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**GEOMETRIC COEFFICIENTS  
FOR USE IN  
NUMERICAL RESISTIVITY ANALYSIS**

by

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# Geometric Coefficients for Use in Numerical Resistivity Analysis

## ABSTRACT

Apart from empirical methods, the methods of interpreting earth-resistivity data may be classified as direct or indirect. In the latter the interpreter attempts to match the resistivity data to one or other of a group of discrete solutions provided by a previously compiled set of tables or curves. In the direct methods the solution is arrived at by numerical manipulation of the field data.

Ideally, a direct method would lead to a complete three-dimensional picture of the resistivity or conductivity distribution for the subsurface volume or model under investigation. Practically, it is necessary to make simplifying assumptions. A common assumption has been that the subsurface or model consists of an array of rectangular blocks embedded in a medium of uniform resistivity. Each block has specified dimensions and a uniform resistivity which is to be determined by the analysis of the field or experimental data.

The best least-squares solution for this assumed subsurface geometry may be expressed in terms of measured potentials or resistivities and a matrix or operator whose elements depend on the subsurface array assumed and the positions taken by the electrodes during the course of the measurements. For each combination of an electrode configuration and a subsurface block a geometric coefficient may be computed. Each coefficient is the algebraic sum of six similar coefficients, one for each surface of the block. The elements of the operators are made up of geometric coefficients or their linear combinations.

Five operators were computed by Ness for an unpublished doctoral thesis (1959) and two more are presented here. In addition, a tabulation is presented of geometric factors for the pole-pole electrode configuration with respect to a large number of buried rectangular horizontal and vertical surfaces. From these factors may be developed the operators for a great variety of subsurface blocks and arrays of blocks, not only for the pole-pole configuration but for any other desired colinear configuration.

The general expression for the geometric coefficient is only an approximation and must undergo certain manipulations to give it the required symmetry properties. As a result the tabulated coefficients display anomalous characteristics which are probably indicative of some degree of error. In addition, the solution to the potential equation on which the work is based is also a first approximation and its development rests on certain simplifying assumptions. Other difficulties arise because there is some uncertainty as to how the contrast between block resistivity and background resistivity should enter into the solution and because it is necessary to assume a value for the background resistivity before the solution can be attempted. Nevertheless results put forward by other workers suggest that the method is of value. More field and model work is required, however, to establish firmly advantages and limitations.

## INTRODUCTION

The problem of the interpretation of earth-resistivity data has been under investigation for many years and a number of methods have been developed. The first quantitative approach was made by Wenner (1915). It was soon realized that Wenner's method was of limited application as it was based on simplifying assumptions seldom realized under actual field conditions. Other methods were devised to overcome in part these limitations. A summary of the more important or more popular of these methods has been given by Lennox (1963). Mooney (1954) has critically evaluated all except the more recent methods.

Apart from empirical methods, the interpretation of earth-resistivity data has been broadly classified as either indirect or direct by N. F. Ness in a Ph.D. study completed in 1959 at the Massachusetts Institute of Technology. The indirect methods of interpreting the earth-resistivity data require the use of extensive tables, or curves of theoretical solutions, or both. The success of these methods largely depends on the knowledge of subsurface geology, the conformity of the geology to the idealized model of the earth, and the experience of the interpreter in the area of interest. These methods are usually limited to the case of a horizontally stratified earth or to other simple geometric situations such as the hemisphere (Cook and Gray, 1961) and vertical structures such as faults or dikes (Logn, 1954).

In the direct methods of interpretation, some geometric limitations are generally imposed on the earth model to which it is desired to fit the resistivity data. The solution is then arrived at by numerical manipulation of the data. Once an earth model is selected no extensive tables of any kind are required, but tabulations of certain geometric parameters may be necessary if flexibility in the selection of earth models is required.

The determination of geometric and resistivity parameters by performing arithmetic operations on the field or model data is an inverse boundary-value problem requiring the use of fast electronic computers. A similar technique to that reported here has been utilized by Dorman and Ewing (1962) for the analysis of seismic surface-wave dispersion data.

The direct numerical approach to the interpretation of the data provides a solution in the case of more complicated subsurface geologic conditions. Indirect methods usually fail in such a case. The direct interpretation also minimizes subjective manipulation of the solution. However, it is quite possible to adjust the solution to allow for the geologic information that may be available.

A direct numerical approach for interpreting earth-resistivity data is discussed here and comprehensive tables of geometric factors or coefficients

to be used in its practical application are presented. The method was developed in two doctorate studies, the first by Vozoff at the Massachusetts Institute of Technology in 1956, the second that already mentioned by Ness in 1959, and in a paper by Vozoff (1960). The development is based on the equation of electrical conduction derived by Stevenson (1934). For the interpretation it is assumed that the subsurface is made up of an array of rectangular blocks of specified dimensions embedded in a material of resistivity  $\rho_0$ . A value is assumed for the background resistivity  $\rho_0$  and, using a digital-computer solution, values of the block resistivities are selected in such a way that there is the best possible match in the least-squares sense between computed apparent-resistivity results at the surface and actual observed resistivities. A different assumption for  $\rho_0$ , however, may lead to a better agreement and it is commonly desirable to adjust  $\rho_0$  in order to improve the results. The resistivity distribution computed in this fashion for the assumed subsurface array will be indicative of the actual subsurface resistivity conditions.

The solution, from which the resistivities of the blocks contained in the assumed subsurface array may be derived, is expressed in matrix notation. Involved, in addition to the vector giving the potentials or apparent resistivities observed at the surface, is the matrix of the geometric coefficients already mentioned, and its transpose. That part of the solution depending on the geometric coefficients can also be expressed as a matrix and is referred to as an operator. Once a subsurface array has been assumed, the coefficients and hence the operator may be calculated by means of a digital computer and the operator will subsequently always be available for the analysis of field or model data. The assumed subsurface array and hence the operator to be used will depend on the suspected or known geologic situation.

Ness calculated a number of operators for use with the method. They were limited in number, however, and were applicable to only five selected subsurface arrays. Since the effect of a block is the sum of the effects of its surfaces, greater flexibility is introduced into the method if geometric coefficients are computed for specified surfaces instead of for blocks. The results for various surfaces may then be combined to produce the coefficients for a great variety of subsurface-block arrays, thus facilitating the selection of an array conforming reasonably closely to actual geologic conditions. A very comprehensive primary set of factors for various surfaces are presented here, together with derived sets for combinations of surfaces and for whole blocks. From these factors operators can be derived which, by operating on the field data in a specified way, yield the solution. Finally the operators are presented for two new block arrays.

### Acknowledgments

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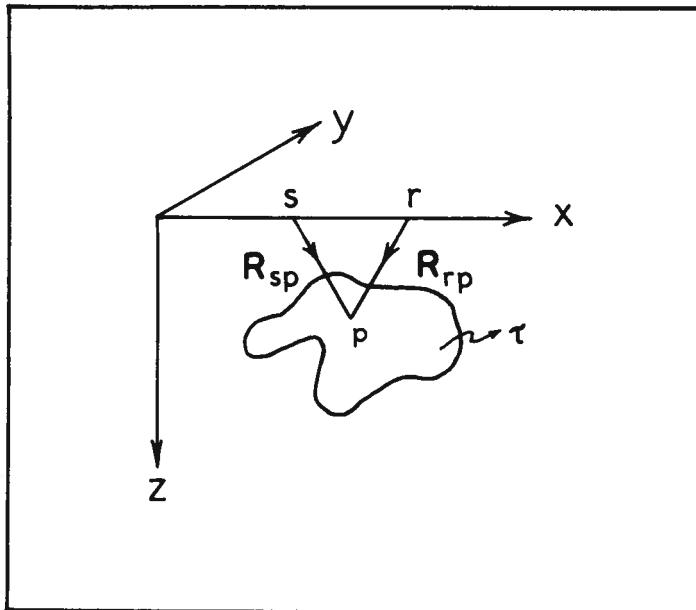
Many of the computations were done at the Computing Centre, University of Alberta, and our sincere thanks are due to the staff of the centre in general, and to A. Heyworth in particular, for their generous cooperation and assistance. G. R. Jackson of the centre programmed the IBM 1620 to carry out matrix inversion by the Gauss-Jordan method.

## SOLUTION

Stevenson (1934) derived the equation for the potential  $\phi_{rs}$  at a point  $r$  on the surface of a half-earth due to a source of current  $I_s$  located at a point  $s$ , also on the surface, for that case in which the half-earth has uniform conductivity  $\sigma_0$  except for an arbitrary volume  $\tau$ :

$$\begin{aligned}\phi_{rs} &= \frac{I_s}{2\pi \sigma_0 R_{rs}} + \frac{1}{2\pi} \iiint \frac{\nabla \sigma_p \cdot \nabla \phi_p}{\sigma_p R_{rp}} d\tau \\ &= \phi_{rs}^0 + \phi_{rs}^1\end{aligned}\quad (1)$$

where  $\phi_p$  and  $\sigma_p$  are the potential and conductivity, respectively, at a point  $p$  within the volume  $\tau$ , and  $\phi_{rs}^0$  and  $\phi_{rs}^1$  are termed the primary and the secondary potential, respectively.



*FIGURE 1. General physical situation to which Stevenson's potential equation applies.*

Figure 1 depicts the physical situation. The derivation of (1) assumes that the conductivities at  $r$  and  $s$  are the same. This condition can be satisfied by postulating a thin surface layer of uniform conductivity.

The primary potential is the potential for a uniform half-space. The secondary potential is a correction term which accounts for the existence within the region  $\tau$  of charge distributions which are maintained wherever current passes through a region of nonuniform conductivity.

Vozoff (1960) pointed out that there is no exact solution, in a finite number of terms, to equation (1), and suggested that  $\phi_p$  under the integral sign be approximated to by

$$\phi_p \cong \frac{I_s}{2\pi \sigma_0 R_{sp}}$$

Thus

$$\phi_{rs}^1 \cong -\frac{I_s}{4\pi^2 \sigma_p} \iiint \frac{\nabla \ln \sigma_p \cdot \mathbf{R}_{sp}}{R_{rp} R_{sp}^3} d\tau$$

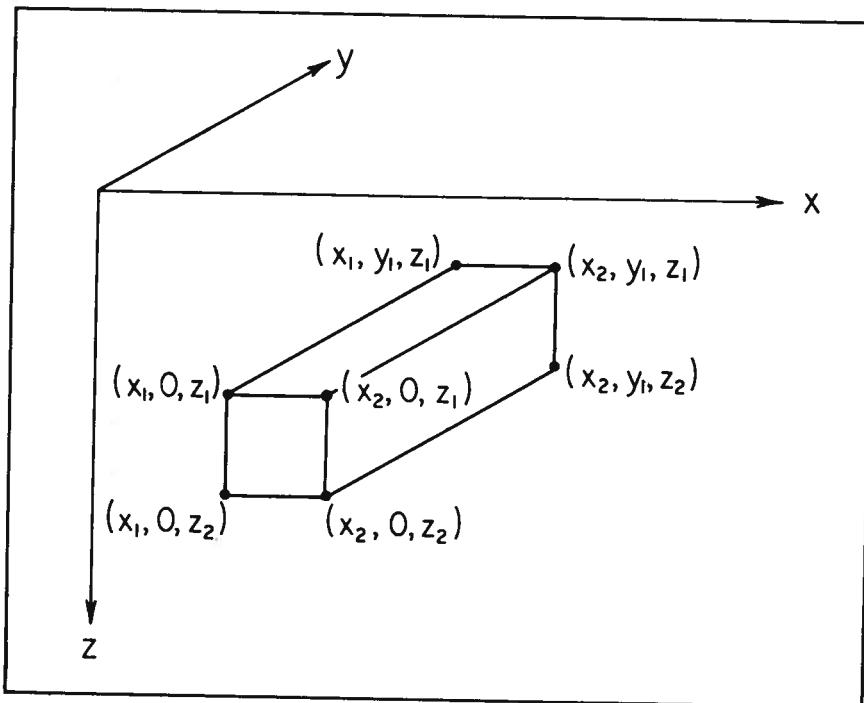


FIGURE 2. Typical subsurface block in simplified physical situation.

Three additional assumptions (Vozoff, 1960) were made in order to arrive at a practical solution:

(1) The real nonuniform subsurface region of interest is replaced by a model subsurface array of small homogeneous blocks of given geometries but unknown conductivities. This model array of blocks is embedded in a surrounding homogeneous medium. The blocks are taken to be of rectangular shape with their limiting surfaces parallel to the planes defined by the coordinate axes. This assumption is fundamental to the method of interpretation. A typical subsurface block is shown in figure 2.

(2) The effect of each block of the subsurface array at any point of measurement on the surface of the earth combines linearly with the effect of the other blocks to produce the observed apparent-resistivity reading at that point.

(3) There exists on the surface of the earth a thin layer of uniform conductivity.

It can now be shown that, for a single rectangular block of conductivity

$$\sigma_i, \quad \phi_{rs}^1 \cong \frac{-I_s \Delta \ln \sigma_p}{4\pi^2 \sigma_0} \iint \frac{\mathbf{n} \cdot \mathbf{R}_{sp}}{R_{rp} R_{sp}^3} dS \quad (2)$$

where  $\Delta \ln \sigma_p = \ln(\sigma_i / \sigma_0) = \ln(\rho_0 / \rho_i)$ ,  $\mathbf{n}$  represents the outward normal to each surface of the block in turn, and  $\rho$  is used to denote resistivity. The right-hand side of (2) can be replaced by the sum of six similar expressions, one for each surface of the block. Each expression involves the product of a resistivity-contrast factor and a geometric factor.

Vozoff (1960) pointed out that the behavior of the resistivity-contrast factor  $\ln(\rho_0 / \rho_i)$  is contrary to experience since it tends toward plus or minus infinity as the resistivity contrast becomes very large or very small. He suggested, on the basis of laboratory model experiments, that the contrast factor  $f_i$  be expressed as

$$f_i = 3.6 \frac{\rho_0 - \rho_i}{\rho_0 + 2\rho_i} \quad (3)$$

This is the form utilized here.

Ness (1959) noted that the geometric factor in (2) does not possess source-receiver symmetry. He suggested averaging it with the similar expression obtained if the source and receiver positions are interchanged.

This gives

$$g_{sri} = \frac{I}{4\pi} \iint \frac{R_{rp}^2 \mathbf{n} \cdot \mathbf{R}_{sp} + R_{sp}^2 \mathbf{n} \cdot \mathbf{R}_{rp}}{R_{rp}^3 R_{sp}^3} dS \quad (4)$$

where  $g_{sri}$  is the modified geometric factor due to the  $i$ th rectangular block for the source at  $s$  and the receiver at  $r$ .

For a subsurface made up of  $n$  homogeneous blocks with resistivities  $\rho_1, \rho_2, \dots, \rho_n$ , embedded in a half-space of resistivity  $\rho_0$ ,

$$\phi_{rs} = \phi_{rs}^0 - \frac{I_s \rho_0}{2\pi} \sum_{i=1}^n g_{sri} f_i \quad (5)$$

Equation (5) contains  $n$  unknowns — the resistivities of the  $n$  blocks — and there will be one such equation for each source-receiver configuration.

If the field measurements are of the apparent resistivity  $\rho_{rs}$  the following equation may be substituted:

$$\rho_{rs} = \rho_0 - \rho_0 \sum_{i=1}^n a_{sri} f_i \quad (6)$$

where  $a_{sri}$  ( $= c_{rs} g_{sri}$ ) is the geometric factor due to the  $i$ th block for the source at  $s$  and the receiver at  $r$ .

The electrode configuration determines the value of  $c_{rs}$ . For the pole-pole configuration that has been considered to this point, it may be easily shown to be equal to  $R_{rs}$ . The algebraic summation of the appropriate potential terms yields  $c_{rs}$  for other electrode configurations (Heiland, 1946). In the case of a dipole-dipole configuration, for example, in which the electrodes form a linear array, the separations between the two source electrodes and between the two receiver electrodes being both  $a$ , and that between the midpoints of the source and receiver dipoles being  $Ma$ :

$$c_{rs} = \frac{M(M^2-1)a}{2}$$

In discussing the solution of (5) it is convenient to use matrix notation. Suppose that  $m$  readings have been taken on the surface of the earth. There will be, correspondingly,  $m$  equations of the form (5). In matrix notation these may be rearranged as:

$$\mathbf{G} \mathbf{F} = \Psi \quad (7)$$

where  $\mathbf{G}$  is an  $m \times n$  matrix of the geometric factors  $g_{sri}$ ,  $\mathbf{F}$  is a column

vector of the  $n$  unknown contrast factors, and  $\Psi$  is a column vector, the  $m$  elements of which are given by

$$\psi_t = \frac{2\pi}{Is \rho_0} (\phi_t^o - \phi_t) \quad (8)$$

In the above each value of  $t$  ( $= 1, 2, 3, \dots, m$ ) represents some source-receiver configuration characterized by  $r$  and  $s$ .

The solution of (7) by the method of least squares (Bjerhammar, 1951) gives

$$\mathbf{F} = \mathbf{H} \Psi \quad (9)$$

where  $\mathbf{H} = (\mathbf{G}^T \mathbf{G})^{-1} \mathbf{G}^T$

The matrix  $\mathbf{H}$  can be looked upon as an operator. Once the geometry of the blocks and the configuration of the electrodes are known, then all of the elements of this matrix can be calculated as is described in the section on computation, and postmultiplication by  $\Psi$  yields the solution vector  $\mathbf{F}$ .

If the field data are apparent resistivities, then, starting with equation (6) rather than with (5), an equation analogous to (7) can be derived:

$$\mathbf{AF} = \mathbf{B} \quad (10)$$

where  $\mathbf{A}$  is an  $m \times n$  matrix of the geometric factors  $a_{sri}$ , and  $\mathbf{B}$  is a column vector whose  $m$  elements are given by  $b_t = (\rho_0 - \rho_{rs})/\rho_0$

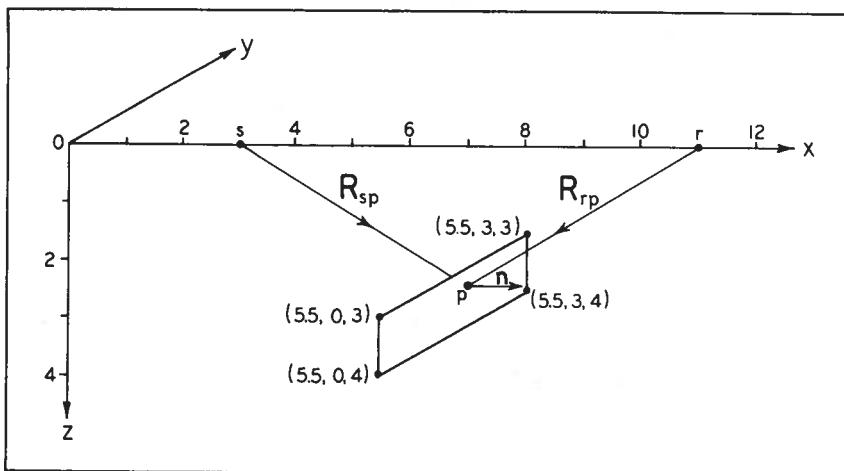
The solution for  $\mathbf{F}$  now becomes:

$$\mathbf{F} = (\mathbf{A}^T \mathbf{A})^{-1} \mathbf{A}^T \mathbf{B} \quad (11)$$

Once the geometry of the subsurface model and the electrode configurations have been decided upon, and provided  $\rho_0$  is known or can be estimated, these matrix operators need be calculated only once as they are independent of field data. However, in the more complicated case of determining  $\rho_0$  from the field data, the matrices corresponding to the above operators become dependent on field data and have to be evaluated separately for each new set of data. This is only acceptable when it is necessary to make a more sophisticated analysis.

### COMPUTATION OF THE COEFFICIENTS

The coefficients  $g_{sri}$  are surface integrals and can be computed once the geometry of the model and the electrode configuration are known. To calculate these coefficients for a block, the surface integrals are evaluated over each surface of the block and added. Thus, if the coefficients for various horizontal and vertical surfaces are known, it is then possible to derive coefficients of various rectangular blocks formed by these surfaces and to approximate the subsurface region of interest by an array of blocks of various sizes and shapes embedded in a matrix of resistivity  $\rho_0$ . The procedure of deriving and tabulating the coefficients for various surfaces as well as for selected blocks gives an added measure of flexibility and facility when compared to the approach where only the final coefficients for the blocks are known.



**FIGURE 3.** Parameters involved in the calculation of a typical coefficient  $g_{sri}$ .

The line along which the electrodes are located for the series of measurements is taken to be the  $x$ -axis. Figure 3, in conjunction with equation (4), illustrates the method of computation. In this instance the vertical surface is in the plane  $x=5.5$  and is delimited by  $y=3.0, 0.0$  and  $z=3.0, 4.0$ . The source electrode is placed at  $x=3$  and the receiver electrode is placed at  $x=11$ . The coefficient for this rectangular surface and electrode configuration or for any other combination of rectangular surface and electrode configuration can now be calculated from equation (4). The convention concerning the direction of the unit normal  $n$  depends on whether the geometric factor is being calculated for an isolated surface

or for the combination of surfaces making up either a rectangular tube or a block. For an isolated single surface the unit normal is directed away from the origin of coordinates; for a tube or block it is the outward normal.

It is convenient to consider the line of measurement to be graduated in units whose magnitude is unspecified. Under actual field conditions the unit may be 10 feet or 30 feet or some other such length dictated by the objective of the resistivity survey. This unspecified unit will be referred to as the 'unit' in the following. All dimensions, such as the linear dimensions of the surfaces of integration, will be measured in terms of this unit. The electrodes on the line of measurement are moved in unit steps and measured resistivities must be expressed in terms of this selected unit of length.

The surface integral given by (4) is evaluated approximately by dividing the surface of integration into smaller areas, evaluating the integrand at the center of each, multiplying each integrand by the corresponding area, and adding the products. Thus the surface integral is replaced by a double summation.

In the light of remarks made by Ness it appears that, if the linear dimensions of the smaller areas are of the order of a half unit, the estimate of the double integral, as given by the double summation, is satisfactory for the cases where the surfaces are deeper than one unit. For surfaces less than one unit deep, a finer grid must be used. This has been taken into account in the calculation of the coefficients.

Numerical values of  $g_{sri}$  have been calculated for the pole-pole and dipole-dipole configurations, using an IBM 1620 digital computer. Pole-pole coefficients for selected single surfaces of integration make up the first four series of results. For every surface of integration and for each of 15 source positions  $s(s=1, 2, 3, \dots, 15)$  coefficients were calculated for eight receiver positions  $r$ , given by  $r=s+N(N=1, 2, 3, \dots, 8)$ . There are therefore, 120 pole-pole coefficients for each surface of integration. The fifth series of results contains the pole-pole coefficients for various combinations of vertical surfaces and is based on the previous results. In each case the selected vertical surfaces combine to form a vertical tube and there are 120 coefficients for each tube.

Dipole-dipole coefficients were derived from the results of the first five series. For each surface or tube and for each of 14 source configurations  $s, s+1$  ( $s=1, 2, 3, \dots, 14$ ), coefficients were calculated for six receiver configurations  $r, r+1$ , given by  $r=s+N(N=2, 3, 4, \dots, 7)$ . There are, therefore, 84 dipole-dipole coefficients for each surface or tube.

Finally, the dipole-dipole coefficients for various horizontal surfaces and tubes have been combined to give the coefficients for selected sub-surface blocks.

The general presentation of the results in all series is the same (Table 1). Each  $g_{sri}$  coefficient appears as a decimal fraction followed by the letter E (for exponent) followed by the power of ten by which the decimal fraction must be multiplied to obtain the value of the coefficient. Thus .1058E-03 is to be interpreted as  $0.1058 \times 10^{-3}$ .

### Results for Single Surfaces

The first four series of pole-pole coefficients are denoted by  $x5.5-C$ ,  $x6.5-C$ ,  $y3-C$ , and  $zW-C$  (Appendices A, B, C, and D). There are four corresponding series of dipole-dipole coefficients. Only the pole-pole coefficients, however, are given here.

The series  $x5.5-C$  and  $x6.5-C$  both have seven sets of results, and each set contains five subsets. In the first case the surface of integration is in the plane  $x=5.5$ ; in the second in the plane  $x=6.5$ . For each set the surface of integration is bounded in the  $y$ -direction by  $y=0.0$ , 3.0 and one of the  $z$ -boundaries is common to all the subsets. The other boundary is moved 0.2 units for each successive subset so that the largest surface of integration thereby defined for any one set extends for 1 unit in the  $z$ -direction. For example, for the five subsets in  $x5.5-2$ , the surface of integration is bounded in the  $z$ -direction by  $z=1.0$  in all cases, the other  $z$ -boundary being  $z=1.2$ , 1.4, 1.6, 1.8, and 2.0 successively. The surfaces for which coefficients have been calculated thus extend from the surface to a depth of 7 units. The results for series  $x5.5-C$  are given in appendix A, those for  $x6.5-C$  in appendix B.

The series  $y3-C$  also has seven sets of results, with five subsets to each. All surfaces of integration are in the plane  $y=3.0$  and are bounded in the  $x$ -direction by  $x=5.5$ , 6.5. Within the sets and subsets the  $z$ -boundaries are varied in the same way as was the case for the series  $x5.5-C$  and  $x6.5-C$ . The results for this series are given in appendix C.

The series  $zW-C$  has nine sets of results, with four subsets to each. The surfaces of integration are planes for which  $z=W$  (a constant) and all are bounded in the  $x$ -direction by  $x=5.5$ , 6.5 and in the  $y$ -direction by  $y=0.0$ , 3.0. The surfaces of integration are spaced evenly at intervals of 0.2 units so that, for example, results are given in the first set for the planes  $z=0.0$ , 0.2, 0.4, and 0.6, in the second set for  $z=0.8$ , 1.0, 1.2, and 1.4, and so on. The results for this series are given in appendix D.

### Results for Rectangular Tubes

There is just one series of pole-pole results for vertical rectangular tubes, this being the series DV-C. It has seven sets of results, and each set contains five subsets. There is also a corresponding series of dipole-dipole results which, however, is not given here.

Corresponding values of  $g_{sri}$  being selected from the first three series, their combination to form DV-C may be represented symbolically:

$$DV-C = 2(x6.5-C - x5.5-C + y3-C) \quad (12)$$

In this expression the coefficient is added wherever the direction of the outward normal is away from the origin and subtracted wherever it is toward the origin. The effect of multiplication by 2 is to add another surface of integration in the plane  $y=-3.0$  and to extend the surfaces of integration in the planes  $x=5.5, 6.5$  so that their boundaries in the  $y$ -direction become  $y=-3.0, 3.0$ . Consequently the series DV-C gives the combined effects of the vertical surfaces  $x=5.5, 6.5$  between the limits  $y=-3.0, 3.0$  and the vertical surfaces  $y=-3.0, 3.0$ , between the limits  $x=5.5, 6.5$ . The limits of the surfaces of integration in the  $z$ -direction for each rectangular tube are as outlined for the series  $x5.5-C$ . The pole-pole results for this series are given in appendix E.

### Dipole-Dipole Results for Rectangular Blocks

There is only one set of dipole-dipole results computed for rectangular blocks, this being the set DB-1. Although obtained from the combination of series  $zW-C$  and DV-C, it does not utilize all the results presented for these two series. A more complete set of results may, however, readily be derived.

Within the one set DB-1 there are seven subsets. The coefficients appearing in DB-1 are  $\bar{g}_{sri}$  values where

$$\bar{g}_{sri} = g_{s+1, ri} - g_{s+1, r+1, i} - g_{sri} + g_{s, r+1, i} \quad (13)$$

and these dipole-dipole coefficients refer to blocks at various depths. The bar over the symbol here and elsewhere will be used to distinguish dipole-dipole coefficients and matrices from pole-pole coefficients and matrices. Each pole-pole coefficient entering into the expression for  $\bar{g}_{sri}$  is the algebraic sum of the pole-pole coefficients already tabulated for the surfaces making up the blocks. Symbolically, for each pole-pole coefficient

$$DB-C = DV-C + 2(zW_1-C - zW_2-C) \quad (14)$$

where  $z=W_1$  is the bottom surface of the block and  $z=W_2$  is the top surface. As before, multiplication by 2 serves to extend the surfaces of integration so that the boundaries for the top and bottom surfaces are given by  $x=5.5, 6.5$  and  $y=-3.0, 3.0$ . The  $zW$ -C coefficients are added or subtracted as the outward normals are directed toward or away from the origin.

For each subset in DB-1 the horizontal bounding planes are different. For the first subset they are  $z=0.2, 1.0$ ; for the second  $z=1.0, 2.0$ ; and for succeeding subsets they differ by one unit so that for the last subset they are  $z=6.0, 7.0$ . Thus there are 84 calculated dipole-dipole coefficients for each of seven subsurface blocks contained in a vertical column extending to a depth of 7 units and bounded horizontally by  $x=5.5, 6.5$  and  $y=-3.0, 3.0$ . The complete set is presented in table 1.

### **Derivation of Coefficients for Other Subsurface Blocks**

The coefficients so far derived and listed in table 1 are only for those blocks contained in a specific vertical column. Results are also required for blocks displaced in the  $x$ -direction from this column in order to permit some flexibility in the selection of block shapes and sizes. It is convenient, for this purpose, to make use of a schematic graphical presentation for the coefficients and to infer from it some useful properties which lead directly to the derivation of coefficients for blocks other than those listed in table 1.

A standard method of graphical presentation (Marshall and Madden, 1959) is to map the resistivity (or coefficients, or data in other form) under the midpoint of the source-receiver position on the line of survey, the vertical distance below the midpoint being proportional to the separation between the source and the receiver. In the case of the dipole-dipole configuration, a line projected from the point plotted, at an angle of  $45^\circ$  to the survey line, will cut the survey line at a point that is the midpoint of either the source dipole or of the receiver dipole. This mapping is then taken to represent a cross section under the survey line.

The graphical representation of the 84 dipole-dipole coefficients appearing in each column of table 1 is given in figure 4. Each data point appears as a black circle and the points are identified by numbering them sequentially from 1 to 84.

The coefficients that will actually apply at the data points shown in the figure depend on the subsurface block under consideration. They will be those appearing in the fifth column of table 1, for example, if the block is block I (Fig. 4), for which the boundaries are  $x=5.5, 6.5$ ,  $y=-3.0, 3.0$ , and  $z=1.0, 2.0$ . The results in the other columns of the table give the coefficients for various blocks either vertically above or below block I.

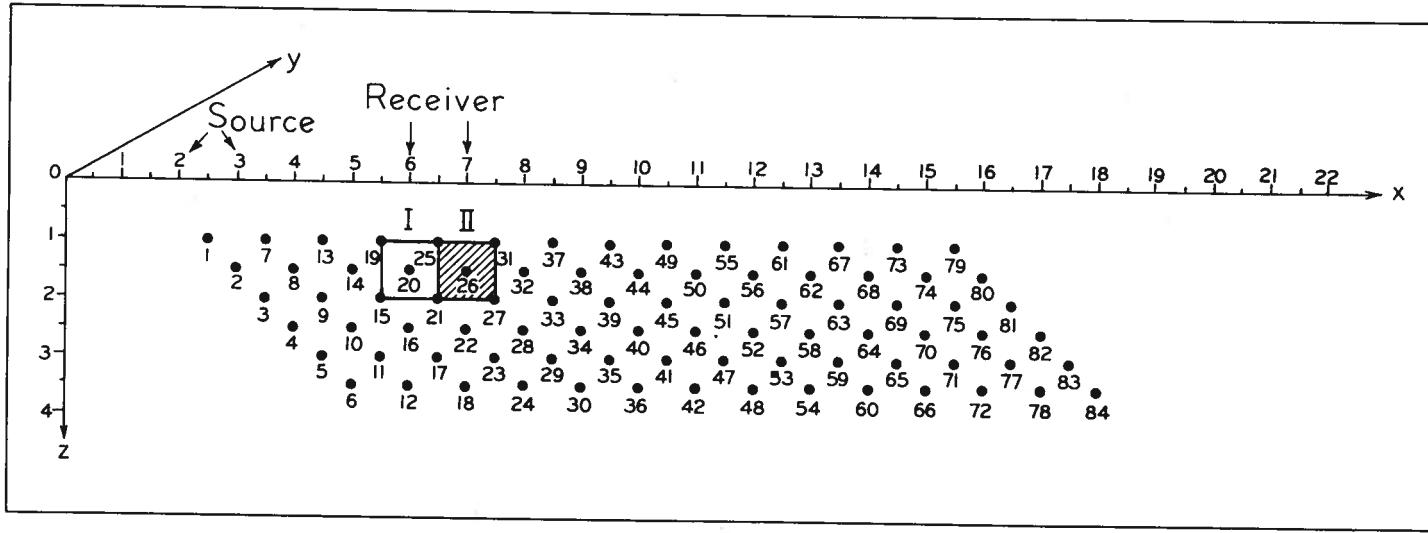


FIGURE 4. Method of graphical presentation for coefficients or resistivity data.

**Table 1A. Set DB-1: Dipole-Dipole Coefficients for Rectangular Blocks**

THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS FOR  
 THE BLOCKS DELIMITED BY X=5.5,6.5 AND Y=-3.0,3.0 AND  
 Z LIMITS AS SHOWN

THE NUMERICAL VALUES ARE             $G(S+1)RI - G(S+1)(R+1)I - GSRI + GS(R+1)I$   
 SOURCE POSITION=S,S+1 , RECEIVER POSITION=R,R+1

N	S	R	Z=0.2,1.0	Z=1.0,2.0	Z=2.0,3.0	Z=3.0,4.0	Z=4.0,5.0	Z=5.0,6.0	Z=6.0,7.0
1	1	3	.1091E-02	.7126E-03	.2632E-03	.9733E-04	.3774E-04	.1575E-04	.8839E-05
2	1	4	.2677E-02	.8951E-03	.2280E-03	.7269E-04	.2726E-04	.1156E-04	.6645E-05
3	1	5	-.6072E-02	-.6280E-03	-.9697E-04	-.1316E-04	.1688E-05	.3043E-05	.2712E-05
4	1	6	-.8812E-03	-.1863E-02	-.4447E-03	-.1089E-03	-.2784E-04	-.7050E-05	-.2001E-05
5	1	7	.8243E-03	-.5582E-03	-.3659E-03	-.1337E-03	-.4420E-04	-.1450E-04	-.6048E-05
6	1	8	.4316E-03	-.3189E-04	-.1732E-03	-.1016E-03	-.4375E-04	-.1724E-04	-.8422E-05
7	2	4	.6110E-02	.1990E-02	.4707E-03	.1352E-03	.4557E-04	.1759E-04	.8888E-05
8	2	5	-.1041E-01	-.6905E-03	-.1085E-04	.2553E-04	.1664E-04	.8829E-05	.5070E-05
9	2	6	-.3626E-02	-.3531E-02	-.6536E-03	-.1215E-03	-.2243E-04	-.3105E-05	.7220E-08
10	2	7	.1342E-02	-.1268E-02	-.6215E-03	-.1809E-03	-.4887E-04	-.1317E-04	-.4725E-05
11	2	8	.7383E-03	-.2086E-03	-.3335E-03	-.1517E-03	-.5398E-04	-.1819E-04	-.7890E-05
12	2	9	.3952E-03	.2044E-04	-.1516E-03	-.1016E-03	-.4600E-04	-.1851E-04	-.9179E-05
13	3	5	-.2002E-01	.3425E-03	.3374E-03	.1138E-03	.4131E-04	.1658E-04	.7762E-05
14	3	6	-.1474E-01	-.7375E-02	-.8446E-03	-.9222E-04	-.4285E-05	.4281E-05	.3003E-05
15	3	7	.2167E-02	-.3287E-02	-.1025E-02	-.2121E-03	-.4242E-04	-.7946E-05	-.2018E-05
16	3	8	.1366E-02	-.8608E-03	-.6352E-03	-.2055E-03	-.5720E-04	-.1567E-04	-.5838E-05
17	3	9	.7383E-03	-.2086E-03	-.3335E-03	-.1517E-03	-.5398E-04	-.1819E-04	-.7890E-05
18	3	10	.4316E-03	-.3190E-04	-.1731E-03	-.1016E-03	-.4375E-04	-.1724E-04	-.8422E-05

Table 1B. Set DB-1: Dipole-Dipole Coefficients for Rectangular Blocks

THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS FOR  
 THE BLOCKS DELIMITED BY X=5.5,6.5 AND Y=-3.0,3.0 AND  
 Z LIMITS AS SHOWN

THE NUMERICAL VALUES ARE            G(S+1)RI-G(S+1)(R+1)I-GSRI+GS(R+1)I  
 SOURCE POSITION=S,S+1 , RECEIVER POSITION=R,R+1

N	S	R	Z=0.2,1.0	Z=1.0,2.0	Z=2.0,3.0	Z=3.0,4.0	Z=4.0,5.0	Z=5.0,6.0	Z=6.0,7.0
19	4	6	- .9074E-01 - .1483E-01 - .5721E-03	.2850E-04	.2936E-04	.1434E-04	.6515E-05		
20	4	7	.1103E-03 - .9303E-02 - .1348E-02 - .1622E-03 - .1575E-04	.1957E-05	.2026E-05				
21	4	8	.2167E-02 - .3287E-02 - .1025E-02 - .2121E-03 - .4242E-04 - .7945E-05 - .2018E-05						
22	4	9	.1342E-02 - .1267E-02 - .6215E-03 - .1809E-03 - .4887E-04 - .1317E-04 - .4725E-05						
23	4	10	.8244E-03 - .5582E-03 - .3659E-03 - .1337E-03 - .4420E-04 - .1450E-04 - .6048E-0E						
24	4	11	.5332E-03 - .2740E-03 - .2216E-03 - .9453E-04 - .3614E-04 - .1360E-04 - .6307E-05						
25	5	7	- .9074E-01 - .1483E-01 - .5721E-03	.2850E-04	.2936E-04	.1434E-04	.6515E-05		
26	5	8	- .1474E-01 - .7375E-02 - .8446E-03 - .9222E-04 - .4285E-05	.4280E-05	.3004E-05				
27	5	9	- .3626E-02 - .3531E-02 - .6536E-03 - .1215E-03 - .2243E-04 - .3105E-05 - .7220E-08						
28	5	10	- .8812E-03 - .1863E-02 - .4447E-03 - .1089E-03 - .2784E-04 - .7050E-05 - .2001E-05						
29	5	11	- .3118E-04 - .1078E-02 - .2982E-03 - .8648E-04 - .2658E-04 - .8422E-05 - .3068E-05						
30	5	12	- .2537E-03 - .6719E-03 - .2038E-03 - .6603E-04 - .2295E-04 - .8321E-05 - .3451E-05						
31	6	8	- .2002E-01	.3425E-03	.3374E-03	.1138E-03	.4131E-04	.1658E-04	.7762E-05
32	6	9	- .1041E-01 - .6905E-03 - .1085E-04	.2553E-04	.1664E-04	.8828E-05	.5070E-05		
33	6	10	- .6072E-02 - .6281E-03 - .9697E-04 - .1316E-04	.1688E-05	.3044E-05	.2712E-05			
34	6	11	- .3891E-02 - .4643E-03 - .1012E-03 - .2533E-04 - .5455E-05 - .4708E-06	.9962E-06					
35	6	12	- .2674E-02 - .3340E-03 - .8579E-04 - .2646E-04 - .8085E-05 - .2281E-05 - .9890E-07						
36	6	13	- .1937E-02 - .2427E-03 - .6862E-04 - .2379E-04 - .8484E-05 - .3029E-05 - .7199E-06						

Table 1C. Set DB-1: Dipole-Dipole Coefficients for Rectangular Blocks

THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS FOR  
THE BLOCKS DELIMITED BY X=5.5,6.5 AND Y=-3.0,3.0 AND  
Z LIMITS AS SHOWN

THE NUMERICAL VALUES ARE                     $G(S+1)RI - G(S+1)(R+1)I - GSRI + GS(R+1)I$   
SOURCE POSITION=S,S+1 , RECEIVER POSITION=R,R+1

