

INITIAL DATE & TIME: 87/01/22 14:47:20

CURRENT: 01 THICKNESS: .056 cm MAGNETIC FIELD: 5000 G

SAMPLE: LASRCUO 20

Programmed initial & final temp. numbers & temperatures are: 1 300 65 20

***** RESISTIVITY DATA *****

INITIAL & FINAL VALUES OF VOLTAGE ACROSS 10 ohm RESISTOR ARE: 1.526E-002 1.521E-002

| | | | | | | | |
|-------|--------|-------|------------|-------|--------|-------|------------|
| 299.0 | 12.246 | 999.9 | 1.690E-005 | 298.0 | 12.256 | 999.9 | 8.235E-006 |
| 297.0 | 12.276 | 999.9 | 1.677E-005 | 296.3 | 12.295 | 999.9 | 8.385E-006 |
| 294.3 | 12.326 | 999.9 | 1.669E-005 | 293.7 | 12.333 | 999.9 | 8.215E-006 |
| 293.0 | 12.344 | 999.9 | 1.670E-005 | 292.4 | 12.364 | 999.9 | 8.305E-006 |
| 289.0 | 12.415 | 999.9 | 1.638E-005 | 288.3 | 12.423 | 999.9 | 8.035E-006 |
| 287.5 | 12.433 | 999.9 | 1.630E-005 | 286.9 | 12.453 | 999.9 | 8.090E-006 |
| 284.2 | 12.483 | 999.9 | 1.621E-005 | 283.1 | 12.503 | 999.9 | 7.940E-006 |
| | | | | | | | |
| 282.5 | 12.512 | 999.9 | 1.613E-005 | 281.7 | 12.532 | 999.9 | 8.125E-006 |
| 279.2 | 12.572 | 999.9 | 1.588E-005 | 278.2 | 12.590 | 999.9 | 7.930E-006 |
| 277.6 | 12.602 | 999.9 | 1.597E-005 | 277.1 | 12.611 | 999.9 | 8.075E-006 |
| 274.1 | 12.661 | 999.9 | 1.582E-005 | 273.4 | 12.679 | 999.9 | 7.835E-006 |
| 272.7 | 12.689 | 999.9 | 1.570E-005 | 272.1 | 12.699 | 999.9 | 7.810E-006 |
| 269.2 | 12.749 | 999.9 | 1.552E-005 | 268.1 | 12.778 | 999.9 | 7.755E-006 |
| 267.5 | 12.780 | 999.9 | 1.540E-005 | 266.9 | 12.788 | 999.9 | 7.965E-006 |
| 264.1 | 12.850 | 999.9 | 1.524E-005 | 263.4 | 12.848 | 999.9 | 7.560E-006 |
| 262.8 | 12.867 | 999.9 | 1.501E-005 | 261.8 | 12.887 | 999.9 | 7.735E-006 |
| 259.3 | 12.918 | 999.9 | 1.538E-005 | 258.3 | 12.947 | 999.9 | 7.420E-006 |
| 257.6 | 12.955 | 999.9 | 1.496E-005 | 257.0 | 12.968 | 999.9 | 7.385E-006 |
| 254.1 | 13.016 | 999.9 | 1.483E-005 | 253.0 | 13.046 | 999.9 | 7.405E-006 |
| 252.2 | 13.067 | 999.9 | 1.474E-005 | 251.6 | 13.075 | 999.9 | 7.625E-006 |
| 249.3 | 13.105 | 999.9 | 1.467E-005 | 248.6 | 13.126 | 999.9 | 7.350E-006 |
| 248.0 | 13.145 | 999.9 | 1.473E-005 | 247.0 | 13.156 | 999.9 | 7.540E-006 |
| 244.3 | 13.204 | 999.9 | 1.435E-005 | 243.1 | 13.235 | 999.9 | 7.205E-006 |
| 242.4 | 13.242 | 999.9 | 1.437E-005 | 241.1 | 13.275 | 999.9 | 7.230E-006 |
| 239.4 | 13.303 | 999.9 | 1.418E-005 | 238.8 | 13.324 | 999.9 | 7.115E-006 |
| 238.2 | 13.333 | 999.9 | 1.410E-005 | 237.1 | 13.352 | 999.9 | 7.250E-006 |
| 234.2 | 13.423 | 999.9 | 1.382E-005 | 233.1 | 13.451 | 999.9 | 6.965E-006 |
| 232.3 | 13.473 | 999.9 | 1.386E-005 | 231.3 | 13.490 | 999.9 | 7.265E-006 |
| 229.3 | 13.531 | 999.9 | 1.348E-005 | 228.6 | 13.550 | 999.9 | 6.820E-006 |
| 228.0 | 13.560 | 999.9 | 1.373E-005 | 227.3 | 13.580 | 999.9 | 7.225E-006 |
| 224.1 | 13.651 | 999.9 | 1.360E-005 | 222.8 | 13.679 | 999.9 | 6.840E-006 |
| 222.1 | 13.699 | 999.9 | 1.339E-005 | 221.0 | 13.730 | 999.9 | 6.965E-006 |
| 219.3 | 13.768 | 999.9 | 1.313E-005 | 218.3 | 13.778 | 999.9 | 6.680E-006 |
| 217.6 | 13.798 | 999.9 | 1.325E-005 | 215.9 | 13.856 | 999.9 | 6.750E-006 |
| 214.3 | 13.887 | 999.9 | 1.304E-005 | 213.8 | 13.895 | 999.9 | 6.560E-006 |
| 213.1 | 13.917 | 999.9 | 1.292E-005 | 212.1 | 13.946 | 999.9 | 6.740E-006 |
| 209.2 | 14.006 | 999.9 | 1.282E-005 | 208.0 | 14.045 | 999.9 | 6.495E-006 |
| 207.2 | 14.055 | 999.9 | 1.279E-005 | 206.0 | 14.096 | 999.9 | 6.710E-006 |
| 204.3 | 14.136 | 999.9 | 1.247E-005 | 203.6 | 14.156 | 999.9 | 6.400E-006 |
| 202.9 | 14.173 | 999.9 | 1.253E-005 | 201.8 | 14.204 | 999.9 | 6.545E-006 |
| 199.1 | 14.274 | 999.9 | 1.241E-005 | 198.3 | 14.303 | 999.9 | 6.305E-006 |
| 197.5 | 14.321 | 999.9 | 1.238E-005 | 196.7 | 14.342 | 999.9 | 6.550E-006 |
| 194.0 | 14.423 | 999.9 | 1.221E-005 | 193.2 | 14.441 | 999.9 | 6.265E-006 |
| 192.4 | 14.463 | 999.9 | 1.201E-005 | 191.2 | 14.499 | 999.9 | 6.360E-006 |
| 188.8 | 14.581 | 999.9 | 1.189E-005 | 187.5 | 14.610 | 999.9 | 6.120E-006 |
| 186.8 | 14.639 | 999.9 | 1.185E-005 | 185.6 | 14.677 | 999.9 | 6.355E-006 |
| 184.0 | 14.717 | 999.9 | 1.184E-005 | 182.9 | 14.758 | 999.9 | 5.965E-006 |
| 182.2 | 14.786 | 999.9 | 1.181E-005 | 181.1 | 14.827 | 999.9 | 6.355E-006 |
| 179.2 | 14.877 | 999.9 | 1.176E-005 | 178.1 | 14.925 | 999.9 | 5.950E-006 |
| 177.3 | 14.956 | 999.9 | 1.147E-005 | 176.1 | 14.996 | 999.9 | 6.400E-006 |
| 173.8 | 15.066 | 999.9 | 1.134E-005 | 172.5 | 15.104 | 999.9 | 5.890E-006 |
| 171.8 | 15.133 | 999.9 | 1.146E-005 | 170.5 | 15.181 | 999.9 | 6.080E-006 |
| 168.9 | 15.233 | 999.9 | 1.145E-005 | | | | |

