47.1 |
| 4.1A | 800 | 6.990 | 208.6 | -47.5 |
| 4.1A | 900 | 6.800 | 205.4 | -46.9 |
| 4.2A | NRM | 18.900 | 190.7 | 21.1 |
| 4.2A | 50 | 18.500 | 239.1 | 72.7 |
| 4.2A | 100 | 16.200 | 204.9 | 40.4 |
| 4.2A | 150 | 15.200 | 195.8 | 32.7 |
| 4.2A | 200 | 14.900 | 197.1 | 19.0 |
| 4.2A | 300 | 17.300 | 194.2 | 11.2 |
| 4.2A | 400 | 13.400 | 194.2 | 12.5 |
| 4.2A | 500 | 12.400 | 192.3 | 10.7 |
| 4.2A | 600 | 11.300 | 192.3 | 8.9 |
| 4.2A | 700 | 10.500 | 187.5 | 11.9 |
| 4.2A | 800. | 10.100 | 191.2 | 10.8 |
| 4.2A | 900 | 9.880 | 195.6 | 12.7 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 5.2A | NRM | 22.900 | 193.9 | 49.2 |
| 5.2A | 50 | 21.700 | 195.4 | 46.0 |
| 5.2A | 100 | 19.600 | 195.9 | 41.5 |
| 5.2A | 150 | 17.400 | 195.7 | 37.9 |
| 5.2A | 200 | 15.500 | 192.9 | 34.6 |
| 5.2A | 300 | 13.300 | 189.1 | 30.4 |
| 5.2A | 400 | 11.500 | 188.9 | 25.6 |
| 5.2A | 500 | 11.300 | 190.1 | 20.6 |
| 5.2A | 600 | 9.730 | 183.8 | 17.8 |
| 5.2A | 700 | 9.800 | 186.2 | 15.0 |
| 5.2A | 800 | 9.020 | 184.4 | 7.2 |
| 5.2A | 900 | 8.240 | 187.1 | 13.1 |
| 5.1A | NRM | 26.600 | 183.8 | -23.6 |
| 5.1A | 50 | 35.500 | 197.6 | -35.8 |
| 5.1A | 100 | 32.600 | 197.2 | -31.5 |
| 5.1A | 150 | 30.500 | 195.1 | -28.8 |
| 5.1A | 200 | 30.800 | 195.0 | -32.1 |
| 5.1A | 300 | 31.000 | 193.1 | -33.5 |
| 5.1A | 400 | 30.400 | 193.4 | -34.6 |
| 5.1A | 500 | 30.100 | 192.4 | -35.6 |
| 5.1A | 600 | 29.900 | 191.3 | -36.3 |
| 5.1A | 700 | 29.700 | 191.9 | -37.3 |
| 5.1A | 800 | 29.600 | 191.8 | -37.9 |
| 5.1A | 900 | 28.900 | 192.3 | -37.9 |
| 6.3A | NRM | 16.700 | 182.1 | -34.2 |
| 6.3A | 50 | 18.000 | 177.8 | -42.0 |
| 6.3A | 100 | 19.600 | 176.8 | -43.4 |
| 6.3A | 150 | 20.100 | 177.4 | -43.6 |
| 6.3A | 200 | 23.200 | 183.7 | -44.4 |
| 6.3A | 300 | 21.500 | 178.5 | -48.2 |
| 6.3A | 400 | 21.500 | 178.9 | -49.0 |
| 6.3A | 500 | 22.200 | 178.4 | -51.0 |
| 6.3A | 600 | 21.800 | 180.4 | -50.9 |
| 6.3A | 700 | 22.300 | 180.8 | -51.8 |
| 6.3A | 800 | 21.900 | 180.4 | -51.3 |
| 6.3A | 900 | 22.600 | 179.5 | -51.6 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 6.2A | NRM | 7.480 | 106.8 | -40.1 |
| 6.2A | 50 | 9.960 | 139.0 | -60.5 |
| 6.2A | 100 | 12.200 | 104.1 | -56.1 |
| 6.2A | 150 | 13.300 | 107.9 | -58.6 |
| 6.2A | 200 | 14.400 | 110.2 | -62.8 |
| 6.2A | 300 | 15.000 | 108.3 | -61.5 |
| 6.2A | 400 | 15.100 | 115.1 | -68.0 |
| 6.2A | 500 | 16.000 | 114.4 | -69.3 |
| 6.2A | 600 | 16.300 | 110.7 | -71.2 |
| 6.2A | 700 | 16.400 | 108.1 | -72.5 |
| 6.2A | 800 | 16.000 | 112.9 | -70.5 |
| 6.2A | 900 | 16.000 | 118.4 | -67.6 |
| 6.1A | NRM | 7.870 | 57.2 | 62.8 |
| 6.1A | 25 | 5.990 | 78.8 | 51.9 |
| 6.1A | 50 | 3.910 | 88.9 | 39.1 |
| 6.1A | 100 | 2.490 | 110.3 | 20.2 |
| 6.1A | 150 | 2.200 | 120.1 | 8.5 |
| 6.1A | 200 | 1.940 | 140.5 | 11.6 |
| 6.1A | 300 | 1.800 | 160.3 | 30.4 |
| 6.1A | 400 | 2.200 | 145.4 | -2.8 |
| 6.1A | 500 | 2.070 | 149.8 | 0.4 |
| 6.1A | 700 | 1.310 | 147.3 | -0.9 |
| 6.1A | 800 | 1.440 | 152.7 | 17.9 |
| 6.1A | 900 | 2.710 | 137.6 | -21.5 |
| 7.2A | NRM | 29.800 | 145.6 | -26.4 |
| 7.2A | 50 | 32.400 | 143.1 | -31.4 |
| 7.2A | 100 | 32.700 | 142.0 | -33.5 |
| 7.2A | 150 | 34.500 | 144.7 | -33.7 |
| 7.2A | 200 | 34.600 | 145.7 | -36.0 |
| 7.2A | 300 | 35.900 | 146.3 | -36.7 |
| 7.2A | 400 | 36.200 | 147.2 | -38.5 |
| 7.2A | 500 | 35.800 | 147.4 | -39.0 |
| 7.2A | 600 | 36.000 | 147.7 | -39.9 |
| 7.2A | 700 | 35.600 | 149.3 | -40.3 |
| 7.2A | 800 | 35.900 | 147.9 | -40.3 |
| 7.2A | 900 | 34.800 | 148.6 | -39.6 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 7.1A | NRM | 41.100 | 191.7 | -35.0 |
| 7.1A | 25 | 42.600 | 194.9 | -36.5 |
| 7.1A | 50 | 43.300 | 195.4 | -37.4 |
| 7.1A | 100 | 44.000 | 197.3 | -38.6 |
| 7.1A | 150 | 45.000 | 196.3 | -38.8 |
| 7.1A | 200 | 45.700 | 196.5 | -39.3 |
| 7.1A | 300 | 46.200 | 196.8 | -39.0 |
| 7.1A | 400 | 46.500 | 196.7 | -39.0 |
| 7.1A | 500 | 46.500 | 197.2 | -39.0 |
| 7.1A | 700 | 46.000 | 197.1 | -39.7 |
| 7.1A | 800 | 44.500 | 197.0 | -39.4 |
| 7.1A | 900 | 44.000 | 196.2 | -39.8 |
| 7.3A | NRM | 90.100 | 355.2 | 44.5 |
| 7.3A | 50 | 87.300 | 355.7 | 44.1 |
| 7.3A | 100 | 85.300 | 356.5 | 44.5 |
| 7.3A | 150 | 84.300 | 356.6 | 42.6 |
| 7.3A | 200 | 83.600 | 356.9 | 42.0 |
| 7.3A | 300 | 73.300 | 357.6 | 48.8 |
| 7.3A | 400 | 79.200 | 356.3 | 42.6 |
| 7.3A | 500 | 80.300 | 356.2 | 42.3 |
| 7.3A | 600 | 80.200 | 356.4 | 42.0 |
| 7.3A | 700 | 78.600 | 357.2 | 42.6 |
| 7.3A | 800 | 77.800 | 356.9 | 42.5 |
| 7.3A | 900 | 76.600 | 357.2 | 41.5 |
| 8.2A | NRM | 20.300 | 306.3 | 74.4 |
| 8.2A | 50 | 30.100 | 69.9 | 63.1 |
| 8.2A | 100 | 18.800 | 37.4 | 74.6 |
| 8.2A | 150 | 15.900 | 334.2 | 69.6 |
| 8.2A | 200 | 12.800 | 310.3 | 64.5 |
| 8.2A | 300 | 13.100 | 306.9 | 52.6 |
| 8.2A | 400 | 12.500 | 310.6 | 65.2 |
| 8.2A | 500 | 11.500 | 307.0 | 61.3 |
| 8.2A | 600 | 11.700 | 310.7 | 63.4 |
| 8.2A | 700 | 11.200 | 313.3 | 62.6 |
| 8.2A | 800 | 10.600 | 312.2 | 63.7 |
| 8.2A | 900 | 11.500 | 322.0 | 61.3 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 8.1A | NRM | 118.000 | 351.8 | 11.0 |
| 8.1A | 25 | 115.000 | 351.8 | 11.5 |
| 8.1A | 50 | 101.000 | 352.7 | 13.6 |
| 8.1A | 100 | 85.900 | 351.1 | 15.4 |