N	S	R	Z=0.2,1.0	Z=1.0,2.0	Z=2.0,3.0	Z=3.0,4.0	Z=4.0,5.0	Z=5.0,6.0	Z=6.0,7.0
37	7	9	.6110E-02	.1990E-02	.4707E-03	.1352E-03	.4557E-04	.1759E-04	.8888E-05
38	7	10	.2677E-02	.8951E-03	.2280E-03	.7269E-04	.2726E-04	.1156E-04	.6647E-05
39	7	11	.1377E-02	.4501E-03	.1137E-03	.3747E-04	.1506E-04	.6936E-05	.4632E-05
40	7	12	.7916E-03	.2479E-03	.5895E-04	.1879E-04	.7743E-05	.3811E-05	.3066E-05
41	7	13	.4923E-03	.1467E-03	.3161E-04	.9012E-05	.3574E-05	.1851E-05	.1946E-05
42	7	14	.3250E-03	.9207E-04	.1737E-04	.3898E-05	.1271E-05	.6783E-06	.1183E-05
43	8	10	.1090E-02	.7126E-03	.2632E-03	.9733E-04	.3774E-04	.1575E-04	.8839E-05
44	8	11	.5952E-03	.3998E-03	.1554E-03	.6124E-04	.2534E-04	.1123E-04	.6894E-05
45	8	12	.3565E-03	.2414E-03	.9552E-04	.3884E-04	.1672E-04	.7740E-05	.5182E-05
46	8	13	.2290E-03	.1549E-03	.6126E-04	.2515E-04	.1103E-04	.5245E-05	.3832E-05
47	8	14	.1552E-03	.1044E-03	.4087E-04	.1670E-04	.7339E-05	.3527E-05	.2810E-05
48	8	15	.1098E-03	.7336E-04	.2824E-04	.1138E-04	.4942E-05	.2368E-05	.2063E-05
49	9	11	.2764E-03	.2386E-03	.1216E-03	.5693E-04	.2612E-04	.1224E-04	.7645E-05
50	9	12	.1689E-03	.1488E-03	.7865E-04	.3850E-04	.1852E-04	.9088E-05	.6047E-05
51	9	13	.1101E-03	.9791E-04	.5267E-04	.2646E-04	.1312E-04	.6650E-05	.4697E-05
52	9	14	.7546E-04	.6739E-04	.3650E-04	.1858E-04	.9384E-05	.4857E-05	.3620E-05
53	9	15	.5382E-04	.4812E-04	.2609E-04	.1335E-04	.6802E-05	.3562E-05	.2791E-05
54	9	16	.3968E-04	.3545E-04	.1917E-04	.9812E-05	.5007E-05	.2635E-05	.2162E-05

**Table 1D. Set DB-1: Dipole-Dipole Coefficients for Rectangular Blocks**

THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS FOR  
 THE BLOCKS DELIMITED BY X=5.5,6.5 AND Y=-3.0,3.0 AND  
 Z LIMITS AS SHOWN

THE NUMERICAL VALUES ARE                    G(S+1)RI-G(S+1)(R+1)I-GSRI+GS(R+1)I  
 SOURCE POSITION=S,S+1 , RECEIVER POSITION=R,R+1

N	S	R	Z=0.2,1.0	Z=1.0,2.0	Z=2.0,3.0	Z=3.0,4.0	Z=4.0,5.0	Z=5.0,6.0	Z=6.0,7.0
55	10	12	.9018E-04	.8874E-04	.5521E-04	.3095E-04	.1648E-04	.8677E-05	.5953E-05
56	10	13	.5933E-04	.5918E-04	.3781E-04	.2192E-04	.1210E-04	.6604E-05	.4750E-05
57	10	14	.4092E-04	.4115E-04	.2669E-04	.1579E-04	.8938E-05	.5005E-05	.3749E-05
58	10	15	.2936E-04	.2965E-04	.1939E-04	.1161E-04	.6674E-05	.3805E-05	.2954E-05
59	10	16	.2172E-04	.2200E-04	.1444E-04	.8711E-05	.5054E-05	.2914E-05	.2337E-05
60	10	17	.1651E-04	.1674E-04	.1100E-04	.6658E-05	.3881E-05	.2253E-05	.1862E-05
61	11	13	.3492E-04	.3691E-04	.2606E-04	.1666E-04	.1001E-04	.5838E-05	.4324E-05
62	11	14	.2421E-04	.2584E-04	.1861E-04	.1220E-04	.7539E-05	.4528E-05	.3467E-05
63	11	15	.1743E-04	.1871E-04	.1364E-04	.9095E-05	.5732E-05	.3515E-05	.2770E-05
64	11	16	.1294E-04	.1395E-04	.1024E-04	.6901E-05	.4407E-05	.2744E-05	.2217E-05
65	11	17	.9861E-05	.1065E-04	.7856E-05	.5330E-05	.3435E-05	.2161E-05	.1784E-05
66	11	18	.7677E-05	.8311E-05	.6141E-05	.4182E-05	.2710E-05	.1717E-05	.1447E-05
67	12	14	.1533E-04	.1693E-04	.1298E-04	.9131E-05	.6028E-05	.3833E-05	.3009E-05
68	12	15	.1107E-04	.1230E-04	.9583E-05	.6868E-05	.4638E-05	.3020E-05	.2426E-05
69	12	16	.8236E-05	.9200E-05	.7233E-05	.5254E-05	.3605E-05	.2389E-05	.1959E-05
70	12	17	.6285E-05	.7045E-05	.5575E-05	.4085E-05	.2834E-05	.1903E-05	.1588E-05
71	12	18	.4902E-05	.5505E-05	.4374E-05	.3227E-05	.2256E-05	.1528E-05	.1295E-05
72	12	19	.3894E-05	.4381E-05	.3488E-05	.2584E-05	.1816E-05	.1239E-05	.1064E-05

**Table 1E. Set DB-1: Dipole-Dipole Coefficients for Rectangular Blocks**

THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS FOR  
THE BLOCKS DELIMITED BY X=5.5,6.5 AND Y=-3.0,3.0 AND  
Z LIMITS AS SHOWN

THE NUMERICAL VALUES ARE  $G(S+1)RI - G(S+1)(R+1)I - GSRI + GS(R+1)I$   
SOURCE POSITION=S,S+1 , RECEIVER POSITION=R,R+1

N	S	R	Z=0.2,1.0	Z=1.0,2.0	Z=2.0,3.0	Z=3.0,4.0	Z=4.0,5.0	Z=5.0,6.0	Z=6.0,7.0
73	13	15	.7417E-05	.8424E-05	.6842E-05	.5155E-05	.3662E-05	.2500E-05	.2047E-05
74	13	16	.5528E-05	.6312E-05	.5185E-05	.3967E-05	.2869E-05	.1997E-05	.1662E-05
75	13	17	.4223E-05	.4841E-05	.4007E-05	.3100E-05	.2271E-05	.1604E-05	.1355E-05
76	13	18	.3297E-05	.3789E-05	.3155E-05	.2458E-05	.1818E-05	.1298E-05	.1110E-05
77	13	19	.2621E-05	.3018E-05	.2521E-05	.1976E-05	.1472E-05	.1060E-05	.9167E-06
78	13	20	.2118E-05	.2442E-05	.2045E-05	.1608E-05	.1204E-05	.8724E-06	.7619E-06
79	14	16	.3871E-05	.4486E-05	.3793E-05	.3010E-05	.2264E-05	.1637E-05	.1382E-05
80	14	17	.2963E-05	.3445E-05	.2940E-05	.2361E-05	.1802E-05	.1324E-05	.1130E-05
81	14	18	.2313E-05	.2699E-05	.2318E-05	.1878E-05	.1449E-05	.1078E-05	.9297E-06
82	14	19	.1841E-05	.2153E-05	.1857E-05	.1514E-05	.1178E-05	.8846E-06	.7683E-06
83	14	20	.1488E-05	.1742E-05	.1508E-05	.1236E-05	.9673E-06	.7315E-06	.6399E-06
84	14	21	.1219E-05	.1430E-05	.1240E-05	.1020E-05	.8018E-06	.6097E-06	.5368E-06

In order to derive coefficients with respect to other blocks, such as block II, it should first of all be noted that all the blocks to be considered are symmetrical about the  $x$ - $z$  plane and, in addition, there is also source-receiver symmetry. Consequently, coefficients with respect to any block will be the same for data points symmetrically located on either side of it. For example, the coefficients with respect to block I for data points 2 and 38 will be the same. Secondly, once the coefficients are known for any block in the vertical column containing block I, coefficients can be derived for other blocks at the same depth, but displaced in the positive or negative  $x$ -direction. The displacement of the data point of interest from the data point in table 1 which will give the required coefficient will be the same as the displacement of the block of interest from the reference block. The two displacements will, however, be in opposite directions. Thus the coefficient with respect to block II at data point 33 will be the same as the coefficient with respect to block I at data point 27.

With these properties of the coefficients in mind, it is possible to plot a symmetrical distribution of data points on either side of block I and to derive coefficients for a total of 84 subsurface blocks. For the 49 blocks between  $x=5.5$  and  $x=12.5$  the coefficients are complete; for the 35 blocks between  $x=12.5$  and  $x=17.5$  a number of coefficients are missing. Missing coefficients arise because of the way in which source-receiver configurations were selected.

The process of obtaining coefficients with respect to blocks lying between  $x=6.5$  and  $x=17.5$  is facilitated by table 2, which was prepared by making use of the coefficient properties outlined above. For every combination of source- and receiver-dipole configuration and block limits in the  $x$ -direction, the table lists the row of table 1 in which the desired coefficient will be found. The depth of the block of interest will determine the column. The use of the table may be illustrated by two examples. The coefficient for data point 9, that is, for the source dipole at 2, 3 and the receiver dipole at 6, 7, with respect to block II (Fig. 4), is given by the tabulated coefficient in the third row of table 1 for the block lying between the limits  $z=1.0$ , 2.0. As the second example, suppose that a coefficient is required at data point 1 for a block lying between the depths of  $z=6.0$  and  $z=7.0$  and extending from  $x=5.5$  to  $x=9.5$ . For this data point the source dipole is at 1, 2 and the receiver dipole at 3, 4 and the coefficient for the composite block is obtained by summing the coefficients given in the last column of table 1 for data points 1, 49, 55, and 61.

**Table 2. Conversion of Dipole-Dipole Coefficients of Set DB-1 into Those for Other Subsurface Blocks**

Data point <i>N</i>	Electrode configuration <i>s</i> <i>r</i>	Row in table 1 giving coefficient at data point <i>N</i> (Fig. 4) with respect to blocks with <i>x</i> -boundaries																					
		6.5		7.5		8.5		9.5		10.5		11.5		12.5		13.5		14.5		15.5		16.5	
		7.5	8.5	8.5	9.5	9.5	10.5	10.5	11.5	11.5	12.5	12.5	13.5	13.5	14.5	14.5	15.5	15.5	16.5	16.5	17.5		
1	1      3	49	55	61	67	73	79	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
2	1      4	44	50	56	62	68	74	80	—	—	—	—	—	—	—	—	—	—	—	—	—		
3	1      5	39	45	51	57	63	69	75	81	82	83	84	85	86	87	88	89	89	90	91	92		
4	1      6	34	40	46	52	58	64	70	76	82	83	84	85	86	87	88	89	89	90	91	92		
5	1      7	29	35	41	47	53	59	65	71	77	78	79	80	81	82	83	84	84	85	86	87		
6	1      8	24	30	36	42	48	54	60	66	72	78	84	85	86	87	88	89	89	90	91	92		
7	2      4	1	49	55	61	67	73	79	—	—	—	—	—	—	—	—	—	—	—	—	—		
8	2      5	2	44	50	56	62	68	74	80	82	83	84	85	86	87	88	89	89	90	91	92		
9	2      6	3	39	45	51	57	63	69	75	81	82	83	84	85	86	87	88	88	89	90	91		
10	2      7	4	34	40	46	52	58	64	70	76	82	83	84	85	86	87	88	88	89	90	91		
11	2      8	5	29	35	41	47	53	59	65	71	77	78	79	80	81	82	83	83	84	85	86		
12	2      9	6	24	30	36	42	48	54	60	66	72	78	84	85	86	87	88	88	89	90	91		
13	3      5	7	1	49	55	61	67	73	79	—	—	—	—	—	—	—	—	—	—	—	—		
14	3      6	8	2	44	50	56	62	68	74	80	82	83	84	85	86	87	88	88	89	90	91		
15	3      7	9	3	39	45	51	57	63	69	75	81	82	83	84	85	86	87	87	88	89	90		
16	3      8	10	4	34	40	46	52	58	64	70	76	82	83	84	85	86	87	88	88	89	90		
17	3      9	11	5	29	35	41	47	53	59	65	71	77	78	79	80	81	82	82	83	84	85		
18	3      10	12	6	24	30	36	42	48	54	60	66	72	78	84	85	86	87	87	88	89	90		
19	4      6	13	7	1	49	55	61	67	73	79	85	86	87	88	89	90	91	91	92	93	94		
20	4      7	14	8	2	44	50	56	62	68	74	80	82	83	84	85	86	87	87	88	89	90		
21	4      8	15	9	3	39	45	51	57	63	69	75	81	82	83	84	85	86	87	87	88	89		
22	4      9	16	10	4	34	40	46	52	58	64	70	76	82	83	84	85	86	87	87	88	89		
23	4      10	17	11	5	29	35	41	47	53	59	65	71	77	83	84	85	86	86	87	88	89		
24	4      11	18	12	6	24	30	36	42	48	54	60	66	72	78	84	85	86	86	87	88	89		

## GEOMETRIC RESISTIVITY COEFFICIENTS

25	5	7	19	13	7	1	49	55	61	67	73	79	
26	5	8	20	14	8	2	44	50	56	62	68	74	80
27	5	9	21	15	9	3	39	45	51	57	63	69	75
28	5	10	22	16	10	4	34	40	46	52	58	64	70
29	5	11	23	17	11	5	29	35	41	47	53	59	65
30	5	12	24	18	12	6	24	30	36	42	48	54	60
31	6	8	25	19	13	7	1	49	55	61	67	73	79
32	6	9	26	20	14	8	2	44	50	56	62	68	74
33	6	10	27	21	15	9	3	39	45	51	57	63	69
34	6	11	28	22	16	10	4	34	40	46	52	58	64
35	6	12	29	23	17	11	5	29	35	41	47	53	59
36	6	13	30	24	18	12	6	24	30	36	42	48	54
37	7	9	31	25	19	13	7	1	49	55	61	67	73
38	7	10	32	26	20	14	8	2	44	50	56	62	68
39	7	11	33	27	21	15	9	3	39	45	51	57	63
40	7	12	34	28	22	16	10	4	34	40	46	52	58
41	7	13	35	29	23	17	11	5	29	35	41	47	53
42	7	14	36	30	24	18	12	6	24	30	36	42	48
43	8	10	37	31	25	19	13	7	1	49	55	61	67
44	8	11	38	32	26	20	14	8	2	44	50	56	62
45	8	12	39	33	27	21	15	9	3	39	45	51	57
46	8	13	40	34	28	22	16	10	4	34	40	46	52
47	8	14	41	35	29	23	17	11	5	29	35	41	47
48	8	15	42	36	30	24	18	12	6	24	30	36	42
49	9	11	43	37	31	25	19	13	7	1	49	55	61
50	9	12	44	38	32	26	20	14	8	2	44	50	56
51	9	13	45	39	33	27	21	15	9	3	39	45	51
52	9	14	46	40	34	28	22	16	10	4	34	40	46
53	9	15	47	41	35	29	23	17	11	5	29	35	41
54	9	16	48	42	36	30	24	18	12	6	24	30	36
55	10	12	49	43	37	31	25	19	13	7	1	49	55
56	10	13	50	44	38	32	26	20	14	8	2	44	50
57	10	14	51	45	39	33	27	21	15	9	3	39	45
58	10	15	52	46	40	34	28	22	16	10	4	34	40
59	10	16	53	47	41	35	29	23	17	11	5	29	35
60	10	17	54	48	42	36	30	24	18	12	6	24	30

**Table 2 (cont'd). Conversion of Dipole-Dipole Coefficients of Set DB-1 into Those for Other Subsurface Blocks**

Data point <i>N</i>	Electrode configuration	Row in table 1 giving coefficient at data point <i>N</i> (Fig. 4) with respect to blocks with <i>x</i> -boundaries												
		6.5 7.5	7.5 8.5	8.5 9.5	9.5 10.5	10.5 11.5	11.5 12.5	12.5 13.5	13.5 14.5	14.5 15.5	15.5 16.5	16.5 17.5		
61	11 13	55	49	43	37	31	25	19	13	7	1	49		
62	11 14	56	50	44	38	32	26	20	14	8	2	44		
63	11 15	57	51	45	39	33	27	21	15	9	3	39		
64	11 16	58	52	46	40	34	28	22	16	10	4	34		
65	11 17	59	53	47	41	35	29	23	17	11	5	29		
66	11 18	60	54	48	42	36	30	24	18	12	6	24		
67	12 14	61	55	49	43	37	31	25	19	13	7	1		
68	12 15	62	56	50	44	38	32	26	20	14	8	2		
69	12 16	63	57	51	45	39	33	27	21	15	9	3		
70	12 17	64	58	52	46	40	34	28	22	16	10	4		
71	12 18	65	59	53	47	41	35	29	23	17	11	5		
72	12 19	66	60	54	48	42	36	30	24	18	12	6		
73	13 15	67	61	55	49	43	37	31	25	19	13	7		
74	13 16	68	62	56	50	44	38	32	26	20	14	8		
75	13 17	69	63	57	51	45	39	33	27	21	15	9		
76	13 18	70	64	58	52	46	40	34	28	22	16	10		
77	13 19	71	65	59	53	47	41	35	29	23	17	11		
78	13 20	72	66	60	54	48	42	36	30	24	18	12		
79	14 16	73	67	61	55	49	43	37	31	25	19	13		
80	14 17	74	68	62	56	50	44	38	32	26	20	14		
81	14 18	75	69	63	57	51	45	39	33	27	21	15		
82	14 19	76	70	64	58	52	46	40	34	28	22	16		
83	14 20	77	71	65	59	53	47	41	35	29	23	17		
84	14 21	78	72	66	60	54	48	42	36	30	24	18		

## OPERATORS

### A Simple Example

The steps to be taken in obtaining the dipole-dipole operator  $\bar{H}$  are shown schematically in figure 5. A simple illustration of the procedure is provided by assuming the subsurface to consist of a single rectangular block delimited by  $x=5.5, 6.5$ ;  $y=-3.0, 3.0$ ; and  $z=3.0, 4.0$ . The potential data are to be collected in a dipole-dipole survey for  $s=4.5$  and  $r=s+2, s+3$  where  $s$  and  $s+1$ ,  $r$  and  $r+1$  give the positions of the source and receiver electrodes, respectively, for any given measurement. It is apparent from the foregoing that  $n=1$  and  $m=4$ . The assumed subsurface geometry and sequence of electrode positions are shown on figure 6.

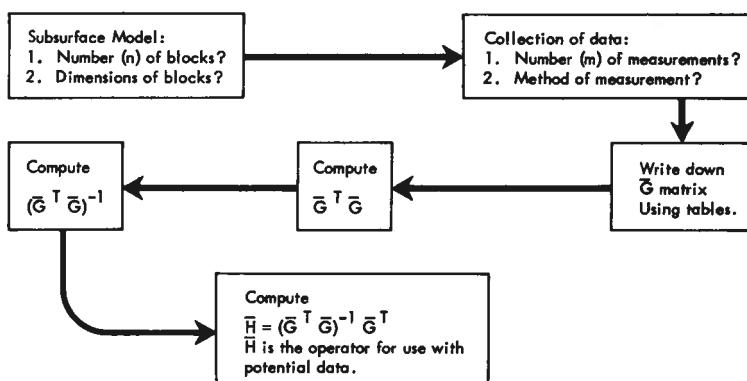


FIGURE 5. Computation of the operator  $\bar{H}$ .

The matrix  $G$  for this geometry and sequence of electrode positions can be taken directly from table 1, the required data being contained in the fourth  $z$ -column in the rows given by  $N=19, 20, 25, 26$ :

$$\bar{G} = \begin{bmatrix} 0.2850 \times 10^{-4} \\ -0.1622 \times 10^{-3} \\ 0.2850 \times 10^{-4} \\ -0.9222 \times 10^{-4} \end{bmatrix}$$

The remaining steps illustrated in figure 5 are:

$$\bar{G}^T \bar{G} = \begin{bmatrix} 0.2850 \times 10^{-4} & -0.1622 \times 10^{-3} & 0.2850 \times 10^{-4} & -0.9222 \times 10^{-4} \end{bmatrix} \times \begin{bmatrix} 0.2850 \times 10^{-4} \\ -0.1622 \times 10^{-3} \\ 0.2850 \times 10^{-4} \\ -0.9222 \times 10^{-4} \end{bmatrix}$$

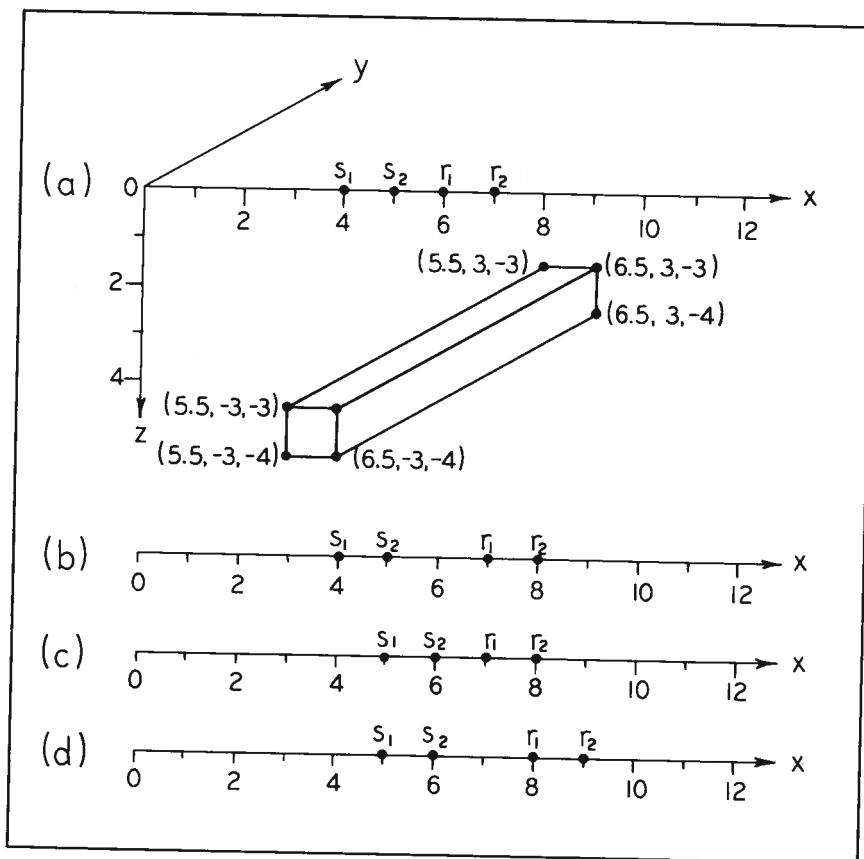


FIGURE 6. Subsurface geometry and measurement sequence for simple example.

$$= 3.6437 \times 10^{-6}$$

$$(\bar{\mathbf{G}}^T \bar{\mathbf{G}})^{-1} = 0.2744 \times 10^8$$

$$\begin{aligned} (\bar{\mathbf{G}}^T \bar{\mathbf{G}})^{-1} \bar{\mathbf{G}} &= [0.2744 \times 10^8 \\ &\quad \times [0.2850 \times 10^{-4} \quad -0.1622 \times 10^{-3} \quad 0.2850 \times 10^{-4} \quad -0.9222 \times 10^{-4}]] \\ &= [0.7820 \times 10^{-3} \quad -0.4450 \times 10^4 \quad 0.7820 \times 10^3 \quad -0.2530 \times 10^4] \\ &= \bar{\mathbf{H}} \end{aligned}$$

In solving equation (9) for the block resistivity the vector  $\Psi$  in this case will be given by

$$\Psi = \begin{bmatrix} \psi_a \\ \psi_b \\ \psi_c \\ \psi_d \end{bmatrix}$$

where  $\psi_a, \psi_b, \psi_c, \psi_d$  are given by (8) using the observed values of  $\phi_t$  for electrode configurations *a*, *b*, *c*, and *d*, respectively (Fig. 6). It is important to realize that the same configuration sequence is used in determining  $\Psi$  as was used in calculating  $\bar{H}$ .

It has been already noted that the series DB-1 (Table 1), from which  $\bar{G}$  in this example was derived, does not utilize all of the results calculated for the other series (Appendices A to E). Consequently, there are subsurface geometries for which the elements of  $\bar{G}$  cannot be taken directly from table 1 but must be obtained by algebraic summation of the appropriate coefficients in the series zW-C and DV-C (Appendices D and E), making use of equations (13) and (14), as outlined in the discussion of the series DB-1.

### Development of More Complex Operators

For the analysis of actual data from a field survey or from a model experiment in the laboratory, two operators, denoted by  $\bar{H}_1$  and  $\bar{H}_2$  and utilizing 20 potential-data points each, have been developed. The data points and the 20 corresponding dipole-dipole source-receiver configurations are listed in table 3; the source positions being given by *s* and *s*+1, the receiver positions by *r* and *r*+1. The figures given in the table for the electrode positions refer to the numbers of units by which the electrodes are displaced along the *x*-axis (Fig. 4). The operators were generated by using the coefficients in the sequence corresponding to the numerical order of the data points. In solving equation (9) for block resistivities the field data must be utilized in the same sequence.

Table 3. Source-Receiver Configurations and Data Points for Operators  
 $\bar{H}_1$  and  $\bar{H}_2$

<i>s</i>	<i>r</i>	Data points
4	6, 7, 8, 9	19, 20, 21, 22
5	7, 8, 9	25, 26, 27
6	8, 9, 10	31, 32, 33
7	9, 10, 11, 12	37, 38, 39, 40
8	10, 11, 12	43, 44, 45
9	11, 12	49, 50
10	12	55

Coefficients with respect to all subsurface blocks for which data are available can be obtained from table 1, making use of table 2 if necessary, as outlined above in the section on graphical presentation and symmetry properties of the coefficients.

For each source-receiver combination there will be a linear equation in  $n$  unknown resistivity-contrast factors,  $n$  being the number of rectangular blocks assumed for the model of the subsurface region.

The  $\bar{G}$  matrix can be written down for the assumed geometry and the operator  $\bar{H}$  can be developed. In the case of the development of more complex operators the main difficulty is the evaluation of the inverse of  $\bar{G}'\bar{G}$ . A number of methods of inverting matrices (Householder, 1953) were tried, but the final choice was the Gauss-Jordan method. To get an idea of the error involved  $\bar{G}'\bar{G}$  and its computed inverse can be multiplied and the resultant matrix compared with the identity matrix

$$I = \begin{bmatrix} 1 & 0 & 0 & \dots \\ 0 & 1 & 0 & \dots \\ 0 & 0 & 1 & \dots \\ \dots & \dots & \dots & \dots \end{bmatrix}$$

If the elements of the product of  $(\bar{G}'\bar{G})^{-1}$  and  $(\bar{G}'\bar{G})$  do not differ greatly from those of  $I$  the results may be accepted.

### Operators $\bar{H}_1$ and $\bar{H}_2$

In the case of operator  $\bar{H}_1$  the region of interest is subdivided into 8 smaller blocks shown in cross section in figure 7. These blocks extend between  $y = -3.0$  and  $y = 3.0$ . Each block gives rise to a column in the  $\bar{G}$  matrix. Each data point used gives rise to a row in the  $\bar{G}$  matrix. Hence

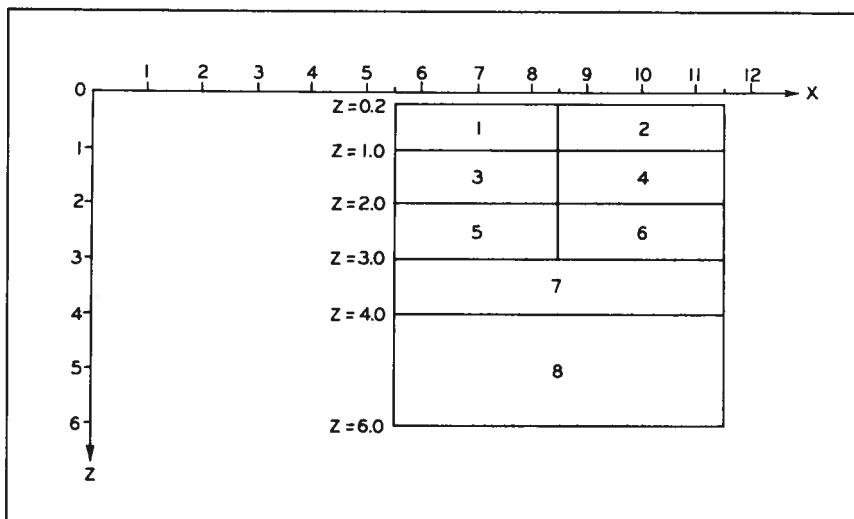


FIGURE 7. Cross section of assumed subsurface geometry for operator  $\bar{H}_1$ .

when 20 data points are used we get  $\bar{G}$  as a  $20 \times 8$  matrix. The  $\bar{G}$  matrix is given in table 4 and the operator developed from it in table 5.

In the case of operator  $\bar{H}_2$  the region of interest is subdivided into 6 blocks extending between  $y = -3.0$  and  $y = 3.0$ . The blocks are shown in cross section in figure 8. Each of the blocks gives rise to a column in the  $\bar{G}$  matrix and each of the 20 data points gives rise to a row. Thus  $\bar{G}$  is a  $20 \times 6$  matrix. Since the six blocks for  $\bar{H}_2$  are identical with the first six blocks for  $\bar{H}_1$ ,  $\bar{G}$  for  $\bar{H}_2$  is given by the first six columns in table 4. The operator developed from this  $\bar{G}$  is given in table 6.

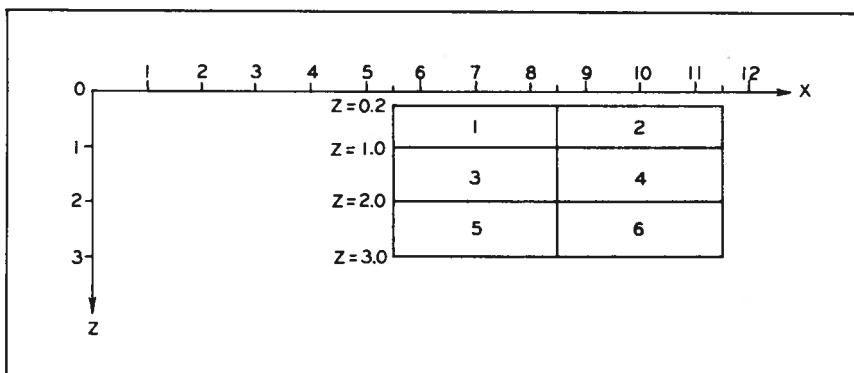


FIGURE 8. Cross section of assumed subsurface geometry for operator  $\bar{H}_2$ .

### III-Conditioned Systems of Equations

The resolution of the systems of equations given by (7) and (10), or of the analogous systems that can be developed to express observed potential differences or resistivities for the dipole-dipole case, is greatly influenced by the nature of the matrix of geometric factors appropriate to the system of equations being considered. In the case of dipole-dipole measurements of potential difference this is the matrix  $\bar{G}$ . In certain cases it may become very laborious to obtain an accurate solution due to the loss of many significant digits during the computations and the term "ill-conditioned" (Buckingham, 1957; National Physical Laboratories, 1961) may be applied to these systems of equations, one particular such case being that for which there is a large variation in the magnitude of the elements of the matrix. To obtain an accurate solution of an ill-conditioned system of equations all arithmetic computations have to be carried out with great precision, thus making it necessary to retain a large number of significant digits at all stages. This difficulty can be alleviated by the use of an electronic digital computer, but it is nevertheless useful to be able to recognize ill-conditioned equations, to determine the reasons for their ill-conditioning, and to be able to remedy or improve the situation if it arises.

Table 4.  $\bar{G}$  Matrix for Operator  $\bar{H}_1$ 

Row	Column							
	1	2	3	4	5	6	7	8
1	-.10465E-00	.14577E-02	-.12504E-01	.10400E-02	.23598E-03	.44009E-03	.46286E-03	.28181E-03
2	-.25047E-01	.34413E-02	-.17369E-01	.14438E-02	-.22039E-02	.46207E-03	-.56484E-04	.11469E-03
3	.70900E-03	-.43383E-02	-.10105E-01	.63485E-04	-.27047E-02	.11227E-03	-.48269E-03	-.75090E-04
4	.40518E-02	-.39814E-02	-.33968E-02	-.20803E-02	-.18783E-02	-.48703E-03	-.68278E-03	-.22624E-03
5	-.20151E-00	.74782E-02	-.29332E-01	.29421E-02	-.80691E-03	.85561E-03	.46041E-03	.30036E-03
6	-.29378E-01	-.71410E-02	-.24054E-01	.60440E-03	-.30377E-02	.37256E-03	-.18721E-03	.87068E-04
7	.70900E-03	-.83212E-02	-.10105E-01	-.37095E-02	-.27047E-02	-.63689E-03	.64313E-03	-.12509E-03
8	-.10151E-00	-.12819E-01	-.29332E-01	.30459E-02	-.80691E-03	.10713E-02	.51734E-03	.31989E-03
9	-.25047E-01	-.22480E-01	-.17369E-01	-.71712E-02	-.22039E-02	-.62747E-03	-.22292E-03	.75961E-04
10	-.75314E-02	-.75314E-02	-.74468E-02	-.74467E-02	-.17761E-02	-.17761E-02	-.69378E-03	-.14236E-03
11	-.10465E-00	-.10465E-00	-.12504E-01	-.12504E-01	.23597E-03	.23598E-03	.55526E-03	.32956E-03
12	-.22480E-01	-.25047E-01	-.71712E-02	-.17369E-01	-.62747E-03	-.22039E-02	-.22292E-03	.75961E-04
13	-.83212E-02	.70900E-03	-.37095E-02	-.10105E-01	-.63690E-03	-.27047E-02	.64313E-03	-.12509E-03
14	-.39814E-02	.40518E-02	-.20803E-02	-.33968E-02	-.48703E-03	-.18783E-02	-.68278E-03	-.22624E-03
15	-.12819E-01	-.20151E-00	.30460E-02	-.29332E-01	-.10713E-02	-.80691E-03	.51734E-03	.31989E-03
16	-.71409E-02	-.29378E-01	.60439E-03	-.24054E-01	.37256E-03	-.30377E-02	-.18721E-03	.87068E-04
17	-.43383E-02	.70900E-03	.63475E-04	-.10105E-01	.11227E-03	-.27047E-02	-.48269E-03	-.75091E-04
18	.74781E-02	-.20151E-00	.29421E-02	-.29332E-01	.85561E-03	-.80691E-03	.46041E-03	.30036E-03
19	.34414E-02	-.25047E-01	.14438E-02	-.17369E-01	.46207E-03	-.22039E-02	-.56484E-04	.11468E-03
20	.14576E-02	-.10465E-00	.10400E-02	-.12504E-01	.44009E-03	-.23597E-03	.46286E-03	.28181E-03

Table 5. Operator  $\bar{H}_1$ 

Row	Column			
	1	2	3	4
1	.29883E+01	.70026E+01	-.83114E+01	.68379E+01
2	.47275E+01	.36127E+01	-.35639E+01	.13984E+02
3	-.27055E+02	-.58035E+02	.99973E+02	-.11410E+03
4	-.30251E+02	-.32578E+02	.53673E+02	-.17754E+03
5	.98307E+03	.72350E+03	-.90640E+03	.19093E+04
6	.97698E+03	.66532E+03	-.58837E+03	.22730E+04
7	-.63924E+04	-.36732E+04	.21326E+04	-.96030E+04
8	.97695E+04	.49907E+04	-.45701E+03	.86128E+04
	5	6	7	8
1	.13729E+01	.96326E+01	-.77898E+01	-.71205E+01
2	.57055E+01	.14184E+01	-.36884E+01	-.54431E+01
3	-.49878E+02	-.90775E+02	.85892E+02	.55868E+02
4	-.66515E+02	-.27511E+02	.46186E+02	.58605E+02
5	.65095E+03	.61240E+03	-.91879E+03	-.84569E+03
6	.72821E+03	.38650E+03	-.65500E+03	-.85468E+03
7	-.26624E+04	-.15623E+04	.29223E+04	.41271E+04
8	.18127E+04	.86632E+03	-.23958E+04	-.46979E+04
	9	10	11	12
1	.23277E+01	-.87937E+01	-.43108E+01	-.11323E+01
2	-.11324E+01	-.87937E+01	-.43108E+01	.23276E+01
3	-.16978E+02	.98505E+02	.36169E+02	.86092E+01
4	.86097E+01	.98505E+02	.36169E+02	-.16977E+02
5	-.24320E+03	-.12743E+04	-.51561E+03	-.32708E+03
6	-.32708E+03	-.12743E+04	-.51561E+03	-.24320E+03
7	.20718E+04	.52599E+04	.24785E+04	.20718E+04
8	-.29823E+04	-.50384E+04	-.27929E+04	-.29823E+04
	13	14	15	16
1	-.36880E+01	.13984E+02	-.54432E+01	.14186E+01
2	-.77894E+01	.68384E+01	-.71207E+01	.96328E+01
3	.46182E+02	-.17754E+03	.58607E+02	-.27513E+02
4	.85887E+02	-.11410E+03	.55870E+02	-.90777E+02
5	-.65494E+03	.22731E+04	-.85471E+03	.38653E+03
6	-.91873E+03	.19094E+04	-.84572E+03	.61243E+03
7	.29220E+04	-.96033E+04	.41273E+04	-.15624E+04
8	-.23955E+04	.86132E+04	-.46980E+04	.86651E+03
	17	18	19	20
1	-.35644E+01	.57058E+01	.36125E+01	.47273E+01
2	-.83119E+01	.13732E+01	.70026E+01	.29884E+01
3	.53679E+02	-.66518E+02	-.32576E+02	-.30250E+02
4	.99979E+02	-.49882E+02	-.58033E+02	-.27055E+02
5	-.58845E+03	.72826E+03	.66529E+03	.97699E+03
6	-.90649E+03	.65100E+03	.72348E+03	.98307E+03
7	.21331E+04	-.26627E+04	-.36731E+04	-.63924E+04
8	-.45749E+03	.18129E+04	.49906E+04	.97696E+04

Table 6. Operator  $\bar{H}_2$ 

Row	Column			
	1	2	3	4
1	-.10508E+01	.39517E+01	-.36810E+01	-.63329E+01
2	.68814E-00	.56177E-00	.10664E+01	.81353E-00
3	-.28044E-00	-.29705E+02	.32821E+02	.52087E+02
4	-.34762E+01	.42486E+01	-.13478E+02	-.11350E+02
5	.20186E+02	.91559E+02	-.23143E+03	-.30249E+03
6	.14102E+02	.33378E+02	.86603E+02	.61216E+02
	5	6	7	8
1	-.29525E+01	.68633E+01	-.35178E+01	-.26270E+01
2	.13799E+01	-.13509E+01	.58353E-00	-.94961E-00
3	.81495E+01	-.52625E+02	.30639E+02	.51419E+01
4	-.84872E+01	.10638E+02	-.90666E+01	.78789E+01
5	-.34905E+02	.18503E+03	-.21726E+03	-.20846E+02
6	.42356E+02	-.40859E+02	.46531E+02	-.29835E+02
	9	10	11	12
1	.38524E+01	-.19554E+01	-.15790E+01	.39233E-00
2	.39230E-00	-.19554E+01	-.15790E+01	.38524E+01
3	-.29479E+02	.14144E+02	.51162E+01	-.38916E+01
4	-.38914E+01	.14144E+02	.51156E+01	-.29479E+02
5	.92101E+02	-.10331E+03	-.16675E+02	.82231E+01
6	.82223E+01	-.10330E+03	-.16672E+02	.92100E+02
	13	14	15	16
1	.58352E-00	.81349E-00	-.94960E-00	-.13509E+01
2	-.35178E+01	-.63329E+01	.26270E+01	.68632E+01
3	-.90665E+01	-.11349E+02	.78788E+01	.10638E+02
4	.30639E+02	.52087E+02	.51419E+01	-.52625E+02
5	.46530E+02	.61215E+02	-.29835E+02	-.40858E+02
6	-.21726E+03	-.30249E+03	-.20847E+02	.18503E+03
	17	18	19	20
1	.10663E+01	.13799E+01	.56178E-00	.68816E-00
2	-.36810E+01	-.29525E+01	.39517E+01	-.10509E+01
3	-.13478E+02	-.84872E+01	-.42486E+01	-.34764E+01
4	.32821E+02	.81493E+01	-.29705E+02	-.27996E-00
5	.86603E+02	.42356E+02	.33377E+02	.14103E+02
6	-.23143E+03	-.34904E+02	.91559E+02	.20184E+02

The ill-conditioned system of equations may be considered from both the numerical and physical points of view and either a numerical or physical approach may be utilized in the attempt to derive a better-conditioned system of equations to describe the same physical situation. One numerical approach to the transformation into a better-conditioned system is the proper scaling of the coefficients (Householder, 1953), a procedure which will not affect the solution of a system of linear equations. In large systems, however, scaling may fail to give the desired results and the only alternative numerical approach is that already mentioned, the use

of digital computers capable of retaining many significant digits throughout the calculations. Whether it is at all desirable to attempt to solve a highly ill-conditioned system and, if the attempt is made, whether the solution can be relied on as a realistic and accurate picture of the actual physical situation are both debatable questions. Probably a more satisfactory approach to the problem is the physical one in which an effort is made to identify and eliminate unnecessary variables.