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|-------|--------|-------|-------------|-------|--------|-------|------------|
| 108.7 | 18.462 | 999.9 | -5.510E-006 | 107.1 | 18.600 | 999.9 | 5.170E-006 |
| 103.4 | 18.886 | 999.9 | -5.355E-006 | 101.6 | 19.064 | 999.9 | 5.350E-006 |
| 97.7 | 19.410 | 999.9 | -5.355E-006 | 96.0 | 19.600 | 97.8 | 5.128E-006 |
| 93.5 | 19.848 | 95.5 | -5.305E-006 | 91.7 | 20.051 | 93.6 | 5.135E-006 |
| 87.7 | 20.501 | 89.5 | -5.210E-006 | 85.6 | 20.776 | 87.2 | 4.880E-006 |
| 82.6 | 21.158 | 84.1 | -5.125E-006 | 80.4 | 21.479 | 81.7 | 4.755E-006 |
| 78.2 | 21.805 | 79.3 | -5.015E-006 | 76.2 | 22.132 | 77.1 | 4.680E-006 |
| 72.5 | 22.775 | 73.2 | -4.950E-006 | 70.2 | 23.221 | 70.6 | 4.630E-006 |
| 67.8 | 23.713 | 68.0 | -4.920E-006 | 65.7 | 24.151 | 65.8 | 4.568E-006 |
| 61.8 | 25.059 | 61.8 | -4.878E-006 | 59.1 | 25.668 | 59.2 | 4.473E-006 |
| 57.1 | 26.284 | 56.8 | -4.798E-006 | 54.4 | 27.145 | 53.9 | 4.468E-006 |
| 52.3 | 27.850 | 51.8 | -4.790E-006 | 49.5 | 28.909 | 49.0 | 4.340E-006 |
| 45.8 | 30.648 | 44.8 | -4.703E-006 | 43.4 | 32.195 | 41.8 | 4.255E-006 |
| 41.1 | 33.980 | 38.6 | -4.605E-006 | 38.5 | 35.913 | 35.8 | 4.140E-006 |
| 36.7 | 38.381 | 32.8 | -4.553E-006 | 34.7 | 40.558 | 30.6 | 4.158E-006 |
| 32.8 | 43.418 | 28.2 | -4.478E-006 | 32.2 | 42.607 | 28.8 | 4.183E-006 |