| 8.1A | 150 | 69.200 | 352.9 | 17.8 |
| 8.1A | 200 | 53.500 | 355.7 | 20.1 |
| 8.1A | 300 | 45.200 | 358.6 | 21.5 |
| 8.1A | 400 | 32.300 | 7.4 | 27.5 |
| 8.1A | 500 | 29.200 | 10.6 | 29.3 |
| 8.1A | 700 | 27.800 | 14.1 | 32.3 |
| 8.1A | 800 | 26.600 | 15.7 | 31.1 |
| 8.1A | 900 | 26.600 | 15.8 | 32.7 |
| 8.3A | NRM | 12.400 | 321.9 | 56.0 |
| 8.3A | 50 | 9.630 | 328.0 | 35.7 |
| 8.3A | 100 | 9.360 | 314.3 | 23.0 |
| 8.3A | 150 | 8.080 | 333.8 | -23.7 |
| 8.3A | 200 | 6.830 | 365.4 | 13.5 |
| 8.3A | 300 | 6.720 | 340.0 | 16.4 |
| 8.3A | 400 | 4.610 | 314.6 | 21.3 |
| 8.3A | 500 | 5.000 | 326.7 | 21.6 |
| 8.3A | 600 | 4.990 | 326.3 | 0.4 |
| 8.3A | 700 | 4.120 | 314.3 | 5.7 |
| 8.3A | 800 | 4.070 | 321.6 | -4.2 |
| 8.3A | 900 | 4.630 | 315.4 | 6.2 |
| 9.2A | NRM | 10.200 | 137.0 | 73.0 |
| 9.2A | 50 | 5.020 | 65.9 | 72.3 |
| 9.2A | 100 | 2.800 | 47.4 | 79.8 |
| 9.2A | 150 | 2.450 | 74.5 | 62.7 |
| 9.2A | 200 | 2.570 | 220.0 | 72.7 |
| 9.2A | 300 | 1.540 | 292.8 | 71.9 |
| 9.2A | 400 | 1.610 | 294.5 | 76.4 |
| 9.2A | 500 | 1.110 | 186.2 | 68.6 |
| 9.2A | 600 | .811 | 274.9 | 53.3 |
| 9.2A | 700 | .694 | 276.2 | 54.1 |
| 9.2A | 800 | 1.320 | 317.8 | 3.3 |
| 9.2A | 900 | 1.350 | 293.1 | -0.5 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 9.1A | NRM | 3.130 | 76.8 | 64.4 |
| 9.1A | 25 | 4.020 | 105.4 | 26.9 |
| 9.1A | 50 | 3.900 | 337.9 | 0.0 |
| 9.1A | 100 | .976 | 337.6 | 16.4 |
| 9.1A | 150 | .237 | 31.8 | 57.5 |
| 9.1A | 200 | .368 | 342.5 | 50.8 |
| 9.1A | 300 | .287 | 333.9 | 48.0 |
| 9.1A | 400 | .660 | 243.1 | -43.7 |
| 9.1A | 500 | .666 | 286.7 | 8.2 |
| 9.1A | 700 | .788 | 345.7 | -47.5 |
| 9.1A | 800 | .311 | 36.4 | -56.9 |
| 9.1A | 900 | .432 | 40.7 | -7.3 |
| 10.1A | NRM | 5.030 | 4.9 | 51.1 |
| 10.1A | 25 | 1.620 | 50.1 | 61.4 |
| 10.1A | 50 | 1.940 | 26.6 | 59.6 |
| 10.1A | 100 | 1.700 | 94.3 | 63.0 |
| 10.1A | 150 | .135 | 323.8 | 56.3 |
| 10.1A | 200 | .337 | 61.7 | 68.6 |
| 10.1A | 300 | .503 | 140.9 | 44.7 |
| 10.1A | 400 | .344 | 42.4 | 48.2 |
| 10.1A | 500 | .567 | 82.5 | 77.5 |
| 10.1A | 700 | .329 | 45.6 | 76.4 |
| 10.1A | 800 | .481 | 63.9 | 21.0 |
| 10.1A | 900 | .355 | 94.7 | -50.2 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 1.2B | NRM | 141.000 | 190.6 | -33.0 |
| 1.2B | 100 | 144.000 | 190.8 | -31.9 |
| 1.2B | 300 | 147.000 | 190.6 | -33.3 |
| 1.2B | 500 | 147.000 | 190.8 | -33.4 |
| 1.2B | 700 | 134.000 | 203.1 | -9.9 |
| 1.2B | 900 | 127.000 | 193.8 | -46.6 |
| 1.4B | NRM | 103.000 | 183.1 | -47.2 |
| 1.4B | 100 | 108.000 | 183.2 | -47.8 |
| 1.4B | 300 | 110.000 | 182.5 | -47.8 |
| 1.4B | 500 | 111.000 | 183.7 | -48.3 |
| 1.4B | 700 | 178.000 | 198.6 | -63.4 |
| 1.4B | 900 | 153.000 | 213.2 | -53.1 |
| 2.2B | NRM | 20.500 | 173.3 | -1.5 |
| 2.2B | 100 | 28.800 | 176.4 | -14.3 |
| 2.2B | 300 | 25.400 | 176.9 | -23.6 |
| 2.2B | 500 | 25.200 | 174.5 | -29.8 |
| 2.2B | 700 | 27.800 | 188.1 | -44.3 |
| 2.2B | 900 | 7.170 | 286.8 | 11.1 |
| 2.3B | NRM | 19.800 | 216.1 | -17.0 |
| 2.3B | 100 | 29.500 | 203.6 | -37.3 |
| 2.3B | 300 | 30.900 | 215.5 | -43.2 |
| 2.3B | 500 | 31.400 | 214.5 | -46.6 |
| 2.3B | 700 | 37.300 | 207.0 | -24.9 |
| 2.3B | 900 | 32.900 | 208.3 | -31.5 |
| 3.2B | NRM | 69.200 | 170.9 | -31.5 |
| 3.2B | 100 | 72.600 | 173.5 | -34.4 |
| 3.2B | 300 | 73.900 | 173.9 | -35.0 |
| 3.2B | 500 | 72.300 | 174.5 | -37.0 |
| 3.2B | 700 | 93.700 | 203.4 | -32.5 |
| 3.2B | 900 | 107.000 | 192.3 | -41.1 |
| 3.3B | NRM | 42.300 | 185.6 | -40.4 |
| 3.3B | 100 | 45.400 | 182.4 | -41.9 |
| 3.3B | 300 | 49.000 | 188.7 | -48.1 |
| 3.3B | 500 | 47.700 | 185.6 | -46.1 |
| 3.3B | 700 | 45.300 | 210.1 | -66.1 |
| 3.3B | 900 | 44.500 | 219.5 | -53.9 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 4.3B | NRM | 22.400 | 200.4 | -11.0 |
| 4.3B | 100 | 22.200 | 203.7 | -11.2 |
| 4.3B | 300 | 24.100 | 203.3 | -21.1 |
| 4.3B | 500 | 25.100 | 205.8 | -24.2 |
| 4.3B | 700 | 33.300 | 230.2 | -15.6 |
| 4.3B | 900 | 30.800 | 219.1 | 1.1 |
| 4.2B | NRM | 19.000 | 199.2 | 54.1 |
| 4.2B | 100 | 16.500 | 194.0 | 54.0 |
| 4.2B | 300 | 11.900 | 204.4 | 33.1 |
| 4.2B | 500 | 10.100 | 202.7 | 28.1 |
| 4.2B | 700 | 16.300 | 354.3 | 38.0 |
| 4.2B | 900 | 7.460 | 215.5 | -23.7 |
| 5.2B | NRM | 17.200 | 195.0 | 28.4 |
| 5.2B | 100 | 16.900 | 200.3 | 18.3 |
| 5.2B | 300 | 13.400 | 189.6 | 7.4 |
| 5.2B | 500 | 36.800 | 230.9 | -1.5 |
| 5.2B | 700 | 36.900 | 184.6 | 55.4 |
| 5.2B | 900 | 11.500 | 150.3 | 2.9 |
| 5.1B | NRM | 26.700 | 188.1 | -10.6 |
| 5.1B | 100 | 29.100 | 188.6 | -16.4 |
| 5.1B | 300 | 29.200 | 189.3 | -27.9 |
| 5.1B | 500 | 31.900 | 168.8 | -20.5 |
| 5.1B | 700 | 32.200 | 170.9 | -16.9 |
| 5.1B | 900 | 42.900 | 238.6 | -18.0 |
| 6.3B | NRM | 14.000 | 157.9 | -25.0 |
| 6.3B | 100 | 18.400 | 147.9 | -34.9 |
| 6.3B | 300 | 21.900 | 166.9 | -47.5 |
| 6.3B | 500 | 53.900 | 96.4 | -28.6 |
| 6.3B | 700 | 42.100 | 119.1 | -34.0 |
| 6.3B | 900 | 47.100 | 142.5 | 21.7 |
| 6.2B | NRM | 17.600 | 126.1 | 2.4 |
| 6.2B | 100 | 17.400 | 110.7 | 3.3 |
| 6.2B | 300 | 15.300 | 127.2 | -27.0 |
| 6.2B | 500 | 28.600 | 91.6 | -30.9 |
| 6.2B | 700 | 50.000 | 295.8 | -15.3 |
| 6.2B | 900 | 81.200 | 2.7 | -62.8 |