An examination of the elements of  $\bar{G}$  for operator  $\bar{H}_1$  (Table 4) indicates that an ill-conditioned system of equations will be associated with the use of this operator. The elements range in value from 0.2015 to  $0.5648 \times 10^{-4}$ , a range of magnitude which necessitates a 28-digit accuracy for the computation of  $(\bar{G}^T \bar{G})^{-1}$ . Comparison of the product of  $\bar{G}^T \bar{G}$  and its computed inverse with the identity matrix  $I$  reveals differences between corresponding elements as large as  $0.5 \times 10^{-2}$ .

The physical approach to the transformation into a better-conditioned system involves the elimination of variables for which the coefficients are generally small. In the case of  $\bar{G}$  for  $\bar{H}_1$ , the very small values are those for the deepest blocks, 7 and 8 (Fig. 7). Operator  $\bar{H}_2$  represents an attempt to obtain a better-conditioned system by the elimination from consideration of these two blocks (Fig. 8). The range in value of the elements of  $\bar{G}$  for  $\bar{H}_2$  (Columns 1-6, table 4) suggests that the new system is still ill-conditioned, the smallest element now being  $0.6348 \times 10^{-4}$  instead of  $0.5648 \times 10^{-4}$ . The greater proportion of the very small coefficients have been eliminated, however, and this should lead to better conditioning. The comparison of the product of  $\bar{G}^T \bar{G}$  and its computed inverse with the identity matrix  $I$  also indicates better conditioning since the maximum difference between corresponding elements has been reduced to  $0.146 \times 10^{-4}$ . A 28-digit accuracy was again used for the computation of  $(\bar{G}^T \bar{G})^{-1}$ .

The elimination of blocks for which the geometric factors  $g_{sri}$  are small is more or less equivalent to the elimination of blocks whose contributions to the surface potentials are of the same order of magnitude as instrumental and observational errors. The contribution to the surface potential due to the  $i$ th block, for the electrode configuration denoted by  $t$ , is the product of the contrast factor  $f_i$  and the geometric factor  $g_{sri}$ . The possible variation in  $f_i$  is only from -1.8 to 3.6, corresponding to  $\rho_i$  ranging from very much greater than to very much smaller than  $\rho_0$ . Generally, then, a small geometric factor  $g_{sri}$  implies a small contribution to the surface potential. If this contribution is less than about one half of one per cent it is highly unlikely that the effect will be detected. Thus  $\bar{H}_1$  could only be expected to yield reasonable results for the deeper blocks 7 and 8 if the data were very precise, which is not the case for most field surveys and model studies.

An alternative approach to the improvement of the ill-conditioned set of equations is the replacement of the smaller coefficients in each equation by zero. Some arbitrary value of the ratio of the coefficient under consideration to the largest coefficient in the matrix would form the basis for rejection or retention of coefficients, the value selected being chosen so that a reasonable number of coefficients are retained for all blocks. This procedure would obviously result in a weakly coupled system but it might, nevertheless, still be useful. Physically it is equivalent to the rejection, for each source-receiver configuration, of those blocks that are least likely to make any significant contribution to the measured surface potential.

## DISCUSSION

### Accuracy of the Approximate Method of Computing Coefficients

The accuracy of the computed coefficients  $g_{sri}$  is rather difficult to assess. It may be noted, however, that the surface integral in equation (4) can be analytically evaluated for the special case for which the source and receiver are at the same point. A particular case was considered, the computed value being 0.2778 and the analytical value, using 4-figure tables, 0.2771. This is in agreement with the conclusion arrived at by Ness (1959) that the truncation errors due to discrete summation are less than one half of one per cent.

### Anomalous Behavior of the Coefficients

An examination of the tables of coefficients, in particular those given for the series  $x5.5\text{-}C$  and  $x6.5\text{-}C$  (Appendices A and B), reveals two types of behavior, neither of which is in conformity with intuitive ideas of coefficient behavior. For both these series it is possible for the two electrodes in the pole-pole configuration for which the results were computed to be on opposite sides of the surface with respect to which the computation is made. Anomalous behavior is observed, (1) if the electrodes are symmetrically located with respect to the surface, or (2) as one electrode is moved from one side to the other of the surface, the position of the other electrode remaining fixed. This type of behavior is not possible for the series  $y3\text{-}C$  and  $zW\text{-}C$  (Appendices C and D) because both electrodes always remain on the same side of the surface. Anomalous behavior is incorporated into the series DV-C (Appendix E) and the set DB-1 (Table 1) but is not readily apparent because of the algebraic summation of the coefficients for various surfaces to obtain these results. Undoubtedly the fact that previous investigators (Ness, 1959; Vozoff, 1960) did not tabulate coefficients for individual surfaces as an intermediate step in their calculations explains why they failed to note any anomalous behavior. It is of interest to discuss these two types of behavior in somewhat greater detail and to consider their effects on the numerical analysis of field and model results.

The first type of anomalous behavior is illustrated by an examination of the data given for the series  $x5.5\text{-}C$  and  $x6.5\text{-}C$  in appendices A and B. For the series  $x5.5\text{-}C$  the calculated coefficients are seen to be zero for the four pairs of symmetrical source-receiver configurations 2, 9; 3, 8; 4, 7; and 5, 6; for the series  $x6.5\text{-}C$  the corresponding configurations are 3, 10; 4, 9; 5, 8; and 6, 7. From the physical point of view the implication is that a surface is undetectable if the source and receiver are on opposite sides of and equidistant from it. This conclusion does not seem reasonable and it

can be readily shown that it is a direct consequence of the use of the modified expression for  $g_{sr}$  given by equation (4). As was explained in a preceding section, this expression was adopted as a means of forcing source-receiver symmetry into the solution. For the symmetrical electrode configurations the averaging process implied by (4) results in the addition of two terms which are numerically equal but of opposite sign.

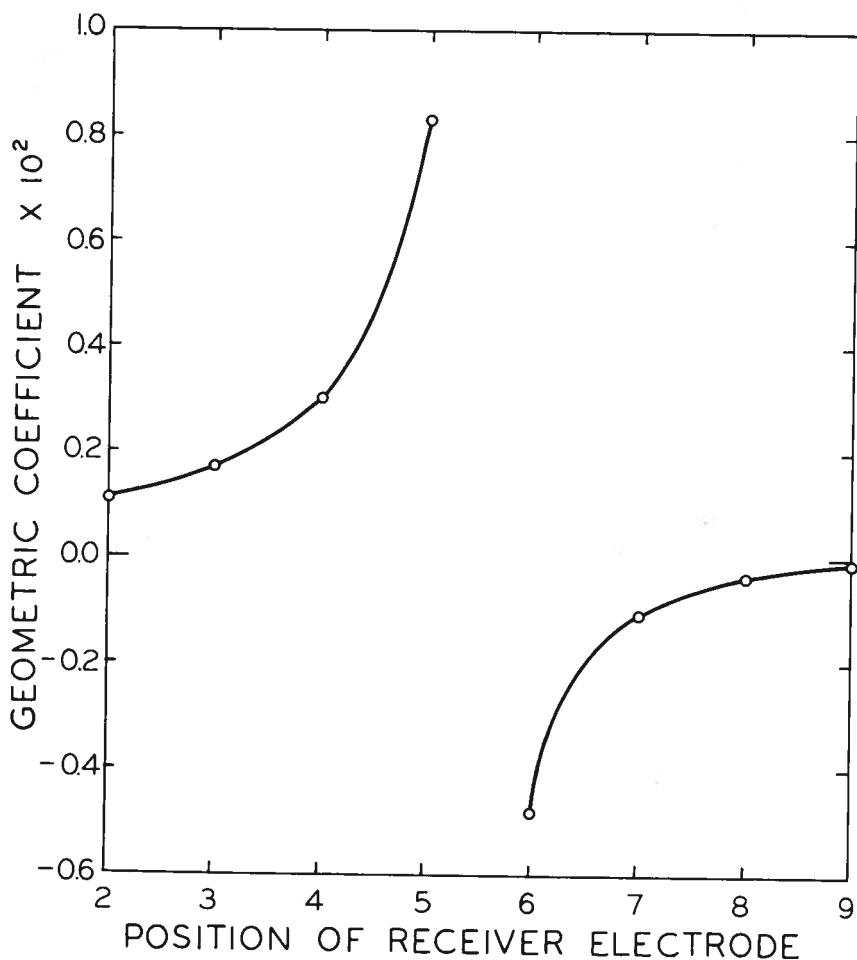


FIGURE 9. Anomalous behavior of the geometric coefficients.  
Source electrode at  $x=1.0$ ; coefficients calculated for vertical surface in the plane  $x=5.5$ .

Figure 9, based on a specific example taken from series x5.5-C, illustrates the second type of anomalous behavior. If both the source and

the receiver are located on the same side of the vertical surface and the position of one electrode is kept fixed, the geometric coefficient is found to be positive and to increase in value as the other electrode approaches the surface. The rate of increase also becomes greater as the surface is approached. If the moving electrode passes to the other side of the vertical surface, the coefficient assumes a large negative value which decreases in absolute value as the electrode moves farther away, the rate of decrease being quite large at first but becoming rapidly smaller. Again, this type of behavior is not anticipated on any reasonable physical basis. The difficulty may arise because the approximate solution to the physical problem is for a body of finite extent embedded in another medium which is semi-infinite and otherwise homogeneous. In this situation any contrast must be at the surface of a closed volume and an isolated surface cannot exist. The effect of the inclusion can be calculated one surface at a time but physical implications can be drawn only from the calculated effect of the entire body and not from that of a single surface.

Although there are peculiarities in the behavior of the coefficients, which may lead to errors in the interpretation of field and model results, the method can still be of value if the errors are not excessive. The results shown by Vozoff (1960) indicate that there is a reasonably good agreement between the numerical predictions of apparent resistivities and those actually observed for a number of simple laboratory models.

### Form and Behavior of the Resistivity-Contrast Factor

The form assumed for the resistivity-contrast factor  $f_i$  is given by equation (3). Its behavior is shown in figure 10. Good results are to be expected from this form if the resistivity ratio  $\rho_i / \rho_0$  is in the range  $10^{-2}$  to  $10^2$ .

The use of (3) in the interpretation of field results can only be justified if the interpretation gives plausible results. This aspect of the problem requires more work if the practical utility of the method is to be more firmly established. The actual form of the contrast factor and its behavior under field conditions are both of importance in this respect. In particular, the relations among assumed subsurface geometries, actual geometries, and computed  $f_i$  values deserve some study. Even in a controlled model experiment the contrast factor will undoubtedly vary with changes in block geometry. Ness has observed that, if there is a deep anomalous region of uniform resistivity which in reality extends over into three or more of the deeper blocks that have been assumed for the subsurface geometry, the calculated  $f_i$  values for the interior assumed blocks are depressed while those for the exterior blocks are elevated with respect to the true  $f_i$  for the real subsurface anomalous region. Since the form of

$f_i$  assumed in this bulletin is somewhat different than Ness's form there may also be some minor differences in behavior between the two forms. The important point, however, is that characteristic behavior of this kind should be investigated, preferably using models, in order that the results may guide field workers to a better interpretation of their measurements. In actual practice qualitative interpretations based on values of  $f_i$  rather than on those of  $\rho_i$  may well lead to satisfactory results.

### Requirements for Resistivity Data

Two questions of importance are how much resistivity data should be collected per station and what field techniques should be used in collecting them. Firstly, it is not sufficient that the number of field measurements equal the number of unknowns (Vozoff, 1960). An M.Sc. study completed by S. A. Bukhari at the University of Alberta in 1961 suggests, on the basis of information theory, that the number of field measurements should be more than three times as great as the number of unknowns, that is, as the number of blocks assumed for the subsurface geometry. Furthermore, dimensional requirements, discussed in detail by Vozoff (1960), are also extremely significant. In other words, the spatial relations between the succession of electrode positions used and the subsurface geometry have an important bearing on the analytical results. Of particular relevance is Vozoff's remark (*ibid.* p. 1193) that "the case where anomalies are due to horizontal cylinders of various conductivities is a two-dimensional problem, and one way to solve it is to collect apparent resistivity curves for a very large number of source locations on a traverse line perpendicular to strike."

In designing an operator associated with a model of the subsurface region of the earth or in planning actual field surveys, these points must be given particular attention, and it will then be possible to obtain sufficient information at a minimum cost.

### Choice of a Suitable Background Resistivity

Before discussing in greater detail the trial-and-error adjustment of the background resistivity  $\rho_0$ , it should be emphasized once again that the present scheme of interpretation is possible only if a value can be assigned to  $\rho_0$  prior to the analysis of the field or model data. This resistivity value may either be based on a knowledge of field or model conditions and hence require little or no adjustment, or it may be little more than an educated guess and the results of an analysis based on its use will probably suggest that it should undergo considerable modification. It is, of course, possible to make  $\rho_0$  one of the unknowns in the system of equations to be solved, but this leads to an additional least-squares restraint for the system, making the solution extremely laborious and causing the method to lose its appeal for everyday applications.

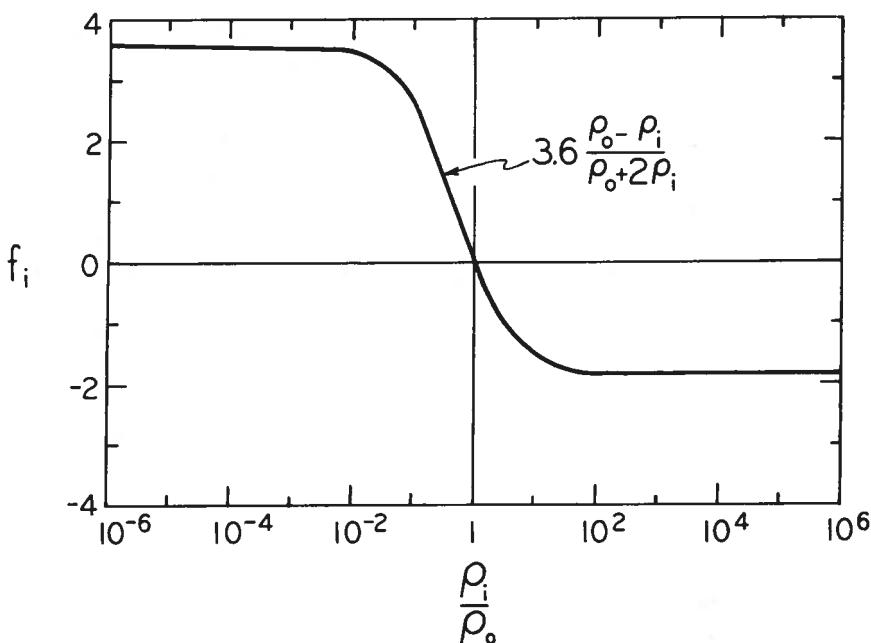


FIGURE 10. Behavior of the contrast factor  $f_i$ .

It is generally difficult to make an intuitive estimate of  $\rho_o$  that will lead immediately to reasonable  $f_i$  values. One approach to the problem is to determine apparent resistivities for very small spacings between the source and receiver electrodes and to use a resistivity value based on the results as a first approximation. Generally, however, this does not measure the background resistivity but provides only an estimate of the resistivity for local surface features. The assumption of such a value in the interpretation of the field data can lead to rather improbable values for the resistivity-contrast factors  $f_i$  and an educated guess at  $\rho_o$  is commonly just as satisfactory. An alternative field method for the estimation of  $\rho_o$  is possible if the inhomogeneous region is known to be limited in areal extent. If field measurements are taken sufficiently far away from the inhomogeneous region, the apparent resistivities derived from them should provide a good estimate.

Once an initial value of  $\rho_o$  has been selected and an initial set of  $f_i$  values been derived from the field or model data, the trial-and-error adjustment of  $\rho_o$  can begin. The value is so adjusted that the greatest number of  $f_i$  values in the range -1.8 to 3.6 is obtained. A solution obtained in this way is obviously not unique since a range of  $\rho_o$  values may satisfy the criterion but, nevertheless, a useful preliminary result is provided for each station. This result may be accepted without further modification or it

may be modified, either by attempting to correlate between stations or by attempting to minimize the residuals at each station.

It should be recalled also that one of the assumptions made in the derivation of the system of equations given by (7) was that there is no interaction among the blocks themselves. This assumption made it possible to obtain a linear system of equations. The fact that there is actually some interaction further complicates the question of the nature of  $\rho_0$  and renders the present approach only a first approximation to the solution. However, if it is possible to estimate  $\rho_0$  from field data and general observation of the surrounding conditions and to get plausible interpretations of the data, then this value of  $\rho_0$  may be accepted, especially in an area of good geologic control, where the predicted values can be checked with information available from the control points.

### Solution by Linear Programming

The solution to the system of equations (7) was obtained by the method of least squares. The problem can also be solved by using the techniques of linear programming as indicated by S. A. Bukhari in an M.Sc. study at the University of Alberta completed in 1961. This method uses  $g_{sri}$  coefficients directly without any further arithmetical operations, and additionally its method of solution is such that it is reasonably easy to incorporate geological control into the solution. However to obtain a solution within a reasonable time it is necessary to use a digital computer. The advantage of the method described here is that the necessary computations are not as laborious. The actual analysis of the resistivity data for a specific assumed subsurface geometry and sequence of measurement positions can always be carried out on a desk calculator. The calculation of the operator  $\bar{H}$ , however, generally requires the use of a digital computer except for very simple geometries and measurement sequences such as those for the illustrative example given in a preceding section.

### Dipole-Dipole Coefficients

The coefficients given in the series  $x5.5-C$ ,  $x6.5-C$ ,  $y3-C$ ,  $zW-C$ , and  $DV-C$  (Appendices A to E) are all for the pole-pole electrode configuration. In developing the results presented in table 1, it was necessary to calculate, as an intermediate step, the corresponding dipole-dipole coefficients. These coefficients are not given in this bulletin, but may be obtained separately from the Research Council of Alberta upon request.

## CONCLUSIONS

Thesis investigations by Ness (1959) and Vozoff (1956), and a published investigation by Vozoff (1960) led to the development of a numerical method for the interpretation of earth-resistivity data that promised to be useful for those geologic situations that cannot be approximated to by horizontal layering or by other simple subsurface geometries. Use of the method, however, requires either an electronic digital computer to carry out the complete computation for each resistivity station, or the availability of a special precalculated matrix known as an operator, the dimensions and elements of which depend on the assumed subsurface geometry and the sequence of electrode configurations employed at each station. If an appropriate operator is available, the analysis of the resistivity data is considerably simplified and may be carried out by means of a less elaborate digital-computer program or, if necessary, on an ordinary desk calculator. With a fairly diverse selection of operators, then, the method is much more suitable for general use.

Calculation of the operators themselves must also be carried out by digital computer, but it is generally possible to use a single operator for many or all stations in a field area. Prior to the work described here, only a few operators were available and the calculation of others required the preliminary computation of geometric coefficients for all desired electrode configurations with respect to each rectangular subsurface block assumed for the geometry of interest. Two more operators are presented here, but a more significant contribution is the presentation of various series of geometric coefficients, with respect to surfaces instead of blocks, from which the geometric coefficients for a large variety of subsurface geometries and electrode configurations can be derived. This means that the basic data required for the calculation of a great variety of operators may be obtained by a simple algebraic summation of the appropriate tabulated coefficients. It is believed that this should make possible the much more extensive use of the method.

Anomalies are noted in the behavior of the tabulated geometric coefficients and there is some uncertainty as to the validity of the form assumed for the resistivity contrast factor, on which the results of the numerical analysis also depend. The modified expression adopted for the geometric coefficients has been shown to lead to some of the anomalous behavior and undoubtedly influences the calculated values of the resistivity-contrast factor as well. It is to be expected, therefore, that there will be errors in the interpretation of field or model resistivity data. A comparison of predicted and observed results for a model experiment (Vozoff, 1960) suggests that these errors are tolerable, but additional work should be

carried out to substantiate this conclusion. Model studies will be of particular value in investigating the behavior of the resistivity-contrast factor. Ness's results (1959) indicate that a careful study of the behavior of this factor under carefully controlled conditions will be of considerable value as a guide to practical field interpretation.

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- Vozoff, K. (1956): On quantitative analysis of earth resistivity data; Ph.D. thesis, Massachusetts Inst. Tech., 137 pages.



**Appendix A. Series x5.5-C**

**Appendix A. Series x5.5-C**

X 5.5- 1/PAGE 1OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
1	2	.1139E-02	.2267E-02	.3375E-02	.4453E-02	.5494E-02
1	3	.1717E-02	.3409E-02	.5054E-02	.6631E-02	.8126E-02
1	4	.3016E-02	.5934E-02	.8676E-02	.1118E-01	.1344E-01
1	5	.8316E-02	.1497E-01	.1982E-01	.2337E-01	.2606E-01
1	6	-.4821E-02	-.8199E-02	-.1009E-01	-.1100E-01	-.1135E-01
1	7	-.1056E-02	-.2047E-02	-.2924E-02	-.3656E-02	-.4239E-02
1	8	-.3601E-03	-.7095E-03	-.1038E-02	-.1338E-02	-.1605E-02
1	9	-.1099E-03	-.2176E-03	-.3211E-03	-.4185E-03	-.5086E-03
2	3	.2337E-02	.4637E-02	.6864E-02	.8989E-02	.1098E-01
2	4	.4078E-02	.8021E-02	.1171E-01	.1508E-01	.1810E-01
2	5	.1113E-01	.2009E-01	.2666E-01	.3149E-01	.3515E-01
2	6	-.5660E-02	-.9507E-02	-.1150E-01	-.1232E-01	-.1247E-01
2	7	-.1067E-02	-.2060E-02	-.2919E-02	-.3615E-02	-.4143E-02
2	8	-.2699E-03	-.5300E-03	-.7715E-03	-.9879E-03	-.1174E-02
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	.1099E-03	.2176E-03	.3211E-03	.4185E-03	.5086E-03
3	4	.6047E-02	.1187E-01	.1728E-01	.2217E-01	.2648E-01
3	5	.1647E-01	.2976E-01	.3952E-01	.4667E-01	.5204E-01
3	6	-.6764E-02	-.1110E-01	-.1303E-01	-.1349E-01	-.1320E-01
3	7	-.9075E-03	-.1733E-02	-.2419E-02	-.2938E-02	-.3292E-02
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	.2699E-03	.5300E-03	.7715E-03	.9879E-03	.1174E-02
3	10	.3601E-03	.7095E-03	.1038E-02	.1338E-02	.1605E-02
3	11	.3849E-03	.7598E-03	.1115E-02	.1443E-02	.1740E-02

## Appendix A. Series x5.5-C

X 5.5- 1/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
4	5	.2954E-01	.5316E-01	.7012E-01	.8208E-01	.9061E-01
4	6	-.7889E-02	-.1225E-01	-.1339E-01	-.1284E-01	-.1166E-01
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	.9075E-03	.1733E-02	.2419E-02	.2938E-02	.3292E-02
4	9	.1067E-02	.2060E-02	.2919E-02	.3615E-02	.4143E-02
4	10	.1056E-02	.2047E-02	.2924E-02	.3656E-02	.4239E-02
4	11	.9971E-03	.1938E-02	.2780E-02	.3498E-02	.4083E-02
4	12	.9277E-03	.1807E-02	.2599E-02	.3282E-02	.3849E-02
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	.7889E-02	.1225E-01	.1339E-01	.1284E-01	.1166E-01
5	8	.6764E-02	.1110E-01	.1303E-01	.1349E-01	.1320E-01
5	9	.5660E-02	.9507E-02	.1150E-01	.1232E-01	.1247E-01
5	10	.4821E-02	.8199E-02	.1009E-01	.1100E-01	.1135E-01
5	11	.4183E-02	.7170E-02	.8915E-02	.9833E-02	.1026E-01
5	12	.3688E-02	.6353E-02	.7955E-02	.8841E-02	.9299E-02
5	13	.3294E-02	.5696E-02	.7166E-02	.8008E-02	.8470E-02
6	7	-.2954E-01	-.5316E-01	-.7012E-01	-.8208E-01	-.9061E-01
6	8	-.1647E-01	-.2976E-01	-.3952E-01	-.4667E-01	-.5204E-01
6	9	-.1113E-01	-.2009E-01	-.2666E-01	-.3149E-01	-.3515E-01
6	10	-.8316E-02	-.1497E-01	-.1982E-01	-.2337E-01	-.2606E-01
6	11	-.6597E-02	-.1185E-01	-.1566E-01	-.1842E-01	-.2051E-01
6	12	-.5450E-02	-.9775E-02	-.1288E-01	-.1513E-01	-.1682E-01
6	13	-.4634E-02	-.8301E-02	-.1092E-01	-.1281E-01	-.1421E-01
6	14	-.4027E-02	-.7204E-02	-.9469E-02	-.1108E-01	-.1228E-01

Appendix A. Series x55-C

X 5.5- 1/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
7	8	-6047E-02	-1187E-01	-1728E-01	-2217E-01	-2648E-01
7	9	-4078E-02	-8021E-02	-1171E-01	-1508E-01	-1810E-01
7	10	-3016E-02	-5934E-02	-8676E-02	-1118E-01	-1344E-01
7	11	-2366E-02	-4656E-02	-6809E-02	-8783E-02	-1056E-01
7	12	-1934E-02	-3806E-02	-5566E-02	-7179E-02	-8633E-02
7	13	-1629E-02	-3206E-02	-4688E-02	-6045E-02	-7268E-02
7	14	-1404E-02	-2763E-02	-4038E-02	-5207E-02	-6258E-02
7	15	-1232E-02	-2423E-02	-3541E-02	-4565E-02	-5485E-02
8	9	-2337E-02	-4637E-02	-6864E-02	-8989E-02	-1098E-01
8	10	-1717E-02	-3409E-02	-5054E-02	-6631E-02	-8126E-02
8	11	-1337E-02	-2657E-02	-3941E-02	-5175E-02	-6348E-02
8	12	-1086E-02	-2158E-02	-3201E-02	-4205E-02	-5161E-02
8	13	-9095E-03	-1806E-02	-2681E-02	-3522E-02	-4323E-02
8	14	-7795E-03	-1548E-02	-2298E-02	-3019E-02	-3706E-02
8	15	-6804E-03	-1351E-02	-2005E-02	-2635E-02	-3235E-02
8	16	-6027E-03	-1197E-02	-1776E-02	-2334E-02	-2865E-02
9	10	-1139E-02	-2267E-02	-3375E-02	-4453E-02	-5494E-02
9	11	-8811E-03	-1754E-02	-2614E-02	-3453E-02	-4265E-02
9	12	-7109E-03	-1416E-02	-2110E-02	-2789E-02	-3447E-02
9	13	-5918E-03	-1179E-02	-1757E-02	-2323E-02	-2873E-02
9	14	-5046E-03	-1005E-02	-1499E-02	-1982E-02	-2451E-02
9	15	-4385E-03	-8739E-03	-1302E-02	-1722E-02	-2130E-02
9	16	-3869E-03	-7710E-03	-1149E-02	-1520E-02	-1880E-02
9	17	-3456E-03	-6888E-03	-1027E-02	-1358E-02	-1679E-02

## Appendix A. Series x5.5-C

X 5.5- 1/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
10	11	-6337E-03	-1263E-02	-1886E-02	-2497E-02	-3094E-02
10	12	-5082E-03	-1013E-02	-1513E-02	-2005E-02	-2487E-02
10	13	-4208E-03	-8394E-03	-1253E-02	-1662E-02	-2062E-02
10	14	-3571E-03	-7125E-03	-1064E-02	-1411E-02	-1751E-02
10	15	-3090E-03	-6166E-03	-9213E-03	-1221E-02	-1516E-02
10	16	-2716E-03	-5420E-03	-8099E-03	-1074E-02	-1333E-02
10	17	-2419E-03	-4826E-03	-7212E-03	-9564E-03	-1187E-02
10	18	-2177E-03	-4343E-03	-6490E-03	-8607E-03	-1068E-02
11	12	-3859E-03	-7702E-03	-1151E-02	-1527E-02	-1897E-02
11	13	-3180E-03	-6347E-03	-9491E-03	-1259E-02	-1565E-02
11	14	-2687E-03	-5364E-03	-8022E-03	-1065E-02	-1324E-02
11	15	-2316E-03	-4624E-03	-6917E-03	-9185E-03	-1142E-02
11	16	-2029E-03	-4051E-03	-6060E-03	-8048E-03	-1001E-02
11	17	-1801E-03	-3596E-03	-5379E-03	-7145E-03	-8888E-03
11	18	-1616E-03	-3227E-03	-4828E-03	-6413E-03	-7977E-03
11	19	-1464E-03	-2923E-03	-4373E-03	-5809E-03	-7226E-03
12	13	-2512E-03	-5016E-03	-7505E-03	-9970E-03	-1240E-02
12	14	-2114E-03	-4222E-03	-6319E-03	-8397E-03	-1045E-02
12	15	-1816E-03	-3627E-03	-5429E-03	-7216E-03	-8984E-03
12	16	-1586E-03	-3167E-03	-4741E-03	-6303E-03	-7848E-03
12	17	-1403E-03	-2804E-03	-4197E-03	-5579E-03	-6948E-03
12	18	-1256E-03	-2509E-03	-3757E-03	-4995E-03	-6221E-03
12	19	-1135E-03	-2268E-03	-3395E-03	-4514E-03	-5622E-03
12	20	-1034E-03	-2066E-03	-3093E-03	-4112E-03	-5122E-03

### Appendix A. Series x5.5-C

X 5.5- 1/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
13	14	-•1721E-03	-•3438E-03	-•5147E-03	-•6844E-03	-•8524E-03
13	15	-•1473E-03	-•2944E-03	-•4408E-03	-•5862E-03	-•7304E-03
13	16	-•1283E-03	-•2563E-03	-•3839E-03	-•5106E-03	-•6362E-03
13	17	-•1132E-03	-•2263E-03	-•3389E-03	-•4508E-03	-•5618E-03
13	18	-•1011E-03	-•2021E-03	-•3026E-03	-•4026E-03	-•5018E-03
13	19	-•9121E-04	-•1822E-03	-•2729E-03	-•3631E-03	-•4526E-03
13	20	-•8292E-04	-•1657E-03	-•2481E-03	-•3301E-03	-•4115E-03
13	21	-•7593E-04	-•1517E-03	-•2272E-03	-•3023E-03	-•3769E-03
14	15	-•1228E-03	-•2454E-03	-•3675E-03	-•4890E-03	-•6095E-03
14	16	-•1066E-03	-•2131E-03	-•3192E-03	-•4248E-03	-•5295E-03
14	17	-•9394E-04	-•1877E-03	-•2811E-03	-•3741E-03	-•4665E-03
14	18	-•8370E-04	-•1672E-03	-•2505E-03	-•3334E-03	-•4158E-03
14	19	-•7532E-04	-•1505E-03	-•2254E-03	-•3001E-03	-•3742E-03
14	20	-•6835E-04	-•1366E-03	-•2046E-03	-•2723E-03	-•3397E-03
14	21	-•6248E-04	-•1248E-03	-•1870E-03	-•2490E-03	-•3105E-03
14	22	-•5748E-04	-•1148E-03	-•1721E-03	-•2290E-03	-•2857E-03
15	16	-•9060E-04	-•1810E-03	-•2712E-03	-•3610E-03	-•4502E-03
15	17	-•7961E-04	-•1591E-03	-•2383E-03	-•3173E-03	-•3957E-03
15	18	-•7079E-04	-•1414E-03	-•2119E-03	-•2821E-03	-•3520E-03
15	19	-•6358E-04	-•1270E-03	-•1904E-03	-•2535E-03	-•3162E-03
15	20	-•5760E-04	-•1151E-03	-•1725E-03	-•2296E-03	-•2865E-03
15	21	-•5257E-04	-•1050E-03	-•1574E-03	-•2096E-03	-•2615E-03
15	22	-•4829E-04	-•9653E-04	-•1446E-03	-•1926E-03	-•2403E-03
15	23	-•4461E-04	-•8918E-04	-•1336E-03	-•1779E-03	-•2220E-03

## Appendix A. Series x5.5-C

X 5.5- 2/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
1	2	.9957E-03	.1941E-02	.2834E-02	.3672E-02	.4454E-02
1	3	.1400E-02	.2701E-02	.3900E-02	.4996E-02	.5995E-02
1	4	.2006E-02	.3773E-02	.5321E-02	.6674E-02	.7856E-02
1	5	.2104E-02	.3800E-02	.5197E-02	.6367E-02	.7359E-02
1	6	-.2796E-04	.1203E-03	.3632E-03	.6530E-03	.9612E-03
1	7	-.4411E-03	-.7585E-03	-.9733E-03	-.1106E-02	-.1175E-02
1	8	-.2305E-03	-.4243E-03	-.5825E-03	-.7080E-03	-.8041E-03
1	9	-.8156E-04	-.1540E-03	-.2172E-03	-.2713E-03	-.3166E-03
2	3	.1859E-02	.3570E-02	.5129E-02	.6541E-02	.7811E-02
2	4	.2663E-02	.4991E-02	.7011E-02	.8759E-02	.1026E-01
2	5	.2860E-02	.5151E-02	.7022E-02	.8572E-02	.9869E-02
2	6	.2000E-03	.5754E-03	.1028E-02	.1505E-02	.1975E-02
2	7	-.3731E-03	-.6156E-03	-.7538E-03	-.8127E-03	-.8137E-03
2	8	-.1557E-03	-.2808E-03	-.3771E-03	-.4479E-03	-.4968E-03
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	.8156E-04	.1540E-03	.2172E-03	.2713E-03	.3166E-03
3	4	.3737E-02	.6937E-02	.9656E-02	.1195E-01	.1389E-01
3	5	.4128E-02	.7368E-02	.9950E-02	.1203E-01	.1372E-01
3	6	.6373E-03	.1399E-02	.2174E-02	.2908E-02	.3579E-02
3	7	-.2115E-03	-.3110E-03	-.3285E-03	-.2903E-03	-.2169E-03
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	.1557E-03	.2808E-03	.3771E-03	.4479E-03	.4968E-03
3	10	.2305E-03	.4243E-03	.5825E-03	.7080E-03	.8041E-03
3	11	.2612E-03	.4863E-03	.6760E-03	.8322E-03	.9581E-03

**Appendix A. Series x5.5-C**

X 5.5- 2/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
4	5	.6190E-02	.1076E-01	.1419E-01	.1680E-01	.1881E-01
4	6	.1302E-02	.2514E-02	.3565E-02	.4448E-02	.5180E-02
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	.2115E-03	.3110E-03	.3285E-03	.2903E-03	.2169E-03
4	9	.3731E-03	.6156E-03	.7538E-03	.8127E-03	.8137E-03
4	10	.4411E-03	.7585E-03	.9733E-03	.1106E-02	.1175E-02
4	11	.4595E-03	.8071E-03	.1059E-02	.1235E-02	.1348E-02
4	12	.4546E-03	.8087E-03	.1076E-02	.1273E-02	.1411E-02
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	-.1302E-02	-.2514E-02	-.3565E-02	-.4448E-02	-.5180E-02
5	8	-.6373E-03	-.1399E-02	-.2174E-02	-.2908E-02	-.3579E-02
5	9	-.2000E-03	-.5754E-03	-.1028E-02	-.1505E-02	-.1975E-02
5	10	.2796E-04	-.1203E-03	-.3632E-03	-.6530E-03	-.9612E-03
5	11	.1450E-03	.1255E-03	.1071E-04	-.1580E-03	-.3554E-03
5	12	.2050E-03	.2592E-03	.2226E-03	.1312E-03	.7609E-05
5	13	.2347E-03	.3316E-03	.3434E-03	.3022E-03	.2281E-03
6	7	-.6190E-02	-.1076E-01	-.1419E-01	-.1680E-01	-.1881E-01
6	8	-.4128E-02	-.7368E-02	-.9950E-02	-.1203E-01	-.1372E-01
6	9	-.2860E-02	-.5151E-02	-.7022E-02	-.8572E-02	-.9869E-02
6	10	-.2104E-02	-.3800E-02	-.5197E-02	-.6367E-02	-.7359E-02
6	11	-.1628E-02	-.2940E-02	-.4023E-02	-.4934E-02	-.5711E-02
6	12	-.1310E-02	-.2363E-02	-.3232E-02	-.3963E-02	-.4587E-02
6	13	-.1087E-02	-.1957E-02	-.2674E-02	-.3275E-02	-.3790E-02
6	14	-.9237E-03	-.1660E-02	-.2264E-02	-.2771E-02	-.3204E-02

## Appendix A. Series x55-C

X 5.5- 2/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0, 1.2	Z = 1.0, 1.4	Z = 1.0, 1.6	Z = 1.0, 1.8	Z = 1.0, 2.0
7	8	-3737E-02	-6937E-02	-9656E-02	-1195E-01	-1389E-01
7	9	-2663E-02	-4991E-02	-7011E-02	-8759E-02	-1026E-01
7	10	-2006E-02	-3773E-02	-5321E-02	-6674E-02	-7856E-02
7	11	-1582E-02	-2980E-02	-4209E-02	-5289E-02	-6237E-02
7	12	-1293E-02	-2437E-02	-3444E-02	-4330E-02	-5110E-02
7	13	-1087E-02	-2048E-02	-2895E-02	-3639E-02	-4296E-02
7	14	-9346E-03	-1759E-02	-2485E-02	-3124E-02	-3687E-02
7	15	-8171E-03	-1537E-02	-2171E-02	-2728E-02	-3219E-02
8	9	-1859E-02	-3570E-02	-5129E-02	-6541E-02	-7811E-02
8	10	-1400E-02	-2701E-02	-3900E-02	-4996E-02	-5995E-02
8	11	-1103E-02	-2132E-02	-3085E-02	-3963E-02	-4767E-02
8	12	-9005E-03	-1742E-02	-2523E-02	-3245E-02	-3908E-02
8	13	-7556E-03	-1462E-02	-2119E-02	-2727E-02	-3287E-02
8	14	-6480E-03	-1254E-02	-1818E-02	-2340E-02	-2821E-02
8	15	-5655E-03	-1094E-02	-1587E-02	-2043E-02	-2463E-02
8	16	-5007E-03	-9693E-03	-1405E-02	-1808E-02	-2180E-02
9	10	-9957E-03	-1941E-02	-2634E-02	-3672E-02	-4454E-02
9	11	-7809E-03	-1526E-02	-2235E-02	-2903E-02	-3532E-02
9	12	-6345E-03	-1242E-02	-1821E-02	-2370E-02	-2887E-02
9	13	-5303E-03	-1039E-02	-1524E-02	-1985E-02	-2421E-02
9	14	-4531E-03	-8883E-03	-1304E-02	-1699E-02	-2073E-02
9	15	-3942E-03	-7730E-03	-1135E-02	-1479E-02	-1805E-02
9	16	-3480E-03	-6824E-03	-1002E-02	-1306E-02	-1594E-02
9	17	-3109E-03	-6097E-03	-8954E-03	-1167E-02	-1425E-02

**Appendix A. Series x5.5-C**

X 5.5- 2/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
10	11	- .5799E-03	- .1140E-02	- .1679E-02	- .2194E-02	- .2686E-02
10	12	- .4690E-03	- .9237E-03	- .1362E-02	- .1784E-02	- .2188E-02
10	13	- .3902E-03	- .7693E-03	- .1136E-02	- .1489E-02	- .1828E-02
10	14	- .3322E-03	- .6552E-03	- .9681E-03	- .1270E-02	- .1560E-02
10	15	- .2879E-03	- .5682E-03	- .8399E-03	- .1102E-02	- .1354E-02
10	16	- .2534E-03	- .5001E-03	- .7394E-03	- .9706E-03	- .1193E-02
10	17	- .2257E-03	- .4456E-03	- .6589E-03	- .8652E-03	- .1063E-02
10	18	- .2032E-03	- .4012E-03	- .5933E-03	- .7790E-03	- .9581E-03
11	12	- .3624E-03	- .7161E-03	- .1059E-02	- .1392E-02	- .1714E-02
11	13	- .3003E-03	- .5939E-03	- .8801E-03	- .1158E-02	- .1427E-02
11	14	- .2546E-03	- .5040E-03	- .7473E-03	- .9842E-03	- .1214E-02
11	15	- .2200E-03	- .4356E-03	- .6463E-03	- .8515E-03	- .1050E-02
11	16	- .1930E-03	- .3822E-03	- .5673E-03	- .7477E-03	- .9232E-03
11	17	- .1714E-03	- .3397E-03	- .5042E-03	- .6647E-03	- .8209E-03
11	18	- .1539E-03	- .3050E-03	- .4529E-03	- .5972E-03	- .7376E-03
11	19	- .1395E-03	- .2764E-03	- .4104E-03	- .5413E-03	- .6686E-03
12	13	- .2397E-03	- .4751E-03	- .7055E-03	- .9305E-03	- .1149E-02
12	14	- .2025E-03	- .4017E-03	- .5970E-03	- .7881E-03	- .9745E-03
12	15	- .1744E-03	- .3461E-03	- .5147E-03	- .6798E-03	- .8411E-03
12	16	- .1525E-03	- .3028E-03	- .4505E-03	- .5953E-03	- .7369E-03
12	17	- .1352E-03	- .2684E-03	- .3994E-03	- .5279E-03	- .6537E-03
12	18	- .1211E-03	- .2405E-03	- .3579E-03	- .4732E-03	- .5860E-03
12	19	- .1095E-03	- .2175E-03	- .3237E-03	- .4280E-03	- .5301E-03
12	20	- .9981E-04	- .1982E-03	- .2950E-03	- .3901E-03	- .4833E-03