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|------|--------|------|-------------|------|--------|------|------------|
| 31.7 | 44.715 | 27.2 | -4.418E-006 | 30.7 | 45.195 | 26.9 | 4.048E-006 |
| 30.3 | 45.373 | 26.7 | -4.323E-006 | 30.3 | 44.972 | 27.0 | 3.920E-006 |
| 24.8 | 56.082 | 21.2 | -4.103E-006 | 25.1 | 61.378 | 19.4 | 3.693E-006 |
| 21.2 | 90.311 | 13.8 | -4.045E-006 | 21.0 | 77.276 | 15.7 | 3.588E-006 |
| 22.8 | 63.793 | 18.7 | -4.025E-006 | 24.4 | 54.587 | 21.8 | 3.675E-006 |
| 25.8 | 63.724 | 18.7 | -4.075E-006 | 22.6 | 81.237 | 15.1 | 3.558E-006 |
| 21.3 | 89.460 | 13.9 | -4.045E-006 | 20.9 | 92.627 | 13.6 | 3.718E-006 |
| 20.4 | 92.924 | 13.5 | -4.050E-006 | 20.7 | 84.285 | 14.6 | 3.215E-006 |
| 20.4 | 84.948 | 14.5 | -3.995E-006 | 19.9 | 88.727 | 14.0 | 3.603E-006 |
| 19.5 | 91.736 | 13.7 | -3.995E-006 | 19.1 | 92.023 | 13.6 | 3.355E-006 |
| 18.9 | 93.428 | 13.5 | -3.958E-006 | 18.7 | 94.131 | 13.4 | 3.675E-006 |

THE NEXT LINE SHOULD CONTAIN 3 ZEROES

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FINAL DATE & TIME: 87/01/22 19:35:30

INITIAL DATE & TIME: 87/01/12 12:16:26

CURRENT: 01 THICKNESS: .163 cm MAGNETIC FIELD: 5000 G

SAMPLE: LASCO .35

Programmed initial & final temp. numbers & temperatures are: 1 300 65 20

***** RESISTIVITY DATA *****

INITIAL & FINAL VALUES OF VOLTAGE ACROSS 10 ohm RESISTOR ARE: 1.529E-002 1.517E-002

| | | | | | | | |
|-------|--------|-------|------------|-------|--------|-------|------------|
| 298.9 | 12.238 | 999.9 | 7.135E-006 | 297.8 | 12.255 | 999.9 | 1.743E-005 |
| 296.6 | 12.286 | 999.9 | 7.175E-006 | 295.8 | 12.295 | 999.9 | 1.736E-005 |
| 294.1 | 12.324 | 999.9 | 7.285E-006 | 293.5 | 12.344 | 999.9 | 1.737E-005 |
| 292.9 | 12.344 | 999.9 | 7.065E-006 | 292.2 | 12.354 | 999.9 | 1.733E-005 |
| 289.2 | 12.405 | 999.9 | 7.125E-006 | 288.5 | 12.415 | 999.9 | 1.718E-005 |
| 287.6 | 12.432 | 999.9 | 7.000E-006 | 286.9 | 12.443 | 999.9 | 1.724E-005 |
| 284.3 | 12.483 | 999.9 | 7.140E-006 | 283.7 | 12.494 | 999.9 | 1.694E-005 |
| 282.7 | 12.512 | 999.9 | 6.885E-006 | 282.1 | 12.521 | 999.9 | 1.679E-005 |
| 278.9 | 12.573 | 999.9 | 6.880E-006 | 278.2 | 12.582 | 999.9 | 1.669E-005 |
| 277.6 | 12.590 | 999.9 | 6.800E-006 | 277.1 | 12.611 | 999.9 | 1.665E-005 |
| 273.8 | 12.662 | 999.9 | 6.805E-006 | 273.2 | 12.681 | 999.9 | 1.654E-005 |
| 272.2 | 12.710 | 999.9 | 6.800E-006 | 271.5 | 12.709 | 999.9 | 1.637E-005 |
| 269.4 | 12.751 | 999.9 | 6.735E-006 | 268.8 | 12.750 | 999.9 | 1.632E-005 |
| 267.8 | 12.780 | 999.9 | 6.725E-006 | 267.2 | 12.790 | 999.9 | 1.630E-005 |
| 263.8 | 12.849 | 999.9 | 6.670E-006 | 263.1 | 12.859 | 999.9 | 1.611E-005 |
| 262.5 | 12.870 | 999.9 | 6.610E-006 | 261.9 | 12.879 | 999.9 | 1.605E-005 |
| 259.3 | 12.918 | 999.9 | 6.665E-006 | 258.6 | 12.927 | 999.9 | 1.599E-005 |
| 257.6 | 12.948 | 999.9 | 6.575E-006 | 257.0 | 12.958 | 999.9 | 1.589E-005 |
| 254.2 | 13.007 | 999.9 | 6.530E-006 | 253.4 | 13.027 | 999.9 | 1.583E-005 |
| 252.3 | 13.046 | 999.9 | 6.475E-006 | 251.6 | 13.067 | 999.9 | 1.575E-005 |
| 249.0 | 13.106 | 999.9 | 6.335E-006 | 248.2 | 13.139 | 999.9 | 1.564E-005 |
| 247.2 | 13.155 | 999.9 | 6.440E-006 | 246.5 | 13.164 | 999.9 | 1.559E-005 |
| 244.0 | 13.205 | 999.9 | 6.440E-006 | 243.3 | 13.225 | 999.9 | 1.551E-005 |
| 242.6 | 13.245 | 999.9 | 6.350E-006 | 241.9 | 13.254 | 999.9 | 1.552E-005 |
| 239.2 | 13.306 | 999.9 | 6.225E-006 | 238.5 | 13.313 | 999.9 | 1.537E-005 |