TABLE 7. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 7.2B | NRM | 38.700 | 148.0 | -26.5 |
| 7.2B | 100 | 46.200 | 144.2 | -31.3 |
| 7.2B | 300 | 45.300 | 149.4 | -35.3 |
| 7.2B | 500 | 29.400 | 122.0 | -35.2 |
| 7.2B | 700 | 49.500 | 210.1 | -25.3 |
| 7.2B | 900 | 66.100 | 161.1 | -4.9 |
| 7.3B | NRM | 85.300 | 352.5 | 42.1 |
| 7.3B | 100 | 83.600 | 352.8 | 38.3 |
| 7.3B | 300 | 80.200 | 352.9 | 40.1 |
| 7.3B | 500 | 78.400 | 4.3 | 35.3 |
| 7.3B | 700 | 76.100 | 352.3 | 14.3 |
| 7.3B | 900 | 106.000 | 341.4 | 34.7 |
| 8.2B | NRM | 18.500 | 300.5 | 72.8 |
| 8.2B | 100 | 13.800 | 324.0 | 58.7 |
| 8.2B | 300 | 10.800 | 329.8 | 61.2 |
| 8.2B | 500 | 9.960 | 341.7 | 64.5 |
| 8.2B | 700 | 23.200 | 154.0 | 8.4 |
| 8.2B | 900 | 7.930 | 287.4 | 68.6 |
| 8.3B | NRM | 16.000 | 326.0 | 43.5 |
| 8.3B | 100 | 10.400 | 332.7 | 24.1 |
| 8.3B | 300 | 7.880 | 343.4 | 1.4 |
| 8.3B | 500 | 6.990 | 297.8 | 65.3 |
| 8.3B | 700 | 33.700 | 7.9 | -60.3 |
| 8.3B | 900 | 11.400 | 236.9 | 11.7 |
| 9.2B | NRM | 9.040 | 65.2 | 48.2 |
| 9.2B | 100 | 4.720 | 80.0 | 58.1 |
| 9.2B | 300 | 2.000 | 56.2 | 63.2 |
| 9.2B | 500 | 1.750 | 39.1 | 68.3 |
| 9.2B | 700 | 69.100 | 25.9 | -8.5 |
| 9.2B | 900 | 41.000 | 325.5 | 31.0 |