## Appendix A. Series x55-C

X 5.5- 2/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
13	14	-.1660E-03	-.3296E-03	-.4906E-03	-.6486E-03	-.8034E-03
13	15	-.1425E-03	-.2832E-03	-.4217E-03	-.5579E-03	-.6915E-03
13	16	-.1243E-03	-.2471E-03	-.3682E-03	-.4873E-03	-.6043E-03
13	17	-.1099E-03	-.2185E-03	-.3256E-03	-.4311E-03	-.5348E-03
13	18	-.9825E-04	-.1953E-03	-.2912E-03	-.3856E-03	-.4784E-03
13	19	-.8865E-04	-.1763E-03	-.2628E-03	-.3481E-03	-.4320E-03
13	20	-.8064E-04	-.1604E-03	-.2391E-03	-.3167E-03	-.3931E-03
13	21	-.7387E-04	-.1469E-03	-.2191E-03	-.2902E-03	-.3602E-03
14	15	-.1193E-03	-.2373E-03	-.3538E-03	-.4685E-03	-.5813E-03
14	16	-.1038E-03	-.2066E-03	-.3081E-03	-.4082E-03	-.5068E-03
14	17	-.9160E-04	-.1822E-03	-.2719E-03	-.3604E-03	-.4476E-03
14	18	-.8170E-04	-.1626E-03	-.2426E-03	-.3217E-03	-.3996E-03
14	19	-.7358E-04	-.1464E-03	-.2186E-03	-.2898E-03	-.3601E-03
14	20	-.6681E-04	-.1330E-03	-.1985E-03	-.2633E-03	-.3272E-03
14	21	-.6110E-04	-.1216E-03	-.1816E-03	-.2408E-03	-.2993E-03
14	22	-.5623E-04	-.1119E-03	-.1671E-03	-.2217E-03	-.2756E-03
15	16	-.8845E-04	-.1761E-03	-.2629E-03	-.3486E-03	-.4330E-03
15	17	-.7783E-04	-.1550E-03	-.2315E-03	-.3070E-03	-.3817E-03
15	18	-.6934E-04	-.1380E-03	-.2062E-03	-.2736E-03	-.3402E-03
15	19	-.6233E-04	-.1241E-03	-.1854E-03	-.2461E-03	-.3060E-03
15	20	-.5651E-04	-.1125E-03	-.1681E-03	-.2231E-03	-.2776E-03
15	21	-.5160E-04	-.1028E-03	-.1535E-03	-.2039E-03	-.2536E-03
15	22	-.4742E-04	-.9443E-04	-.1411E-03	-.1873E-03	-.2331E-03
15	23	-.4382E-04	-.8725E-04	-.1304E-03	-.1732E-03	-.2155E-03

### Appendix A. Series x5.5-C

X 5.5- 3/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
1	2	.7256E-03	.1396E-02	.2015E-02	.2583E-02	.3104E-02
1	3	.9055E-03	.1723E-02	.2461E-02	.3125E-02	.3722E-02
1	4	.1033E-02	.1937E-02	.2729E-02	.3425E-02	.4037E-02
1	5	.8499E-03	.1583E-02	.2220E-02	.2777E-02	.3265E-02
1	6	.3097E-03	.6108E-03	.8978E-03	.1167E-02	.1418E-02
1	7	-.2189E-04	-.8885E-05	.2895E-04	.8381E-04	.1497E-03
1	8	-.7070E-04	-.1198E-03	-.1510E-03	-.1678E-03	-.1730E-03
1	9	-.3717E-04	-.6693E-04	-.9010E-04	-.1074E-03	-.1199E-03
2	3	.1136E-02	.2150E-02	.3052E-02	.3853E-02	.4564E-02
2	4	.1303E-02	.2428E-02	.3401E-02	.4244E-02	.4976E-02
2	5	.1094E-02	.2025E-02	.2820E-02	.3503E-02	.4092E-02
2	6	.4469E-03	.8627E-03	.1244E-02	.1591E-02	.1904E-02
2	7	.3929E-04	.1054E-03	.1882E-03	.2803E-03	.3763E-03
2	8	-.3061E-04	-.4654E-04	-.5097E-04	-.4664E-04	-.3587E-04
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	.3717E-04	.6693E-04	.9010E-04	.1074E-03	.1199E-03
3	4	.1635E-02	.3014E-02	.4181E-02	.5168E-02	.6007E-02
3	5	.1391E-02	.2541E-02	.3497E-02	.4296E-02	.4968E-02
3	6	.5990E-03	.1127E-02	.1589E-02	.1992E-02	.2342E-02
3	7	.9338E-04	.1961E-03	.3010E-03	.4037E-03	.5013E-03
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	.3061E-04	.4654E-04	.5097E-04	.4664E-04	.3587E-04
3	10	.7070E-04	.1198E-03	.1510E-03	.1678E-03	.1730E-03
3	11	.9867E-04	.1737E-03	.2285E-03	.2664E-03	.2903E-03

X 5.5- 3/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
4	5	.1573E-02	.2816E-02	.3808E-02	.4608E-02	.5258E-02
4	6	.6024E-03	.1097E-02	.1506E-02	.1843E-02	.2123E-02
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	-.9338E-04	-.1961E-03	-.3010E-03	-.4037E-03	-.5013E-03
4	9	-.3929E-04	-.1054E-03	-.1882E-03	-.2803E-03	-.3763E-03
4	10	.2189E-04	.8885E-05	-.2895E-04	-.8381E-04	-.1497E-03
4	11	.6512E-04	.9326E-04	.9354E-04	.7325E-04	.3813E-04
4	12	.9207E-04	.1477E-03	.1752E-03	.1810E-03	.1704E-03
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	-.6024E-03	-.1097E-02	-.1506E-02	-.1843E-02	-.2123E-02
5	8	-.5990E-03	-.1127E-02	-.1589E-02	-.1992E-02	-.2342E-02
5	9	-.4469E-03	-.8627E-03	-.1244E-02	-.1591E-02	-.1904E-02
5	10	-.3097E-03	-.6108E-03	-.8978E-03	-.1167E-02	-.1418E-02
5	11	-.2103E-03	-.4236E-03	-.6337E-03	-.8368E-03	-.1030E-02
5	12	-.1415E-03	-.2919E-03	-.4450E-03	-.5970E-03	-.7453E-03
5	13	-.9419E-04	-.1999E-03	-.3117E-03	-.4256E-03	-.5391E-03
6	7	-.1573E-02	-.2816E-02	-.3808E-02	-.4608E-02	-.5258E-02
6	8	-.1391E-02	-.2541E-02	-.3497E-02	-.4296E-02	-.4968E-02
6	9	-.1094E-02	-.2025E-02	-.2820E-02	-.3503E-02	-.4092E-02
6	10	-.8499E-03	-.1583E-02	-.2220E-02	-.2777E-02	-.3265E-02
6	11	-.6700E-03	-.1253E-02	-.1764E-02	-.2215E-02	-.2615E-02
6	12	-.5402E-03	-.1012E-02	-.1428E-02	-.1797E-02	-.2126E-02
6	13	-.4452E-03	-.8350E-03	-.1179E-02	-.1485E-02	-.1759E-02
6	14	-.3743E-03	-.7021E-03	-.9918E-03	-.1250E-02	-.1481E-02

## Appendix A. Series x5.5-C

**Appendix A. Series x5.5-C**

X 5.5- 3/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
7	8	- .1635E-02	- .3014E-02	- .4181E-02	- .5168E-02	- .6007E-02
7	9	- .1303E-02	- .2428E-02	- .3401E-02	- .4244E-02	- .4976E-02
7	10	- .1033E-02	- .1937E-02	- .2729E-02	- .3425E-02	- .4037E-02
7	11	- .8338E-03	- .1568E-02	- .2217E-02	- .2791E-02	- .3301E-02
7	12	- .6879E-03	- .1296E-02	- .1835E-02	- .2314E-02	- .2742E-02
7	13	- .5794E-03	- .1092E-02	- .1548E-02	- .1954E-02	- .2318E-02
7	14	- .4970E-03	- .9374E-03	- .1329E-02	- .1678E-02	- .1991E-02
7	15	- .4331E-03	- .8167E-03	- .1157E-02	- .1462E-02	- .1735E-02
8	9	- .1136E-02	- .2150E-02	- .3052E-02	- .3853E-02	- .4564E-02
8	10	- .9055E-03	- .1723E-02	- .2461E-02	- .3125E-02	- .3722E-02
8	11	- .7340E-03	- .1402E-02	- .2009E-02	- .2560E-02	- .3060E-02
8	12	- .6079E-03	- .1163E-02	- .1671E-02	- .2133E-02	- .2555E-02
8	13	- .5139E-03	- .9848E-03	- .1415E-02	- .1809E-02	- .2169E-02
8	14	- .4422E-03	- .8479E-03	- .1219E-02	- .1560E-02	- .1872E-02
8	15	- .3863E-03	- .7410E-03	- .1066E-02	- .1364E-02	- .1637E-02
8	16	- .3419E-03	- .6559E-03	- .9439E-03	- .1208E-02	- .1450E-02
9	10	- .7256E-03	- .1396E-02	- .2015E-02	- .2583E-02	- .3104E-02
9	11	- .5878E-03	- .1135E-02	- .1645E-02	- .2116E-02	- .2552E-02
9	12	- .4864E-03	- .9421E-03	- .1367E-02	- .1763E-02	- .2132E-02
9	13	- .4108E-03	- .7966E-03	- .1158E-02	- .1495E-02	- .1811E-02
9	14	- .3531E-03	- .6854E-03	- .9972E-03	- .1289E-02	- .1562E-02
9	15	- .3082E-03	- .5986E-03	- .8714E-03	- .1127E-02	- .1366E-02
9	16	- .2726E-03	- .5295E-03	- .7710E-03	- .9977E-03	- .1210E-02
9	17	- .2437E-03	- .4735E-03	- .6896E-03	- .8925E-03	- .1082E-02

X 5.5- 3/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
10	11	- .4664E-03	- .9076E-03	- .1323E-02	- .1714E-02	- .2080E-02
10	12	- .3850E-03	- .7511E-03	- .1098E-02	- .1426E-02	- .1735E-02
10	13	- .3244E-03	- .6338E-03	- .9281E-03	- .1207E-02	- .1471E-02
10	14	- .2782E-03	- .5442E-03	- .7977E-03	- .1038E-02	- .1267E-02
10	15	- .2423E-03	- .4743E-03	- .6958E-03	- .9068E-03	- .1107E-02
10	16	- .2139E-03	- .4188E-03	- .6147E-03	- .8014E-03	- .9792E-03
10	17	- .1909E-03	- .3739E-03	- .5490E-03	- .7159E-03	- .8750E-03
10	18	- .1721E-03	- .3371E-03	- .4949E-03	- .6456E-03	- .7891E-03
11	12	- .3094E-03	- .6063E-03	- .8905E-03	- .1161E-02	- .1419E-02
11	13	- .2599E-03	- .5103E-03	- .7508E-03	- .9812E-03	- .1201E-02
11	14	- .2224E-03	- .4370E-03	- .6438E-03	- .8424E-03	- .1032E-02
11	15	- .1932E-03	- .3801E-03	- .5603E-03	- .7337E-03	- .9004E-03
11	16	- .1702E-03	- .3349E-03	- .4939E-03	- .6472E-03	- .7947E-03
11	17	- .1516E-03	- .2984E-03	- .4403E-03	- .5772E-03	- .7090E-03
11	18	- .1363E-03	- .2685E-03	- .3963E-03	- .5196E-03	- .6384E-03
11	19	- .1237E-03	- .2436E-03	- .3596E-03	- .4716E-03	- .5795E-03
12	13	- .2127E-03	- .4188E-03	- .6181E-03	- .8103E-03	- .9953E-03
12	14	- .1815E-03	- .3578E-03	- .5287E-03	- .6940E-03	- .8536E-03
12	15	- .1573E-03	- .3104E-03	- .4591E-03	- .6032E-03	- .7426E-03
12	16	- .1382E-03	- .2729E-03	- .4038E-03	- .5309E-03	- .6541E-03
12	17	- .1228E-03	- .2427E-03	- .3593E-03	- .4726E-03	- .5825E-03
12	18	- .1103E-03	- .2179E-03	- .3227E-03	- .4247E-03	- .5236E-03
12	19	- .9990E-04	- .1974E-03	- .2924E-03	- .3848E-03	- .4746E-03
12	20	- .9114E-04	- .1801E-03	- .2668E-03	- .3512E-03	- .4333E-03

## Appendix A. Series x5.5-C

## Appendix A. Series x5.5.C

X 5.5- 3/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
13	14	-•1512E-03	-•2987E-03	-•4423E-03	-•5819E-03	-•7173E-03
13	15	-•1307E-03	-•2585E-03	-•3832E-03	-•5046E-03	-•6227E-03
13	16	-•1146E-03	-•2268E-03	-•3364E-03	-•4433E-03	-•5474E-03
13	17	-•1017E-03	-•2013E-03	-•2987E-03	-•3938E-03	-•4866E-03
13	18	-•9114E-04	-•1804E-03	-•2678E-03	-•3533E-03	-•4366E-03
13	19	-•8238E-04	-•1631E-03	-•2422E-03	-•3196E-03	-•3951E-03
13	20	-•7504E-04	-•1486E-03	-•2207E-03	-•2913E-03	-•3602E-03
13	21	-•6881E-04	-•1363E-03	-•2025E-03	-•2672E-03	-•3305E-03
14	15	-•1107E-03	-•2193E-03	-•3255E-03	-•4293E-03	-•5306E-03
14	16	-•9690E-04	-•1920E-03	-•2852E-03	-•3764E-03	-•4656E-03
14	17	-•8579E-04	-•1700E-03	-•2527E-03	-•3338E-03	-•4131E-03
14	18	-•7673E-04	-•1521E-03	-•2262E-03	-•2989E-03	-•3701E-03
14	19	-•6925E-04	-•1373E-03	-•2043E-03	-•2700E-03	-•3344E-03
14	20	-•6298E-04	-•1249E-03	-•1859E-03	-•2457E-03	-•3044E-03
14	21	-•5766E-04	-•1144E-03	-•1702E-03	-•2251E-03	-•2789E-03
14	22	-•5311E-04	-•1054E-03	-•1568E-03	-•2074E-03	-•2570E-03
15	16	-•8325E-04	-•1651E-03	-•2456E-03	-•3245E-03	-•4018E-03
15	17	-•7357E-04	-•1460E-03	-•2172E-03	-•2872E-03	-•3559E-03
15	18	-•6570E-04	-•1304E-03	-•1941E-03	-•2568E-03	-•3183E-03
15	19	-•5919E-04	-•1175E-03	-•1750E-03	-•2316E-03	-•2872E-03
15	20	-•5375E-04	-•1067E-03	-•1590E-03	-•2105E-03	-•2611E-03
15	21	-•4915E-04	-•9766E-04	-•1454E-03	-•1926E-03	-•2389E-03
15	22	-•4521E-04	-•8985E-04	-•1338E-03	-•1772E-03	-•2199E-03
15	23	-•4181E-04	-•8311E-04	-•1238E-03	-•1639E-03	-•2035E-03

### Appendix A. Series x5-5-C

X 5.5- 4/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
1	2	.4763E-03	.9113E-03	.1308E-02	.1669E-02	.1999E-02
1	3	.5362E-03	.1017E-02	.1450E-02	.1839E-02	.2188E-02
1	4	.5397E-03	.1016E-02	.1439E-02	.1813E-02	.2147E-02
1	5	.4294E-03	.8087E-03	.1144E-02	.1442E-02	.1708E-02
1	6	.2321E-03	.4458E-03	.6419E-03	.8213E-03	.9852E-03
1	7	.7250E-04	.1483E-03	.2249E-03	.3008E-03	.3746E-03
1	8	.3799E-05	.1445E-04	.3019E-04	.4957E-04	.7144E-04
1	9	-.8223E-05	-.1294E-04	-.1479E-04	-.1431E-04	-.1200E-04
2	3	.6300E-03	.1188E-02	.1684E-02	.2123E-02	.2514E-02
2	4	.6359E-03	.1190E-02	.1674E-02	.2098E-02	.2470E-02
2	5	.5097E-03	.9526E-03	.1338E-02	.1675E-02	.1971E-02
2	6	.2817E-03	.5345E-03	.7609E-03	.9636E-03	.1144E-02
2	7	.9619E-04	.1901E-03	.2802E-03	.3655E-03	.4455E-03
2	8	.1534E-04	.3376E-04	.5409E-04	.7544E-04	.9715E-04
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	.8223E-05	.1294E-04	.1479E-04	.1431E-04	.1200E-04
3	4	.7150E-03	.1326E-02	.1850E-02	.2302E-02	.2692E-02
3	5	.5678E-03	.1050E-02	.1461E-02	.1813E-02	.2116E-02
3	6	.3041E-03	.5684E-03	.7984E-03	.9987E-03	.1173E-02
3	7	.9109E-04	.1750E-03	.2516E-03	.3212E-03	.3841E-03
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	-.1534E-04	-.3376E-04	-.5409E-04	-.7544E-04	-.9715E-04
3	10	-.3799E-05	-.1445E-04	-.3019E-04	-.4957E-04	-.7144E-04
3	11	.1238E-04	.1555E-04	.1144E-04	.1675E-05	-.1240E-04

## Appendix A. Series x5.5-C

X 5.5- 4/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0,3.2	Z = 3.0,3.4	Z = 3.0,3.6	Z = 3.0,3.8	Z = 3.0,4.0
4	5	.5336E-03	.9747E-03	.1342E-02	.1650E-02	.1909E-02
4	6	.2337E-03	.4298E-03	.5950E-03	.7349E-03	.8541E-03
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	-.9109E-04	-.1750E-03	-.2516E-03	-.3212E-03	-.3841E-03
4	9	-.9619E-04	-.1901E-03	-.2802E-03	-.3655E-03	-.4455E-03
4	10	-.7250E-04	-.1483E-03	-.2249E-03	-.3008E-03	-.3746E-03
4	11	-.4549E-04	-.9790E-04	-.1545E-03	-.2135E-03	-.2733E-03
4	12	-.2279E-04	-.5448E-04	-.9247E-04	-.1347E-03	-.1796E-03
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	-.2337E-03	-.4298E-03	-.5950E-03	-.7349E-03	-.8541E-03
5	8	-.3041E-03	-.5684E-03	-.7984E-03	-.9987E-03	-.1173E-02
5	9	-.2817E-03	-.5345E-03	-.7609E-03	-.9636E-03	-.1144E-02
5	10	-.2321E-03	-.4458E-03	-.6419E-03	-.8213E-03	-.9852E-03
5	11	-.1833E-03	-.3556E-03	-.5167E-03	-.6669E-03	-.8064E-03
5	12	-.1429E-03	-.2796E-03	-.4095E-03	-.5323E-03	-.6481E-03
5	13	-.1114E-03	-.2196E-03	-.3238E-03	-.4236E-03	-.5188E-03
6	7	-.5336E-03	-.9747E-03	-.1342E-02	-.1650E-02	-.1909E-02
6	8	-.5678E-03	-.1050E-02	-.1461E-02	-.1813E-02	-.2116E-02
6	9	-.5097E-03	-.9526E-03	-.1338E-02	-.1675E-02	-.1971E-02
6	10	-.4294E-03	-.8087E-03	-.1144E-02	-.1442E-02	-.1708E-02
6	11	-.3555E-03	-.6729E-03	-.9572E-03	-.1212E-02	-.1442E-02
6	12	-.2947E-03	-.5599E-03	-.7991E-03	-.1015E-02	-.1212E-02
6	13	-.2466E-03	-.4696E-03	-.6718E-03	-.8558E-03	-.1023E-02
6	14	-.2088E-03	-.3982E-03	-.5705E-03	-.7278E-03	-.8720E-03

## Appendix A. Series x55-C

X 5.5- 4/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
7	8	- .7150E-03	- .1326E-02	- .1850E-02	- .2302E-02	- .2692E-02
7	9	- .6359E-03	- .1190E-02	- .1674E-02	- .2098E-02	- .2470E-02
7	10	- .5397E-03	- .1016E-02	- .1439E-02	- .1813E-02	- .2147E-02
7	11	- .4533E-03	- .8575E-03	- .1218E-02	- .1542E-02	- .1832E-02
7	12	- .3825E-03	- .7255E-03	- .1033E-02	- .1312E-02	- .1563E-02
7	13	- .3261E-03	- .6196E-03	- .8845E-03	- .1124E-02	- .1341E-02
7	14	- .2813E-03	- .5351E-03	- .7646E-03	- .9730E-03	- .1162E-02
7	15	- .2455E-03	- .4673E-03	- .6682E-03	- .8508E-03	- .1017E-02
8	9	- .6300E-03	- .1188E-02	- .1684E-02	- .2123E-02	- .2514E-02
8	10	- .5362E-03	- .1017E-02	- .1450E-02	- .1839E-02	- .2188E-02
8	11	- .4525E-03	- .8625E-03	- .1234E-02	- .1570E-02	- .1876E-02
8	12	- .3839E-03	- .7338E-03	- .1052E-02	- .1343E-02	- .1608E-02
8	13	- .3292E-03	- .6302E-03	- .9057E-03	- .1157E-02	- .1388E-02
8	14	- .2856E-03	- .5474E-03	- .7874E-03	- .1007E-02	- .1210E-02
8	15	- .2506E-03	- .4806E-03	- .6919E-03	- .8862E-03	- .1065E-02
8	16	- .2222E-03	- .4264E-03	- .6141E-03	- .7869E-03	- .9462E-03
9	10	- .4763E-03	- .9113E-03	- .1308E-02	- .1669E-02	- .1999E-02
9	11	- .4024E-03	- .7732E-03	- .1114E-02	- .1428E-02	- .1716E-02
9	12	- .3419E-03	- .6588E-03	- .9522E-03	- .1223E-02	- .1474E-02
9	13	- .2935E-03	- .5666E-03	- .8205E-03	- .1056E-02	- .1275E-02
9	14	- .2549E-03	- .4927E-03	- .7144E-03	- .9209E-03	- .1113E-02
9	15	- .2239E-03	- .4332E-03	- .6286E-03	- .8110E-03	- .9812E-03
9	16	- .1988E-03	- .3848E-03	- .5586E-03	- .7211E-03	- .8729E-03
9	17	- .1781E-03	- .3449E-03	- .5009E-03	- .6468E-03	- .7833E-03

### Appendix A. Series x55-C

X 5.5- 4/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
10	11	-3428E-03	-6628E-03	-9611E-03	-1238E-02	-1496E-02
10	12	-2911E-03	-5645E-03	-8209E-03	-1061E-02	-1285E-02
10	13	-2497E-03	-4853E-03	-7072E-03	-9159E-03	-1111E-02
10	14	-2168E-03	-4218E-03	-6156E-03	-7983E-03	-9705E-03
10	15	-1903E-03	-3707E-03	-5415E-03	-7029E-03	-8554E-03
10	16	-1688E-03	-3291E-03	-4810E-03	-6248E-03	-7609E-03
10	17	-1512E-03	-2949E-03	-4312E-03	-5604E-03	-6827E-03
10	18	-1366E-03	-2664E-03	-3897E-03	-5065E-03	-6173E-03
11	12	-2453E-03	-4780E-03	-6983E-03	-9064E-03	-1102E-02
11	13	-2102E-03	-4105E-03	-6009E-03	-7817E-03	-9531E-03
11	14	-1822E-03	-3563E-03	-5224E-03	-6807E-03	-8312E-03
11	15	-1598E-03	-3128E-03	-4591E-03	-5987E-03	-7319E-03
11	16	-1416E-03	-2774E-03	-4074E-03	-5317E-03	-6505E-03
11	17	-1266E-03	-2482E-03	-3648E-03	-4764E-03	-5832E-03
11	18	-1142E-03	-2240E-03	-3294E-03	-4303E-03	-5269E-03
11	19	-1038E-03	-2037E-03	-2996E-03	-3915E-03	-4795E-03
12	13	-1777E-03	-3482E-03	-5114E-03	-6674E-03	-8163E-03
12	14	-1538E-03	-3018E-03	-4440E-03	-5804E-03	-7110E-03
12	15	-1346E-03	-2645E-03	-3895E-03	-5098E-03	-6253E-03
12	16	-1191E-03	-2342E-03	-3452E-03	-4522E-03	-5551E-03
12	17	-1064E-03	-2093E-03	-3088E-03	-4047E-03	-4971E-03
12	18	-9590E-04	-1887E-03	-2784E-03	-3651E-03	-4487E-03
12	19	-8706E-04	-1713E-03	-2529E-03	-3318E-03	-4079E-03
12	20	-7957E-04	-1566E-03	-2313E-03	-3034E-03	-3731E-03

## Appendix A. Series x5.5-C

X 5.5- 4/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
13	14	- .1311E-03	- .2579E-03	- .3803E-03	- .4983E-03	- .6120E-03
13	15	- .1145E-03	- .2256E-03	- .3332E-03	- .4371E-03	- .5375E-03
13	16	- .1012E-03	- .1995E-03	- .2948E-03	- .3872E-03	- .4765E-03
13	17	- .9029E-04	- .1780E-03	- .2633E-03	- .3460E-03	- .4261E-03
13	18	- .8123E-04	- .1603E-03	- .2371E-03	- .3118E-03	- .3842E-03
13	19	- .7365E-04	- .1453E-03	- .2151E-03	- .2830E-03	- .3488E-03
13	20	- .6724E-04	- .1327E-03	- .1965E-03	- .2585E-03	- .3188E-03
13	21	- .6175E-04	- .1219E-03	- .1805E-03	- .2376E-03	- .2930E-03
14	15	- .9866E-04	- .1946E-03	- .2879E-03	- .3784E-03	- .4661E-03
14	16	- .8701E-04	- .1718E-03	- .2544E-03	- .3347E-03	- .4127E-03
14	17	- .7749E-04	- .1531E-03	- .2268E-03	- .2987E-03	- .3686E-03
14	18	- .6962E-04	- .1376E-03	- .2040E-03	- .2688E-03	- .3318E-03
14	19	- .6304E-04	- .1246E-03	- .1849E-03	- .2436E-03	- .3009E-03
14	20	- .5747E-04	- .1137E-03	- .1686E-03	- .2223E-03	- .2747E-03
14	21	- .5272E-04	- .1043E-03	- .1548E-03	- .2041E-03	- .2523E-03
14	22	- .4863E-04	- .9627E-04	- .1428E-03	- .1884E-03	- .2329E-03
15	16	- .7567E-04	- .1496E-03	- .2218E-03	- .2922E-03	- .3609E-03
15	17	- .6729E-04	- .1331E-03	- .1975E-03	- .2605E-03	- .3219E-03
15	18	- .6037E-04	- .1195E-03	- .1774E-03	- .2341E-03	- .2894E-03
15	19	- .5459E-04	- .1081E-03	- .1606E-03	- .2119E-03	- .2622E-03
15	20	- .4971E-04	- .9851E-04	- .1463E-03	- .1932E-03	- .2391E-03
15	21	- .4555E-04	- .9028E-04	- .1341E-03	- .1771E-03	- .2193E-03
15	22	- .4197E-04	- .8321E-04	- .1236E-03	- .1633E-03	- .2022E-03
15	23	- .3887E-04	- .7706E-04	- .1145E-03	- .1513E-03	- .1874E-03

Appendix A. Series x5.5-C

X 5.5- 5/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
1	2	.3001E-03	.5734E-03	.8224E-03	.1049E-02	.1256E-02
1	3	.3143E-03	.5974E-03	.8526E-03	.1082E-02	.1291E-02
1	4	.2969E-03	.5621E-03	.7993E-03	.1012E-02	.1203E-02
1	5	.2369E-03	.4488E-03	.6387E-03	.8091E-03	.9625E-03
1	6	.1495E-03	.2860E-03	.4104E-03	.5238E-03	.6273E-03
1	7	.7102E-04	.1387E-03	.2028E-03	.2633E-03	.3199E-03
1	8	.2342E-04	.4769E-04	.7226E-04	.9671E-04	.1207E-03
1	9	.3753E-05	.8597E-05	.1424E-04	.2046E-04	.2705E-04
2	3	.3474E-03	.6569E-03	.9329E-03	.1179E-02	.1400E-02
2	4	.3276E-03	.6166E-03	.8722E-03	.1098E-02	.1300E-02
2	5	.2601E-03	.4895E-03	.6923E-03	.8721E-03	.1031E-02
2	6	.1622E-03	.3075E-03	.4377E-03	.5546E-03	.6595E-03
2	7	.7448E-04	.1434E-03	.2071E-03	.2658E-03	.3196E-03
2	8	.2156E-04	.4265E-04	.6300E-04	.8248E-04	.1009E-03
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	-.3753E-05	-.8597E-05	-.1424E-04	-.2046E-04	-.2705E-04
3	4	.3382E-03	.6325E-03	.8894E-03	.1114E-02	.1312E-02
3	5	.2619E-03	.4891E-03	.6869E-03	.8597E-03	.1011E-02
3	6	.1530E-03	.2872E-03	.4052E-03	.5092E-03	.6011E-03
3	7	.5670E-04	.1077E-03	.1536E-03	.1949E-03	.2320E-03
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	-.2156E-04	-.4265E-04	-.6300E-04	-.8248E-04	-.1009E-03
3	10	-.2342E-04	-.4769E-04	-.7226E-04	-.9671E-04	-.1207E-03
3	11	-.1727E-04	-.3683E-04	-.5794E-04	-.8001E-04	-.1025E-03

## Appendix A. Series x5.5-C

X 5.5- 5/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
4	5	.2206E-03	.4089E-03	.5704E-03	.7098E-03	.8306E-03
4	6	.1018E-03	.1894E-03	.2650E-03	.3305E-03	.3875E-03
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	-.5670E-04	-.1077E-03	-.1536E-03	-.1949E-03	-.2320E-03
4	9	-.7448E-04	-.1434E-03	-.2071E-03	-.2658E-03	-.3196E-03
4	10	-.7102E-04	-.1387E-03	-.2028E-03	-.2633E-03	-.3199E-03
4	11	-.5945E-04	-.1177E-03	-.1744E-03	-.2290E-03	-.2813E-03
4	12	-.4641E-04	-.9337E-04	-.1401E-03	-.1862E-03	-.2312E-03
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	-.1018E-03	-.1894E-03	-.2650E-03	-.3305E-03	-.3875E-03
5	8	-.1530E-03	-.2872E-03	-.4052E-03	-.5092E-03	-.6011E-03
5	9	-.1622E-03	-.3075E-03	-.4377E-03	-.5546E-03	-.6595E-03
5	10	-.1495E-03	-.2860E-03	-.4104E-03	-.5238E-03	-.6273E-03
5	11	-.1294E-03	-.2492E-03	-.3601E-03	-.4626E-03	-.5573E-03
5	12	-.1088E-03	-.2108E-03	-.3064E-03	-.3957E-03	-.4793E-03
5	13	-.9047E-04	-.1762E-03	-.2573E-03	-.3339E-03	-.4062E-03
6	7	-.2206E-03	-.4089E-03	-.5704E-03	-.7098E-03	-.8306E-03
6	8	-.2619E-03	-.4891E-03	-.6869E-03	-.8597E-03	-.1011E-02
6	9	-.2601E-03	-.4895E-03	-.6923E-03	-.8721E-03	-.1031E-02
6	10	-.2369E-03	-.4488E-03	-.6387E-03	-.8091E-03	-.9625E-03
6	11	-.2074E-03	-.3949E-03	-.5647E-03	-.7188E-03	-.8589E-03
6	12	-.1787E-03	-.3417E-03	-.4905E-03	-.6266E-03	-.7512E-03
6	13	-.1536E-03	-.2944E-03	-.4238E-03	-.5429E-03	-.6527E-03
6	14	-.1324E-03	-.2543E-03	-.3668E-03	-.4708E-03	-.5672E-03

**Appendix A. Series x5.5-C**

X 5.5- 5/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0,4.2	Z = 4.0,4.4	Z = 4.0,4.6	Z = 4.0,4.8	Z = 4.0,5.0
7	8	- .3382E-03	- .6325E-03	- .8894E-03	- .1114E-02	- .1312E-02
7	9	- .3276E-03	- .6166E-03	- .8722E-03	- .1098E-02	- .1300E-02
7	10	- .2969E-03	- .5621E-03	- .7993E-03	- .1012E-02	- .1203E-02
7	11	- .2612E-03	- .4966E-03	- .7092E-03	- .9014E-03	- .1075E-02
7	12	- .2274E-03	- .4337E-03	- .6212E-03	- .7920E-03	- .9479E-03
7	13	- .1978E-03	- .3782E-03	- .5430E-03	- .6939E-03	- .8322E-03
7	14	- .1729E-03	- .3311E-03	- .4762E-03	- .6094E-03	- .7320E-03
7	15	- .1522E-03	- .2917E-03	- .4199E-03	- .5379E-03	- .6469E-03
8	9	- .3474E-03	- .6569E-03	- .9329E-03	- .1179E-02	- .1400E-02
8	10	- .3143E-03	- .5974E-03	- .8526E-03	- .1082E-02	- .1291E-02
8	11	- .2771E-03	- .5288E-03	- .7576E-03	- .9658E-03	- .1155E-02
8	12	- .2422E-03	- .4637E-03	- .6662E-03	- .8517E-03	- .1021E-02
8	13	- .2119E-03	- .4065E-03	- .5852E-03	- .7497E-03	- .9012E-03
8	14	- .1863E-03	- .3578E-03	- .5160E-03	- .6620E-03	- .7969E-03
8	15	- .1648E-03	- .3170E-03	- .4576E-03	- .5877E-03	- .7082E-03
8	16	- .1469E-03	- .2828E-03	- .4085E-03	- .5251E-03	- .6332E-03
9	10	- .3001E-03	- .5734E-03	- .8224E-03	- .1049E-02	- .1256E-02
9	11	- .2648E-03	- .5080E-03	- .7313E-03	- .9364E-03	- .1124E-02
9	12	- .2319E-03	- .4462E-03	- .6441E-03	- .8271E-03	- .9962E-03
9	13	- .2032E-03	- .3919E-03	- .5670E-03	- .7295E-03	- .8805E-03
9	14	- .1790E-03	- .3458E-03	- .5010E-03	- .6456E-03	- .7803E-03
9	15	- .1588E-03	- .3070E-03	- .4453E-03	- .5745E-03	- .6951E-03
9	16	- .1418E-03	- .2745E-03	- .3985E-03	- .5144E-03	- .6229E-03
9	17	- .1276E-03	- .2471E-03	- .3589E-03	- .4636E-03	- .5618E-03

X 5.5- 5/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
10	11	-2395E-03	-4618E-03	-6679E-03	-8589E-03	-1035E-02
10	12	-2098E-03	-4057E-03	-5886E-03	-7590E-03	-9180E-03
10	13	-1840E-03	-3566E-03	-5184E-03	-6699E-03	-8119E-03
10	14	-1621E-03	-3148E-03	-4583E-03	-5933E-03	-7201E-03
10	15	-1439E-03	-2796E-03	-4076E-03	-5283E-03	-6419E-03
10	16	-1286E-03	-2501E-03	-3649E-03	-4734E-03	-5757E-03
10	17	-1158E-03	-2253E-03	-3289E-03	-4269E-03	-5195E-03
10	18	-1049E-03	-2043E-03	-2984E-03	-3874E-03	-4717E-03
11	12	-1851E-03	-3595E-03	-5235E-03	-6777E-03	-8225E-03
11	13	-1623E-03	-3159E-03	-4610E-03	-5981E-03	-7275E-03
11	14	-1430E-03	-2788E-03	-4076E-03	-5296E-03	-6452E-03
11	15	-1268E-03	-2476E-03	-3624E-03	-4715E-03	-5751E-03
11	16	-1133E-03	-2214E-03	-3244E-03	-4224E-03	-5157E-03
11	17	-1020E-03	-1994E-03	-2923E-03	-3809E-03	-4654E-03
11	18	-9242E-04	-1807E-03	-2651E-03	-3456E-03	-4225E-03
11	19	-8427E-04	-1648E-03	-2419E-03	-3155E-03	-3858E-03
12	13	-1420E-03	-2772E-03	-4059E-03	-5282E-03	-6443E-03
12	14	-1250E-03	-2445E-03	-3586E-03	-4674E-03	-5711E-03
12	15	-1108E-03	-2170E-03	-3186E-03	-4159E-03	-5088E-03
12	16	-9893E-04	-1939E-03	-2850E-03	-3724E-03	-4560E-03
12	17	-8896E-04	-1745E-03	-2567E-03	-3356E-03	-4113E-03
12	18	-8054E-04	-1580E-03	-2326E-03	-3043E-03	-3732E-03
12	19	-7338E-04	-1440E-03	-2121E-03	-2776E-03	-3406E-03
12	20	-6725E-04	-1320E-03	-1945E-03	-2547E-03	-3125E-03

## Appendix A. Series x5.5-C

### Appendix A. Series x55-C

X 5.5- 5/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
13	14	-1093E-03	-2143E-03	-3151E-03	-4117E-03	-5043E-03
13	15	-9679E-04	-1900E-03	-2797E-03	-3660E-03	-4489E-03
13	16	-8633E-04	-1696E-03	-2500E-03	-3275E-03	-4020E-03
13	17	-7755E-04	-1525E-03	-2249E-03	-2949E-03	-3623E-03
13	18	-7015E-04	-1380E-03	-2037E-03	-2672E-03	-3285E-03
13	19	-6385E-04	-1257E-03	-1856E-03	-2436E-03	-2996E-03
13	20	-5847E-04	-1151E-03	-1701E-03	-2233E-03	-2747E-03
13	21	-5383E-04	-1060E-03	-1566E-03	-2057E-03	-2532E-03
14	15	-8494E-04	-1671E-03	-2464E-03	-3231E-03	-3970E-03
14	16	-7567E-04	-1490E-03	-2200E-03	-2888E-03	-3552E-03
14	17	-6791E-04	-1338E-03	-1978E-03	-2598E-03	-3198E-03
14	18	-6136E-04	-1210E-03	-1789E-03	-2352E-03	-2897E-03
14	19	-5581E-04	-1101E-03	-1629E-03	-2142E-03	-2640E-03
14	20	-5105E-04	-1007E-03	-1491E-03	-1962E-03	-2419E-03
14	21	-4696E-04	-9272E-04	-1372E-03	-1806E-03	-2228E-03
14	22	-4340E-04	-8572E-04	-1269E-03	-1670E-03	-2061E-03
15	16	-6678E-04	-1317E-03	-1947E-03	-2560E-03	-3153E-03
15	17	-5986E-04	-1181E-03	-1749E-03	-2301E-03	-2837E-03
15	18	-5403E-04	-1067E-03	-1581E-03	-2081E-03	-2567E-03
15	19	-4909E-04	-9702E-04	-1437E-03	-1893E-03	-2337E-03
15	20	-4486E-04	-8871E-04	-1315E-03	-1733E-03	-2140E-03
15	21	-4123E-04	-8155E-04	-1209E-03	-1594E-03	-1969E-03
15	22	-3807E-04	-7533E-04	-1117E-03	-1473E-03	-1820E-03
15	23	-3532E-04	-6989E-04	-1037E-03	-1367E-03	-1690E-03

## Appendix A. Series x5.5-C

X 5.5- 6/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0, 5.2	Z = 5.0, 5.4	Z = 5.0, 5.6	Z = 5.0, 5.8	Z = 5.0, 6.0
1	2	.1886E-03	.3607E-03	.5180E-03	.6618E-03	.7934E-03
1	3	.1882E-03	.3588E-03	.5135E-03	.6540E-03	.7819E-03
1	4	.1719E-03	.3269E-03	.4669E-03	.5937E-03	.7085E-03
1	5	.1382E-03	.2631E-03	.3760E-03	.4784E-03	.5713E-03
1	6	.9440E-04	.1805E-03	.2593E-03	.3313E-03	.3972E-03
1	7	.5303E-04	.1025E-03	.1486E-03	.1915E-03	.2313E-03
1	8	.2335E-04	.4589E-04	.6752E-04	.8816E-04	.1078E-03
1	9	.6814E-05	.1372E-04	.2063E-04	.2747E-04	.3417E-04
2	3	.1978E-03	.3755E-03	.5353E-03	.6794E-03	.8094E-03
2	4	.1794E-03	.3397E-03	.4832E-03	.6119E-03	.7276E-03
2	5	.1423E-03	.2695E-03	.3833E-03	.4854E-03	.5772E-03
2	6	.9439E-04	.1794E-03	.2561E-03	.3254E-03	.3881E-03
2	7	.4942E-04	.9474E-04	.1362E-03	.1743E-03	.2091E-03
2	8	.1747E-04	.3391E-04	.4932E-04	.6373E-04	.7718E-04
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	-.6814E-05	-.1372E-04	-.2063E-04	-.2747E-04	-.3417E-04
3	4	.1742E-03	.3283E-03	.4649E-03	.5864E-03	.6948E-03
3	5	.1333E-03	.2511E-03	.3553E-03	.4480E-03	.5305E-03
3	6	.8142E-04	.1537E-03	.2181E-03	.2756E-03	.3270E-03
3	7	.3340E-04	.6350E-04	.9063E-04	.1151E-03	.1372E-03
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	-.1747E-04	-.3391E-04	-.4932E-04	-.6373E-04	-.7718E-04
3	10	-.2335E-04	-.4589E-04	-.6752E-04	-.8816E-04	-.1078E-03
3	11	-.2268E-04	-.4521E-04	-.6736E-04	-.8898E-04	-.1099E-03