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|-------|--------|-------|------------|-------|--------|-------|-------------|
| 168.0 | 15.266 | 999.9 | 7.535E-006 | 167.0 | 15.308 | 999.9 | -7.450E-006 |
| 163.6 | 15.428 | 999.9 | 7.485E-006 | 162.6 | 15.474 | 999.9 | -7.315E-006 |
| 158.3 | 15.636 | 999.9 | 7.340E-006 | 157.2 | 15.672 | 999.9 | -7.315E-006 |
| 153.2 | 15.850 | 999.9 | 7.330E-006 | 151.6 | 15.919 | 999.9 | -7.315E-006 |
| 148.3 | 16.070 | 999.9 | 7.235E-006 | 146.8 | 16.140 | 999.9 | -7.240E-006 |
| 143.6 | 16.289 | 999.9 | 7.125E-006 | 142.5 | 16.347 | 999.9 | -7.295E-006 |
| 138.3 | 16.554 | 999.9 | 7.010E-006 | 136.8 | 16.634 | 999.9 | -7.030E-006 |
| 133.7 | 16.802 | 999.9 | 7.030E-006 | 131.9 | 16.899 | 999.9 | -7.035E-006 |
| 127.9 | 17.127 | 999.9 | 6.880E-006 | 126.3 | 17.227 | 999.9 | -6.850E-006 |
| 123.1 | 17.423 | 999.9 | 6.795E-006 | 121.5 | 17.524 | 999.9 | -6.890E-006 |
| 118.5 | 17.712 | 999.9 | 6.775E-006 | 117.5 | 17.791 | 999.9 | -6.790E-006 |
| 113.2 | 18.088 | 999.9 | 6.645E-006 | 111.5 | 18.215 | 999.9 | -6.700E-006 |
| 108.0 | 18.492 | 999.9 | 6.575E-006 | 106.4 | 18.630 | 999.9 | -6.595E-006 |
| 103.6 | 18.868 | 999.9 | 6.590E-006 | 101.7 | 19.028 | 999.9 | -6.680E-006 |
| 98.1 | 19.374 | 999.9 | 6.490E-006 | 97.0 | 19.462 | 99.1 | -6.845E-006 |
| 92.8 | 19.907 | 94.9 | 6.455E-006 | 90.9 | 20.136 | 92.8 | -6.565E-006 |
| 88.4 | 20.421 | 90.2 | 6.425E-006 | 87.0 | 20.580 | 88.8 | -6.500E-006 |
| 83.4 | 21.054 | 84.9 | 6.460E-006 | 81.4 | 21.312 | 83.0 | -6.535E-006 |
| 78.1 | 21.809 | 79.3 | 6.380E-006 | 76.2 | 22.115 | 77.2 | -6.580E-006 |
| 72.3 | 22.776 | 73.2 | 6.115E-006 | 70.9 | 23.073 | 71.5 | -6.065E-006 |
| 68.3 | 23.612 | 68.5 | 6.185E-006 | 65.9 | 24.134 | 65.9 | -6.380E-006 |
| 62.4 | 24.893 | 62.5 | 6.085E-006 | 60.5 | 25.339 | 60.6 | -6.185E-006 |
| 57.9 | 26.041 | 57.8 | 6.050E-006 | 55.1 | 26.882 | 54.6 | -6.150E-006 |
| 52.5 | 27.703 | 52.3 | 6.920E-006 | 50.1 | 28.621 | 49.7 | -6.515E-006 |
| 46.7 | 30.134 | 46.0 | 6.140E-006 | 44.3 | 31.450 | 43.2 | -6.550E-006 |
| 41.2 | 33.785 | 38.9 | 6.115E-006 | 38.6 | 35.619 | 36.2 | -6.450E-006 |
| 36.4 | 38.508 | 32.7 | 6.160E-006 | 34.7 | 40.235 | 30.9 | -6.605E-006 |
| 32.7 | 43.039 | 28.5 | 6.060E-006 | 32.2 | 42.263 | 29.1 | -6.180E-006 |
| 31.8 | 44.048 | 27.7 | 6.040E-006 | 30.9 | 44.963 | 27.0 | -6.215E-006 |
| 30.3 | 45.181 | 26.9 | 6.025E-006 | 30.3 | 44.761 | 27.2 | -6.345E-006 |
| 24.3 | 57.137 | 20.8 | 5.485E-006 | 24.2 | 48.738 | 24.7 | -6.130E-006 |
| 22.9 | 53.147 | 22.5 | 5.205E-006 | 23.9 | 49.144 | 24.4 | -6.070E-006 |
| 24.2 | 49.347 | 24.3 | 5.240E-006 | 24.9 | 47.877 | 25.2 | -6.025E-006 |
| 25.0 | 49.406 | 24.3 | 5.365E-006 | 24.4 | 50.143 | 23.9 | -6.110E-006 |
| 23.7 | 53.197 | 22.4 | 5.220E-006 | 23.3 | 53.181 | 22.4 | -6.040E-006 |
| 22.6 | 56.477 | 21.1 | 5.215E-006 | 22.3 | 56.520 | 21.1 | -6.130E-006 |
| 21.4 | 59.812 | 19.9 | 5.155E-006 | 21.3 | 59.822 | 19.9 | -6.050E-006 |
| 20.5 | 63.394 | 18.8 | 5.175E-006 | 20.4 | 63.457 | 18.8 | -6.225E-006 |
| 19.7 | 67.553 | 17.7 | 5.145E-006 | 19.6 | 67.560 | 17.7 | -5.935E-006 |

THE NEXT LINE SHOULD CONTAIN 3 ZEROES

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FINAL DATE & TIME: 87/01/13 08:06:35