TABLE 8. CORE# CEM OC-1. THERMAL DEMAGNETIZATION DATA.

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 1.1B | NRM | 66.400 | 212.0 | -46.0 |
| 1.1B | 250 | 54.500 | 213.5 | -48.0 |
| 1.1B | 400 | 42.800 | 213.3 | -48.1 |
| 1.1B | 500 | 36.800 | 211.7 | -50.5 |
| 1.1B | 550 | 34.800 | 209.9 | -52.8 |
| 1.1B | 590 | 33.100 | 212.9 | -52.8 |
| 1.1B | 630 | 12.000 | 210.0 | -53.8 |
| 1.1B | 650 | 1.820 | 221.8 | -24.6 |
| 1.1B | 670 | .906 | 280.3 | 55.1 |
| 1.1B | 700 | .852 | 304.2 | 26.3 |
| 2.1B | NRM | 82.500 | 207.2 | -22.6 |
| 2.1B | 250 | 67.400 | 208.5 | -26.6 |
| 2.1B | 400 | 52.200 | 208.3 | -27.3 |
| 2.1B | 500 | 44.300 | 207.1 | -27.2 |
| 2.1B | 550 | 42.200 | 209.0 | -26.5 |
| 2.1B | 590 | 37.400 | 207.4 | -26.4 |
| 2.1B | 630 | 4.350 | 213.1 | -15.7 |
| 2.1B | 650 | .889 | 242.8 | 44.9 |
| 2.1B | 670 | .928 | 238.3 | 78.4 |
| 2.1B | 700 | .836 | 159.5 | 62.4 |
| 3.1B | NRM | 64.600 | 182.8 | -22.3 |
| 3.1B | 250 | 55.000 | 183.8 | -23.2 |
| 3.1B | 400 | 43.800 | 184.7 | -22.3 |
| 3.1B | 500 | 37.200 | 183.4 | -23.6 |
| 3.1B | 550 | 35.500 | 184.6 | -22.4 |
| 3.1B | 590 | 31.800 | 185.5 | -22.7 |
| 3.1B | 630 | 2.950 | 195.2 | -7.3 |
| 3.1B | 650 | 1.090 | 276.8 | 54.4 |
| 3.1B | 670 | 1.160 | 337.6 | 52.8 |
| 3.1B | 700 | .693 | 271.9 | 45.8 |
| 4.1B | NRM | 5.710 | 213.9 | -38.5 |
| 4.1B | 250 | 4.910 | 198.3 | -44.3 |
| 4.1B | 400 | 3.890 | 194.9 | -41.7 |
| 4.1B | 500 | 2.970 | 202.7 | -39.2 |
| 4.1B | 550 | 2.560 | 203.4 | -44.4 |
| 4.1B | 590 | 2.220 | 189.7 | -47.3 |
| 4.1B | 630 | .154 | 1.4 | 22.0 |
| 4.1B | 650 | .425 | 109.6 | 76.5 |
| 4.1B | 670 | .630 | 350.0 | 41.4 |
| 4.1B | 700 | .518 | 147.7 | -46.6 |