## Appendix A. Series x5.5-C

X 5.5- 6/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0,5.2	Z = 5.0,5.4	Z = 5.0,5.6	Z = 5.0,5.8	Z = 5.0,6.0
4	5	.1050E-03	.1969E-03	.2774E-03	.3484E-03	.4111E-03
4	6	.4983E-04	.9354E-04	.1320E-03	.1660E-03	.1961E-03
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	-.3340E-04	-.6350E-04	-.9063E-04	-.1151E-03	-.1372E-03
4	9	-.4942E-04	-.9474E-04	-.1362E-03	-.1743E-03	-.2091E-03
4	10	-.5303E-04	-.1025E-03	-.1486E-03	-.1915E-03	-.2313E-03
4	11	-.4980E-04	-.9707E-04	-.1418E-03	-.1840E-03	-.2238E-03
4	12	-.4366E-04	-.8579E-04	-.1262E-03	-.1649E-03	-.2018E-03
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	-.4983E-04	-.9354E-04	-.1320E-03	-.1660E-03	-.1961E-03
5	8	-.8142E-04	-.1537E-03	-.2181E-03	-.2756E-03	-.3270E-03
5	9	-.9439E-04	-.1794E-03	-.2561E-03	-.3254E-03	-.3881E-03
5	10	-.9440E-04	-.1805E-03	-.2593E-03	-.3313E-03	-.3972E-03
5	11	-.8754E-04	-.1684E-03	-.2431E-03	-.3122E-03	-.3761E-03
5	12	-.7799E-04	-.1508E-03	-.2187E-03	-.2821E-03	-.3412E-03
5	13	-.6808E-04	-.1321E-03	-.1925E-03	-.2492E-03	-.3026E-03
6	7	-.1050E-03	-.1969E-03	-.2774E-03	-.3484E-03	-.4111E-03
6	8	-.1333E-03	-.2511E-03	-.3553E-03	-.4480E-03	-.5305E-03
6	9	-.1423E-03	-.2695E-03	-.3833E-03	-.4854E-03	-.5772E-03
6	10	-.1382E-03	-.2631E-03	-.3760E-03	-.4784E-03	-.5713E-03
6	11	-.1274E-03	-.2437E-03	-.3498E-03	-.4468E-03	-.5356E-03
6	12	-.1144E-03	-.2195E-03	-.3162E-03	-.4052E-03	-.4874E-03
6	13	-.1013E-03	-.1950E-03	-.2817E-03	-.3621E-03	-.4366E-03
6	14	-.8936E-04	-.1723E-03	-.2495E-03	-.3214E-03	-.3885E-03

X 5.5- 6/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0, 5.2	Z = 5.0, 5.4	Z = 5.0, 5.6	Z = 5.0, 5.8	Z = 5.0, 6.0
7	8	-1742E-03	-3283E-03	-4649E-03	-5864E-03	-6948E-03
7	9	-1794E-03	-3397E-03	-4832E-03	-6119E-03	-7276E-03
7	10	-1719E-03	-3269E-03	-4669E-03	-5937E-03	-7085E-03
7	11	-1581E-03	-3018E-03	-4327E-03	-5521E-03	-6611E-03
7	12	-1423E-03	-2726E-03	-3920E-03	-5017E-03	-6024E-03
7	13	-1270E-03	-2438E-03	-3514E-03	-4508E-03	-5425E-03
7	14	-1130E-03	-2174E-03	-3139E-03	-4034E-03	-4863E-03
7	15	-1007E-03	-1940E-03	-2805E-03	-3610E-03	-4358E-03
8	9	-1978E-03	-3755E-03	-5353E-03	-6794E-03	-8094E-03
8	10	-1882E-03	-3588E-03	-5135E-03	-6540E-03	-7819E-03
8	11	-1729E-03	-3307E-03	-4749E-03	-6069E-03	-7277E-03
8	12	-1559E-03	-2992E-03	-4309E-03	-5520E-03	-6637E-03
8	13	-1396E-03	-2684E-03	-3874E-03	-4975E-03	-5993E-03
8	14	-1248E-03	-2403E-03	-3475E-03	-4469E-03	-5393E-03
8	15	-1117E-03	-2155E-03	-3120E-03	-4018E-03	-4855E-03
8	16	-1004E-03	-1939E-03	-2811E-03	-3623E-03	-4382E-03
9	10	-1886E-03	-3607E-03	-5180E-03	-6618E-03	-7934E-03
9	11	-1731E-03	-3323E-03	-4787E-03	-6135E-03	-7376E-03
9	12	-1563E-03	-3008E-03	-4346E-03	-5583E-03	-6730E-03
9	13	-1401E-03	-2703E-03	-3914E-03	-5039E-03	-6086E-03
9	14	-1255E-03	-2426E-03	-3517E-03	-4536E-03	-5488E-03
9	15	-1127E-03	-2180E-03	-3166E-03	-4088E-03	-4951E-03
9	16	-1015E-03	-1967E-03	-2859E-03	-3695E-03	-4479E-03
9	17	-9197E-04	-1782E-03	-2592E-03	-3353E-03	-4067E-03

### Appendix A. Series x55-C

**Appendix A. Series x5.5-C**

X 5.5- 6/PAGE 4OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
10	11	-•1640E-03	-•3159E-03	-•4567E-03	-•5872E-03	-•7081E-03
10	12	-•1481E-03	-•2861E-03	-•4147E-03	-•5346E-03	-•6463E-03
10	13	-•1329E-03	-•2573E-03	-•3738E-03	-•4828E-03	-•5848E-03
10	14	-•1191E-03	-•2311E-03	-•3362E-03	-•4350E-03	-•5278E-03
10	15	-•1070E-03	-•2079E-03	-•3029E-03	-•3924E-03	-•4768E-03
10	16	-•9660E-04	-•1877E-03	-•2738E-03	-•3551E-03	-•4318E-03
10	17	-•8756E-04	-•1703E-03	-•2486E-03	-•3226E-03	-•3925E-03
10	18	-•7975E-04	-•1552E-03	-•2266E-03	-•2943E-03	-•3584E-03
11	12	-•1359E-03	-•2635E-03	-•3832E-03	-•4954E-03	-•6006E-03
11	13	-•1220E-03	-•2370E-03	-•3454E-03	-•4475E-03	-•5437E-03
11	14	-•1094E-03	-•2129E-03	-•3108E-03	-•4034E-03	-•4908E-03
11	15	-•9834E-04	-•1916E-03	-•2801E-03	-•3640E-03	-•4435E-03
11	16	-•8874E-04	-•1731E-03	-•2533E-03	-•3295E-03	-•4018E-03
11	17	-•8045E-04	-•1570E-03	-•2300E-03	-•2994E-03	-•3654E-03
11	18	-•7329E-04	-•1431E-03	-•2098E-03	-•2732E-03	-•3337E-03
11	19	-•6710E-04	-•1311E-03	-•1922E-03	-•2505E-03	-•3061E-03
12	13	-•1101E-03	-•2146E-03	-•3137E-03	-•4075E-03	-•4963E-03
12	14	-•9879E-04	-•1928E-03	-•2822E-03	-•3672E-03	-•4481E-03
12	15	-•8877E-04	-•1735E-03	-•2543E-03	-•3314E-03	-•4048E-03
12	16	-•8008E-04	-•1567E-03	-•2299E-03	-•2999E-03	-•3668E-03
12	17	-•7259E-04	-•1421E-03	-•2087E-03	-•2725E-03	-•3335E-03
12	18	-•6611E-04	-•1295E-03	-•1903E-03	-•2487E-03	-•3046E-03
12	19	-•6051E-04	-•1186E-03	-•1744E-03	-•2280E-03	-•2793E-03
12	20	-•5565E-04	-•1091E-03	-•1605E-03	-•2099E-03	-•2573E-03

## Appendix A. Series x5.5-C

X 5.5- 6/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0, 5.2	Z = 5.0, 5.4	Z = 5.0, 5.6	Z = 5.0, 5.8	Z = 5.0, 6.0
13	14	- .8858E-04	- .1733E-03	- .2542E-03	- .3316E-03	- .4054E-03
13	15	- .7956E-04	- .1558E-03	- .2290E-03	- .2991E-03	- .3662E-03
13	16	- .7174E-04	- .1407E-03	- .2069E-03	- .2706E-03	- .3317E-03
13	17	- .6499E-04	- .1275E-03	- .1878E-03	- .2458E-03	- .3015E-03
13	18	- .5917E-04	- .1162E-03	- .1712E-03	- .2242E-03	- .2752E-03
13	19	- .5413E-04	- .1064E-03	- .1568E-03	- .2054E-03	- .2523E-03
13	20	- .4975E-04	- .9784E-04	- .1442E-03	- .1891E-03	- .2323E-03
13	21	- .4594E-04	- .9037E-04	- .1333E-03	- .1747E-03	- .2148E-03
14	15	- .7122E-04	- .1398E-03	- .2058E-03	- .2693E-03	- .3303E-03
14	16	- .6418E-04	- .1261E-03	- .1859E-03	- .2435E-03	- .2990E-03
14	17	- .5810E-04	- .1143E-03	- .1686E-03	- .2210E-03	- .2716E-03
14	18	- .5286E-04	- .1040E-03	- .1536E-03	- .2015E-03	- .2478E-03
14	19	- .4833E-04	- .9520E-04	- .1406E-03	- .1845E-03	- .2271E-03
14	20	- .4440E-04	- .8749E-04	- .1292E-03	- .1698E-03	- .2090E-03
14	21	- .4097E-04	- .8076E-04	- .1193E-03	- .1568E-03	- .1932E-03
14	22	- .3797E-04	- .7486E-04	- .1107E-03	- .1454E-03	- .1792E-03
15	16	- .5753E-04	- .1132E-03	- .1671E-03	- .2192E-03	- .2696E-03
15	17	- .5205E-04	- .1025E-03	- .1515E-03	- .1989E-03	- .2448E-03
15	18	- .4732E-04	- .9330E-04	- .1379E-03	- .1812E-03	- .2233E-03
15	19	- .4323E-04	- .8529E-04	- .1261E-03	- .1659E-03	- .2045E-03
15	20	- .3969E-04	- .7834E-04	- .1159E-03	- .1525E-03	- .1881E-03
15	21	- .3660E-04	- .7227E-04	- .1070E-03	- .1408E-03	- .1737E-03
15	22	- .3389E-04	- .6695E-04	- .9916E-04	- .1305E-03	- .1611E-03
15	23	- .3151E-04	- .6226E-04	- .9225E-04	- .1214E-03	- .1499E-03

## Appendix A. Series x5.5-C

X 5.5- 7/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
1	2	.1205E-03	.2310E-03	.3324E-03	.4256E-03	.5113E-03
1	3	.1164E-03	.2226E-03	.3197E-03	.4084E-03	.4897E-03
1	4	.1043E-03	.1991E-03	.2856E-03	.3645E-03	.4366E-03
1	5	.8447E-04	.1614E-03	.2315E-03	.2957E-03	.3543E-03
1	6	.6034E-04	.1156E-03	.1664E-03	.2131E-03	.2560E-03
1	7	.3702E-04	.7141E-04	.1033E-03	.1329E-03	.1604E-03
1	8	.1861E-04	.3621E-04	.5282E-04	.6847E-04	.8321E-04
1	9	.6527E-05	.1284E-04	.1894E-04	.2479E-04	.3039E-04
2	3	.1176E-03	.2241E-03	.3209E-03	.4088E-03	.4889E-03
2	4	.1042E-03	.1983E-03	.2834E-03	.3606E-03	.4307E-03
2	5	.8274E-04	.1574E-03	.2250E-03	.2863E-03	.3420E-03
2	6	.5682E-04	.1084E-03	.1553E-03	.1980E-03	.2369E-03
2	7	.3197E-04	.6130E-04	.8821E-04	.1129E-03	.1356E-03
2	8	.1253E-04	.2420E-04	.3506E-04	.4516E-04	.5455E-04
2	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
2	10	-.6527E-05	-.1284E-04	-.1894E-04	-.2479E-04	-.3039E-04
3	4	.9688E-04	.1837E-03	.2617E-03	.3320E-03	.3955E-03
3	5	.7368E-04	.1396E-03	.1989E-03	.2522E-03	.3004E-03
3	6	.4612E-04	.8759E-04	.1249E-03	.1586E-03	.1892E-03
3	7	.2004E-04	.3821E-04	.5471E-04	.6971E-04	.8338E-04
3	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	9	-.1253E-04	-.2420E-04	-.3506E-04	-.4516E-04	-.5455E-04
3	10	-.1861E-04	-.3621E-04	-.5282E-04	-.6847E-04	-.8321E-04
3	11	-.2023E-04	-.3967E-04	-.5829E-04	-.7608E-04	-.9304E-04

X 5.5- 7/PAGE 20F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.51S DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
4	5	.5562E-04	.1051E-03	.1492E-03	.1887E-03	.2242E-03
4	6	.2678E-04	.5065E-04	.7201E-04	.9116E-04	.1083E-03
4	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	8	-.2004E-04	-.3821E-04	-.5471E-04	-.6971E-04	-.8338E-04
4	9	-.3197E-04	-.6130E-04	-.8821E-04	-.1129E-03	-.1356E-03
4	10	-.3702E-04	-.7141E-04	-.1033E-03	-.1329E-03	-.1604E-03
4	11	-.3742E-04	-.7258E-04	-.1055E-03	-.1365E-03	-.1655E-03
4	12	-.3516E-04	-.6857E-04	-.1002E-03	-.1302E-03	-.1587E-03
5	6	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	7	-.2678E-04	-.5065E-04	-.7201E-04	-.9116E-04	-.1083E-03
5	8	-.4612E-04	-.8759E-04	-.1249E-03	-.1586E-03	-.1892E-03
5	9	-.5682E-04	-.1084E-03	-.1553E-03	-.1980E-03	-.2369E-03
5	10	-.6034E-04	-.1156E-03	-.1664E-03	-.2131E-03	-.2560E-03
5	11	-.5908E-04	-.1137E-03	-.1644E-03	-.2113E-03	-.2548E-03
5	12	-.5519E-04	-.1067E-03	-.1548E-03	-.1997E-03	-.2416E-03
5	13	-.5016E-04	-.9733E-04	-.1416E-03	-.1833E-03	-.2225E-03
6	7	-.5562E-04	-.1051E-03	-.1492E-03	-.1887E-03	-.2242E-03
6	8	-.7368E-04	-.1396E-03	-.1989E-03	-.2522E-03	-.3004E-03
6	9	-.8274E-04	-.1574E-03	-.2250E-03	-.2863E-03	-.3420E-03
6	10	-.8447E-04	-.1614E-03	-.2315E-03	-.2957E-03	-.3543E-03
6	11	-.8143E-04	-.1561E-03	-.2248E-03	-.2881E-03	-.3463E-03
6	12	-.7584E-04	-.1459E-03	-.2108E-03	-.2708E-03	-.3265E-03
6	13	-.6924E-04	-.1336E-03	-.1935E-03	-.2493E-03	-.3013E-03
6	14	-.6255E-04	-.1209E-03	-.1756E-03	-.2267E-03	-.2746E-03

## Appendix A. Series x5.5-C

X 5.5- 7/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0,6.2	Z = 6.0,6.4	Z = 6.0,6.6	Z = 6.0,6.8	Z = 6.0,7.0
7	8	- .9688E-04	- .1837E-03	- .2617E-03	- .3320E-03	- .3955E-03
7	9	- .1042E-03	- .1983E-03	- .2834E-03	- .3606E-03	- .4307E-03
7	10	- .1043E-03	- .1991E-03	- .2856E-03	- .3645E-03	- .4366E-03
7	11	- .9971E-04	- .1910E-03	- .2748E-03	- .3517E-03	- .4225E-03
7	12	- .9272E-04	- .1781E-03	- .2570E-03	- .3298E-03	- .3972E-03
7	13	- .8487E-04	- .1634E-03	- .2363E-03	- .3040E-03	- .3669E-03
7	14	- .7706E-04	- .1487E-03	- .2154E-03	- .2776E-03	- .3356E-03
7	15	- .6974E-04	- .1348E-03	- .1955E-03	- .2524E-03	- .3056E-03
8	9	- .1176E-03	- .2241E-03	- .3209E-03	- .4088E-03	- .4889E-03
8	10	- .1164E-03	- .2226E-03	- .3197E-03	- .4084E-03	- .4897E-03
8	11	- .1108E-03	- .2125E-03	- .3060E-03	- .3920E-03	- .4713E-03
8	12	- .1029E-03	- .1980E-03	- .2858E-03	- .3670E-03	- .4423E-03
8	13	- .9437E-04	- .1818E-03	- .2631E-03	- .3386E-03	- .4088E-03
8	14	- .8592E-04	- .1659E-03	- .2404E-03	- .3099E-03	- .3748E-03
8	15	- .7805E-04	- .1509E-03	- .2190E-03	- .2827E-03	- .3423E-03
8	16	- .7092E-04	- .1372E-03	- .1994E-03	- .2577E-03	- .3125E-03
9	10	- .1205E-03	- .2310E-03	- .3324E-03	- .4256E-03	- .5113E-03
9	11	- .1144E-03	- .2199E-03	- .3173E-03	- .4073E-03	- .4905E-03
9	12	- .1062E-03	- .2047E-03	- .2961E-03	- .3810E-03	- .4599E-03
9	13	- .9746E-04	- .1882E-03	- .2728E-03	- .3517E-03	- .4253E-03
9	14	- .8887E-04	- .1719E-03	- .2496E-03	- .3223E-03	- .3904E-03
9	15	- .8088E-04	- .1567E-03	- .2278E-03	- .2945E-03	- .3572E-03
9	16	- .7366E-04	- .1428E-03	- .2079E-03	- .2691E-03	- .3267E-03
9	17	- .6723E-04	- .1305E-03	- .1901E-03	- .2462E-03	- .2992E-03

### Appendix A. Series x5.5-C

## Appendix A. Series x5.5-C

X 5.5- 7/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0,6.2	Z = 6.0,6.4	Z = 6.0,6.6	Z = 6.0,6.8	Z = 6.0,7.0
10	11	- .1121E-03	- .2161E-03	- .3127E-03	- .4024E-03	- .4857E-03
10	12	- .1041E-03	- .2012E-03	- .2917E-03	- .3762E-03	- .4551E-03
10	13	- .9555E-04	- .1850E-03	- .2688E-03	- .3473E-03	- .4209E-03
10	14	- .8720E-04	- .1691E-03	- .2461E-03	- .3186E-03	- .3867E-03
10	15	- .7945E-04	- .1543E-03	- .2249E-03	- .2914E-03	- .3542E-03
10	16	- .7244E-04	- .1408E-03	- .2055E-03	- .2666E-03	- .3243E-03
10	17	- .6620E-04	- .1288E-03	- .1881E-03	- .2442E-03	- .2974E-03
10	18	- .6067E-04	- .1181E-03	- .1726E-03	- .2243E-03	- .2733E-03
11	12	- .9867E-04	- .1911E-03	- .2779E-03	- .3592E-03	- .4355E-03
11	13	- .9056E-04	- .1758E-03	- .2561E-03	- .3317E-03	- .4029E-03
11	14	- .8267E-04	- .1608E-03	- .2346E-03	- .3043E-03	- .3702E-03
11	15	- .7536E-04	- .1467E-03	- .2144E-03	- .2785E-03	- .3393E-03
11	16	- .6875E-04	- .1340E-03	- .1960E-03	- .2549E-03	- .3108E-03
11	17	- .6286E-04	- .1226E-03	- .1795E-03	- .2337E-03	- .2852E-03
11	18	- .5764E-04	- .1125E-03	- .1649E-03	- .2147E-03	- .2622E-03
11	19	- .5304E-04	- .1036E-03	- .1519E-03	- .1979E-03	- .2418E-03
12	13	- .8408E-04	- .1636E-03	- .2389E-03	- .3101E-03	- .3774E-03
12	14	- .7676E-04	- .1496E-03	- .2188E-03	- .2845E-03	- .3469E-03
12	15	- .6998E-04	- .1366E-03	- .2000E-03	- .2604E-03	- .3179E-03
12	16	- .6384E-04	- .1247E-03	- .1829E-03	- .2384E-03	- .2914E-03
12	17	- .5838E-04	- .1142E-03	- .1676E-03	- .2186E-03	- .2674E-03
12	18	- .5354E-04	- .1048E-03	- .1539E-03	- .2009E-03	- .2459E-03
12	19	- .4927E-04	- .9653E-04	- .1418E-03	- .1852E-03	- .2268E-03
12	20	- .4551E-04	- .8919E-04	- .1311E-03	- .1713E-03	- .2099E-03

## Appendix A. Series x5.5-C

X 5.5- 7/PAGE 5OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 5.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0,6.2	Z = 6.0,6.4	Z = 6.0,6.6	Z = 6.0,6.8	Z = 6.0,7.0
13	14	- .7045E-04	- .1376E-03	- .2017E-03	- .2627E-03	- .3209E-03
13	15	- .6421E-04	- .1256E-03	- .1843E-03	- .2405E-03	- .2941E-03
13	16	- .5858E-04	- .1147E-03	- .1685E-03	- .2201E-03	- .2695E-03
13	17	- .5356E-04	- .1050E-03	- .1544E-03	- .2018E-03	- .2473E-03
13	18	- .4911E-04	- .9637E-04	- .1418E-03	- .1855E-03	- .2275E-03
13	19	- .4519E-04	- .8872E-04	- .1306E-03	- .1710E-03	- .2098E-03
13	20	- .4173E-04	- .8197E-04	- .1207E-03	- .1581E-03	- .1941E-03
13	21	- .3867E-04	- .7598E-04	- .1119E-03	- .1467E-03	- .1801E-03
14	15	- .5859E-04	- .1148E-03	- .1688E-03	- .2206E-03	- .2703E-03
14	16	- .5344E-04	- .1048E-03	- .1543E-03	- .2019E-03	- .2476E-03
14	17	- .4884E-04	- .9594E-04	- .1413E-03	- .1850E-03	- .2272E-03
14	18	- .4477E-04	- .8802E-04	- .1297E-03	- .1700E-03	- .2089E-03
14	19	- .4118E-04	- .8101E-04	- .1195E-03	- .1567E-03	- .1926E-03
14	20	- .3801E-04	- .7482E-04	- .1104E-03	- .1448E-03	- .1781E-03
14	21	- .3521E-04	- .6934E-04	- .1023E-03	- .1343E-03	- .1653E-03
14	22	- .3273E-04	- .6447E-04	- .9524E-04	- .1250E-03	- .1539E-03
15	16	- .4866E-04	- .9564E-04	- .1409E-03	- .1846E-03	- .2268E-03
15	17	- .4445E-04	- .8746E-04	- .1290E-03	- .1692E-03	- .2080E-03
15	18	- .4073E-04	- .8020E-04	- .1184E-03	- .1554E-03	- .1912E-03
15	19	- .3745E-04	- .7379E-04	- .1090E-03	- .1431E-03	- .1762E-03
15	20	- .3456E-04	- .6812E-04	- .1007E-03	- .1323E-03	- .1629E-03
15	21	- .3200E-04	- .6310E-04	- .9333E-04	- .1226E-03	- .1511E-03
15	22	- .2973E-04	- .5866E-04	- .8678E-04	- .1141E-03	- .1406E-03
15	23	- .2772E-04	- .5470E-04	- .8095E-04	- .1064E-03	- .1313E-03

**Appendix B. Series x6.5-C**

## Appendix B. Series x6.5-C

X 6.5- 1/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
1	2	.6337E-03	.1263E-02	.1886E-02	.2497E-02	.3094E-02
1	3	.8811E-03	.1754E-02	.2614E-02	.3453E-02	.4265E-02
1	4	.1337E-02	.2657E-02	.3941E-02	.5175E-02	.6348E-02
1	5	.2366E-02	.4656E-02	.6809E-02	.8783E-02	.1056E-01
1	6	.6597E-02	.1185E-01	.1566E-01	.1842E-01	.2051E-01
1	7	-.4183E-02	-.7170E-02	-.8915E-02	-.9833E-02	-.1026E-01
1	8	-.9971E-03	-.1938E-02	-.2780E-02	-.3498E-02	-.4083E-02
1	9	-.3849E-03	-.7598E-03	-.1115E-02	-.1443E-02	-.1740E-02
2	3	.1139E-02	.2267E-02	.3375E-02	.4453E-02	.5494E-02
2	4	.1717E-02	.3409E-02	.5054E-02	.6631E-02	.8126E-02
2	5	.3016E-02	.5934E-02	.8676E-02	.1118E-01	.1344E-01
2	6	.8316E-02	.1497E-01	.1982E-01	.2337E-01	.2606E-01
2	7	-.4821E-02	-.8199E-02	-.1009E-01	-.1100E-01	-.1135E-01
2	8	-.1056E-02	-.2047E-02	-.2924E-02	-.3656E-02	-.4239E-02
2	9	-.3601E-03	-.7095E-03	-.1038E-02	-.1338E-02	-.1605E-02
2	10	-.1099E-03	-.2176E-03	-.3211E-03	-.4185E-03	-.5086E-03
3	4	.2337E-02	.4637E-02	.6864E-02	.8989E-02	.1098E-01
3	5	.4078E-02	.8021E-02	.1171E-01	.1508E-01	.1810E-01
3	6	.1113E-01	.2009E-01	.2666E-01	.3149E-01	.3515E-01
3	7	-.5660E-02	-.9507E-02	-.1150E-01	-.1232E-01	-.1247E-01
3	8	-.1067E-02	-.2060E-02	-.2919E-02	-.3615E-02	-.4143E-02
3	9	-.2699E-03	-.5300E-03	-.7715E-03	-.9879E-03	-.1174E-02
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	.1099E-03	.2176E-03	.3211E-03	.4185E-03	.5086E-03

## Appendix B. Series x6.5-C

X 6.5- 1/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
4	5	.6047E-02	.1187E-01	.1728E-01	.2217E-01	.2648E-01
4	6	.1647E-01	.2976E-01	.3952E-01	.4667E-01	.5204E-01
4	7	-.6764E-02	-.1110E-01	-.1303E-01	-.1349E-01	-.1320E-01
4	8	-.9075E-03	-.1733E-02	-.2419E-02	-.2938E-02	-.3292E-02
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	.2699E-03	.5300E-03	.7715E-03	.9879E-03	.1174E-02
4	11	.3601E-03	.7095E-03	.1038E-02	.1338E-02	.1605E-02
4	12	.3849E-03	.7598E-03	.1115E-02	.1443E-02	.1740E-02
5	6	.2954E-01	.5316E-01	.7012E-01	.8208E-01	.9061E-01
5	7	-.7889E-02	-.1225E-01	-.1339E-01	-.1284E-01	-.1166E-01
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	.9075E-03	.1733E-02	.2419E-02	.2938E-02	.3292E-02
5	10	.1067E-02	.2060E-02	.2919E-02	.3615E-02	.4143E-02
5	11	.1056E-02	.2047E-02	.2924E-02	.3656E-02	.4239E-02
5	12	.9971E-03	.1938E-02	.2780E-02	.3498E-02	.4083E-02
5	13	.9277E-03	.1807E-02	.2599E-02	.3282E-02	.3849E-02
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	.7889E-02	.1225E-01	.1339E-01	.1284E-01	.1166E-01
6	9	.6764E-02	.1110E-01	.1303E-01	.1349E-01	.1320E-01
6	10	.5660E-02	.9507E-02	.1150E-01	.1232E-01	.1247E-01
6	11	.4821E-02	.8199E-02	.1009E-01	.1100E-01	.1135E-01
6	12	.4183E-02	.7170E-02	.8915E-02	.9833E-02	.1026E-01
6	13	.3688E-02	.6353E-02	.7955E-02	.8841E-02	.9299E-02
6	14	.3294E-02	.5696E-02	.7166E-02	.8008E-02	.8470E-02

**Appendix B. Series x6.5-C**

X 6.5- 1/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
7	8	-.2954E-01	-.5316E-01	-.7012E-01	-.8208E-01	-.9061E-01
7	9	-.1647E-01	-.2976E-01	-.3952E-01	-.4667E-01	-.5204E-01
7	10	-.1113E-01	-.2009E-01	-.2666E-01	-.3149E-01	-.3515E-01
7	11	-.8316E-02	-.1497E-01	-.1982E-01	-.2337E-01	-.2606E-01
7	12	-.6597E-02	-.1185E-01	-.1566E-01	-.1842E-01	-.2051E-01
7	13	-.5450E-02	-.9775E-02	-.1288E-01	-.1513E-01	-.1682E-01
7	14	-.4634E-02	-.8301E-02	-.1092E-01	-.1281E-01	-.1421E-01
7	15	-.4027E-02	-.7204E-02	-.9469E-02	-.1108E-01	-.1228E-01
8	9	-.6047E-02	-.1187E-01	-.1728E-01	-.2217E-01	-.2648E-01
8	10	-.4078E-02	-.8021E-02	-.1171E-01	-.1508E-01	-.1810E-01
8	11	-.3016E-02	-.5934E-02	-.8676E-02	-.1118E-01	-.1344E-01
8	12	-.2366E-02	-.4656E-02	-.6809E-02	-.8783E-02	-.1056E-01
8	13	-.1934E-02	-.3806E-02	-.5566E-02	-.7179E-02	-.8633E-02
8	14	-.1629E-02	-.3206E-02	-.4688E-02	-.6045E-02	-.7268E-02
8	15	-.1404E-02	-.2763E-02	-.4038E-02	-.5207E-02	-.6258E-02
8	16	-.1232E-02	-.2423E-02	-.3541E-02	-.4565E-02	-.5485E-02
9	10	-.2337E-02	-.4637E-02	-.6864E-02	-.8989E-02	-.1098E-01
9	11	-.1717E-02	-.3409E-02	-.5054E-02	-.6631E-02	-.8126E-02
9	12	-.1337E-02	-.2657E-02	-.3941E-02	-.5175E-02	-.6348E-02
9	13	-.1086E-02	-.2158E-02	-.3201E-02	-.4205E-02	-.5161E-02
9	14	-.9095E-03	-.1806E-02	-.2681E-02	-.3522E-02	-.4323E-02
9	15	-.7795E-03	-.1548E-02	-.2298E-02	-.3019E-02	-.3706E-02
9	16	-.6804E-03	-.1351E-02	-.2005E-02	-.2635E-02	-.3235E-02
9	17	-.6027E-03	-.1197E-02	-.1776E-02	-.2334E-02	-.2865E-02

X 6.5- 1/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
10	11	-1139E-02	-2267E-02	-3375E-02	-4453E-02	-5494E-02
10	12	-8811E-03	-1754E-02	-2614E-02	-3453E-02	-4265E-02
10	13	-7109E-03	-1416E-02	-2110E-02	-2789E-02	-3447E-02
10	14	-5918E-03	-1179E-02	-1757E-02	-2323E-02	-2873E-02
10	15	-5046E-03	-1005E-02	-1499E-02	-1982E-02	-2451E-02
10	16	-4385E-03	-8739E-03	-1302E-02	-1722E-02	-2130E-02
10	17	-3869E-03	-7710E-03	-1149E-02	-1520E-02	-1880E-02
10	18	-3456E-03	-6888E-03	-1027E-02	-1358E-02	-1679E-02
11	12	-6337E-03	-1263E-02	-1886E-02	-2497E-02	-3094E-02
11	13	-5082E-03	-1013E-02	-1513E-02	-2005E-02	-2487E-02
11	14	-4208E-03	-8394E-03	-1253E-02	-1662E-02	-2062E-02
11	15	-3571E-03	-7125E-03	-1064E-02	-1411E-02	-1751E-02
11	16	-3090E-03	-6166E-03	-9213E-03	-1221E-02	-1516E-02
11	17	-2716E-03	-5420E-03	-8099E-03	-1074E-02	-1333E-02
11	18	-2419E-03	-4826E-03	-7212E-03	-9564E-03	-1187E-02
11	19	-2177E-03	-4343E-03	-6490E-03	-8607E-03	-1068E-02
12	13	-3859E-03	-7702E-03	-1151E-02	-1527E-02	-1897E-02
12	14	-3180E-03	-6347E-03	-9491E-03	-1259E-02	-1565E-02
12	15	-2687E-03	-5364E-03	-8022E-03	-1065E-02	-1324E-02
12	16	-2316E-03	-4624E-03	-6917E-03	-9185E-03	-1142E-02
12	17	-2029E-03	-4051E-03	-6060E-03	-8048E-03	-1001E-02
12	18	-1801E-03	-3596E-03	-5379E-03	-7145E-03	-8888E-03
12	19	-1616E-03	-3227E-03	-4828E-03	-6413E-03	-7977E-03
12	20	-1464E-03	-2923E-03	-4373E-03	-5809E-03	-7226E-03

## Appendix B. Series x6.5-C

## Appendix B. Series x6.5-C

X 6.5- 1/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
13	14	-•2512E-03	-•5016E-03	-•7505E-03	-•9970E-03	-•1240E-02
13	15	-•2114E-03	-•4222E-03	-•6319E-03	-•8397E-03	-•1045E-02
13	16	-•1816E-03	-•3627E-03	-•5429E-03	-•7216E-03	-•8984E-03
13	17	-•1586E-03	-•3167E-03	-•4741E-03	-•6303E-03	-•7848E-03
13	18	-•1403E-03	-•2804E-03	-•4197E-03	-•5579E-03	-•6948E-03
13	19	-•1256E-03	-•2509E-03	-•3757E-03	-•4995E-03	-•6221E-03
13	20	-•1135E-03	-•2268E-03	-•3395E-03	-•4514E-03	-•5622E-03
13	21	-•1034E-03	-•2066E-03	-•3093E-03	-•4112E-03	-•5122E-03
14	15	-•1721E-03	-•3438E-03	-•5147E-03	-•6844E-03	-•8524E-03
14	16	-•1473E-03	-•2944E-03	-•4408E-03	-•5862E-03	-•7304E-03
14	17	-•1283E-03	-•2563E-03	-•3839E-03	-•5106E-03	-•6362E-03
14	18	-•1132E-03	-•2263E-03	-•3389E-03	-•4508E-03	-•5618E-03
14	19	-•1011E-03	-•2021E-03	-•3026E-03	-•4026E-03	-•5018E-03
14	20	-•9121E-04	-•1822E-03	-•2729E-03	-•3631E-03	-•4526E-03
14	21	-•8292E-04	-•1657E-03	-•2481E-03	-•3301E-03	-•4115E-03
14	22	-•7593E-04	-•1517E-03	-•2272E-03	-•3023E-03	-•3769E-03
15	16	-•1228E-03	-•2454E-03	-•3675E-03	-•4890E-03	-•6095E-03
15	17	-•1066E-03	-•2131E-03	-•3192E-03	-•4248E-03	-•5295E-03
15	18	-•9394E-04	-•1877E-03	-•2811E-03	-•3741E-03	-•4665E-03
15	19	-•8370E-04	-•1672E-03	-•2505E-03	-•3334E-03	-•4158E-03
15	20	-•7532E-04	-•1505E-03	-•2254E-03	-•3001E-03	-•3742E-03
15	21	-•6835E-04	-•1366E-03	-•2046E-03	-•2723E-03	-•3397E-03
15	22	-•6248E-04	-•1248E-03	-•1870E-03	-•2490E-03	-•3105E-03
15	23	-•5748E-04	-•1148E-03	-•1721E-03	-•2290E-03	-•2857E-03

## Appendix B. Series x6.5-C

X 6.5- 2/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
1	2	.5799E-03	.1140E-02	.1679E-02	.2194E-02	.2686E-02
1	3	.7809E-03	.1526E-02	.2235E-02	.2903E-02	.3532E-02
1	4	.1103E-02	.2132E-02	.3085E-02	.3963E-02	.4767E-02
1	5	.1582E-02	.2980E-02	.4209E-02	.5289E-02	.6237E-02
1	6	.1628E-02	.2940E-02	.4023E-02	.4934E-02	.5711E-02
1	7	-.1450E-03	-.1255E-03	-.1071E-04	.1580E-03	.3554E-03
1	8	-.4595E-03	-.8071E-03	-.1059E-02	-.1235E-02	-.1348E-02
1	9	-.2612E-03	-.4863E-03	-.6760E-03	-.8322E-03	-.9581E-03
2	3	.9957E-03	.1941E-02	.2834E-02	.3672E-02	.4454E-02
2	4	.1400E-02	.2701E-02	.3900E-02	.4996E-02	.5995E-02
2	5	.2006E-02	.3773E-02	.5321E-02	.6674E-02	.7856E-02
2	6	.2104E-02	.3800E-02	.5197E-02	.6367E-02	.7359E-02
2	7	-.2796E-04	.1203E-03	.3632E-03	.6530E-03	.9612E-03
2	8	-.4411E-03	-.7585E-03	-.9733E-03	-.1106E-02	-.1175E-02
2	9	-.2305E-03	-.4243E-03	-.5825E-03	-.7080E-03	-.8041E-03
2	10	-.8156E-04	-.1540E-03	-.2172E-03	-.2713E-03	-.3166E-03
3	4	.1859E-02	.3570E-02	.5129E-02	.6541E-02	.7811E-02
3	5	.2663E-02	.4991E-02	.7011E-02	.8759E-02	.1026E-01
3	6	.2860E-02	.5151E-02	.7022E-02	.8572E-02	.9869E-02
3	7	.2000E-03	.5754E-03	.1028E-02	.1505E-02	.1975E-02
3	8	-.3731E-03	-.6156E-03	-.7538E-03	-.8127E-03	-.8137E-03
3	9	-.1557E-03	-.2808E-03	-.3771E-03	-.4479E-03	-.4968E-03
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	.8156E-04	.1540E-03	.2172E-03	.2713E-03	.3166E-03

## Appendix B. Series x6.5-C

X 6.5- 2/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
4	5	.3737E-02	.6937E-02	.9656E-02	.1195E-01	.1389E-01
4	6	.4128E-02	.7368E-02	.9950E-02	.1203E-01	.1372E-01
4	7	.6373E-03	.1399E-02	.2174E-02	.2908E-02	.3579E-02
4	8	-.2115E-03	-.3110E-03	-.3285E-03	-.2903E-03	-.2169E-03
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	.1557E-03	.2808E-03	.3771E-03	.4479E-03	.4968E-03
4	11	.2305E-03	.4243E-03	.5825E-03	.7080E-03	.8041E-03
4	12	.2612E-03	.4863E-03	.6760E-03	.8322E-03	.9581E-03
5	6	.6190E-02	.1076E-01	.1419E-01	.1680E-01	.1881E-01
5	7	.1302E-02	.2514E-02	.3565E-02	.4448E-02	.5180E-02
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	.2115E-03	.3110E-03	.3285E-03	.2903E-03	.2169E-03
5	10	.3731E-03	.6156E-03	.7538E-03	.8127E-03	.8137E-03
5	11	.4411E-03	.7585E-03	.9733E-03	.1106E-02	.1175E-02
5	12	.4595E-03	.8071E-03	.1059E-02	.1235E-02	.1348E-02
5	13	.4546E-03	.8087E-03	.1076E-02	.1273E-02	.1411E-02
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	-.1302E-02	-.2514E-02	-.3565E-02	-.4448E-02	-.5180E-02
6	9	-.6373E-03	-.1399E-02	-.2174E-02	-.2908E-02	-.3579E-02
6	10	-.2000E-03	-.5754E-03	-.1028E-02	-.1505E-02	-.1975E-02
6	11	.2796E-04	-.1203E-03	-.3632E-03	-.6530E-03	-.9612E-03
6	12	.1450E-03	.1255E-03	.1071E-04	.1580E-03	.3554E-03
6	13	.2050E-03	.2592E-03	.2226E-03	.1312E-03	.7609E-05
6	14	.2347E-03	.3316E-03	.3434E-03	.3022E-03	.2281E-03