INITIAL DATE & TIME: 87/01/07 13:57:32

CURRENT: 01 THICKNESS: .15 cm MAGNETIC FIELD: 5000 G

SAMPLE: LaSrCuO #3

Programmed initial & final temp. numbers & temperatures are: 1 300 65 20

***** RESISTIVITY DATA *****

INITIAL & FINAL VALUES OF VOLTAGE ACROSS 10 ohm RESISTOR ARE: 1.526E-002 1.519E-002

| | | | | | | | |
|-------|--------|-------|------------|-------|--------|-------|------------|
| 298.8 | 12.241 | 999.9 | 1.557E-005 | 297.8 | 12.270 | 999.9 | 6.355E-006 |
| 296.8 | 12.282 | 999.9 | 1.515E-005 | 295.9 | 12.301 | 999.9 | 6.535E-006 |
| 294.2 | 12.319 | 999.9 | 1.521E-005 | 293.3 | 12.340 | 999.9 | 6.250E-006 |
| 292.6 | 12.352 | 999.9 | 1.514E-005 | 291.9 | 12.359 | 999.9 | 6.415E-006 |
| 289.2 | 12.400 | 999.9 | 1.508E-005 | 288.5 | 12.411 | 999.9 | 6.145E-006 |
| 287.8 | 12.428 | 999.9 | 1.493E-005 | 287.1 | 12.438 | 999.9 | 6.400E-006 |
| 284.2 | 12.480 | 999.9 | 1.483E-005 | 283.5 | 12.497 | 999.9 | 6.095E-006 |
| 282.8 | 12.507 | 999.9 | 1.470E-005 | 282.2 | 12.517 | 999.9 | 6.310E-006 |
| 279.1 | 12.569 | 999.9 | 1.465E-005 | 278.4 | 12.578 | 999.9 | 5.995E-006 |
| 277.8 | 12.598 | 999.9 | 1.454E-005 | 277.2 | 12.608 | 999.9 | 6.230E-006 |
| 274.2 | 12.657 | 999.9 | 1.454E-005 | 273.6 | 12.667 | 999.9 | 5.915E-006 |
| 273.0 | 12.687 | 999.9 | 1.435E-005 | 272.3 | 12.698 | 999.9 | 6.170E-006 |
| 269.2 | 12.747 | 999.9 | 1.427E-005 | 268.5 | 12.767 | 999.9 | 5.825E-006 |
| 267.8 | 12.777 | 999.9 | 1.416E-005 | 267.2 | 12.786 | 999.9 | 6.035E-006 |

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|------|--------|------|-------------|------|--------|------|------------|
| 22.8 | 56.200 | 21.2 | -1.615E-006 | 22.7 | 56.204 | 21.2 | 1.219E-006 |
| 21.9 | 59.475 | 20.0 | -1.654E-006 | 21.8 | 59.449 | 20.0 | 1.254E-006 |
| 20.9 | 63.216 | 18.9 | -1.625E-006 | 20.9 | 63.173 | 18.9 | 1.346E-006 |
| 17.8 | 99.891 | 12.8 | -1.413E-006 | 17.7 | 87.027 | 14.2 | 1.240E-006 |

THE NEXT LINE SHOULD CONTAIN 3 ZEROES

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FINAL DATE & TIME: 87/01/08 12:16:34