TABLE 8. CONTINUED

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 6.1B | NRM | 16.800 | 166.1 | 54.1 |
| 6.1B | 250 | 11.100 | 174.5 | 43.3 |
| 6.1B | 400 | 6.100 | 178.9 | 37.0 |
| 6.1B | 500 | 3.310 | 189.2 | 11.9 |
| 6.1B | 550 | 2.570 | 180.4 | -5.5 |
| 6.1B | 590 | 3.060 | 168.6 | -15.9 |
| 6.1B | 630 | 2.010 | 170.8 | -25.8 |
| 6.1B | 650 | .916 | 239.7 | 10.5 |
| 6.1B | 670 | 1.660 | 306.6 | 14.1 |
| 6.1B | 700 | 1.290 | 308.7 | 7.2 |
| 7.1B | NRM | 42.500 | 198.5 | -36.9 |
| 7.1B | 250 | 38.300 | 197.0 | -38.0 |
| 7.1B | 400 | 30.800 | 196.9 | -38.0 |
| 7.1B | 500 | 26.900 | 195.8 | -39.2 |
| 7.1B | 550 | 26.100 | 194.5 | -39.3 |
| 7.1B | 590 | 23.900 | 195.6 | -38.6 |
| 7.1B | 630 | 9.260 | 194.8 | -37.4 |
| 7.1B | 650 | .789 | 173.5 | -24.0 |
| 7.1B | 670 | .480 | 230.3 | -13.6 |
| 7.1B | 700 | .394 | 148.1 | 42.0 |
| 8.1B | NRM | 36.300 | 20.6 | 36.7 |
| 8.1B | 250 | 26.000 | 23.4 | 35.2 |
| 8.1B | 400 | 19.100 | 24.1 | 35.8 |
| 8.1B | 500 | 14.300 | 25.1 | 36.6 |
| 8.1B | 550 | 11.200 | 24.2 | 37.4 |
| 8.1B | 590 | 7.640 | 23.6 | 37.6 |
| 8.1B | 630 | 1.370 | 55.2 | 58.2 |
| 8.1B | 650 | .748 | 106.5 | 16.7 |
| 8.1B | 670 | .444 | 180.0 | 54.6 |
| 8.1B | 700 | .688 | 150.9 | -35.9 |
| 9.1B | NRM | 3.250 | 114.6 | 56.8 |
| 9.1B | 250 | 1.700 | 184.3 | 45.3 |
| 9.1B | 400 | 2.880 | 208.6 | 49.3 |
| 9.1B | 500 | 15.400 | 225.4 | 32.8 |
| 9.1B | 550 | 1.870 | 254.4 | 48.3 |
| 9.1B | 590 | 1.170 | 193.0 | 58.7 |
| 9.1B | 630 | .799 | 184.9 | 38.4 |
| 9.1B | 650 | 1.030 | 211.2 | 37.6 |
| 9.1B | 670 | 1.530 | 213.4 | 36.8 |
| 9.1B | 700 | .902 | 229.9 | -53.1 |

TABLE 8. CONTINUED

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 10.1B | NRM | 6.430 | 59.1 | 72.0 |
| 10.1B | 250 | 4.030 | 128.1 | 72.4 |
| 10.1B | 400 | 6.840 | 153.3 | 52.2 |
| 10.1B | 500 | 4.120 | 214.2 | -24.7 |
| 10.1B | 550 | 2.020 | 272.3 | 44.7 |
| 10.1B | 590 | 1.600 | 254.3 | 76.3 |
| 10.1B | 630 | .525 | 54.6 | 86.1 |
| 10.1B | 650 | .626 | 191.0 | 35.5 |
| 10.1B | 670 | .340 | 278.4 | 17.0 |
| 10.1B | 700 | 1.100 | 28.3 | -27.4 |

TABLE 9. CORE# CEM OC-1. COMBINATION ALTERNATING FIELD-THERMAL DEMAGNETIZATION DATA.

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 1.2A | AFD | 137.000 | 190.7 | -39.8 |
| 1.2A | 400 | 89.600 | 191.4 | -38.6 |
| 1.2A | 500 | 78.900 | 189.6 | -38.8 |
| 1.2A | 590 | 66.300 | 189.9 | -39.6 |
| 1.2A | 630 | 11.000 | 189.4 | -35.2 |
| 1.4A | AFD | 140.000 | 185.9 | -49.2 |
| 1.4A | 400 | 103.000 | 186.7 | -48.2 |
| 1.4A | 500 | 94.300 | 185.2 | -47.8 |
| 1.4A | 590 | 82.600 | 185.2 | -48.8 |
| 1.4A | 630 | 21.400 | 178.9 | -48.7 |
| 2.2A | AFD | 21.100 | 186.9 | -37.3 |
| 2.2A | 400 | 13.300 | 187.7 | -31.4 |
| 2.2A | 500 | 11.200 | 185.6 | -34.1 |
| 2.2A | 590 | 9.510 | 184.2 | -38.4 |
| 2.2A | 630 | .554 | 186.0 | 19.1 |
| 2.3A | AFD | 30.600 | 200.2 | -50.4 |
| 2.3A | 400 | 19.100 | 203.2 | -47.6 |
| 2.3A | 500 | 14.800 | 201.5 | -46.1 |
| 2.3A | 590 | 13.600 | 201.8 | -49.8 |
| 2.3A | 630 | .839 | 187.8 | -15.1 |
| 3.2A | AFD | 63.100 | 173.7 | -35.0 |
| 3.2A | 400 | 43.300 | 175.6 | -32.2 |
| 3.2A | 500 | 39.100 | 172.9 | -32.1 |
| 3.2A | 590 | 34.600 | 173.0 | -33.5 |
| 3.2A | 630 | 3.280 | 164.4 | -9.8 |
| 3.3A | AFD | 52.700 | 184.1 | -53.7 |
| 3.3A | 400 | 30.700 | 194.3 | -50.6 |
| 3.3A | 500 | 30.000 | 184.2 | -52.2 |
| 3.3A | 590 | 25.900 | 183.7 | -54.6 |
| 3.3A | 630 | 2.620 | 170.0 | -38.1 |