### Appendix B. Series x6.5-C

X 6.5- 2/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
7	8	-6190E-02	-1076E-01	-1419E-01	-1680E-01	-1881E-01
7	9	-4128E-02	-7368E-02	-9950E-02	-1203E-01	-1372E-01
7	10	-2860E-02	-5151E-02	-7022E-02	-8572E-02	-9869E-02
7	11	-2104E-02	-3800E-02	-5197E-02	-6367E-02	-7359E-02
7	12	-1628E-02	-2940E-02	-4023E-02	-4934E-02	-5711E-02
7	13	-1310E-02	-2363E-02	-3232E-02	-3963E-02	-4587E-02
7	14	-1087E-02	-1957E-02	-2674E-02	-3275E-02	-3790E-02
7	15	-9237E-03	-1660E-02	-2264E-02	-2771E-02	-3204E-02
8	9	-3737E-02	-6937E-02	-9656E-02	-1195E-01	-1389E-01
8	10	-2663E-02	-4991E-02	-7011E-02	-8759E-02	-1026E-01
8	11	-2006E-02	-3773E-02	-5321E-02	-6674E-02	-7856E-02
8	12	-1582E-02	-2980E-02	-4209E-02	-5289E-02	-6237E-02
8	13	-1293E-02	-2437E-02	-3444E-02	-4330E-02	-5110E-02
8	14	-1087E-02	-2048E-02	-2895E-02	-3639E-02	-4296E-02
8	15	-9346E-03	-1759E-02	-2485E-02	-3124E-02	-3687E-02
8	16	-8171E-03	-1537E-02	-2171E-02	-2728E-02	-3219E-02
9	10	-1859E-02	-3570E-02	-5129E-02	-6541E-02	-7811E-02
9	11	-1400E-02	-2701E-02	-3900E-02	-4996E-02	-5995E-02
9	12	-1103E-02	-2132E-02	-3085E-02	-3963E-02	-4767E-02
9	13	-9005E-03	-1742E-02	-2523E-02	-3245E-02	-3908E-02
9	14	-7556E-03	-1462E-02	-2119E-02	-2727E-02	-3287E-02
9	15	-6480E-03	-1254E-02	-1818E-02	-2340E-02	-2821E-02
9	16	-5655E-03	-1094E-02	-1587E-02	-2043E-02	-2463E-02
9	17	-5007E-03	-9693E-03	-1405E-02	-1808E-02	-2180E-02

## Appendix B. Series x6.5-C

X 6.5- 2/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
10	11	- .9957E-03	- .1941E-02	- .2834E-02	- .3672E-02	- .4454E-02
10	12	- .7809E-03	- .1526E-02	- .2235E-02	- .2903E-02	- .3532E-02
10	13	- .6345E-03	- .1242E-02	- .1821E-02	- .2370E-02	- .2887E-02
10	14	- .5303E-03	- .1039E-02	- .1524E-02	- .1985E-02	- .2421E-02
10	15	- .4531E-03	- .8883E-03	- .1304E-02	- .1699E-02	- .2073E-02
10	16	- .3942E-03	- .7730E-03	- .1135E-02	- .1479E-02	- .1805E-02
10	17	- .3480E-03	- .6824E-03	- .1002E-02	- .1306E-02	- .1594E-02
10	18	- .3109E-03	- .6097E-03	- .8954E-03	- .1167E-02	- .1425E-02
11	12	- .5799E-03	- .1140E-02	- .1679E-02	- .2194E-02	- .2686E-02
11	13	- .4690E-03	- .9237E-03	- .1362E-02	- .1784E-02	- .2188E-02
11	14	- .3902E-03	- .7693E-03	- .1136E-02	- .1489E-02	- .1828E-02
11	15	- .3322E-03	- .6552E-03	- .9681E-03	- .1270E-02	- .1560E-02
11	16	- .2879E-03	- .5682E-03	- .8399E-03	- .1102E-02	- .1354E-02
11	17	- .2534E-03	- .5001E-03	- .7394E-03	- .9706E-03	- .1193E-02
11	18	- .2257E-03	- .4456E-03	- .6589E-03	- .8652E-03	- .1063E-02
11	19	- .2032E-03	- .4012E-03	- .5933E-03	- .7790E-03	- .9581E-03
12	13	- .3624E-03	- .7161E-03	- .1059E-02	- .1392E-02	- .1714E-02
12	14	- .3003E-03	- .5939E-03	- .8801E-03	- .1158E-02	- .1427E-02
12	15	- .2546E-03	- .5040E-03	- .7473E-03	- .9842E-03	- .1214E-02
12	16	- .2200E-03	- .4356E-03	- .6463E-03	- .8515E-03	- .1050E-02
12	17	- .1930E-03	- .3822E-03	- .5673E-03	- .7477E-03	- .9232E-03
12	18	- .1714E-03	- .3397E-03	- .5042E-03	- .6647E-03	- .8209E-03
12	19	- .1539E-03	- .3050E-03	- .4529E-03	- .5972E-03	- .7376E-03
12	20	- .1395E-03	- .2764E-03	- .4104E-03	- .5413E-03	- .6686E-03

## Appendix B. Series x6.5-C

X 6.5- 2/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
13	14	-•2397E-03	-•4751E-03	-•7055E-03	-•9305E-03	-•1149E-02
13	15	-•2025E-03	-•4017E-03	-•5970E-03	-•7881E-03	-•9745E-03
13	16	-•1744E-03	-•3461E-03	-•5147E-03	-•6798E-03	-•8411E-03
13	17	-•1525E-03	-•3028E-03	-•4505E-03	-•5953E-03	-•7369E-03
13	18	-•1352E-03	-•2684E-03	-•3994E-03	-•5279E-03	-•6537E-03
13	19	-•1211E-03	-•2405E-03	-•3579E-03	-•4732E-03	-•5860E-03
13	20	-•1095E-03	-•2175E-03	-•3237E-03	-•4280E-03	-•5301E-03
13	21	-•9981E-04	-•1982E-03	-•2950E-03	-•3901E-03	-•4833E-03
14	15	-•1660E-03	-•3296E-03	-•4906E-03	-•6486E-03	-•8034E-03
14	16	-•1425E-03	-•2832E-03	-•4217E-03	-•5579E-03	-•6915E-03
14	17	-•1243E-03	-•2471E-03	-•3682E-03	-•4873E-03	-•6043E-03
14	18	-•1099E-03	-•2185E-03	-•3256E-03	-•4311E-03	-•5348E-03
14	19	-•9825E-04	-•1953E-03	-•2912E-03	-•3856E-03	-•4784E-03
14	20	-•8865E-04	-•1763E-03	-•2628E-03	-•3481E-03	-•4320E-03
14	21	-•8064E-04	-•1604E-03	-•2391E-03	-•3167E-03	-•3931E-03
14	22	-•7387E-04	-•1469E-03	-•2191E-03	-•2902E-03	-•3602E-03
15	16	-•1193E-03	-•2373E-03	-•3538E-03	-•4685E-03	-•5813E-03
15	17	-•1038E-03	-•2066E-03	-•3081E-03	-•4082E-03	-•5068E-03
15	18	-•9160E-04	-•1822E-03	-•2719E-03	-•3604E-03	-•4476E-03
15	19	-•8170E-04	-•1626E-03	-•2426E-03	-•3217E-03	-•3996E-03
15	20	-•7358E-04	-•1464E-03	-•2186E-03	-•2898E-03	-•3601E-03
15	21	-•6681E-04	-•1330E-03	-•1985E-03	-•2633E-03	-•3272E-03
15	22	-•6110E-04	-•1216E-03	-•1816E-03	-•2408E-03	-•2993E-03
15	23	-•5623E-04	-•1119E-03	-•1671E-03	-•2217E-03	-•2756E-03

### Appendix B. Series x6.5-C

X 6.5- 3/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X = 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
1	2	.4664E-03	.9076E-03	.1323E-02	.1714E-02	.2080E-02
1	3	.5878E-03	.1135E-02	.1645E-02	.2116E-02	.2552E-02
1	4	.7340E-03	.1402E-02	.2009E-02	.2560E-02	.3060E-02
1	5	.8338E-03	.1568E-02	.2217E-02	.2791E-02	.3301E-02
1	6	.6700E-03	.1253E-02	.1764E-02	.2215E-02	.2615E-02
1	7	.2103E-03	.4236E-03	.6337E-03	.8368E-03	.1030E-02
1	8	-.6512E-04	-.9326E-04	-.9354E-04	-.7325E-04	-.3813E-04
1	9	-.9867E-04	-.1737E-03	-.2285E-03	-.2664E-03	-.2903E-03
2	3	.7256E-03	.1396E-02	.2015E-02	.2583E-02	.3104E-02
2	4	.9055E-03	.1723E-02	.2461E-02	.3125E-02	.3722E-02
2	5	.1033E-02	.1937E-02	.2729E-02	.3425E-02	.4037E-02
2	6	.8499E-03	.1583E-02	.2220E-02	.2777E-02	.3265E-02
2	7	.3097E-03	.6108E-03	.8978E-03	.1167E-02	.1418E-02
2	8	-.2189E-04	-.8885E-05	.2895E-04	.8381E-04	.1497E-03
2	9	-.7070E-04	-.1198E-03	-.1510E-03	-.1678E-03	-.1730E-03
2	10	-.3717E-04	-.6693E-04	-.9010E-04	-.1074E-03	-.1199E-03
3	4	.1136E-02	.2150E-02	.3052E-02	.3853E-02	.4564E-02
3	5	.1303E-02	.2428E-02	.3401E-02	.4244E-02	.4976E-02
3	6	.1094E-02	.2025E-02	.2820E-02	.3503E-02	.4092E-02
3	7	.4469E-03	.8627E-03	.1244E-02	.1591E-02	.1904E-02
3	8	.3929E-04	.1054E-03	.1882E-03	.2803E-03	.3763E-03
3	9	-.3061E-04	-.4654E-04	-.5097E-04	-.4664E-04	-.3587E-04
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	.3717E-04	.6693E-04	.9010E-04	.1074E-03	.1199E-03

X 6.5- 3/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
4	5	.1635E-02	.3014E-02	.4181E-02	.5168E-02	.6007E-02
4	6	.1391E-02	.2541E-02	.3497E-02	.4296E-02	.4968E-02
4	7	.5990E-03	.1127E-02	.1589E-02	.1992E-02	.2342E-02
4	8	.9338E-04	.1961E-03	.3010E-03	.4037E-03	.5013E-03
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	.3061E-04	.4654E-04	.5097E-04	.4664E-04	.3587E-04
4	11	.7070E-04	.1198E-03	.1510E-03	.1678E-03	.1730E-03
4	12	.9867E-04	.1737E-03	.2285E-03	.2664E-03	.2903E-03
5	6	.1573E-02	.2816E-02	.3808E-02	.4608E-02	.5258E-02
5	7	.6024E-03	.1097E-02	.1506E-02	.1843E-02	.2123E-02
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	-.9338E-04	-.1961E-03	-.3010E-03	-.4037E-03	-.5013E-03
5	10	-.3929E-04	-.1054E-03	-.1882E-03	-.2803E-03	-.3763E-03
5	11	.2189E-04	.8885E-05	-.2895E-04	-.8381E-04	-.1497E-03
5	12	.6512E-04	.9326E-04	.9354E-04	.7325E-04	.3813E-04
5	13	.9207E-04	.1477E-03	.1752E-03	.1810E-03	.1704E-03
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	-.6024E-03	-.1097E-02	-.1506E-02	-.1843E-02	-.2123E-02
6	9	-.5990E-03	-.1127E-02	-.1589E-02	-.1992E-02	-.2342E-02
6	10	-.4469E-03	-.8627E-03	-.1244E-02	-.1591E-02	-.1904E-02
6	11	-.3097E-03	-.6108E-03	-.8978E-03	-.1167E-02	-.1418E-02
6	12	-.2103E-03	-.4236E-03	-.6337E-03	-.8368E-03	-.1030E-02
6	13	-.1415E-03	-.2919E-03	-.4450E-03	-.5970E-03	-.7453E-03
6	14	-.9419E-04	-.1999E-03	-.3117E-03	-.4256E-03	-.5391E-03

### Appendix B. Series x6.5-C

### Appendix B. Series x6.5-C

X 6.5- 3/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
7	8	-1573E-02	-2816E-02	-3808E-02	-4608E-02	-5258E-02
7	9	-1391E-02	-2541E-02	-3497E-02	-4296E-02	-4968E-02
7	10	-1094E-02	-2025E-02	-2820E-02	-3503E-02	-4092E-02
7	11	-8499E-03	-1583E-02	-2220E-02	-2777E-02	-3265E-02
7	12	-6700E-03	-1253E-02	-1764E-02	-2215E-02	-2615E-02
7	13	-5402E-03	-1012E-02	-1428E-02	-1797E-02	-2126E-02
7	14	-4452E-03	-8350E-03	-1179E-02	-1485E-02	-1759E-02
7	15	-3743E-03	-7021E-03	-9918E-03	-1250E-02	-1481E-02
8	9	-1635E-02	-3014E-02	-4181E-02	-5168E-02	-6007E-02
8	10	-1303E-02	-2428E-02	-3401E-02	-4244E-02	-4976E-02
8	11	-1033E-02	-1937E-02	-2729E-02	-3425E-02	-4037E-02
8	12	-8338E-03	-1568E-02	-2217E-02	-2791E-02	-3301E-02
8	13	-6879E-03	-1296E-02	-1835E-02	-2314E-02	-2742E-02
8	14	-5794E-03	-1092E-02	-1548E-02	-1954E-02	-2318E-02
8	15	-4970E-03	-9374E-03	-1329E-02	-1678E-02	-1991E-02
8	16	-4331E-03	-8167E-03	-1157E-02	-1462E-02	-1735E-02
9	10	-1136E-02	-2150E-02	-3052E-02	-3853E-02	-4564E-02
9	11	-9055E-03	-1723E-02	-2461E-02	-3125E-02	-3722E-02
9	12	-7340E-03	-1402E-02	-2009E-02	-2560E-02	-3060E-02
9	13	-6079E-03	-1163E-02	-1671E-02	-2133E-02	-2555E-02
9	14	-5139E-03	-9848E-03	-1415E-02	-1809E-02	-2169E-02
9	15	-4422E-03	-8479E-03	-1219E-02	-1560E-02	-1872E-02
9	16	-3863E-03	-7410E-03	-1066E-02	-1364E-02	-1637E-02
9	17	-3419E-03	-6559E-03	-9439E-03	-1208E-02	-1450E-02

## Appendix B. Series x6.5-C

X 6.5- 3/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
10	11	- .7256E-03	- .1396E-02	- .2015E-02	- .2583E-02	- .3104E-02
10	12	- .5878E-03	- .1135E-02	- .1645E-02	- .2116E-02	- .2552E-02
10	13	- .4864E-03	- .9421E-03	- .1367E-02	- .1763E-02	- .2132E-02
10	14	- .4108E-03	- .7966E-03	- .1158E-02	- .1495E-02	- .1811E-02
10	15	- .3531E-03	- .6854E-03	- .9972E-03	- .1289E-02	- .1562E-02
10	16	- .3082E-03	- .5986E-03	- .8714E-03	- .1127E-02	- .1366E-02
10	17	- .2726E-03	- .5295E-03	- .7710E-03	- .9977E-03	- .1210E-02
10	18	- .2437E-03	- .4735E-03	- .6896E-03	- .8925E-03	- .1082E-02
11	12	- .4664E-03	- .9076E-03	- .1323E-02	- .1714E-02	- .2080E-02
11	13	- .3850E-03	- .7511E-03	- .1098E-02	- .1426E-02	- .1735E-02
11	14	- .3244E-03	- .6338E-03	- .9281E-03	- .1207E-02	- .1471E-02
11	15	- .2782E-03	- .5442E-03	- .7977E-03	- .1038E-02	- .1267E-02
11	16	- .2423E-03	- .4743E-03	- .6958E-03	- .9068E-03	- .1107E-02
11	17	- .2139E-03	- .4188E-03	- .6147E-03	- .8014E-03	- .9792E-03
11	18	- .1909E-03	- .3739E-03	- .5490E-03	- .7159E-03	- .8750E-03
11	19	- .1721E-03	- .3371E-03	- .4949E-03	- .6456E-03	- .7891E-03
12	13	- .3094E-03	- .6063E-03	- .8905E-03	- .1161E-02	- .1419E-02
12	14	- .2599E-03	- .5103E-03	- .7508E-03	- .9812E-03	- .1201E-02
12	15	- .2224E-03	- .4370E-03	- .6438E-03	- .8424E-03	- .1032E-02
12	16	- .1932E-03	- .3801E-03	- .5603E-03	- .7337E-03	- .9004E-03
12	17	- .1702E-03	- .3349E-03	- .4939E-03	- .6472E-03	- .7947E-03
12	18	- .1516E-03	- .2984E-03	- .4403E-03	- .5772E-03	- .7090E-03
12	19	- .1363E-03	- .2685E-03	- .3963E-03	- .5196E-03	- .6384E-03
12	20	- .1237E-03	- .2436E-03	- .3596E-03	- .4716E-03	- .5795E-03

## Appendix B. Series x6.5-C

X 6.5- 3/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
13	14	- .2127E-03	- .4188E-03	- .6181E-03	- .8103E-03	- .9953E-03
13	15	- .1815E-03	- .3578E-03	- .5287E-03	- .6940E-03	- .8536E-03
13	16	- .1573E-03	- .3104E-03	- .4591E-03	- .6032E-03	- .7426E-03
13	17	- .1382E-03	- .2729E-03	- .4038E-03	- .5309E-03	- .6541E-03
13	18	- .1228E-03	- .2427E-03	- .3593E-03	- .4726E-03	- .5825E-03
13	19	- .1103E-03	- .2179E-03	- .3227E-03	- .4247E-03	- .5236E-03
13	20	- .9990E-04	- .1974E-03	- .2924E-03	- .3848E-03	- .4746E-03
13	21	- .9114E-04	- .1801E-03	- .2668E-03	- .3512E-03	- .4333E-03
14	15	- .1512E-03	- .2987E-03	- .4423E-03	- .5819E-03	- .7173E-03
14	16	- .1307E-03	- .2585E-03	- .3832E-03	- .5046E-03	- .6227E-03
14	17	- .1146E-03	- .2268E-03	- .3364E-03	- .4433E-03	- .5474E-03
14	18	- .1017E-03	- .2013E-03	- .2987E-03	- .3938E-03	- .4866E-03
14	19	- .9114E-04	- .1804E-03	- .2678E-03	- .3533E-03	- .4366E-03
14	20	- .8238E-04	- .1631E-03	- .2422E-03	- .3196E-03	- .3951E-03
14	21	- .7504E-04	- .1486E-03	- .2207E-03	- .2913E-03	- .3602E-03
14	22	- .6881E-04	- .1363E-03	- .2025E-03	- .2672E-03	- .3305E-03
15	16	- .1107E-03	- .2193E-03	- .3255E-03	- .4293E-03	- .5306E-03
15	17	- .9690E-04	- .1920E-03	- .2852E-03	- .3764E-03	- .4656E-03
15	18	- .8579E-04	- .1700E-03	- .2527E-03	- .3338E-03	- .4131E-03
15	19	- .7673E-04	- .1521E-03	- .2262E-03	- .2989E-03	- .3701E-03
15	20	- .6925E-04	- .1373E-03	- .2043E-03	- .2700E-03	- .3344E-03
15	21	- .6298E-04	- .1249E-03	- .1859E-03	- .2457E-03	- .3044E-03
15	22	- .5766E-04	- .1144E-03	- .1702E-03	- .2251E-03	- .2789E-03
15	23	- .5311E-04	- .1054E-03	- .1568E-03	- .2074E-03	- .2570E-03

## Appendix B. Series x6.5-C

X 6.5- 4/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0,3.2	Z = 3.0,3.4	Z = 3.0,3.6	Z = 3.0,3.8	Z = 3.0,4.0
1	2	.3428E-03	.6628E-03	.9611E-03	.1238E-02	.1496E-02
1	3	.4024E-03	.7732E-03	.1114E-02	.1428E-02	.1716E-02
1	4	.4525E-03	.8625E-03	.1234E-02	.1570E-02	.1876E-02
1	5	.4533E-03	.8575E-03	.1218E-02	.1542E-02	.1832E-02
1	6	.3555E-03	.6729E-03	.9572E-03	.1212E-02	.1442E-02
1	7	.1833E-03	.3556E-03	.5167E-03	.6669E-03	.8064E-03
1	8	.4549E-04	.9790E-04	.1545E-03	.2135E-03	.2733E-03
1	9	-.1238E-04	-.1555E-04	-.1144E-04	-.1675E-05	.1240E-04
2	3	.4763E-03	.9113E-03	.1308E-02	.1669E-02	.1999E-02
2	4	.5362E-03	.1017E-02	.1450E-02	.1839E-02	.2188E-02
2	5	.5397E-03	.1016E-02	.1439E-02	.1813E-02	.2147E-02
2	6	.4294E-03	.8087E-03	.1144E-02	.1442E-02	.1708E-02
2	7	.2321E-03	.4458E-03	.6419E-03	.8213E-03	.9852E-03
2	8	.7250E-04	.1483E-03	.2249E-03	.3008E-03	.3746E-03
2	9	.3799E-05	.1445E-04	.3019E-04	.4957E-04	.7144E-04
2	10	-.8223E-05	-.1294E-04	-.1479E-04	-.1431E-04	-.1200E-04
3	4	.6300E-03	.1188E-02	.1684E-02	.2123E-02	.2514E-02
3	5	.6359E-03	.1190E-02	.1674E-02	.2098E-02	.2470E-02
3	6	.5097E-03	.9526E-03	.1338E-02	.1675E-02	.1971E-02
3	7	.2817E-03	.5345E-03	.7609E-03	.9636E-03	.1144E-02
3	8	.9619E-04	.1901E-03	.2802E-03	.3655E-03	.4455E-03
3	9	.1534E-04	.3376E-04	.5409E-04	.7544E-04	.9715E-04
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	.8223E-05	.1294E-04	.1479E-04	.1431E-04	.1200E-04

## Appendix B. Series x6.5-C

X 6.5- 4/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0,3.2	Z = 3.0,3.4	Z = 3.0,3.6	Z = 3.0,3.8	Z = 3.0,4.0
4	5	.7150E-03	.1326E-02	.1850E-02	.2302E-02	.2692E-02
4	6	.5678E-03	.1050E-02	.1461E-02	.1813E-02	.2116E-02
4	7	.3041E-03	.5684E-03	.7984E-03	.9987E-03	.1173E-02
4	8	.9109E-04	.1750E-03	.2516E-03	.3212E-03	.3841E-03
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	-.1534E-04	-.3376E-04	-.5409E-04	-.7544E-04	-.9715E-04
4	11	-.3799E-05	-.1445E-04	-.3019E-04	-.4957E-04	-.7144E-04
4	12	.1238E-04	.1555E-04	.1144E-04	.1675E-05	-.1240E-04
5	6	.5336E-03	.9747E-03	.1342E-02	.1650E-02	.1909E-02
5	7	.2337E-03	.4298E-03	.5950E-03	.7349E-03	.8541E-03
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	-.9109E-04	-.1750E-03	-.2516E-03	-.3212E-03	-.3841E-03
5	10	-.9619E-04	-.1901E-03	-.2802E-03	-.3655E-03	-.4455E-03
5	11	-.7250E-04	-.1483E-03	-.2249E-03	-.3008E-03	-.3746E-03
5	12	-.4549E-04	-.9790E-04	-.1545E-03	-.2135E-03	-.2733E-03
5	13	-.2279E-04	-.5448E-04	-.9247E-04	-.1347E-03	-.1796E-03
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	-.2337E-03	-.4298E-03	-.5950E-03	-.7349E-03	-.8541E-03
6	9	-.3041E-03	-.5684E-03	-.7984E-03	-.9987E-03	-.1173E-02
6	10	-.2817E-03	-.5345E-03	-.7609E-03	-.9636E-03	-.1144E-02
6	11	-.2321E-03	-.4458E-03	-.6419E-03	-.8213E-03	-.9852E-03
6	12	-.1833E-03	-.3556E-03	-.5167E-03	-.6669E-03	-.8064E-03
6	13	-.1429E-03	-.2796E-03	-.4095E-03	-.5323E-03	-.6481E-03
6	14	-.1114E-03	-.2196E-03	-.3238E-03	-.4236E-03	-.5188E-03

### Appendix B. Series x6.5-C

X 6.5- 4/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0,3.2	Z = 3.0,3.4	Z = 3.0,3.6	Z = 3.0,3.8	Z = 3.0,4.0
7	8	- .5336E-03	- .9747E-03	- .1342E-02	- .1650E-02	- .1909E-02
7	9	- .5678E-03	- .1050E-02	- .1461E-02	- .1813E-02	- .2116E-02
7	10	- .5097E-03	- .9526E-03	- .1338E-02	- .1675E-02	- .1971E-02
7	11	- .4294E-03	- .8087E-03	- .1144E-02	- .1442E-02	- .1708E-02
7	12	- .3555E-03	- .6729E-03	- .9572E-03	- .1212E-02	- .1442E-02
7	13	- .2947E-03	- .5599E-03	- .7991E-03	- .1015E-02	- .1212E-02
7	14	- .2466E-03	- .4696E-03	- .6718E-03	- .8558E-03	- .1023E-02
7	15	- .2088E-03	- .3982E-03	- .5705E-03	- .7278E-03	- .8720E-03
8	9	- .7150E-03	- .1326E-02	- .1850E-02	- .2302E-02	- .2692E-02
8	10	- .6359E-03	- .1190E-02	- .1674E-02	- .2098E-02	- .2470E-02
8	11	- .5397E-03	- .1016E-02	- .1439E-02	- .1813E-02	- .2147E-02
8	12	- .4533E-03	- .8575E-03	- .1218E-02	- .1542E-02	- .1832E-02
8	13	- .3825E-03	- .7255E-03	- .1033E-02	- .1312E-02	- .1563E-02
8	14	- .3261E-03	- .6196E-03	- .8845E-03	- .1124E-02	- .1341E-02
8	15	- .2813E-03	- .5351E-03	- .7646E-03	- .9730E-03	- .1162E-02
8	16	- .2455E-03	- .4673E-03	- .6682E-03	- .8508E-03	- .1017E-02
9	10	- .6300E-03	- .1188E-02	- .1684E-02	- .2123E-02	- .2514E-02
9	11	- .5362E-03	- .1017E-02	- .1450E-02	- .1839E-02	- .2188E-02
9	12	- .4525E-03	- .8625E-03	- .1234E-02	- .1570E-02	- .1876E-02
9	13	- .3839E-03	- .7338E-03	- .1052E-02	- .1343E-02	- .1608E-02
9	14	- .3292E-03	- .6302E-03	- .9057E-03	- .1157E-02	- .1388E-02
9	15	- .2856E-03	- .5474E-03	- .7874E-03	- .1007E-02	- .1210E-02
9	16	- .2506E-03	- .4806E-03	- .6919E-03	- .8862E-03	- .1065E-02
9	17	- .2222E-03	- .4264E-03	- .6141E-03	- .7869E-03	- .9462E-03

**Appendix B. Series x6.5-C**

X 6.5- 4/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0,3.2	Z = 3.0,3.4	Z = 3.0,3.6	Z = 3.0,3.8	Z = 3.0,4.0
10	11	- .4763E-03	- .9113E-03	- .1308E-02	- .1669E-02	- .1999E-02
10	12	- .4024E-03	- .7732E-03	- .1114E-02	- .1428E-02	- .1716E-02
10	13	- .3419E-03	- .6588E-03	- .9522E-03	- .1223E-02	- .1474E-02
10	14	- .2935E-03	- .5666E-03	- .8205E-03	- .1056E-02	- .1275E-02
10	15	- .2549E-03	- .4927E-03	- .7144E-03	- .9209E-03	- .1113E-02
10	16	- .2239E-03	- .4332E-03	- .6286E-03	- .8110E-03	- .9812E-03
10	17	- .1988E-03	- .3848E-03	- .5586E-03	- .7211E-03	- .8729E-03
10	18	- .1781E-03	- .3449E-03	- .5009E-03	- .6468E-03	- .7833E-03
11	12	- .3428E-03	- .6628E-03	- .9611E-03	- .1238E-02	- .1496E-02
11	13	- .2911E-03	- .5645E-03	- .8209E-03	- .1061E-02	- .1285E-02
11	14	- .2497E-03	- .4853E-03	- .7072E-03	- .9159E-03	- .1111E-02
11	15	- .2168E-03	- .4218E-03	- .6156E-03	- .7983E-03	- .9705E-03
11	16	- .1903E-03	- .3707E-03	- .5415E-03	- .7029E-03	- .8554E-03
11	17	- .1688E-03	- .3291E-03	- .4810E-03	- .6248E-03	- .7609E-03
11	18	- .1512E-03	- .2949E-03	- .4312E-03	- .5604E-03	- .6827E-03
11	19	- .1366E-03	- .2664E-03	- .3897E-03	- .5065E-03	- .6173E-03
12	13	- .2453E-03	- .4780E-03	- .6983E-03	- .9064E-03	- .1102E-02
12	14	- .2102E-03	- .4105E-03	- .6009E-03	- .7817E-03	- .9531E-03
12	15	- .1822E-03	- .3563E-03	- .5224E-03	- .6807E-03	- .8312E-03
12	16	- .1598E-03	- .3128E-03	- .4591E-03	- .5987E-03	- .7319E-03
12	17	- .1416E-03	- .2774E-03	- .4074E-03	- .5317E-03	- .6505E-03
12	18	- .1266E-03	- .2482E-03	- .3648E-03	- .4764E-03	- .5832E-03
12	19	- .1142E-03	- .2240E-03	- .3294E-03	- .4303E-03	- .5269E-03
12	20	- .1038E-03	- .2037E-03	- .2996E-03	- .3915E-03	- .4795E-03

## Appendix B. Series x6.5-C

X 6.5- 4/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0,3.2	Z = 3.0,3.4	Z = 3.0,3.6	Z = 3.0,3.8	Z = 3.0,4.0
13	14	-•1777E-03	-•3482E-03	-•5114E-03	-•6674E-03	-•8163E-03
13	15	-•1538E-03	-•3018E-03	-•4440E-03	-•5804E-03	-•7110E-03
13	16	-•1346E-03	-•2645E-03	-•3895E-03	-•5098E-03	-•6253E-03
13	17	-•1191E-03	-•2342E-03	-•3452E-03	-•4522E-03	-•5551E-03
13	18	-•1064E-03	-•2093E-03	-•3088E-03	-•4047E-03	-•4971E-03
13	19	-•9590E-04	-•1887E-03	-•2784E-03	-•3651E-03	-•4487E-03
13	20	-•8706E-04	-•1713E-03	-•2529E-03	-•3318E-03	-•4079E-03
13	21	-•7957E-04	-•1566E-03	-•2313E-03	-•3034E-03	-•3731E-03
14	15	-•1311E-03	-•2579E-03	-•3803E-03	-•4983E-03	-•6120E-03
14	16	-•1145E-03	-•2256E-03	-•3332E-03	-•4371E-03	-•5375E-03
14	17	-•1012E-03	-•1995E-03	-•2948E-03	-•3872E-03	-•4765E-03
14	18	-•9029E-04	-•1780E-03	-•2633E-03	-•3460E-03	-•4261E-03
14	19	-•8123E-04	-•1603E-03	-•2371E-03	-•3118E-03	-•3842E-03
14	20	-•7365E-04	-•1453E-03	-•2151E-03	-•2830E-03	-•3488E-03
14	21	-•6724E-04	-•1327E-03	-•1965E-03	-•2585E-03	-•3188E-03
14	22	-•6175E-04	-•1219E-03	-•1805E-03	-•2376E-03	-•2930E-03
15	16	-•9866E-04	-•1946E-03	-•2879E-03	-•3784E-03	-•4661E-03
15	17	-•8701E-04	-•1718E-03	-•2544E-03	-•3347E-03	-•4127E-03
15	18	-•7749E-04	-•1531E-03	-•2268E-03	-•2987E-03	-•3686E-03
15	19	-•6962E-04	-•1376E-03	-•2040E-03	-•2688E-03	-•3318E-03
15	20	-•6304E-04	-•1246E-03	-•1849E-03	-•2436E-03	-•3009E-03
15	21	-•5747E-04	-•1137E-03	-•1686E-03	-•2223E-03	-•2747E-03
15	22	-•5272E-04	-•1043E-03	-•1548E-03	-•2041E-03	-•2523E-03
15	23	-•4863E-04	-•9627E-04	-•1428E-03	-•1884E-03	-•2329E-03

**Appendix B. Series x6.5-C**

X 6.5- 5/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 4.0,4.2	Z= 4.0,4.4	Z= 4.0,4.6	Z= 4.0,4.8	Z= 4.0,5.0
1	2	.2395E-03	.4618E-03	.6679E-03	.8589E-03	.1035E-02
1	3	.2648E-03	.5080E-03	.7313E-03	.9364E-03	.1124E-02
1	4	.2771E-03	.5288E-03	.7576E-03	.9658E-03	.1155E-02
1	5	.2612E-03	.4966E-03	.7092E-03	.9014E-03	.1075E-02
1	6	.2074E-03	.3949E-03	.5647E-03	.7188E-03	.8589E-03
1	7	.1294E-03	.2492E-03	.3601E-03	.4626E-03	.5573E-03
1	8	.5945E-04	.1177E-03	.1744E-03	.2290E-03	.2813E-03
1	9	.1727E-04	.3683E-04	.5794E-04	.8001E-04	.1025E-03
2	3	.3001E-03	.5734E-03	.8224E-03	.1049E-02	.1256E-02
2	4	.3143E-03	.5974E-03	.8526E-03	.1082E-02	.1291E-02
2	5	.2969E-03	.5621E-03	.7993E-03	.1012E-02	.1203E-02
2	6	.2369E-03	.4488E-03	.6387E-03	.8091E-03	.9625E-03
2	7	.1495E-03	.2860E-03	.4104E-03	.5238E-03	.6273E-03
2	8	.7102E-04	.1387E-03	.2028E-03	.2633E-03	.3199E-03
2	9	.2342E-04	.4769E-04	.7226E-04	.9671E-04	.1207E-03
2	10	.3753E-05	.8597E-05	.1424E-04	.2046E-04	.2705E-04
3	4	.3474E-03	.6569E-03	.9329E-03	.1179E-02	.1400E-02
3	5	.3276E-03	.6166E-03	.8722E-03	.1098E-02	.1300E-02
3	6	.2601E-03	.4895E-03	.6923E-03	.8721E-03	.1031E-02
3	7	.1622E-03	.3075E-03	.4377E-03	.5546E-03	.6595E-03
3	8	.7448E-04	.1434E-03	.2071E-03	.2658E-03	.3196E-03
3	9	.2156E-04	.4265E-04	.6300E-04	.8248E-04	.1009E-03
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	-.3753E-05	-.8597E-05	-.1424E-04	-.2046E-04	-.2705E-04

## Appendix B. Series x6.5-C

X 6.5- 5/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
4	5	.3382E-03	.6325E-03	.8894E-03	.1114E-02	.1312E-02
4	6	.2619E-03	.4891E-03	.6869E-03	.8597E-03	.1011E-02
4	7	.1530E-03	.2872E-03	.4052E-03	.5092E-03	.6011E-03
4	8	.5670E-04	.1077E-03	.1536E-03	.1949E-03	.2320E-03
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	-.2156E-04	-.4265E-04	-.6300E-04	-.8248E-04	-.1009E-03
4	11	-.2342E-04	-.4769E-04	-.7226E-04	-.9671E-04	-.1207E-03
4	12	-.1727E-04	-.3683E-04	-.5794E-04	-.8001E-04	-.1025E-03
5	6	.2206E-03	.4089E-03	.5704E-03	.7098E-03	.8306E-03
5	7	.1018E-03	.1894E-03	.2650E-03	.3305E-03	.3875E-03
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	-.5670E-04	-.1077E-03	-.1536E-03	-.1949E-03	-.2320E-03
5	10	-.7448E-04	-.1434E-03	-.2071E-03	-.2658E-03	-.3196E-03
5	11	-.7102E-04	-.1387E-03	-.2028E-03	-.2633E-03	-.3199E-03
5	12	-.5945E-04	-.1177E-03	-.1744E-03	-.2290E-03	-.2813E-03
5	13	-.4641E-04	-.9337E-04	-.1401E-03	-.1862E-03	-.2312E-03
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	-.1018E-03	-.1894E-03	-.2650E-03	-.3305E-03	-.3875E-03
6	9	-.1530E-03	-.2872E-03	-.4052E-03	-.5092E-03	-.6011E-03
6	10	-.1622E-03	-.3075E-03	-.4377E-03	-.5546E-03	-.6595E-03
6	11	-.1495E-03	-.2860E-03	-.4104E-03	-.5238E-03	-.6273E-03
6	12	-.1294E-03	-.2492E-03	-.3601E-03	-.4626E-03	-.5573E-03
6	13	-.1088E-03	-.2108E-03	-.3064E-03	-.3957E-03	-.4793E-03
6	14	-.9047E-04	-.1762E-03	-.2573E-03	-.3339E-03	-.4062E-03

**Appendix B. Series x6.5-C**

X 6.5- 5/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0,4.2	Z = 4.0,4.4	Z = 4.0,4.6	Z = 4.0,4.8	Z = 4.0,5.0
7	8	-2206E-03	-4089E-03	-5704E-03	-7098E-03	-8306E-03
7	9	-2619E-03	-4891E-03	-6869E-03	-8597E-03	-1011E-02
7	10	-2601E-03	-4895E-03	-6923E-03	-8721E-03	-1031E-02
7	11	-2369E-03	-4488E-03	-6387E-03	-8091E-03	-9625E-03
7	12	-2074E-03	-3949E-03	-5647E-03	-7188E-03	-8589E-03
7	13	-1787E-03	-3417E-03	-4905E-03	-6266E-03	-7512E-03
7	14	-1536E-03	-2944E-03	-4238E-03	-5429E-03	-6527E-03
7	15	-1324E-03	-2543E-03	-3668E-03	-4708E-03	-5672E-03
8	9	-3382E-03	-6325E-03	-8894E-03	-1114E-02	-1312E-02
8	10	-3276E-03	-6166E-03	-8722E-03	-1098E-02	-1300E-02
8	11	-2969E-03	-5621E-03	-7993E-03	-1012E-02	-1203E-02
8	12	-2612E-03	-4966E-03	-7092E-03	-9014E-03	-1075E-02
8	13	-2274E-03	-4337E-03	-6212E-03	-7920E-03	-9479E-03
8	14	-1978E-03	-3782E-03	-5430E-03	-6939E-03	-8322E-03
8	15	-1729E-03	-3311E-03	-4762E-03	-6094E-03	-7320E-03
8	16	-1522E-03	-2917E-03	-4199E-03	-5379E-03	-6469E-03
9	10	-3474E-03	-6569E-03	-9329E-03	-1179E-02	-1400E-02
9	11	-3143E-03	-5974E-03	-8526E-03	-1082E-02	-1291E-02
9	12	-2771E-03	-5288E-03	-7576E-03	-9658E-03	-1155E-02
9	13	-2422E-03	-4637E-03	-6662E-03	-8517E-03	-1021E-02
9	14	-2119E-03	-4065E-03	-5852E-03	-7497E-03	-9012E-03
9	15	-1863E-03	-3578E-03	-5160E-03	-6620E-03	-7969E-03
9	16	-1648E-03	-3170E-03	-4576E-03	-5877E-03	-7082E-03
9	17	-1469E-03	-2828E-03	-4085E-03	-5251E-03	-6332E-03

## Appendix B. Series x6.5-C

X 6.5- 5/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
10	11	-3001E-03	-5734E-03	-8224E-03	-1049E-02	-1256E-02
10	12	-2648E-03	-5080E-03	-7313E-03	-9364E-03	-1124E-02
10	13	-2319E-03	-4462E-03	-6441E-03	-8271E-03	-9962E-03
10	14	-2032E-03	-3919E-03	-5670E-03	-7295E-03	-8805E-03
10	15	-1790E-03	-3458E-03	-5010E-03	-6456E-03	-7803E-03
10	16	-1588E-03	-3070E-03	-4453E-03	-5745E-03	-6951E-03
10	17	-1418E-03	-2745E-03	-3985E-03	-5144E-03	-6229E-03
10	18	-1276E-03	-2471E-03	-3589E-03	-4636E-03	-5618E-03
11	12	-2395E-03	-4618E-03	-6679E-03	-8589E-03	-1035E-02
11	13	-2098E-03	-4057E-03	-5886E-03	-7590E-03	-9180E-03
11	14	-1840E-03	-3566E-03	-5184E-03	-6699E-03	-8119E-03
11	15	-1621E-03	-3148E-03	-4583E-03	-5933E-03	-7201E-03
11	16	-1439E-03	-2796E-03	-4076E-03	-5283E-03	-6419E-03
11	17	-1286E-03	-2501E-03	-3649E-03	-4734E-03	-5757E-03
11	18	-1158E-03	-2253E-03	-3289E-03	-4269E-03	-5195E-03
11	19	-1049E-03	-2043E-03	-2984E-03	-3874E-03	-4717E-03
12	13	-1851E-03	-3595E-03	-5235E-03	-6777E-03	-8225E-03
12	14	-1623E-03	-3159E-03	-4610E-03	-5981E-03	-7275E-03
12	15	-1430E-03	-2788E-03	-4076E-03	-5296E-03	-6452E-03
12	16	-1268E-03	-2476E-03	-3624E-03	-4715E-03	-5751E-03
12	17	-1133E-03	-2214E-03	-3244E-03	-4224E-03	-5157E-03
12	18	-1020E-03	-1994E-03	-2923E-03	-3809E-03	-4654E-03
12	19	-9242E-04	-1807E-03	-2651E-03	-3456E-03	-4225E-03
12	20	-8427E-04	-1648E-03	-2419E-03	-3155E-03	-3858E-03