INITIAL DATE & TIME: 87/01/13 13:12:17

CURRENT: 01 THICKNESS: .056 cm MAGNETIC FIELD: 5000 G

SAMPLE: LASCO20

Programmed initial & final temp. numbers & temperatures are: 1 300 65 20

***** RESISTIVITY DATA *****

INITIAL & FINAL VALUES OF VOLTAGE ACROSS 10 ohm RESISTOR ARE: 1.528E-002 1.517E-002

| | | | | | | | |
|-------|--------|-------|------------|-------|--------|-------|------------|
| 299.0 | 12.246 | 999.9 | 6.785E-006 | 297.8 | 12.255 | 999.9 | 1.813E-005 |
| 296.5 | 12.285 | 999.9 | 6.970E-006 | 295.7 | 12.293 | 999.9 | 1.820E-005 |
| 294.4 | 12.313 | 999.9 | 6.950E-006 | 293.8 | 12.324 | 999.9 | 1.792E-005 |
| 292.9 | 12.344 | 999.9 | 6.875E-006 | 292.3 | 12.364 | 999.9 | 1.806E-005 |
| 288.8 | 12.404 | 999.9 | 6.770E-006 | 288.2 | 12.425 | 999.9 | 1.764E-005 |
| 287.6 | 12.433 | 999.9 | 6.650E-006 | 287.0 | 12.453 | 999.9 | 1.770E-005 |
| 283.9 | 12.503 | 999.9 | 6.775E-006 | 283.1 | 12.521 | 999.9 | 1.734E-005 |
| 282.5 | 12.532 | 999.9 | 6.595E-006 | 281.8 | 12.542 | 999.9 | 1.738E-005 |
| 279.3 | 12.563 | 999.9 | 6.670E-006 | 278.6 | 12.582 | 999.9 | 1.712E-005 |
| 277.6 | 12.602 | 999.9 | 6.675E-006 | 277.0 | 12.613 | 999.9 | 1.731E-005 |
| 273.9 | 12.660 | 999.9 | 6.425E-006 | 272.9 | 12.701 | 999.9 | 1.704E-005 |
| 272.3 | 12.701 | 999.9 | 5.970E-006 | 271.6 | 12.720 | 999.9 | 1.713E-005 |
| 268.9 | 12.750 | 999.9 | 6.495E-006 | 268.3 | 12.769 | 999.9 | 1.657E-005 |
| 267.3 | 12.788 | 999.9 | 6.345E-006 | 266.8 | 12.798 | 999.9 | 1.665E-005 |
| 264.3 | 12.829 | 999.9 | 6.535E-006 | 263.7 | 12.848 | 999.9 | 1.645E-005 |
| 262.6 | 12.869 | 999.9 | 6.270E-006 | 261.9 | 12.879 | 999.9 | 1.663E-005 |
| 258.9 | 12.927 | 999.9 | 6.240E-006 | 258.3 | 12.947 | 999.9 | 1.603E-005 |
| 257.2 | 12.966 | 999.9 | 6.105E-006 | 256.6 | 12.976 | 999.9 | 1.615E-005 |
| 254.0 | 13.017 | 999.9 | 6.230E-006 | 253.2 | 13.037 | 999.9 | 1.599E-005 |
| 252.1 | 13.056 | 999.9 | 6.065E-006 | 251.5 | 13.075 | 999.9 | 1.589E-005 |
| 248.9 | 13.115 | 999.9 | 6.230E-006 | 248.1 | 13.136 | 999.9 | 1.562E-005 |
| 247.1 | 13.156 | 999.9 | 5.945E-006 | 246.5 | 13.173 | 999.9 | 1.574E-005 |
| 244.0 | 13.215 | 999.9 | 6.050E-006 | 243.2 | 13.225 | 999.9 | 1.550E-005 |
| 242.3 | 13.254 | 999.9 | 5.825E-006 | 241.7 | 13.263 | 999.9 | 1.536E-005 |
| 238.9 | 13.314 | 999.9 | 5.915E-006 | 238.2 | 13.323 | 999.9 | 1.518E-005 |
| 237.1 | 13.361 | 999.9 | 5.845E-006 | 236.5 | 13.374 | 999.9 | 1.499E-005 |
| 233.8 | 13.422 | 999.9 | 5.755E-006 | 233.1 | 13.432 | 999.9 | 1.472E-005 |
| 232.1 | 13.461 | 999.9 | 5.690E-006 | 231.3 | 13.471 | 999.9 | 1.463E-005 |
| 229.3 | 13.531 | 999.9 | 5.720E-006 | 228.3 | 13.550 | 999.9 | 1.476E-005 |
| 227.6 | 13.570 | 999.9 | 5.680E-006 | 227.0 | 13.590 | 999.9 | 1.459E-005 |
| 223.8 | 13.651 | 999.9 | 5.725E-006 | 223.0 | 13.669 | 999.9 | 1.433E-005 |
| 221.9 | 13.699 | 999.9 | 5.555E-006 | 221.1 | 13.719 | 999.9 | 1.415E-005 |
| 219.3 | 13.748 | 999.9 | 5.600E-006 | 218.5 | 13.778 | 999.9 | 1.410E-005 |
| 217.4 | 13.798 | 999.9 | 5.530E-006 | 216.6 | 13.828 | 999.9 | 1.407E-005 |
| 213.7 | 13.897 | 999.9 | 5.600E-006 | 213.0 | 13.917 | 999.9 | 1.410E-005 |

| | | | | | | | |
|------|--------|------|-------------|------|--------|------|------------|
| 63.0 | 24.611 | 63.7 | -5.230E-006 | 59.3 | 25.502 | 59.9 | 4.938E-006 |
| 56.1 | 26.405 | 56.3 | -5.030E-006 | 53.2 | 27.303 | 53.4 | 5.018E-006 |
| 50.8 | 28.174 | 50.9 | -4.930E-006 | 48.2 | 29.243 | 48.2 | 4.515E-006 |
| 45.0 | 30.780 | 44.5 | -4.905E-006 | 42.7 | 32.400 | 41.4 | 4.095E-006 |
| 38.8 | 35.101 | 37.0 | -4.930E-006 | 36.8 | 36.906 | 34.6 | 4.283E-006 |
| 35.6 | 38.654 | 32.5 | -4.900E-006 | 34.8 | 39.450 | 31.7 | 4.190E-006 |
| 33.0 | 42.118 | 29.2 | -4.813E-006 | 32.1 | 41.930 | 29.4 | 5.030E-006 |
| 31.6 | 43.800 | 27.9 | -4.670E-006 | 30.5 | 44.631 | 27.3 | 5.750E-006 |
| 30.0 | 44.770 | 27.2 | -4.605E-006 | 30.0 | 44.235 | 27.6 | 4.925E-006 |
| 25.2 | 59.477 | 20.0 | -4.438E-006 | 25.2 | 51.044 | 23.4 | 2.288E-006 |
| 24.7 | 58.893 | 20.2 | -4.480E-006 | 24.5 | 53.063 | 22.5 | 6.145E-006 |
| 22.9 | 74.139 | 16.3 | -4.423E-006 | 20.8 | 72.350 | 16.7 | 5.105E-006 |
| 23.3 | 58.476 | 20.4 | -4.408E-006 | 25.2 | 49.916 | 24.0 | 6.095E-006 |
| 22.8 | 69.930 | 17.2 | -4.515E-006 | 22.5 | 69.394 | 17.3 | 2.670E-006 |
| 21.5 | 71.833 | 16.8 | -4.273E-006 | 21.1 | 72.449 | 16.6 | 3.230E-006 |
| 20.5 | 74.792 | 16.2 | -4.368E-006 | 20.3 | 74.376 | 16.2 | 4.675E-006 |
| 19.9 | 77.122 | 15.7 | -4.245E-006 | 19.7 | 77.063 | 15.8 | 4.555E-006 |
| 19.4 | 80.417 | 15.2 | -4.295E-006 | 19.0 | 80.445 | 15.2 | 4.148E-006 |