TABLE 9. CONTINUED

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 4.3A | AFD | 26.300 | 202.8 | -25.9 |
| 4.3A | 400 | 16.100 | 205.0 | -23.1 |
| 4.3A | 500 | 11.500 | 199.0 | -22.5 |
| 4.3A | 590 | 8.430 | 199.7 | -26.8 |
| 4.3A | 630 | .898 | 200.5 | 19.7 |
| 4.2A | AFD | 9.880 | 195.6 | 12.7 |
| 4.2A | 400 | 5.900 | 197.8 | 24.0 |
| 4.2A | 500 | 3.900 | 209.3 | 24.2 |
| 4.2A | 590 | 3.220 | 188.3 | 35.7 |
| 4.2A | 630 | 1.430 | 198.5 | 15.1 |
| 5.2A | AFD | 8.240 | 187.1 | 13.1 |
| 5.2A | 400 | 4.520 | 193.6 | 5.1 |
| 5.2A | 500 | 4.710 | 189.8 | 0.5 |
| 5.2A | 590 | 2.770 | 185.0 | 0.5 |
| 5.2A | 630 | .909 | 111.9 | -0.4 |
| 5.1A | AFD | 28.900 | 192.3 | -37.9 |
| 5.1A | 400 | 18.400 | 197.4 | -39.8 |
| 5.1A | 500 | 16.600 | 198.8 | -36.3 |
| 5.1A | 590 | 12.600 | 192.5 | -39.2 |
| 5.1A | 630 | 1.710 | 190.0 | -11.0 |
| 6.3A | AFD | 22.600 | 179.5 | -51.6 |
| 6.3A | 400 | 14.400 | 179.2 | -47.7 |
| 6.3A | 500 | 12.500 | 176.8 | -47.1 |
| 6.3A | 590 | 10.100 | 181.1 | -50.2 |
| 6.3A | 630 | .500 | 171.2 | -53.8 |
| 6.2A | AFD | 16.000 | 118.4 | -67.6 |
| 6.2A | 400 | 10.200 | 121.6 | -65.2 |
| 6.2A | 500 | 8.750 | 107.8 | -64.4 |
| 6.2A | 590 | 6.800 | 108.0 | -74.4 |
| 6.2A | 630 | 1.550 | 12.2 | -57.3 |

TABLE 9. CONTINUED

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 7.2A | AFD | 34.800 | 148.6 | -39.6 |
| 7.2A | 400 | 23.700 | 150.5 | -38.1 |
| 7.2A | 500 | 21.900 | 146.5 | -40.3 |
| 7.2A | 590 | 18.200 | 149.6 | -41.8 |
| 7.2A | 630 | 1.210 | 151.3 | -76.5 |
| 7.3A | AFD | 76.600 | 357.2 | 41.5 |
| 7.3A | 400 | 49.400 | 359.3 | 41.4 |
| 7.3A | 500 | 46.300 | 358.4 | 41.1 |
| 7.3A | 590 | 39.700 | 356.2 | 39.9 |
| 7.3A | 630 | 8.180 | 343.6 | 43.7 |
| 8.2A | AFD | 11.500 | 322.0 | 61.3 |
| 8.2A | 400 | 6.710 | 339.9 | 58.6 |
| 8.2A | 500 | 7.000 | 326.0 | 62.1 |
| 8.2A | 590 | 3.220 | 322.3 | 60.4 |
| 8.2A | 630 | 8.380 | 209.6 | 24.8 |
| 8.3A | AFD | 4.630 | 315.4 | 6.2 |
| 8.3A | 400 | .249 | 357.8 | 72.5 |
| 8.3A | 500 | 1.600 | 177.8 | 90.0 |
| 8.3A | 590 | .706 | 322.3 | -24.0 |
| 8.3A | 630 | 1.230 | 174.5 | 43.0 |
| 9.2A | AFD | 1.350 | 293.1 | -0.5 |
| 9.2A | 400 | .703 | 14.2 | 38.5 |
| 9.2A | 500 | 1.030 | 289.0 | 50.9 |
| 9.2A | 590 | .340 | 250.8 | -0.0 |
| 9.2A | 630 | 2.080 | 223.3 | 27.9 |

TABLE 10. CORE# CEM OC-2. ALTERNATING FIELD DEMAGNETIZATION DATA.

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 12.1A | NRM | .855 | 26.0 | 76.6 |
| 12.1A | 50 | .584 | 95.9 | 87.7 |
| 12.1A | 150 | .573 | 33.1 | 72.9 |
| 12.1A | 300 | .474 | 25.7 | 76.2 |
| 12.1A | 500 | .326 | 9.2 | 61.8 |
| 12.1A | 700 | .257 | 29.6 | 57.7 |
| 12.1A | 900 | .236 | 0.4 | 52.5 |
| 12.2A | NRM | .748 | 55.2 | 74.6 |
| 12.2A | 50 | .708 | 96.3 | 71.8 |
| 12.2A | 150 | .514 | 94.2 | 70.3 |
| 12.2A | 300 | .444 | 102.2 | 70.1 |
| 12.2A | 500 | .347 | 47.9 | 66.7 |
| 12.2A | 700 | .149 | 79.9 | 47.7 |
| 12.2A | 900 | .147 | 41.1 | 36.4 |
| 12.3A | NRM | 1.020 | 171.8 | 83.6 |
| 12.3A | 50 | .685 | 126.9 | 81.0 |
| 12.3A | 150 | .414 | 25.5 | 64.6 |
| 12.3A | 300 | .491 | 35.5 | 72.1 |
| 12.3A | 500 | .283 | 12.5 | 64.5 |
| 12.3A | 700 | .261 | 119.3 | 42.0 |
| 12.3A | 900 | .242 | 250.8 | -17.7 |
| 12.4A | NRM | 2.110 | 22.8 | 78.1 |
| 12.4A | 50 | 1.740 | 50.8 | 67.1 |
| 12.4A | 150 | 1.090 | 42.1 | 71.8 |
| 12.4A | 300 | .575 | 204.7 | 76.8 |
| 12.4A | 500 | .102 | 146.3 | 25.5 |
| 12.4A | 700 | .352 | 214.4 | 26.4 |
| 12.4A | 900 | .300 | 267.7 | 16.7 |
| 12.5A | NRM | 2.140 | 256.6 | 77.4 |
| 12.5A | 50 | .969 | 196.2 | 60.7 |
| 12.5A | 150 | .562 | 157.3 | 20.6 |
| 12.5A | 300 | .439 | 139.2 | -4.9 |
| 12.5A | 500 | .570 | 119.6 | -54.0 |
| 12.5A | 700 | .318 | 143.0 | -48.6 |
| 12.5A | 900 | .661 | 110.1 | 2.2 |
| 12.6A | NRM | 3.020 | 271.8 | 74.5 |
| 12.6A | 50 | 2.260 | 283.7 | 79.3 |
| 12.6A | 150 | 1.760 | 193.8 | 84.4 |
| 12.6A | 300 | 1.010 | 137.0 | 46.1 |
| 12.6A | 500 | .981 | 280.8 | 30.6 |
| 12.6A | 700 | .891 | 197.3 | 54.4 |
| 12.6A | 900 | 1.300 | 225.2 | 18.4 |