### Appendix B. Series x6.5-C

X 6.5- 5/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.51S DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 4.0,4.2	Z= 4.0,4.4	Z= 4.0,4.6	Z= 4.0,4.8	Z= 4.0,5.0
13	14	-•1420E-03	-•2772E-03	-•4059E-03	-•5282E-03	-•6443E-03
13	15	-•1250E-03	-•2445E-03	-•3586E-03	-•4674E-03	-•5711E-03
13	16	-•1108E-03	-•2170E-03	-•3186E-03	-•4159E-03	-•5088E-03
13	17	-•9893E-04	-•1939E-03	-•2850E-03	-•3724E-03	-•4560E-03
13	18	-•8896E-04	-•1745E-03	-•2567E-03	-•3356E-03	-•4113E-03
13	19	-•8054E-04	-•1580E-03	-•2326E-03	-•3043E-03	-•3732E-03
13	20	-•7338E-04	-•1440E-03	-•2121E-03	-•2776E-03	-•3406E-03
13	21	-•6725E-04	-•1320E-03	-•1945E-03	-•2547E-03	-•3125E-03
14	15	-•1093E-03	-•2143E-03	-•3151E-03	-•4117E-03	-•5043E-03
14	16	-•9679E-04	-•1900E-03	-•2797E-03	-•3660E-03	-•4489E-03
14	17	-•8633E-04	-•1696E-03	-•2500E-03	-•3275E-03	-•4020E-03
14	18	-•7755E-04	-•1525E-03	-•2249E-03	-•2949E-03	-•3623E-03
14	19	-•7015E-04	-•1380E-03	-•2037E-03	-•2672E-03	-•3285E-03
14	20	-•6385E-04	-•1257E-03	-•1856E-03	-•2436E-03	-•2996E-03
14	21	-•5847E-04	-•1151E-03	-•1701E-03	-•2233E-03	-•2747E-03
14	22	-•5383E-04	-•1060E-03	-•1566E-03	-•2057E-03	-•2532E-03
15	16	-•8494E-04	-•1671E-03	-•2464E-03	-•3231E-03	-•3970E-03
15	17	-•7567E-04	-•1490E-03	-•2200E-03	-•2888E-03	-•3552E-03
15	18	-•6791E-04	-•1338E-03	-•1978E-03	-•2598E-03	-•3198E-03
15	19	-•6136E-04	-•1210E-03	-•1789E-03	-•2352E-03	-•2897E-03
15	20	-•5581E-04	-•1101E-03	-•1629E-03	-•2142E-03	-•2640E-03
15	21	-•5105E-04	-•1007E-03	-•1491E-03	-•1962E-03	-•2419E-03
15	22	-•4696E-04	-•9272E-04	-•1372E-03	-•1806E-03	-•2228E-03
15	23	-•4340E-04	-•8572E-04	-•1269E-03	-•1670E-03	-•2061E-03

## Appendix B. Series x6.5-C

X 6.5- 6/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0, 5.2	Z = 5.0, 5.4	Z = 5.0, 5.6	Z = 5.0, 5.8	Z = 5.0, 6.0
1	2	.1640E-03	.3159E-03	.4567E-03	.5872E-03	.7081E-03
1	3	.1731E-03	.3323E-03	.4787E-03	.6135E-03	.7376E-03
1	4	.1729E-03	.3307E-03	.4749E-03	.6069E-03	.7277E-03
1	5	.1581E-03	.3018E-03	.4327E-03	.5521E-03	.6611E-03
1	6	.1274E-03	.2437E-03	.3498E-03	.4468E-03	.5356E-03
1	7	.8754E-04	.1684E-03	.2431E-03	.3122E-03	.3761E-03
1	8	.4980E-04	.9707E-04	.1418E-03	.1840E-03	.2238E-03
1	9	.2268E-04	.4521E-04	.6736E-04	.8898E-04	.1099E-03
2	3	.1886E-03	.3607E-03	.5180E-03	.6618E-03	.7934E-03
2	4	.1882E-03	.3588E-03	.5135E-03	.6540E-03	.7819E-03
2	5	.1719E-03	.3269E-03	.4669E-03	.5937E-03	.7085E-03
2	6	.1382E-03	.2631E-03	.3760E-03	.4784E-03	.5713E-03
2	7	.9440E-04	.1805E-03	.2593E-03	.3313E-03	.3972E-03
2	8	.5303E-04	.1025E-03	.1486E-03	.1915E-03	.2313E-03
2	9	.2335E-04	.4589E-04	.6752E-04	.8816E-04	.1078E-03
2	10	.6814E-05	.1372E-04	.2063E-04	.2747E-04	.3417E-04
3	4	.1978E-03	.3755E-03	.5353E-03	.6794E-03	.8094E-03
3	5	.1794E-03	.3397E-03	.4832E-03	.6119E-03	.7276E-03
3	6	.1423E-03	.2695E-03	.3833E-03	.4854E-03	.5772E-03
3	7	.9439E-04	.1794E-03	.2561E-03	.3254E-03	.3881E-03
3	8	.4942E-04	.9474E-04	.1362E-03	.1743E-03	.2091E-03
3	9	.1747E-04	.3391E-04	.4932E-04	.6373E-04	.7718E-04
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	-.6814E-05	-.1372E-04	-.2063E-04	-.2747E-04	-.3417E-04

**Appendix B. Series x6.5-C**

X 6.5- 6/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0, 5.2	Z = 5.0, 5.4	Z = 5.0, 5.6	Z = 5.0, 5.8	Z = 5.0, 6.0
4	5	.1742E-03	.3283E-03	.4649E-03	.5864E-03	.6948E-03
4	6	.1333E-03	.2511E-03	.3553E-03	.4480E-03	.5305E-03
4	7	.8142E-04	.1537E-03	.2181E-03	.2756E-03	.3270E-03
4	8	.3340E-04	.6350E-04	.9063E-04	.1151E-03	.1372E-03
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	-.1747E-04	-.3391E-04	-.4932E-04	-.6373E-04	-.7718E-04
4	11	-.2335E-04	-.4589E-04	-.6752E-04	-.8816E-04	-.1078E-03
4	12	-.2268E-04	-.4521E-04	-.6736E-04	-.8898E-04	-.1099E-03
5	6	.1050E-03	.1969E-03	.2774E-03	.3484E-03	.4111E-03
5	7	.4983E-04	.9354E-04	.1320E-03	.1660E-03	.1961E-03
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	-.3340E-04	-.6350E-04	-.9063E-04	-.1151E-03	-.1372E-03
5	10	-.4942E-04	-.9474E-04	-.1362E-03	-.1743E-03	-.2091E-03
5	11	-.5303E-04	-.1025E-03	-.1486E-03	-.1915E-03	-.2313E-03
5	12	-.4980E-04	-.9707E-04	-.1418E-03	-.1840E-03	-.2238E-03
5	13	-.4366E-04	-.8579E-04	-.1262E-03	-.1649E-03	-.2018E-03
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	-.4983E-04	-.9354E-04	-.1320E-03	-.1660E-03	-.1961E-03
6	9	-.8142E-04	-.1537E-03	-.2181E-03	-.2756E-03	-.3270E-03
6	10	-.9439E-04	-.1794E-03	-.2561E-03	-.3254E-03	-.3881E-03
6	11	-.9440E-04	-.1805E-03	-.2593E-03	-.3313E-03	-.3972E-03
6	12	-.8754E-04	-.1684E-03	-.2431E-03	-.3122E-03	-.3761E-03
6	13	-.7799E-04	-.1508E-03	-.2187E-03	-.2821E-03	-.3412E-03
6	14	-.6808E-04	-.1321E-03	-.1925E-03	-.2492E-03	-.3026E-03

## Appendix B. Series x6.5-C

X 6.5- 6/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.51S DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
7	8	-•1050E-03	-•1969E-03	-•2774E-03	-•3484E-03	-•4111E-03
7	9	-•1333E-03	-•2511E-03	-•3553E-03	-•4480E-03	-•5305E-03
7	10	-•1423E-03	-•2695E-03	-•3833E-03	-•4854E-03	-•5772E-03
7	11	-•1382E-03	-•2631E-03	-•3760E-03	-•4784E-03	-•5713E-03
7	12	-•1274E-03	-•2437E-03	-•3498E-03	-•4468E-03	-•5356E-03
7	13	-•1144E-03	-•2195E-03	-•3162E-03	-•4052E-03	-•4874E-03
7	14	-•1013E-03	-•1950E-03	-•2817E-03	-•3621E-03	-•4366E-03
7	15	-•8936E-04	-•1723E-03	-•2495E-03	-•3214E-03	-•3885E-03
8	9	-•1742E-03	-•3283E-03	-•4649E-03	-•5864E-03	-•6948E-03
8	10	-•1794E-03	-•3397E-03	-•4832E-03	-•6119E-03	-•7276E-03
8	11	-•1719E-03	-•3269E-03	-•4669E-03	-•5937E-03	-•7085E-03
8	12	-•1581E-03	-•3018E-03	-•4327E-03	-•5521E-03	-•6611E-03
8	13	-•1423E-03	-•2726E-03	-•3920E-03	-•5017E-03	-•6024E-03
8	14	-•1270E-03	-•2438E-03	-•3514E-03	-•4508E-03	-•5425E-03
8	15	-•1130E-03	-•2174E-03	-•3139E-03	-•4034E-03	-•4863E-03
8	16	-•1007E-03	-•1940E-03	-•2805E-03	-•3610E-03	-•4358E-03
9	10	-•1978E-03	-•3755E-03	-•5353E-03	-•6794E-03	-•8094E-03
9	11	-•1882E-03	-•3588E-03	-•5135E-03	-•6540E-03	-•7819E-03
9	12	-•1729E-03	-•3307E-03	-•4749E-03	-•6069E-03	-•7277E-03
9	13	-•1559E-03	-•2992E-03	-•4309E-03	-•5520E-03	-•6637E-03
9	14	-•1396E-03	-•2684E-03	-•3874E-03	-•4975E-03	-•5993E-03
9	15	-•1248E-03	-•2403E-03	-•3475E-03	-•4469E-03	-•5393E-03
9	16	-•1117E-03	-•2155E-03	-•3120E-03	-•4018E-03	-•4855E-03
9	17	-•1004E-03	-•1939E-03	-•2811E-03	-•3623E-03	-•4382E-03

**Appendix B. Series x6.5-C**

X 6.5- 6/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0,5.2	Z = 5.0,5.4	Z = 5.0,5.6	Z = 5.0,5.8	Z = 5.0,6.0
10	11	-•1886E-03	-•3607E-03	-•5180E-03	-•6618E-03	-•7934E-03
10	12	-•1731E-03	-•3323E-03	-•4787E-03	-•6135E-03	-•7376E-03
10	13	-•1563E-03	-•3008E-03	-•4346E-03	-•5583E-03	-•6730E-03
10	14	-•1401E-03	-•2703E-03	-•3914E-03	-•5039E-03	-•6086E-03
10	15	-•1255E-03	-•2426E-03	-•3517E-03	-•4536E-03	-•5488E-03
10	16	-•1127E-03	-•2180E-03	-•3166E-03	-•4088E-03	-•4951E-03
10	17	-•1015E-03	-•1967E-03	-•2859E-03	-•3695E-03	-•4479E-03
10	18	-•9197E-04	-•1782E-03	-•2592E-03	-•3353E-03	-•4067E-03
11	12	-•1640E-03	-•3159E-03	-•4567E-03	-•5872E-03	-•7081E-03
11	13	-•1481E-03	-•2861E-03	-•4147E-03	-•5346E-03	-•6463E-03
11	14	-•1329E-03	-•2573E-03	-•3738E-03	-•4828E-03	-•5848E-03
11	15	-•1191E-03	-•2311E-03	-•3362E-03	-•4350E-03	-•5278E-03
11	16	-•1070E-03	-•2079E-03	-•3029E-03	-•3924E-03	-•4768E-03
11	17	-•9660E-04	-•1877E-03	-•2738E-03	-•3551E-03	-•4318E-03
11	18	-•8756E-04	-•1703E-03	-•2486E-03	-•3226E-03	-•3925E-03
11	19	-•7975E-04	-•1552E-03	-•2266E-03	-•2943E-03	-•3584E-03
12	13	-•1359E-03	-•2635E-03	-•3832E-03	-•4954E-03	-•6006E-03
12	14	-•1220E-03	-•2370E-03	-•3454E-03	-•4475E-03	-•5437E-03
12	15	-•1094E-03	-•2129E-03	-•3108E-03	-•4034E-03	-•4908E-03
12	16	-•9834E-04	-•1916E-03	-•2801E-03	-•3640E-03	-•4435E-03
12	17	-•8874E-04	-•1731E-03	-•2533E-03	-•3295E-03	-•4018E-03
12	18	-•8045E-04	-•1570E-03	-•2300E-03	-•2994E-03	-•3654E-03
12	19	-•7329E-04	-•1431E-03	-•2098E-03	-•2732E-03	-•3337E-03
12	20	-•6710E-04	-•1311E-03	-•1922E-03	-•2505E-03	-•3061E-03

## Appendix B. Series x6.5-C

X 6.5- 6/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.51S DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
13	14	- .1101E-03	- .2146E-03	- .3137E-03	- .4075E-03	- .4963E-03
13	15	- .9879E-04	- .1928E-03	- .2822E-03	- .3672E-03	- .4481E-03
13	16	- .8877E-04	- .1735E-03	- .2543E-03	- .3314E-03	- .4048E-03
13	17	- .8008E-04	- .1567E-03	- .2299E-03	- .2999E-03	- .3668E-03
13	18	- .7259E-04	- .1421E-03	- .2087E-03	- .2725E-03	- .3335E-03
13	19	- .6611E-04	- .1295E-03	- .1903E-03	- .2487E-03	- .3046E-03
13	20	- .6051E-04	- .1186E-03	- .1744E-03	- .2280E-03	- .2793E-03
13	21	- .5565E-04	- .1091E-03	- .1605E-03	- .2099E-03	- .2573E-03
14	15	- .8858E-04	- .1733E-03	- .2542E-03	- .3316E-03	- .4054E-03
14	16	- .7956E-04	- .1558E-03	- .2290E-03	- .2991E-03	- .3662E-03
14	17	- .7174E-04	- .1407E-03	- .2069E-03	- .2706E-03	- .3317E-03
14	18	- .6499E-04	- .1275E-03	- .1878E-03	- .2458E-03	- .3015E-03
14	19	- .5917E-04	- .1162E-03	- .1712E-03	- .2242E-03	- .2752E-03
14	20	- .5413E-04	- .1064E-03	- .1568E-03	- .2054E-03	- .2523E-03
14	21	- .4975E-04	- .9784E-04	- .1442E-03	- .1891E-03	- .2323E-03
14	22	- .4594E-04	- .9037E-04	- .1333E-03	- .1747E-03	- .2148E-03
15	16	- .7122E-04	- .1398E-03	- .2058E-03	- .2693E-03	- .3303E-03
15	17	- .6418E-04	- .1261E-03	- .1859E-03	- .2435E-03	- .2990E-03
15	18	- .5810E-04	- .1143E-03	- .1686E-03	- .2210E-03	- .2716E-03
15	19	- .5286E-04	- .1040E-03	- .1536E-03	- .2015E-03	- .2478E-03
15	20	- .4833E-04	- .9520E-04	- .1406E-03	- .1845E-03	- .2271E-03
15	21	- .4440E-04	- .8749E-04	- .1292E-03	- .1698E-03	- .2090E-03
15	22	- .4097E-04	- .8076E-04	- .1193E-03	- .1568E-03	- .1932E-03
15	23	- .3797E-04	- .7486E-04	- .1107E-03	- .1454E-03	- .1792E-03

**Appendix B. Series x6.5-C**

X 6.5- 7/PAGE 1OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0,6.2	Z = 6.0,6.4	Z = 6.0,6.6	Z = 6.0,6.8	Z = 6.0,7.0
1	2	.1121E-03	.2161E-03	.3127E-03	.4024E-03	.4857E-03
1	3	.1144E-03	.2199E-03	.3173E-03	.4073E-03	.4905E-03
1	4	.1108E-03	.2125E-03	.3060E-03	.3920E-03	.4713E-03
1	5	.9971E-04	.1910E-03	.2748E-03	.3517E-03	.4225E-03
1	6	.8143E-04	.1561E-03	.2248E-03	.2881E-03	.3463E-03
1	7	.5908E-04	.1137E-03	.1644E-03	.2113E-03	.2548E-03
1	8	.3742E-04	.7258E-04	.1055E-03	.1365E-03	.1655E-03
1	9	.2023E-04	.3967E-04	.5829E-04	.7608E-04	.9304E-04
2	3	.1205E-03	.2310E-03	.3324E-03	.4256E-03	.5113E-03
2	4	.1164E-03	.2226E-03	.3197E-03	.4084E-03	.4897E-03
2	5	.1043E-03	.1991E-03	.2856E-03	.3645E-03	.4366E-03
2	6	.8447E-04	.1614E-03	.2315E-03	.2957E-03	.3543E-03
2	7	.6034E-04	.1156E-03	.1664E-03	.2131E-03	.2560E-03
2	8	.3702E-04	.7141E-04	.1033E-03	.1329E-03	.1604E-03
2	9	.1861E-04	.3621E-04	.5282E-04	.6847E-04	.8321E-04
2	10	.6527E-05	.1284E-04	.1894E-04	.2479E-04	.3039E-04
3	4	.1176E-03	.2241E-03	.3209E-03	.4088E-03	.4889E-03
3	5	.1042E-03	.1983E-03	.2834E-03	.3606E-03	.4307E-03
3	6	.8274E-04	.1574E-03	.2250E-03	.2863E-03	.3420E-03
3	7	.5682E-04	.1084E-03	.1553E-03	.1980E-03	.2369E-03
3	8	.3197E-04	.6130E-04	.8821E-04	.1129E-03	.1356E-03
3	9	.1253E-04	.2420E-04	.3506E-04	.4516E-04	.5455E-04
3	10	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
3	11	-.6527E-05	-.1284E-04	-.1894E-04	-.2479E-04	-.3039E-04

## Appendix B. Series x6.5-C

X 6.5- 7/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0,6.2	Z = 6.0,6.4	Z = 6.0,6.6	Z = 6.0,6.8	Z = 6.0,7.0
4	5	.9688E-04	.1837E-03	.2617E-03	.3320E-03	.3955E-03
4	6	.7368E-04	.1396E-03	.1989E-03	.2522E-03	.3004E-03
4	7	.4612E-04	.8759E-04	.1249E-03	.1586E-03	.1892E-03
4	8	.2004E-04	.3821E-04	.5471E-04	.6971E-04	.8338E-04
4	9	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
4	10	-.1253E-04	-.2420E-04	-.3506E-04	-.4516E-04	-.5455E-04
4	11	-.1861E-04	-.3621E-04	-.5282E-04	-.6847E-04	-.8321E-04
4	12	-.2023E-04	-.3967E-04	-.5829E-04	-.7608E-04	-.9304E-04
5	6	.5562E-04	.1051E-03	.1492E-03	.1887E-03	.2242E-03
5	7	.2678E-04	.5065E-04	.7201E-04	.9116E-04	.1083E-03
5	8	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
5	9	-.2004E-04	-.3821E-04	-.5471E-04	-.6971E-04	-.8338E-04
5	10	-.3197E-04	-.6130E-04	-.8821E-04	-.1129E-03	-.1356E-03
5	11	-.3702E-04	-.7141E-04	-.1033E-03	-.1329E-03	-.1604E-03
5	12	-.3742E-04	-.7258E-04	-.1055E-03	-.1365E-03	-.1655E-03
5	13	-.3516E-04	-.6857E-04	-.1002E-03	-.1302E-03	-.1587E-03
6	7	.0000E-99	.0000E-99	.0000E-99	.0000E-99	.0000E-99
6	8	-.2678E-04	-.5065E-04	-.7201E-04	-.9116E-04	-.1083E-03
6	9	-.4612E-04	-.8759E-04	-.1249E-03	-.1586E-03	-.1892E-03
6	10	-.5682E-04	-.1084E-03	-.1553E-03	-.1980E-03	-.2369E-03
6	11	-.6034E-04	-.1156E-03	-.1664E-03	-.2131E-03	-.2560E-03
6	12	-.5908E-04	-.1137E-03	-.1644E-03	-.2113E-03	-.2548E-03
6	13	-.5519E-04	-.1067E-03	-.1548E-03	-.1997E-03	-.2416E-03
6	14	-.5016E-04	-.9733E-04	-.1416E-03	-.1833E-03	-.2225E-03

### Appendix B. Series x6.5-C

X 6.5- 7/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
7	8	- .5562E-04	- .1051E-03	- .1492E-03	- .1887E-03	- .2242E-03
7	9	- .7368E-04	- .1396E-03	- .1989E-03	- .2522E-03	- .3004E-03
7	10	- .8274E-04	- .1574E-03	- .2250E-03	- .2863E-03	- .3420E-03
7	11	- .8447E-04	- .1614E-03	- .2315E-03	- .2957E-03	- .3543E-03
7	12	- .8143E-04	- .1561E-03	- .2248E-03	- .2881E-03	- .3463E-03
7	13	- .7584E-04	- .1459E-03	- .2108E-03	- .2708E-03	- .3265E-03
7	14	- .6924E-04	- .1336E-03	- .1935E-03	- .2493E-03	- .3013E-03
7	15	- .6255E-04	- .1209E-03	- .1756E-03	- .2267E-03	- .2746E-03
8	9	- .9688E-04	- .1837E-03	- .2617E-03	- .3320E-03	- .3955E-03
8	10	- .1042E-03	- .1983E-03	- .2834E-03	- .3606E-03	- .4307E-03
8	11	- .1043E-03	- .1991E-03	- .2856E-03	- .3645E-03	- .4366E-03
8	12	- .9971E-04	- .1910E-03	- .2748E-03	- .3517E-03	- .4225E-03
8	13	- .9272E-04	- .1781E-03	- .2570E-03	- .3298E-03	- .3972E-03
8	14	- .8487E-04	- .1634E-03	- .2363E-03	- .3040E-03	- .3669E-03
8	15	- .7706E-04	- .1487E-03	- .2154E-03	- .2776E-03	- .3356E-03
8	16	- .6974E-04	- .1348E-03	- .1955E-03	- .2524E-03	- .3056E-03
9	10	- .1176E-03	- .2241E-03	- .3209E-03	- .4088E-03	- .4889E-03
9	11	- .1164E-03	- .2226E-03	- .3197E-03	- .4084E-03	- .4897E-03
9	12	- .1108E-03	- .2125E-03	- .3060E-03	- .3920E-03	- .4713E-03
9	13	- .1029E-03	- .1980E-03	- .2858E-03	- .3670E-03	- .4423E-03
9	14	- .9437E-04	- .1818E-03	- .2631E-03	- .3386E-03	- .4088E-03
9	15	- .8592E-04	- .1659E-03	- .2404E-03	- .3099E-03	- .3748E-03
9	16	- .7805E-04	- .1509E-03	- .2190E-03	- .2827E-03	- .3423E-03
9	17	- .7092E-04	- .1372E-03	- .1994E-03	- .2577E-03	- .3125E-03

## Appendix B. Series x6.5-C

X 6.5- 7/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0,6.2	Z = 6.0,6.4	Z = 6.0,6.6	Z = 6.0,6.8	Z = 6.0,7.0
10	11	- .1205E-03	- .2310E-03	- .3324E-03	- .4256E-03	- .5113E-03
10	12	- .1144E-03	- .2199E-03	- .3173E-03	- .4073E-03	- .4905E-03
10	13	- .1062E-03	- .2047E-03	- .2961E-03	- .3810E-03	- .4599E-03
10	14	- .9746E-04	- .1882E-03	- .2728E-03	- .3517E-03	- .4253E-03
10	15	- .8887E-04	- .1719E-03	- .2496E-03	- .3223E-03	- .3904E-03
10	16	- .8088E-04	- .1567E-03	- .2278E-03	- .2945E-03	- .3572E-03
10	17	- .7366E-04	- .1428E-03	- .2079E-03	- .2691E-03	- .3267E-03
10	18	- .6723E-04	- .1305E-03	- .1901E-03	- .2462E-03	- .2992E-03
11	12	- .1121E-03	- .2161E-03	- .3127E-03	- .4024E-03	- .4857E-03
11	13	- .1041E-03	- .2012E-03	- .2917E-03	- .3762E-03	- .4551E-03
11	14	- .9555E-04	- .1850E-03	- .2688E-03	- .3473E-03	- .4209E-03
11	15	- .8720E-04	- .1691E-03	- .2461E-03	- .3186E-03	- .3867E-03
11	16	- .7945E-04	- .1543E-03	- .2249E-03	- .2914E-03	- .3542E-03
11	17	- .7244E-04	- .1408E-03	- .2055E-03	- .2666E-03	- .3243E-03
11	18	- .6620E-04	- .1288E-03	- .1881E-03	- .2442E-03	- .2974E-03
11	19	- .6067E-04	- .1181E-03	- .1726E-03	- .2243E-03	- .2733E-03
12	13	- .9867E-04	- .1911E-03	- .2779E-03	- .3592E-03	- .4355E-03
12	14	- .9056E-04	- .1758E-03	- .2561E-03	- .3317E-03	- .4029E-03
12	15	- .8267E-04	- .1608E-03	- .2346E-03	- .3043E-03	- .3702E-03
12	16	- .7536E-04	- .1467E-03	- .2144E-03	- .2785E-03	- .3393E-03
12	17	- .6875E-04	- .1340E-03	- .1960E-03	- .2549E-03	- .3108E-03
12	18	- .6286E-04	- .1226E-03	- .1795E-03	- .2337E-03	- .2852E-03
12	19	- .5764E-04	- .1125E-03	- .1649E-03	- .2147E-03	- .2622E-03
12	20	- .5304E-04	- .1036E-03	- .1519E-03	- .1979E-03	- .2418E-03

**Appendix B. Series x6.5-C**

X 6.5- 7/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE X= 6.5 IS DELIMITED BY Y= 0.0, 3.0  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
13	14	- .8408E-04	- .1636E-03	- .2389E-03	- .3101E-03	- .3774E-03
13	15	- .7676E-04	- .1496E-03	- .2188E-03	- .2845E-03	- .3469E-03
13	16	- .6998E-04	- .1366E-03	- .2000E-03	- .2604E-03	- .3179E-03
13	17	- .6384E-04	- .1247E-03	- .1829E-03	- .2384E-03	- .2914E-03
13	18	- .5838E-04	- .1142E-03	- .1676E-03	- .2186E-03	- .2674E-03
13	19	- .5354E-04	- .1048E-03	- .1539E-03	- .2009E-03	- .2459E-03
13	20	- .4927E-04	- .9653E-04	- .1418E-03	- .1852E-03	- .2268E-03
13	21	- .4551E-04	- .8919E-04	- .1311E-03	- .1713E-03	- .2099E-03
14	15	- .7045E-04	- .1376E-03	- .2017E-03	- .2627E-03	- .3209E-03
14	16	- .6421E-04	- .1256E-03	- .1843E-03	- .2405E-03	- .2941E-03
14	17	- .5858E-04	- .1147E-03	- .1685E-03	- .2201E-03	- .2695E-03
14	18	- .5356E-04	- .1050E-03	- .1544E-03	- .2018E-03	- .2473E-03
14	19	- .4911E-04	- .9637E-04	- .1418E-03	- .1855E-03	- .2275E-03
14	20	- .4519E-04	- .8872E-04	- .1306E-03	- .1710E-03	- .2098E-03
14	21	- .4173E-04	- .8197E-04	- .1207E-03	- .1581E-03	- .1941E-03
14	22	- .3867E-04	- .7598E-04	- .1119E-03	- .1467E-03	- .1801E-03
15	16	- .5859E-04	- .1148E-03	- .1688E-03	- .2206E-03	- .2703E-03
15	17	- .5344E-04	- .1048E-03	- .1543E-03	- .2019E-03	- .2476E-03
15	18	- .4884E-04	- .9594E-04	- .1413E-03	- .1850E-03	- .2272E-03
15	19	- .4477E-04	- .8802E-04	- .1297E-03	- .1700E-03	- .2089E-03
15	20	- .4118E-04	- .8101E-04	- .1195E-03	- .1567E-03	- .1926E-03
15	21	- .3801E-04	- .7482E-04	- .1104E-03	- .1448E-03	- .1781E-03
15	22	- .3521E-04	- .6934E-04	- .1023E-03	- .1343E-03	- .1653E-03
15	23	- .3273E-04	- .6447E-04	- .9524E-04	- .1250E-03	- .1539E-03

**Appendix C. Series y3-C**

Y 3.0- 1/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
1	2	.1151E-03	.2295E-03	.3427E-03	.4540E-03	.5628E-03
1	3	.1660E-03	.3308E-03	.4933E-03	.6523E-03	.8070E-03
1	4	.2435E-03	.4848E-03	.7216E-03	.9519E-03	.1174E-02
1	5	.3349E-03	.6659E-03	.9893E-03	.1301E-02	.1600E-02
1	6	.3804E-03	.7559E-03	.1121E-02	.1474E-02	.1810E-02
1	7	.3331E-03	.6623E-03	.9840E-03	.1294E-02	.1591E-02
1	8	.2415E-03	.4807E-03	.7156E-03	.9441E-03	.1164E-02
1	9	.1645E-03	.3278E-03	.4888E-03	.6465E-03	.7998E-03
2	3	.2178E-03	.4340E-03	.6468E-03	.8548E-03	.1056E-02
2	4	.3125E-03	.6220E-03	.9255E-03	.1220E-02	.1503E-02
2	5	.4230E-03	.8408E-03	.1248E-02	.1642E-02	.2018E-02
2	6	.4775E-03	.9487E-03	.1407E-02	.1849E-02	.2269E-02
2	7	.4205E-03	.8359E-03	.1241E-02	.1632E-02	.2006E-02
2	8	.3097E-03	.6164E-03	.9171E-03	.1209E-02	.1490E-02
2	9	.2157E-03	.4297E-03	.6405E-03	.8465E-03	.1046E-02
2	10	.1533E-03	.3057E-03	.4561E-03	.6037E-03	.7477E-03
3	4	.4173E-03	.8301E-03	.1234E-02	.1625E-02	.2001E-02
3	5	.5541E-03	.1101E-02	.1634E-02	.2147E-02	.2636E-02
3	6	.6210E-03	.1233E-02	.1829E-02	.2401E-02	.2944E-02
3	7	.5507E-03	.1094E-02	.1624E-02	.2134E-02	.2620E-02
3	8	.4133E-03	.8223E-03	.1222E-02	.1610E-02	.1982E-02
3	9	.2954E-03	.5881E-03	.8758E-03	.1156E-02	.1426E-02
3	10	.2157E-03	.4297E-03	.6405E-03	.8465E-03	.1046E-02
3	11	.1645E-03	.3278E-03	.4888E-03	.6465E-03	.7998E-03

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 1/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
4	5	.7401E-03	.1469E-02	.2179E-02	.2859E-02	.3503E-02
4	6	.8233E-03	.1634E-02	.2421E-02	.3174E-02	.3885E-02
4	7	.7359E-03	.1461E-02	.2166E-02	.2843E-02	.3485E-02
4	8	.5637E-03	.1120E-02	.1663E-02	.2188E-02	.2688E-02
4	9	.4133E-03	.8223E-03	.1222E-02	.1610E-02	.1982E-02
4	10	.3097E-03	.6164E-03	.9171E-03	.1209E-02	.1490E-02
4	11	.2415E-03	.4807E-03	.7156E-03	.9441E-03	.1164E-02
4	12	.1957E-03	.3896E-03	.5801E-03	.7655E-03	.9445E-03
5	6	.1049E-02	.2080E-02	.3079E-02	.4029E-02	.4922E-02
5	7	.9446E-03	.1874E-02	.2775E-02	.3636E-02	.4446E-02
5	8	.7359E-03	.1461E-02	.2166E-02	.2843E-02	.3485E-02
5	9	.5507E-03	.1094E-02	.1624E-02	.2134E-02	.2620E-02
5	10	.4205E-03	.8359E-03	.1241E-02	.1632E-02	.2006E-02
5	11	.3331E-03	.6623E-03	.9840E-03	.1294E-02	.1591E-02
5	12	.2733E-03	.5435E-03	.8075E-03	.1062E-02	.1307E-02
5	13	.2309E-03	.4591E-03	.6821E-03	.8978E-03	.1104E-02
6	7	.1049E-02	.2080E-02	.3079E-02	.4029E-02	.4922E-02
6	8	.8233E-03	.1634E-02	.2421E-02	.3174E-02	.3885E-02
6	9	.6210E-03	.1233E-02	.1829E-02	.2401E-02	.2944E-02
6	10	.4775E-03	.9487E-03	.1407E-02	.1849E-02	.2269E-02
6	11	.3804E-03	.7559E-03	.1121E-02	.1474E-02	.1810E-02
6	12	.3134E-03	.6229E-03	.9247E-03	.1215E-02	.1492E-02
6	13	.2656E-03	.5279E-03	.7835E-03	.1029E-02	.1264E-02
6	14	.2301E-03	.4573E-03	.6788E-03	.8922E-03	.1095E-02

Y 3.0- 1/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
7	8	.7401E-03	.1469E-02	.2179E-02	.2859E-02	.3503E-02
7	9	.5541E-03	.1101E-02	.1634E-02	.2147E-02	.2636E-02
7	10	.4230E-03	.8408E-03	.1248E-02	.1642E-02	.2018E-02
7	11	.3349E-03	.6659E-03	.9893E-03	.1301E-02	.1600E-02
7	12	.2747E-03	.5462E-03	.8115E-03	.1067E-02	.1313E-02
7	13	.2319E-03	.4612E-03	.6852E-03	.9017E-03	.1108E-02
7	14	.2003E-03	.3984E-03	.5919E-03	.7790E-03	.9580E-03
7	15	.1762E-03	.3504E-03	.5207E-03	.6853E-03	.8427E-03
8	9	.4173E-03	.8301E-03	.1234E-02	.1625E-02	.2001E-02
8	10	.3125E-03	.6220E-03	.9255E-03	.1220E-02	.1503E-02
8	11	.2435E-03	.4848E-03	.7216E-03	.9519E-03	.1174E-02
8	12	.1972E-03	.3926E-03	.5845E-03	.7713E-03	.9516E-03
8	13	.1648E-03	.3282E-03	.4887E-03	.6449E-03	.7958E-03
8	14	.1413E-03	.2814E-03	.4190E-03	.5530E-03	.6824E-03
8	15	.1236E-03	.2461E-03	.3664E-03	.4836E-03	.5967E-03
8	16	.1098E-03	.2186E-03	.3255E-03	.4296E-03	.5301E-03
9	10	.2178E-03	.4340E-03	.6468E-03	.8548E-03	.1056E-02
9	11	.1660E-03	.3308E-03	.4933E-03	.6523E-03	.8070E-03
9	12	.1319E-03	.2630E-03	.3923E-03	.5190E-03	.6424E-03
9	13	.1087E-03	.2167E-03	.3233E-03	.4278E-03	.5296E-03
9	14	.9216E-04	.1837E-03	.2740E-03	.3627E-03	.4490E-03
9	15	.7987E-04	.1592E-03	.2375E-03	.3143E-03	.3892E-03
9	16	.7045E-04	.1404E-03	.2095E-03	.2772E-03	.3433E-03
9	17	.6301E-04	.1256E-03	.1874E-03	.2480E-03	.3070E-03

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 1/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
10	11	.1151E-03	.2295E-03	.3427E-03	.4540E-03	.5628E-03
10	12	.8962E-04	.1787E-03	.2670E-03	.3538E-03	.4389E-03
10	13	.7258E-04	.1447E-03	.2163E-03	.2867E-03	.3558E-03
10	14	.6066E-04	.1210E-03	.1808E-03	.2397E-03	.2975E-03
10	15	.5197E-04	.1037E-03	.1549E-03	.2054E-03	.2550E-03
10	16	.4542E-04	.9064E-04	.1354E-03	.1795E-03	.2229E-03
10	17	.4033E-04	.8048E-04	.1202E-03	.1594E-03	.1979E-03
10	18	.3627E-04	.7237E-04	.1081E-03	.1433E-03	.1780E-03
11	12	.6372E-04	.1271E-03	.1901E-03	.2522E-03	.3133E-03
11	13	.5068E-04	.1011E-03	.1512E-03	.2007E-03	.2495E-03
11	14	.4172E-04	.8328E-04	.1245E-03	.1653E-03	.2055E-03
11	15	.3530E-04	.7048E-04	.1054E-03	.1399E-03	.1740E-03
11	16	.3053E-04	.6096E-04	.9118E-04	.1210E-03	.1505E-03
11	17	.2688E-04	.5367E-04	.8027E-04	.1065E-03	.1325E-03
11	18	.2400E-04	.4792E-04	.7167E-04	.9518E-04	.1183E-03
11	19	.2168E-04	.4329E-04	.6474E-04	.8598E-04	.1069E-03
12	13	.3722E-04	.7433E-04	.1111E-03	.1477E-03	.1837E-03
12	14	.3018E-04	.6027E-04	.9019E-04	.1198E-03	.1491E-03
12	15	.2521E-04	.5035E-04	.7535E-04	.1001E-03	.1246E-03
12	16	.2157E-04	.4308E-04	.6448E-04	.8570E-04	.1066E-03
12	17	.1881E-04	.3758E-04	.5624E-04	.7476E-04	.9308E-04
12	18	.1667E-04	.3329E-04	.4983E-04	.6624E-04	.8248E-04
12	19	.1496E-04	.2988E-04	.4472E-04	.5945E-04	.7402E-04
12	20	.1356E-04	.2710E-04	.4056E-04	.5392E-04	.6714E-04

Y 3.0- 1/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.01S DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
13	14	.2287E-04	.4570E-04	.6840E-04	.9094E-04	.1132E-03
13	15	.1887E-04	.3770E-04	.5644E-04	.7505E-04	.9349E-04
13	16	.1597E-04	.3190E-04	.4777E-04	.6353E-04	.7915E-04
13	17	.1380E-04	.2757E-04	.4128E-04	.5490E-04	.6841E-04
13	18	.1212E-04	.2423E-04	.3628E-04	.4826E-04	.6013E-04
13	19	.1080E-04	.2159E-04	.3233E-04	.4301E-04	.5359E-04
13	20	.9744E-05	.1946E-04	.2915E-04	.3877E-04	.4832E-04
13	21	.8870E-05	.1772E-04	.2654E-04	.3530E-04	.4399E-04
14	15	.1470E-04	.2938E-04	.4400E-04	.5854E-04	.7295E-04
14	16	.1231E-04	.2461E-04	.3685E-04	.4903E-04	.6112E-04
14	17	.1054E-04	.2107E-04	.3155E-04	.4199E-04	.5234E-04
14	18	.9192E-05	.1836E-04	.2751E-04	.3661E-04	.4564E-04
14	19	.8134E-05	.1625E-04	.2434E-04	.3240E-04	.4039E-04
14	20	.7288E-05	.1456E-04	.2181E-04	.2903E-04	.3620E-04
14	21	.6599E-05	.1318E-04	.1975E-04	.2628E-04	.3278E-04
14	22	.6028E-05	.1204E-04	.1804E-04	.2401E-04	.2994E-04
15	16	.9831E-05	.1964E-04	.2943E-04	.3916E-04	.4884E-04
15	17	.8342E-05	.1667E-04	.2497E-04	.3324E-04	.4145E-04
15	18	.7215E-05	.1441E-04	.2160E-04	.2875E-04	.3586E-04
15	19	.6340E-05	.1267E-04	.1898E-04	.2527E-04	.3152E-04
15	20	.5645E-05	.1128E-04	.1690E-04	.2250E-04	.2807E-04
15	21	.5084E-05	.1016E-04	.1522E-04	.2026E-04	.2528E-04
15	22	.4621E-05	.9237E-05	.1384E-04	.1842E-04	.2298E-04
15	23	.4235E-05	.8465E-05	.1268E-04	.1688E-04	.2106E-04