THE NEXT LINE SHOULD CONTAIN 3 ZEROES

```

000
FINAL DATE & TIME: 87/01/20 13:18:00
100 SUB "5206" (C$,A(),A9,T)
110 ! *****
120 ! Routines for 5206 lockin
130 !
140 ! last mod 10-07-86 by frs
150 !
160 ! 3 parameters => initialize
170 ! C$ -command string
180 ! A() -5206 output
190 ! A9 -device selector
200 ! T -omit to initialize
210 ! -on input--C$<>"Q"
220 ! -T=1 for response
230 ! -T=0 no response
240 ! -on input--C$= "Q"
250 ! -BIT(T,0)=1--A(1)=X, A(2)=Y,A(3)=phase,A(4)=range #(0-20)
260 ! -BIT(T,1)=1--A(1)=R, A(2)=A(3)=phase,A(4)=range #(0-20)
270 ! -BIT(T,2)=1--A(1)=logR, A(2)=,A(3)=phase,A(4)=range #(0-20)
280 ! -BIT(T,3)=1--Autorange before reading
290 ! -BIT(T,4)=1--Autoset before reading
300 ! -on output, T is max subscript of A()
310 ! *****
314 COM Z9
315 IF NPAR=0 THEN SUBEXIT
320 DIM C1$(12)
330 C1$=C$
340 IF NPAR=3 THEN 540
350 IF C1$="Q" THEN 610
360 GOSUB 390
370 IF T=0 THEN SUBEXIT
380 GOSUB 440 @ T=I9 @ SUBEXIT
390 ! *** OUTPUT COMMAND ***
400 GOSUB 510 ! SERIAL POLL
410 IF BIT(C9,0)=0 THEN 400 ! WAIT FOR PREVIOUS CMD DONE
420 OUTPUT A9 USING "K" ; C1$

```

,K,/ CURRENT: ",K," THICKNESS: ",K," cm MAGNETIC FIELD: ",K," G",/,"SAMPLI
665 PRINT USING 667 ; I2,T2,I0,T0
667 IMAGE "Programmed initial & final temp. numbers & temperatures are: ",2(3D,4D,3X.
670 ! *v*v*v*v*v*v*v*v*v*v*v*v*v*v*v*v*

FILE NAME: LASCO3pst
 SAMPLE NAME: LaSrCuO #3
 DATE IS 87/01/22
 TIME IS 20:39:28
 Data taken during the interval
 87/01/07 13:57:32
 87/01/08 12:16:34

Current 01
 Thickness .15 cm
 Mag field 5000 gauss
 Temp range 20 - 300 K
 Temp nos. 33 - 1

| Temp (degC) | Res--a (ohm-cm) | Res--b (ohm-cm) | Hall--a (cm**3/C) | Hall--b (cm**3/C) |
|----------------|--------------------|--------------------|----------------------|----------------------|
| 295.8 | 4.518E-003 | 4.505E-003 | -1.805E+001 | -1.792E+001 |
| 290.0 | 4.451E-003 | 4.485E-003 | -1.792E+001 | -1.785E+001 |
| 280.0 | 4.339E-003 | 4.372E-003 | -1.733E+001 | -1.724E+001 |
| 270.0 | 4.234E-003 | 4.260E-003 | -1.675E+001 | -1.654E+001 |
| 260.0 | 4.115E-003 | 4.148E-003 | -1.642E+001 | -1.625E+001 |
| 250.0 | 4.000E-003 | 4.026E-003 | -1.585E+001 | -1.577E+001 |
| 240.0 | 3.879E-003 | 3.903E-003 | -1.550E+001 | -1.518E+001 |
| 230.0 | 3.765E-003 | 3.793E-003 | -1.491E+001 | -1.471E+001 |
| 220.0 | 3.637E-003 | 3.692E-003 | -1.440E+001 | -1.428E+001 |
| 210.0 | 3.450E-003 | 3.484E-003 | -1.389E+001 | -1.369E+001 |
| 200.0 | 3.216E-003 | 3.375E-003 | -1.344E+001 | -1.333E+001 |
| 190.0 | 3.098E-003 | 3.214E-003 | -1.288E+001 | -1.283E+001 |
| 180.0 | 3.007E-003 | 3.126E-003 | -1.261E+001 | -1.226E+001 |
| 170.0 | 2.903E-003 | 2.998E-003 | -1.206E+001 | -1.178E+001 |
| 160.0 | 2.829E-003 | 2.941E-003 | -1.146E+001 | -1.139E+001 |
| 150.0 | 2.723E-003 | 2.895E-003 | -1.105E+001 | -1.085E+001 |
| 140.0 | 2.622E-003 | 2.774E-003 | -1.046E+001 | -1.037E+001 |
| 130.0 | 2.498E-003 | 2.626E-003 | -1.009E+001 | -1.002E+001 |
| 120.0 | 2.362E-003 | 2.533E-003 | -9.667E+000 | -9.674E+000 |
| 110.0 | 2.347E-003 | 2.419E-003 | -9.070E+000 | -9.227E+000 |
| 100.0 | 2.181E-003 | 2.303E-003 | -8.702E+000 | -8.597E+000 |
| 90.0 | 2.105E-003 | 2.222E-003 | -8.418E+000 | -8.266E+000 |
| 80.0 | 2.009E-003 | 2.095E-003 | -7.965E+000 | -7.698E+000 |
| 70.0 | 1.898E-003 | 2.007E-003 | -7.246E+000 | -7.307E+000 |
| 60.0 | 1.746E-003 | 1.895E-003 | -6.952E+000 | -7.045E+000 |
| 50.0 | 1.625E-003 | 1.731E-003 | -6.366E+000 | -6.559E+000 |
| 40.0 | 1.126E-003 | 1.499E-003 | -5.456E+000 | -4.914E+000 |
| 33.3 | 1.008E-003 | 1.244E-003 | -4.287E+000 | -5.188E+000 |
| 30.0 | 8.373E-004 | 9.861E-004 | -3.505E+000 | -3.372E+000 |
| 28.6 | 8.668E-004 | 9.137E-004 | -3.241E+000 | -3.075E+000 |
| 25.0 | 7.341E-004 | 7.598E-004 | -2.733E+000 | -2.864E+000 |
| 22.2 | 5.616E-004 | 6.612E-004 | -2.662E+000 | -2.776E+000 |
| 17.8 | 1.938E-004 | 5.340E-004 | -2.637E+000 | -2.671E+000 |