TABLE 10. CONTINUED

| SAMPLE# | DEMAG STEP (OERSTEDS) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 12.7A | NRM | 4.150 | 131.1 | 84.9 |
| 12.7A | 50 | 2.400 | 204.2 | 85.1 |
| 12.7A | 150 | .703 | 278.2 | 74.2 |
| 12.7A | 300 | .871 | 351.4 | 72.9 |
| 12.7A | 500 | .179 | 133.0 | 55.5 |
| 12.7A | 700 | .460 | 204.3 | -37.7 |
| 12.7A | 900 | .757 | 53.3 | 4.6 |
| 15.2A | NRM | 11.500 | 112.1 | 69.2 |
| 15.2A | 50 | 10.100 | 96.4 | 80.1 |
| 15.2A | 150 | 7.970 | 99.0 | 80.2 |
| 15.2A | 300 | 5.410 | 143.0 | 75.6 |
| 15.2A | 500 | 3.370 | 95.4 | 72.5 |
| 15.2A | 700 | 2.620 | 352.7 | 81.6 |
| 15.2A | 900 | 1.560 | 217.6 | 37.4 |
| 15.3A | NRM | 13.300 | 248.6 | 77.5 |
| 15.3A | 50 | 11.000 | 276.1 | 74.6 |
| 15.3A | 150 | 7.360 | 239.7 | 75.8 |
| 15.3A | 300 | 5.000 | 249.7 | 75.9 |
| 15.3A | 500 | 3.370 | 247.9 | 56.2 |
| 15.3A | 700 | 1.820 | 237.2 | 44.5 |
| 15.3A | 900 | 1.310 | 270.9 | 52.7 |
| 16.1A | NRM | 17.000 | 267.1 | 79.3 |
| 16.1A | 50 | 10.800 | 269.8 | 61.7 |
| 16.1A | 150 | 7.940 | 259.8 | 66.6 |
| 16.1A | 300 | 5.620 | 265.2 | 74.9 |
| 16.1A | 500 | 2.960 | 254.3 | 63.5 |
| 16.1A | 700 | 1.440 | 226.2 | 44.9 |
| 16.1A | 900 | 1.590 | 185.4 | 43.4 |
| 16.2A | NRM | 30.500 | 353.0 | 84.7 |
| 16.2A | 50 | 21.000 | 341.4 | 78.1 |
| 16.2A | 150 | 14.700 | 321.4 | 79.4 |
| 16.2A | 300 | 9.620 | 294.8 | 82.3 |
| 16.2A | 500 | 6.200 | 268.0 | 81.5 |
| 16.2A | 700 | 4.850 | 270.1 | 78.5 |
| 16.2A | 900 | 3.030 | 318.1 | 58.7 |
| 16.3A | NRM | 20.700 | 357.0 | 82.8 |
| 16.3A | 50 | 17.100 | 349.5 | 85.9 |
| 16.3A | 150 | 12.000 | 304.7 | 82.8 |
| 16.3A | 300 | 7.400 | 291.1 | 82.3 |
| 16.3A | 500 | 4.590 | 295.4 | 83.0 |
| 16.3A | 700 | 2.650 | 55.9 | 72.0 |
| 16.3A | 900 | 1.360 | 264.4 | 56.0 |

TABLE 11. CORE# CEM OC-2. THERMAL DEMAGNETIZATION DATA.

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 12.1B | NRM | 1.800 | 342.8 | 85.4 |
| 12.1B | 200 | .756 | 237.6 | 52.5 |
| 12.1B | 400 | .139 | 2.5 | -10.3 |
| 12.1B | 500 | .216 | 181.5 | 16.8 |
| 12.1B | 550 | 1.650 | 113.7 | 8.3 |
| 12.1B | 590 | .197 | 6.6 | 62.8 |
| 12.1B | 630 | .389 | 348.1 | 11.9 |
| 12.1B | 670 | .363 | 126.5 | 77.6 |
| 12.2B | NRM | .738 | 67.3 | 46.8 |
| 12.2B | 200 | .306 | 83.2 | 9.4 |
| 12.2B | 400 | .186 | 107.3 | -4.6 |
| 12.2B | 500 | .231 | 152.3 | -60.4 |
| 12.2B | 550 | 5.220 | 98.3 | 4.9 |
| 12.2B | 590 | .405 | 136.8 | -33.6 |
| 12.2B | 630 | .254 | 13.3 | 18.3 |
| 12.2B | 670 | .293 | 98.1 | 6.9 |
| 12.3B | NRM | 1.140 | 293.5 | 77.4 |
| 12.3B | 200 | .609 | 239.8 | 55.1 |
| 12.3B | 400 | .915 | 96.0 | 42.8 |
| 12.3B | 500 | 1.050 | 95.7 | -11.0 |
| 12.3B | 550 | 5.090 | 40.3 | 11.7 |
| 12.3B | 590 | .373 | 55.8 | -15.6 |
| 12.3B | 630 | .688 | 57.8 | 12.1 |
| 12.3B | 670 | .514 | 297.3 | 43.7 |
| 12.4B | NRM | 5.000 | 58.0 | -11.0 |
| 12.4B | 200 | 4.510 | 168.6 | -31.4 |
| 12.4B | 400 | 6.600 | 86.1 | -21.6 |
| 12.4B | 500 | 11.700 | 81.0 | -30.5 |
| 12.4B | 550 | 58.200 | 77.4 | 12.3 |
| 12.4B | 590 | 7.070 | 76.4 | -34.6 |
| 12.4B | 630 | 7.150 | 82.2 | -28.0 |
| 12.4B | 670 | 4.650 | 75.7 | -28.0 |