FILE NAME: LASC035pst
 SAMPLE NAME: LASCO .35
 DATE IS 87/01/22
 TIME IS 20:41:13
 Data taken during the interval
 87/01/12 12:16:26
 87/01/13 08:06:35

Current 01
 Thickness .163 cm
 Mag field 5000 gauss
 Temp range 20 - 300 K
 Temp nos. 33 - 1

| Temp (degC) | Res--a (ohm-cm) | Res--b (ohm-cm) | Hall--a (cm**3/C) | Hall--b (cm**3/C) |
|----------------|--------------------|--------------------|----------------------|----------------------|
| 295.7 | 5.560E-003 | 5.516E-003 | 2.164E+001 | 2.162E+001 |
| 290.0 | 5.569E-003 | 5.488E-003 | 2.144E+001 | 2.156E+001 |
| 280.0 | 5.429E-003 | 5.321E-003 | 2.136E+001 | 2.115E+001 |
| 270.0 | 5.263E-003 | 5.224E-003 | 2.101E+001 | 2.087E+001 |
| 260.0 | 5.147E-003 | 5.099E-003 | 2.006E+001 | 2.047E+001 |
| 250.0 | 5.032E-003 | 4.997E-003 | 1.992E+001 | 1.991E+001 |
| 240.0 | 4.943E-003 | 4.869E-003 | 1.963E+001 | 1.959E+001 |
| 230.0 | 4.820E-003 | 4.740E-003 | 1.908E+001 | 1.885E+001 |
| 220.0 | 4.745E-003 | 4.603E-003 | 1.869E+001 | 1.868E+001 |
| 210.0 | 4.544E-003 | 4.499E-003 | 1.813E+001 | 1.805E+001 |
| 200.0 | 4.478E-003 | 4.375E-003 | 1.764E+001 | 1.766E+001 |
| 190.0 | 4.352E-003 | 4.228E-003 | 1.722E+001 | 1.713E+001 |
| 180.0 | 4.238E-003 | 4.165E-003 | 1.665E+001 | 1.651E+001 |
| 170.0 | 4.130E-003 | 3.960E-003 | 1.635E+001 | 1.619E+001 |
| 160.0 | 4.032E-003 | 3.872E-003 | 1.588E+001 | 1.576E+001 |
| 150.0 | 3.906E-003 | 3.740E-003 | 1.561E+001 | 1.555E+001 |
| 140.0 | 3.774E-003 | 3.641E-003 | 1.527E+001 | 1.520E+001 |
| 130.0 | 3.712E-003 | 3.495E-003 | 1.495E+001 | 1.483E+001 |
| 120.0 | 3.578E-003 | 3.429E-003 | 1.466E+001 | 1.454E+001 |
| 110.0 | 3.454E-003 | 3.343E-003 | 1.412E+001 | 1.415E+001 |
| 100.0 | 3.356E-003 | 3.221E-003 | 1.378E+001 | 1.425E+001 |
| 90.0 | 3.317E-003 | 3.115E-003 | 1.357E+001 | 1.384E+001 |
| 80.0 | 3.199E-003 | 3.098E-003 | 1.346E+001 | 1.388E+001 |
| 70.0 | 3.142E-003 | 3.022E-003 | 1.315E+001 | 1.332E+001 |
| 60.0 | 3.044E-003 | 2.939E-003 | 1.319E+001 | 1.305E+001 |
| 50.0 | 3.001E-003 | 2.793E-003 | 1.306E+001 | 1.391E+001 |
| 40.0 | 2.861E-003 | 2.655E-003 | 1.336E+001 | 1.352E+001 |
| 33.3 | 2.795E-003 | 2.563E-003 | 1.308E+001 | 1.350E+001 |
| 30.0 | 2.688E-003 | 2.422E-003 | 1.323E+001 | 1.337E+001 |
| 28.6 | 2.656E-003 | 2.488E-003 | 1.310E+001 | 1.321E+001 |
| 25.0 | 2.217E-003 | 1.337E-003 | 1.298E+001 | 1.279E+001 |
| 22.2 | 2.083E-003 | 1.253E-003 | 1.311E+001 | 1.284E+001 |
| 17.8 | 1.655E-003 | 1.234E-003 | 1.319E+001 | 1.215E+001 |

FILE NAME: LASRC02pst
 SAMPLE NAME: LASRCUO 20
 DATE IS 87/01/22
 TIME IS 20:43:01
 Data taken during the interval
 87/01/22 14:47:20
 87/01/22 19:35:30

Current 01
 Thickness .056 cm
 Mag field 5000 gauss
 Temp range 20 - 300 K
 Temp nos. 33 - 1