TABLE 11. CONTINUED

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 12.5B | NRM | 4.700 | 243.7 | 81.7 |
| 12.5B | 200 | 2.150 | 232.5 | 80.1 |
| 12.5B | 400 | 2.000 | 218.8 | 28.8 |
| 12.5B | 500 | .457 | 67.8 | 54.0 |
| 12.5B | 550 | 8.720 | 116.6 | 9.7 |
| 12.5B | 590 | .530 | 48.0 | 40.9 |
| 12.5B | 630 | .754 | 39.3 | 8.0 |
| 12.5B | 670 | .417 | 108.4 | 45.4 |
| 12.6B | NRM | 5.030 | 234.9 | 67.2 |
| 12.6B | 200 | 2.190 | 240.7 | 60.1 |
| 12.6B | 400 | .962 | 261.7 | 58.4 |
| 12.6B | 500 | 2.280 | 202.6 | 2.2 |
| 12.6B | 550 | 7.250 | 168.0 | 1.3 |
| 12.6B | 590 | 1.260 | 54.9 | 10.6 |
| 12.6B | 630 | .736 | 46.3 | 41.2 |
| 12.6B | 670 | .965 | 281.3 | 48.4 |
| 12.7B | NRM | 3.650 | 348.8 | 54.9 |
| 12.7B | 200 | 1.800 | 308.4 | 48.7 |
| 12.7B | 400 | .864 | 333.5 | 47.0 |
| 12.7B | 500 | .480 | 29.6 | 84.1 |
| 12.7B | 550 | 4.180 | 221.0 | -7.0 |
| 12.7B | 590 | .314 | 324.2 | 87.8 |
| 12.7B | 630 | .211 | 126.3 | 7.5 |
| 12.7B | 670 | .411 | 54.1 | 76.7 |
| 15.2B | NRM | 23.500 | 236.4 | 52.8 |
| 15.2B | 200 | 7.380 | 227.4 | 43.5 |
| 15.2B | 400 | 15.300 | 243.5 | -12.6 |
| 15.2B | 500 | 5.920 | 352.3 | 72.4 |
| 15.2B | 550 | 13.800 | 142.1 | -9.9 |
| 15.2B | 590 | .741 | 254.1 | -48.4 |
| 15.2B | 630 | .651 | 272.8 | 44.8 |
| 15.2B | 670 | 1.040 | 291.3 | 35.1 |

TABLE 11. CONTINUED

| SAMPLE# | DEMAG STEP (DEGREES C.) | MAG INTENSITY ( X E-06 ) (CGS-EMU) | DEC (DEGREES) | INC (DEGREES) |
|---|---|---|---|---|
| 15.3B | NRM | 12.000 | 74.3 | 59.7 |
| 15.3B | 200 | 10.300 | 57.6 | -11.3 |
| 15.3B | 400 | 8.400 | 276.6 | 19.0 |
| 15.3B | 500 | 5.400 | 32.9 | 44.0 |
| 15.3B | 550 | 6.490 | 183.1 | -7.3 |
| 15.3B | 590 | .997 | 307.9 | -23.7 |
| 15.3B | 630 | 1.260 | 358.1 | 10.5 |
| 15.3B | 670 | 1.170 | 159.6 | 56.7 |
| 16.1B | NRM | 21.400 | 269.5 | 65.2 |
| 16.1B | 200 | 8.300 | 273.0 | 59.2 |
| 16.1B | 400 | 16.600 | 217.6 | 21.7 |
| 16.1B | 500 | 3.380 | 107.8 | 30.1 |
| 16.1B | 550 | .647 | 214.8 | 14.3 |
| 16.1B | 590 | .850 | 240.7 | -14.7 |
| 16.1B | 630 | .830 | 290.0 | 58.0 |
| 16.1B | 670 | 1.880 | 348.0 | 12.4 |
| 16.2B | NRM | 29.900 | 154.0 | 73.9 |
| 16.2B | 200 | 10.000 | 138.6 | 64.5 |
| 16.2B | 400 | 7.380 | 235.1 | 2.0 |
| 16.2B | 500 | 7.830 | 356.7 | 46.3 |
| 16.2B | 550 | .610 | 248.1 | -2.8 |
| 16.2B | 590 | 7.840 | 249.4 | -20.6 |
| 16.2B | 630 | .828 | 279.1 | 15.9 |
| 16.2B | 670 | .299 | 342.0 | -9.2 |
| 16.3B | NRM | 22.700 | 229.3 | 66.4 |
| 16.3B | 200 | 8.320 | 268.1 | 73.2 |
| 16.3B | 400 | 9.050 | 233.4 | 14.2 |
| 16.3B | 500 | 5.860 | 34.4 | 34.9 |
| 16.3B | 550 | .570 | 2.9 | -20.0 |
| 16.3B | 590 | .579 | 294.4 | -2.5 |
| 16.3B | 630 | .831 | 261.1 | 46.7 |
| 16.3B | 670 | .475 | 329.8 | -2.9 |