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 2/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
1	2	.1058E-03	.2083E-03	.3071E-03	.4018E-03	.4923E-03
1	3	.1494E-03	.2929E-03	.4300E-03	.5602E-03	.6833E-03
1	4	.2125E-03	.4144E-03	.6049E-03	.7837E-03	.9504E-03
1	5	.2828E-03	.5484E-03	.7960E-03	.1025E-02	.1236E-02
1	6	.3164E-03	.6120E-03	.8861E-03	.1138E-02	.1369E-02
1	7	.2815E-03	.5459E-03	.7924E-03	.1020E-02	.1231E-02
1	8	.2109E-03	.4114E-03	.6007E-03	.7782E-03	.9440E-03
1	9	.1482E-03	.2905E-03	.4265E-03	.5558E-03	.6781E-03
2	3	.1942E-03	.3802E-03	.5570E-03	.7243E-03	.8818E-03
2	4	.2708E-03	.5274E-03	.7687E-03	.9943E-03	.1204E-02
2	5	.3553E-03	.6882E-03	.9978E-03	.1283E-02	.1546E-02
2	6	.3953E-03	.7640E-03	.1105E-02	.1418E-02	.1704E-02
2	7	.3535E-03	.6848E-03	.9930E-03	.1277E-02	.1539E-02
2	8	.2687E-03	.5233E-03	.7629E-03	.9870E-03	.1195E-02
2	9	.1925E-03	.3769E-03	.5523E-03	.7183E-03	.8746E-03
2	10	.1395E-03	.2741E-03	.4031E-03	.5263E-03	.6433E-03
3	4	.3568E-03	.6931E-03	.1007E-02	.1300E-02	.1569E-02
3	5	.4603E-03	.8900E-03	.1287E-02	.1652E-02	.1986E-02
3	6	.5091E-03	.9821E-03	.1417E-02	.1816E-02	.2178E-02
3	7	.4580E-03	.8855E-03	.1281E-02	.1645E-02	.1977E-02
3	8	.3539E-03	.6876E-03	.1000E-02	.1290E-02	.1558E-02
3	9	.2594E-03	.5063E-03	.7396E-03	.9588E-03	.1163E-02
3	10	.1925E-03	.3769E-03	.5523E-03	.7183E-03	.8746E-03
3	11	.1482E-03	.2905E-03	.4265E-03	.5558E-03	.6781E-03

Appendix C. Series y3-C

		S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
4	5	.6035E-03		.1162E-02	.1676E-02	.2145E-02	.2568E-02	
4	6	.6633E-03		.1275E-02	.1835E-02	.2343E-02	.2801E-02	
4	7	.6007E-03		.1157E-02	.1669E-02	.2136E-02	.2558E-02	
4	8	.4722E-03		.9140E-03	.1323E-02	.1701E-02	.2046E-02	
4	9	.3539E-03		.6876E-03	.1000E-02	.1290E-02	.1558E-02	
4	10	.2687E-03		.5233E-03	.7629E-03	.9870E-03	.1195E-02	
4	11	.2109E-03		.4114E-03	.6007E-03	.7782E-03	.9440E-03	
4	12	.1715E-03		.3347E-03	.4890E-03	.6341E-03	.7698E-03	
5	6	.8272E-03		.1585E-02	.2272E-02	.2890E-02	.3443E-02	
5	7	.7537E-03		.1446E-02	.2078E-02	.2648E-02	.3160E-02	
5	8	.6007E-03		.1157E-02	.1669E-02	.2136E-02	.2558E-02	
5	9	.4580E-03		.8855E-03	.1281E-02	.1645E-02	.1977E-02	
5	10	.3535E-03		.6848E-03	.9930E-03	.1277E-02	.1539E-02	
5	11	.2815E-03		.5459E-03	.7924E-03	.1020E-02	.1231E-02	
5	12	.2315E-03		.4491E-03	.6523E-03	.8407E-03	.1014E-02	
5	13	.1956E-03		.3797E-03	.5516E-03	.7111E-03	.8584E-03	
6	7	.8272E-03		.1585E-02	.2272E-02	.2890E-02	.3443E-02	
6	8	.6633E-03		.1275E-02	.1835E-02	.2343E-02	.2801E-02	
6	9	.5091E-03		.9821E-03	.1417E-02	.1816E-02	.2178E-02	
6	10	.3953E-03		.7640E-03	.1105E-02	.1418E-02	.1704E-02	
6	11	.3164E-03		.6120E-03	.8861E-03	.1138E-02	.1369E-02	
6	12	.2612E-03		.5054E-03	.7321E-03	.9411E-03	.1132E-02	
6	13	.2214E-03		.4285E-03	.6208E-03	.7982E-03	.9610E-03	
6	14	.1918E-03		.3712E-03	.5378E-03	.6915E-03	.8326E-03	

## Appendix C. Series y3-C

Y 3.0- 2/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 1.0,1.2	Z = 1.0,1.4	Z = 1.0,1.6	Z = 1.0,1.8	Z = 1.0,2.0
7	8	.6035E-03	.1162E-02	.1676E-02	.2145E-02	.2568E-02
7	9	.4603E-03	.8900E-03	.1287E-02	.1652E-02	.1986E-02
7	10	.3553E-03	.6882E-03	.9978E-03	.1283E-02	.1546E-02
7	11	.2828E-03	.5484E-03	.7960E-03	.1025E-02	.1236E-02
7	12	.2325E-03	.4510E-03	.6550E-03	.8441E-03	.1018E-02
7	13	.1964E-03	.3811E-03	.5536E-03	.7137E-03	.8614E-03
7	14	.1697E-03	.3293E-03	.4784E-03	.6167E-03	.7445E-03
7	15	.1492E-03	.2896E-03	.4207E-03	.5424E-03	.6548E-03
8	9	.3568E-03	.6931E-03	.1007E-02	.1300E-02	.1569E-02
8	10	.2708E-03	.5274E-03	.7687E-03	.9943E-03	.1204E-02
8	11	.2125E-03	.4144E-03	.6049E-03	.7837E-03	.9504E-03
8	12	.1727E-03	.3369E-03	.4922E-03	.6381E-03	.7746E-03
8	13	.1446E-03	.2822E-03	.4124E-03	.5348E-03	.6495E-03
8	14	.1240E-03	.2421E-03	.3538E-03	.4590E-03	.5575E-03
8	15	.1084E-03	.2117E-03	.3095E-03	.4015E-03	.4877E-03
8	16	.9637E-04	.1881E-03	.2749E-03	.3566E-03	.4332E-03
9	10	.1942E-03	.3802E-03	.5570E-03	.7243E-03	.8818E-03
9	11	.1494E-03	.2929E-03	.4300E-03	.5602E-03	.6833E-03
9	12	.1193E-03	.2342E-03	.3442E-03	.4490E-03	.5483E-03
9	13	.9861E-04	.1936E-03	.2846E-03	.3714E-03	.4539E-03
9	14	.8368E-04	.1643E-03	.2416E-03	.3154E-03	.3856E-03
9	15	.7256E-04	.1425E-03	.2096E-03	.2736E-03	.3345E-03
9	16	.6401E-04	.1257E-03	.1849E-03	.2414E-03	.2952E-03
9	17	.5726E-04	.1124E-03	.1654E-03	.2159E-03	.2640E-03

Y 3.0- 2/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
10	11	.1058E-03	.2083E-03	.3071E-03	.4018E-03	.4923E-03
10	12	.8297E-04	.1634E-03	.2413E-03	.3161E-03	.3879E-03
10	13	.6743E-04	.1329E-03	.1964E-03	.2575E-03	.3162E-03
10	14	.5647E-04	.1113E-03	.1646E-03	.2159E-03	.2653E-03
10	15	.4844E-04	.9557E-04	.1412E-03	.1853E-03	.2278E-03
10	16	.4236E-04	.8359E-04	.1235E-03	.1621E-03	.1993E-03
10	17	.3762E-04	.7424E-04	.1097E-03	.1440E-03	.1770E-03
10	18	.3383E-04	.6677E-04	.9870E-04	.1295E-03	.1592E-03
11	12	.5987E-04	.1183E-03	.1751E-03	.2301E-03	.2833E-03
11	13	.4783E-04	.9461E-04	.1401E-03	.1844E-03	.2272E-03
11	14	.3949E-04	.7814E-04	.1158E-03	.1525E-03	.1880E-03
11	15	.3347E-04	.6625E-04	.9825E-04	.1294E-03	.1596E-03
11	16	.2897E-04	.5736E-04	.8510E-04	.1121E-03	.1383E-03
11	17	.2552E-04	.5053E-04	.7497E-04	.9877E-04	.1218E-03
11	18	.2279E-04	.4513E-04	.6696E-04	.8823E-04	.1089E-03
11	19	.2059E-04	.4078E-04	.6050E-04	.7972E-04	.9840E-04
12	13	.3549E-04	.7032E-04	.1044E-03	.1376E-03	.1700E-03
12	14	.2887E-04	.5725E-04	.8507E-04	.1122E-03	.1387E-03
12	15	.2417E-04	.4795E-04	.7127E-04	.9410E-04	.1163E-03
12	16	.2071E-04	.4109E-04	.6109E-04	.8068E-04	.9983E-04
12	17	.1807E-04	.3587E-04	.5335E-04	.7047E-04	.8721E-04
12	18	.1602E-04	.3180E-04	.4730E-04	.6249E-04	.7734E-04
12	19	.1438E-04	.2855E-04	.4246E-04	.5610E-04	.6944E-04
12	20	.1304E-04	.2589E-04	.3852E-04	.5090E-04	.6300E-04

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 2/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
13	14	.2204E-04	.4375E-04	.6510E-04	.8605E-04	.1065E-03
13	15	.1822E-04	.3620E-04	.5390E-04	.7127E-04	.8831E-04
13	16	.1545E-04	.3070E-04	.4572E-04	.6048E-04	.7497E-04
13	17	.1336E-04	.2656E-04	.3956E-04	.5235E-04	.6491E-04
13	18	.1175E-04	.2336E-04	.3480E-04	.4606E-04	.5712E-04
13	19	.1047E-04	.2083E-04	.3103E-04	.4108E-04	.5095E-04
13	20	.9450E-05	.1878E-04	.2799E-04	.3705E-04	.4596E-04
13	21	.8604E-05	.1710E-04	.2549E-04	.3374E-04	.4185E-04
14	15	.1427E-04	.2838E-04	.4229E-04	.5599E-04	.6946E-04
14	16	.1197E-04	.2382E-04	.3551E-04	.4704E-04	.5838E-04
14	17	.1026E-04	.2042E-04	.3046E-04	.4035E-04	.5010E-04
14	18	.8958E-05	.1782E-04	.2658E-04	.3523E-04	.4375E-04
14	19	.7931E-05	.1578E-04	.2354E-04	.3121E-04	.3876E-04
14	20	.7110E-05	.1415E-04	.2111E-04	.2798E-04	.3475E-04
14	21	.6439E-05	.1281E-04	.1912E-04	.2534E-04	.3148E-04
14	22	.5883E-05	.1171E-04	.1747E-04	.2316E-04	.2877E-04
15	16	.9594E-05	.1909E-04	.2849E-04	.3776E-04	.4691E-04
15	17	.8153E-05	.1623E-04	.2422E-04	.3212E-04	.3992E-04
15	18	.7059E-05	.1405E-04	.2098E-04	.2783E-04	.3459E-04
15	19	.6207E-05	.1236E-04	.1845E-04	.2448E-04	.3044E-04
15	20	.5530E-05	.1101E-04	.1644E-04	.2182E-04	.2713E-04
15	21	.4982E-05	.9924E-05	.1482E-04	.1966E-04	.2445E-04
15	22	.4530E-05	.9024E-05	.1347E-04	.1788E-04	.2224E-04
15	23	.4152E-05	.8272E-05	.1235E-04	.1639E-04	.2038E-04

Y 3.0- 3/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
1	2	.8610E-04	.1677E-03	.2449E-03	.3176E-03	.3859E-03
1	3	.1159E-03	.2247E-03	.3264E-03	.4213E-03	.5095E-03
1	4	.1549E-03	.2983E-03	.4306E-03	.5523E-03	.6641E-03
1	5	.1937E-03	.3707E-03	.5319E-03	.6785E-03	.8116E-03
1	6	.2108E-03	.4024E-03	.5761E-03	.7333E-03	.8752E-03
1	7	.1930E-03	.3695E-03	.5303E-03	.6765E-03	.8093E-03
1	8	.1540E-03	.2967E-03	.4284E-03	.5495E-03	.6608E-03
1	9	.1152E-03	.2233E-03	.3244E-03	.4188E-03	.5065E-03
2	3	.1474E-03	.2851E-03	.4130E-03	.5316E-03	.6412E-03
2	4	.1940E-03	.3728E-03	.5369E-03	.6872E-03	.8245E-03
2	5	.2399E-03	.4583E-03	.6566E-03	.8360E-03	.9982E-03
2	6	.2601E-03	.4957E-03	.7085E-03	.9003E-03	.1072E-02
2	7	.2391E-03	.4568E-03	.6544E-03	.8334E-03	.9952E-03
2	8	.1929E-03	.3707E-03	.5340E-03	.6836E-03	.8203E-03
2	9	.1464E-03	.2832E-03	.4104E-03	.5283E-03	.6374E-03
2	10	.1106E-03	.2150E-03	.3130E-03	.4047E-03	.4904E-03
3	4	.2479E-03	.4747E-03	.6814E-03	.8692E-03	.1039E-02
3	5	.3030E-03	.5771E-03	.8242E-03	.1046E-02	.1246E-02
3	6	.3271E-03	.6216E-03	.8860E-03	.1122E-02	.1334E-02
3	7	.3019E-03	.5752E-03	.8216E-03	.1043E-02	.1242E-02
3	8	.2465E-03	.4721E-03	.6778E-03	.8648E-03	.1034E-02
3	9	.1903E-03	.3665E-03	.5290E-03	.6783E-03	.8152E-03
3	10	.1464E-03	.2832E-03	.4104E-03	.5283E-03	.6374E-03
3	11	.1152E-03	.2233E-03	.3244E-03	.4188E-03	.5065E-03

### Appendix C. Series y3.C

## Appendix C. Series y3-C

Y 3.0- 3/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y = 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 2.0, 2.2	Z = 2.0, 2.4	Z = 2.0, 2.6	Z = 2.0, 2.8	Z = 2.0, 3.0
4	5	.3817E-03	.7239E-03	.1029E-02	.1302E-02	.1544E-02
4	6	.4104E-03	.7768E-03	.1102E-02	.1392E-02	.1648E-02
4	7	.3805E-03	.7219E-03	.1026E-02	.1298E-02	.1540E-02
4	8	.3143E-03	.5991E-03	.8561E-03	.1087E-02	.1295E-02
4	9	.2465E-03	.4721E-03	.6778E-03	.8648E-03	.1034E-02
4	10	.1929E-03	.3707E-03	.5340E-03	.6836E-03	.8203E-03
4	11	.1540E-03	.2967E-03	.4284E-03	.5495E-03	.6608E-03
4	12	.1264E-03	.2437E-03	.3522E-03	.4525E-03	.5448E-03
5	6	.4906E-03	.9248E-03	.1307E-02	.1644E-02	.1940E-02
5	7	.4567E-03	.8624E-03	.1221E-02	.1539E-02	.1819E-02
5	8	.3805E-03	.7219E-03	.1026E-02	.1298E-02	.1540E-02
5	9	.3019E-03	.5752E-03	.8216E-03	.1043E-02	.1242E-02
5	10	.2391E-03	.4568E-03	.6544E-03	.8334E-03	.9952E-03
5	11	.1930E-03	.3695E-03	.5303E-03	.6765E-03	.8093E-03
5	12	.1598E-03	.3061E-03	.4398E-03	.5616E-03	.6726E-03
5	13	.1354E-03	.2596E-03	.3731E-03	.4768E-03	.5712E-03
6	7	.4906E-03	.9248E-03	.1307E-02	.1644E-02	.1940E-02
6	8	.4104E-03	.7768E-03	.1102E-02	.1392E-02	.1648E-02
6	9	.3271E-03	.6216E-03	.8860E-03	.1122E-02	.1334E-02
6	10	.2601E-03	.4957E-03	.7085E-03	.9003E-03	.1072E-02
6	11	.2108E-03	.4024E-03	.5761E-03	.7333E-03	.8752E-03
6	12	.1750E-03	.3345E-03	.4793E-03	.6105E-03	.7294E-03
6	13	.1487E-03	.2843E-03	.4076E-03	.5195E-03	.6209E-03
6	14	.1289E-03	.2465E-03	.3534E-03	.4505E-03	.5386E-03

Y 3.0- 3/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
7	8	.3817E-03	.7239E-03	.1029E-02	.1302E-02	.1544E-02
7	9	.3030E-03	.5771E-03	.8242E-03	.1046E-02	.1246E-02
7	10	.2399E-03	.4583E-03	.6566E-03	.8360E-03	.9982E-03
7	11	.1937E-03	.3707E-03	.5319E-03	.6785E-03	.8116E-03
7	12	.1603E-03	.3071E-03	.4411E-03	.5632E-03	.6744E-03
7	13	.1358E-03	.2603E-03	.3742E-03	.4780E-03	.5727E-03
7	14	.1175E-03	.2252E-03	.3237E-03	.4137E-03	.4957E-03
7	15	.1033E-03	.1981E-03	.2848E-03	.3639E-03	.4361E-03
8	9	.2479E-03	.4747E-03	.6814E-03	.8692E-03	.1039E-02
8	10	.1940E-03	.3728E-03	.5369E-03	.6872E-03	.8245E-03
8	11	.1549E-03	.2983E-03	.4306E-03	.5523E-03	.6641E-03
8	12	.1270E-03	.2449E-03	.3540E-03	.4546E-03	.5473E-03
8	13	.1068E-03	.2061E-03	.2981E-03	.3831E-03	.4615E-03
8	14	.9186E-04	.1772E-03	.2564E-03	.3296E-03	.3973E-03
8	15	.8040E-04	.1551E-03	.2245E-03	.2886E-03	.3479E-03
8	16	.7142E-04	.1378E-03	.1994E-03	.2564E-03	.3091E-03
9	10	.1474E-03	.2851E-03	.4130E-03	.5316E-03	.6412E-03
9	11	.1159E-03	.2247E-03	.3264E-03	.4213E-03	.5095E-03
9	12	.9382E-04	.1821E-03	.2649E-03	.3424E-03	.4148E-03
9	13	.7801E-04	.1515E-03	.2207E-03	.2855E-03	.3462E-03
9	14	.6643E-04	.1291E-03	.1881E-03	.2435E-03	.2954E-03
9	15	.5770E-04	.1122E-03	.1635E-03	.2117E-03	.2569E-03
9	16	.5094E-04	.9906E-04	.1444E-03	.1870E-03	.2269E-03
9	17	.4558E-04	.8863E-04	.1292E-03	.1673E-03	.2030E-03

### Appendix C. Series y3-C

### Appendix C. Series y3-C

		S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
10	11	.8610E-04		.1677E-03	.2449E-03	.3176E-03	.3859E-03	
10	12	.6855E-04		.1338E-03	.1957E-03	.2544E-03	.3098E-03	
10	13	.5623E-04		.1098E-03	.1609E-03	.2094E-03	.2553E-03	
10	14	.4733E-04		.9258E-04	.1357E-03	.1767E-03	.2155E-03	
10	15	.4072E-04		.7968E-04	.1168E-03	.1522E-03	.1858E-03	
10	16	.3567E-04		.6980E-04	.1023E-03	.1334E-03	.1628E-03	
10	17	.3170E-04		.6205E-04	.9102E-04	.1186E-03	.1448E-03	
10	18	.2852E-04		.5583E-04	.8190E-04	.1067E-03	.1303E-03	
11	12	.5117E-04		.1002E-03	.1472E-03	.1921E-03	.2349E-03	
11	13	.4136E-04		.8118E-04	.1194E-03	.1560E-03	.1910E-03	
11	14	.3438E-04		.6754E-04	.9945E-04	.1300E-03	.1594E-03	
11	15	.2926E-04		.5752E-04	.8474E-04	.1109E-03	.1360E-03	
11	16	.2540E-04		.4994E-04	.7360E-04	.9636E-04	.1182E-03	
11	17	.2240E-04		.4406E-04	.6495E-04	.8505E-04	.1043E-03	
11	18	.2002E-04		.3939E-04	.5807E-04	.7606E-04	.9334E-04	
11	19	.1810E-04		.3560E-04	.5249E-04	.6876E-04	.8439E-04	
12	13	.3142E-04		.6186E-04	.9126E-04	.1196E-03	.1468E-03	
12	14	.2579E-04		.5082E-04	.7506E-04	.9848E-04	.1210E-03	
12	15	.2170E-04		.4280E-04	.6326E-04	.8307E-04	.1022E-03	
12	16	.1866E-04		.3681E-04	.5443E-04	.7151E-04	.8804E-04	
12	17	.1632E-04		.3221E-04	.4765E-04	.6262E-04	.7711E-04	
12	18	.1449E-04		.2859E-04	.4231E-04	.5561E-04	.6850E-04	
12	19	.1301E-04		.2569E-04	.3802E-04	.4998E-04	.6157E-04	
12	20	.1181E-04		.2332E-04	.3451E-04	.4537E-04	.5589E-04	

## Appendix C. Series y3-C

Y 3.0- 3/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S•RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
13	14	.2001E-04	.3952E-04	.5850E-04	.7693E-04	.9480E-04
13	15	.1666E-04	.3293E-04	.4878E-04	.6421E-04	.7919E-04
13	16	.1418E-04	.2805E-04	.4157E-04	.5475E-04	.6757E-04
13	17	.1230E-04	.2434E-04	.3609E-04	.4755E-04	.5871E-04
13	18	.1084E-04	.2145E-04	.3181E-04	.4193E-04	.5178E-04
13	19	.9677E-05	.1915E-04	.2841E-04	.3745E-04	.4625E-04
13	20	.8734E-05	.1728E-04	.2564E-04	.3381E-04	.4176E-04
13	21	.7956E-05	.1574E-04	.2336E-04	.3080E-04	.3806E-04
14	15	.1320E-04	.2614E-04	.3879E-04	.5114E-04	.6318E-04
14	16	.1113E-04	.2206E-04	.3275E-04	.4321E-04	.5342E-04
14	17	.9580E-05	.1898E-04	.2820E-04	.3722E-04	.4603E-04
14	18	.8378E-05	.1660E-04	.2467E-04	.3258E-04	.4031E-04
14	19	.7430E-05	.1473E-04	.2189E-04	.2891E-04	.3578E-04
14	20	.6667E-05	.1322E-04	.1965E-04	.2595E-04	.3213E-04
14	21	.6043E-05	.1198E-04	.1781E-04	.2353E-04	.2913E-04
14	22	.5523E-05	.1095E-04	.1628E-04	.2151E-04	.2664E-04
15	16	.9001E-05	.1785E-04	.2653E-04	.3505E-04	.4338E-04
15	17	.7679E-05	.1523E-04	.2266E-04	.2995E-04	.3709E-04
15	18	.6667E-05	.1323E-04	.1968E-04	.2603E-04	.3225E-04
15	19	.5874E-05	.1166E-04	.1735E-04	.2295E-04	.2845E-04
15	20	.5240E-05	.1040E-04	.1549E-04	.2049E-04	.2540E-04
15	21	.4725E-05	.9384E-05	.1397E-04	.1848E-04	.2291E-04
15	22	.4299E-05	.8539E-05	.1271E-04	.1682E-04	.2086E-04
15	23	.3943E-05	.7831E-05	.1166E-04	.1543E-04	.1913E-04

## Appendix C. Series y3-C

Y 3.0- 4/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
1	2	.6411E-04	.1241E-03	.1801E-03	.2324E-03	.2812E-03
1	3	.8183E-04	.1576E-03	.2277E-03	.2925E-03	.3522E-03
1	4	.1024E-03	.1961E-03	.2819E-03	.3602E-03	.4318E-03
1	5	.1206E-03	.2300E-03	.3290E-03	.4187E-03	.5000E-03
1	6	.1281E-03	.2438E-03	.3482E-03	.4424E-03	.5275E-03
1	7	.1204E-03	.2295E-03	.3283E-03	.4179E-03	.4991E-03
1	8	.1020E-03	.1954E-03	.2809E-03	.3590E-03	.4304E-03
1	9	.8145E-04	.1569E-03	.2267E-03	.2912E-03	.3508E-03
2	3	.1010E-03	.1941E-03	.2797E-03	.3582E-03	.4303E-03
2	4	.1251E-03	.2391E-03	.3428E-03	.4370E-03	.5226E-03
2	5	.1463E-03	.2784E-03	.3974E-03	.5047E-03	.6014E-03
2	6	.1550E-03	.2943E-03	.4195E-03	.5319E-03	.6330E-03
2	7	.1460E-03	.2778E-03	.3966E-03	.5037E-03	.6003E-03
2	8	.1246E-03	.2382E-03	.3416E-03	.4355E-03	.5210E-03
2	9	.1006E-03	.1932E-03	.2785E-03	.3567E-03	.4286E-03
2	10	.7982E-04	.1540E-03	.2229E-03	.2867E-03	.3458E-03
3	4	.1540E-03	.2932E-03	.4189E-03	.5324E-03	.6347E-03
3	5	.1788E-03	.3389E-03	.4823E-03	.6107E-03	.7258E-03
3	6	.1889E-03	.3575E-03	.5080E-03	.6423E-03	.7622E-03
3	7	.1784E-03	.3383E-03	.4814E-03	.6097E-03	.7245E-03
3	8	.1535E-03	.2922E-03	.4176E-03	.5307E-03	.6328E-03
3	9	.1252E-03	.2396E-03	.3439E-03	.4389E-03	.5254E-03
3	10	.1006E-03	.1932E-03	.2785E-03	.3567E-03	.4286E-03
3	11	.8145E-04	.1569E-03	.2267E-03	.2912E-03	.3508E-03

Y 3.0- 4/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
4	5	.2154E-03	.4067E-03	.5766E-03	.7275E-03	.8617E-03
4	6	.2270E-03	.4280E-03	.6060E-03	.7636E-03	.9034E-03
4	7	.2150E-03	.4061E-03	.5757E-03	.7265E-03	.8605E-03
4	8	.1863E-03	.3531E-03	.5025E-03	.6362E-03	.7559E-03
4	9	.1535E-03	.2922E-03	.4176E-03	.5307E-03	.6328E-03
4	10	.1246E-03	.2382E-03	.3416E-03	.4355E-03	.5210E-03
4	11	.1020E-03	.1954E-03	.2809E-03	.3590E-03	.4304E-03
4	12	.8490E-04	.1629E-03	.2345E-03	.3002E-03	.3604E-03
5	6	.2602E-03	.4888E-03	.6898E-03	.8666E-03	.1022E-02
5	7	.2469E-03	.4646E-03	.6566E-03	.8259E-03	.9755E-03
5	8	.2150E-03	.4061E-03	.5757E-03	.7265E-03	.8605E-03
5	9	.1784E-03	.3383E-03	.4814E-03	.6097E-03	.7245E-03
5	10	.1460E-03	.2778E-03	.3966E-03	.5037E-03	.6003E-03
5	11	.1204E-03	.2295E-03	.3283E-03	.4179E-03	.4991E-03
5	12	.1008E-03	.1925E-03	.2758E-03	.3515E-03	.4203E-03
5	13	.8601E-04	.1643E-03	.2356E-03	.3005E-03	.3596E-03
6	7	.2602E-03	.4888E-03	.6898E-03	.8666E-03	.1022E-02
6	8	.2270E-03	.4280E-03	.6060E-03	.7636E-03	.9034E-03
6	9	.1889E-03	.3575E-03	.5080E-03	.6423E-03	.7622E-03
6	10	.1550E-03	.2943E-03	.4195E-03	.5319E-03	.6330E-03
6	11	.1281E-03	.2438E-03	.3482E-03	.4424E-03	.5275E-03
6	12	.1076E-03	.2049E-03	.2931E-03	.3728E-03	.4451E-03
6	13	.9195E-04	.1752E-03	.2508E-03	.3193E-03	.3815E-03
6	14	.7990E-04	.1523E-03	.2181E-03	.2778E-03	.3320E-03

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 4/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0, 3.2	Z= 3.0, 3.4	Z= 3.0, 3.6	Z= 3.0, 3.8	Z= 3.0, 4.0
7	8	.2154E-03	.4067E-03	.5766E-03	.7275E-03	.8617E-03
7	9	.1788E-03	.3389E-03	.4823E-03	.6107E-03	.7258E-03
7	10	.1463E-03	.2784E-03	.3974E-03	.5047E-03	.6014E-03
7	11	.1206E-03	.2300E-03	.3290E-03	.4187E-03	.5000E-03
7	12	.1010E-03	.1929E-03	.2763E-03	.3521E-03	.4211E-03
7	13	.8618E-04	.1646E-03	.2360E-03	.3010E-03	.3602E-03
7	14	.7476E-04	.1428E-03	.2049E-03	.2615E-03	.3131E-03
7	15	.6583E-04	.1258E-03	.1805E-03	.2304E-03	.2759E-03
8	9	.1540E-03	.2932E-03	.4189E-03	.5324E-03	.6347E-03
8	10	.1251E-03	.2391E-03	.3428E-03	.4370E-03	.5226E-03
8	11	.1024E-03	.1961E-03	.2819E-03	.3602E-03	.4318E-03
8	12	.8521E-04	.1634E-03	.2353E-03	.3011E-03	.3616E-03
8	13	.7225E-04	.1387E-03	.1998E-03	.2561E-03	.3077E-03
8	14	.6236E-04	.1198E-03	.1727E-03	.2214E-03	.2662E-03
8	15	.5469E-04	.1051E-03	.1515E-03	.1944E-03	.2338E-03
8	16	.4862E-04	.9347E-04	.1348E-03	.1729E-03	.2080E-03
9	10	.1010E-03	.1941E-03	.2797E-03	.3582E-03	.4303E-03
9	11	.8183E-04	.1576E-03	.2277E-03	.2925E-03	.3522E-03
9	12	.6740E-04	.1300E-03	.1883E-03	.2423E-03	.2924E-03
9	13	.5665E-04	.1094E-03	.1586E-03	.2044E-03	.2469E-03
9	14	.4853E-04	.9386E-04	.1361E-03	.1755E-03	.2122E-03
9	15	.4230E-04	.8184E-04	.1187E-03	.1531E-03	.1852E-03
9	16	.3741E-04	.7239E-04	.1050E-03	.1355E-03	.1640E-03
9	17	.3349E-04	.6482E-04	.9410E-04	.1214E-03	.1469E-03

### Appendix C. Series y3-C

Y 3.0- 4/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y = 3.0 IS DELIMITED BY X = 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0, 3.2	Z = 3.0, 3.4	Z = 3.0, 3.6	Z = 3.0, 3.8	Z = 3.0, 4.0
10	11	.6411E-04	.1241E-03	.1801E-03	.2324E-03	.2812E-03
10	12	.5218E-04	.1012E-03	.1473E-03	.1905E-03	.2309E-03
10	13	.4338E-04	.8431E-04	.1228E-03	.1591E-03	.1931E-03
10	14	.3682E-04	.7163E-04	.1044E-03	.1354E-03	.1646E-03
10	15	.3184E-04	.6197E-04	.9044E-04	.1173E-03	.1426E-03
10	16	.2796E-04	.5445E-04	.7950E-04	.1031E-03	.1255E-03
10	17	.2489E-04	.4848E-04	.7080E-04	.9190E-04	.1118E-03
10	18	.2241E-04	.4366E-04	.6377E-04	.8278E-04	.1007E-03
11	12	.4062E-04	.7916E-04	.1156E-03	.1501E-03	.1827E-03
11	13	.3338E-04	.6517E-04	.9538E-04	.1240E-03	.1512E-03
11	14	.2804E-04	.5481E-04	.8031E-04	.1045E-03	.1276E-03
11	15	.2402E-04	.4699E-04	.6891E-04	.8980E-04	.1096E-03
11	16	.2094E-04	.4097E-04	.6012E-04	.7838E-04	.9579E-04
11	17	.1851E-04	.3624E-04	.5319E-04	.6938E-04	.8481E-04
11	18	.1657E-04	.3245E-04	.4764E-04	.6215E-04	.7599E-04
11	19	.1499E-04	.2936E-04	.4311E-04	.5624E-04	.6878E-04
12	13	.2617E-04	.5127E-04	.7527E-04	.9821E-04	.1200E-03
12	14	.2175E-04	.4266E-04	.6273E-04	.8196E-04	.1003E-03
12	15	.1846E-04	.3624E-04	.5333E-04	.6975E-04	.8549E-04
12	16	.1595E-04	.3133E-04	.4615E-04	.6039E-04	.7407E-04
12	17	.1400E-04	.2752E-04	.4054E-04	.5308E-04	.6513E-04
12	18	.1245E-04	.2449E-04	.3609E-04	.4726E-04	.5801E-04
12	19	.1121E-04	.2203E-04	.3248E-04	.4254E-04	.5223E-04
12	20	.1018E-04	.2002E-04	.2951E-04	.3866E-04	.4746E-04

## Appendix C. Series y3-C

Y 3.0- 4/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 3.0, 3.2	Z = 3.0, 3.4	Z = 3.0, 3.6	Z = 3.0, 3.8	Z = 3.0, 4.0
13	14	.1728E-04	.3398E-04	.5008E-04	.6560E-04	.8052E-04
13	15	.1452E-04	.2859E-04	.4219E-04	.5532E-04	.6798E-04
13	16	.1244E-04	.2451E-04	.3620E-04	.4750E-04	.5842E-04
13	17	.1084E-04	.2137E-04	.3157E-04	.4145E-04	.5101E-04
13	18	.9582E-05	.1889E-04	.2792E-04	.3667E-04	.4514E-04
13	19	.8571E-05	.1690E-04	.2498E-04	.3282E-04	.4041E-04
13	20	.7745E-05	.1527E-04	.2258E-04	.2968E-04	.3655E-04
13	21	.7062E-05	.1392E-04	.2060E-04	.2707E-04	.3334E-04
14	15	.1171E-04	.2310E-04	.3415E-04	.4487E-04	.5524E-04
14	16	.9954E-05	.1964E-04	.2907E-04	.3822E-04	.4710E-04
14	17	.8606E-05	.1699E-04	.2516E-04	.3311E-04	.4083E-04
14	18	.7554E-05	.1492E-04	.2210E-04	.2910E-04	.3590E-04
14	19	.6716E-05	.1327E-04	.1966E-04	.2589E-04	.3196E-04
14	20	.6037E-05	.1193E-04	.1768E-04	.2329E-04	.2875E-04
14	21	.5478E-05	.1083E-04	.1605E-04	.2114E-04	.2611E-04
14	22	.5012E-05	.9910E-05	.1469E-04	.1935E-04	.2389E-04
15	16	.8150E-05	.1610E-04	.2387E-04	.3143E-04	.3880E-04
15	17	.6994E-05	.1383E-04	.2051E-04	.2703E-04	.3339E-04
15	18	.6098E-05	.1206E-04	.1790E-04	.2360E-04	.2917E-04
15	19	.5389E-05	.1066E-04	.1583E-04	.2088E-04	.2582E-04
15	20	.4818E-05	.9541E-05	.1416E-04	.1868E-04	.2311E-04
15	21	.4351E-05	.8618E-05	.1279E-04	.1688E-04	.2088E-04
15	22	.3964E-05	.7851E-05	.1166E-04	.1539E-04	.1903E-04
15	23	.3638E-05	.7207E-05	.1070E-04	.1412E-04	.1748E-04

Appendix C. Series y3-C

Y 3.0- 5/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
1	2	.4535E-04	.8753E-04	.1267E-03	.1631E-03	.1969E-03
1	3	.5513E-04	.1059E-03	.1528E-03	.1959E-03	.2357E-03
1	4	.6539E-04	.1251E-03	.1797E-03	.2296E-03	.2752E-03
1	5	.7368E-04	.1405E-03	.2011E-03	.2562E-03	.3063E-03
1	6	.7689E-04	.1464E-03	.2094E-03	.2665E-03	.3182E-03
1	7	.7357E-04	.1403E-03	.2009E-03	.2559E-03	.3060E-03
1	8	.6523E-04	.1248E-03	.1793E-03	.2291E-03	.2746E-03
1	9	.5496E-04	.1056E-03	.1523E-03	.1954E-03	.2350E-03
2	3	.6607E-04	.1266E-03	.1821E-03	.2329E-03	.2795E-03
2	4	.7781E-04	.1485E-03	.2127E-03	.2712E-03	.3244E-03
2	5	.8724E-04	.1659E-03	.2371E-03	.3014E-03	.3596E-03
2	6	.9090E-04	.1727E-03	.2464E-03	.3130E-03	.3730E-03
2	7	.8713E-04	.1657E-03	.2368E-03	.3010E-03	.3592E-03
2	8	.7762E-04	.1481E-03	.2123E-03	.2706E-03	.3237E-03
2	9	.6587E-04	.1262E-03	.1815E-03	.2323E-03	.2788E-03
2	10	.5464E-04	.1051E-03	.1517E-03	.1948E-03	.2346E-03
3	4	.9234E-04	.1756E-03	.2509E-03	.3189E-03	.3805E-03
3	5	.1030E-03	.1955E-03	.2784E-03	.3530E-03	.4201E-03
3	6	.1072E-03	.2031E-03	.2890E-03	.3661E-03	.4353E-03
3	7	.1029E-03	.1952E-03	.2781E-03	.3527E-03	.4197E-03
3	8	.9214E-04	.1753E-03	.2504E-03	.3183E-03	.3798E-03
3	9	.7874E-04	.1503E-03	.2155E-03	.2749E-03	.3289E-03
3	10	.6587E-04	.1262E-03	.1815E-03	.2323E-03	.2788E-03
3	11	.5496E-04	.1056E-03	.1523E-03	.1954E-03	.2350E-03

## Appendix C. Series y3-C

Y 3.0- 5/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
4	5	.1193E-03	.2256E-03	.3205E-03	.4052E-03	.4809E-03
4	6	.1240E-03	.2342E-03	.3323E-03	.4197E-03	.4978E-03
4	7	.1192E-03	.2254E-03	.3202E-03	.4048E-03	.4806E-03
4	8	.1071E-03	.2032E-03	.2894E-03	.3667E-03	.4363E-03
4	9	.9214E-04	.1753E-03	.2504E-03	.3183E-03	.3798E-03
4	10	.7762E-04	.1481E-03	.2123E-03	.2706E-03	.3237E-03
4	11	.6523E-04	.1248E-03	.1793E-03	.2291E-03	.2746E-03
4	12	.5525E-04	.1059E-03	.1524E-03	.1951E-03	.2342E-03
5	6	.1374E-03	.2588E-03	.3663E-03	.4617E-03	.5465E-03
5	7	.1323E-03	.2494E-03	.3534E-03	.4458E-03	.5281E-03
5	8	.1192E-03	.2254E-03	.3202E-03	.4048E-03	.4806E-03
5	9	.1029E-03	.1952E-03	.2781E-03	.3527E-03	.4197E-03
5	10	.8713E-04	.1657E-03	.2368E-03	.3010E-03	.3592E-03
5	11	.7357E-04	.1403E-03	.2009E-03	.2559E-03	.3060E-03
5	12	.6260E-04	.1195E-03	.1715E-03	.2188E-03	.2620E-03
5	13	.5390E-04	.1030E-03	.1479E-03	.1890E-03	.2265E-03
6	7	.1374E-03	.2588E-03	.3663E-03	.4617E-03	.5465E-03
6	8	.1240E-03	.2342E-03	.3323E-03	.4197E-03	.4978E-03
6	9	.1072E-03	.2031E-03	.2890E-03	.3661E-03	.4353E-03
6	10	.9090E-04	.1727E-03	.2464E-03	.3130E-03	.3730E-03
6	11	.7689E-04	.1464E-03	.2094E-03	.2665E-03	.3182E-03
6	12	.6553E-04	.1250E-03	.1790E-03	.2281E-03	.2729E-03
6	13	.5651E-04	.1079E-03	.1547E-03	.1973E-03	.2362E-03
6	14	.4935E-04	.9430E-04	.1352E-03	.1727E-03	.2069E-03

Appendix C. Series y3-C

Y 3.0- 5/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
7	8	.1193E-03	.2256E-03	.3205E-03	.4052E-03	.4809E-03
7	9	.1030E-03	.1955E-03	.2784E-03	.3530E-03	.4201E-03
7	10	.8724E-04	.1659E-03	.2371E-03	.3014E-03	.3596E-03
7	11	.7368E-04	.1405E-03	.2011E-03	.2562E-03	.3063E-03
7	12	.6269E-04	.1197E-03	.1717E-03	.2191E-03	.2623E-03
7	13	.5398E-04	.1032E-03	.1481E-03	.1892E-03	.2268E-03
7	14	.4708E-04	.9009E-04	.1294E-03	.1654E-03	.1984E-03
7	15	.4158E-04	.7960E-04	.1144E-03	.1462E-03	.1755E-03
8	9	.9234E-04	.1756E-03	.2509E-03	.3189E-03	.3805E-03
8	10	.7781E-04	.1485E-03	.2127E-03	.2712E-03	.3244E-03
8	11	.6539E-04	.1251E-03	.1797E-03	.2296E-03	.2752E-03
8	12	.5539E-04	.1061E-03	.1527E-03	.1955E-03	.2347E-03
8	13	.4749E-04	.9115E-04	.1313E-03	.1682E-03	.2022E-03
8	14	.4127E-04	.7928E-04	.1142E-03	.1465E-03	.1763E-03
8	15	.3634E-04	.6983E-04	.1007E-03	.1292E-03	.1555E-03
8	16	.3237E-04	.6223E-04	.8978E-04	.1152E-03	.1387E-03
9	10	.6607E-04	.1266E-03	.1821E-03	.2329E-03	.2795E-03
9	11	.5513E-04	.1059E-03	.1528E-03	.1959E-03	.2357E-03
9	12	.4637E-04	.8930E-04	.1290E-03	.1658E-03	.1998E-03
9	13	.3950E-04	.7619E-04	.1102E-03	.1418E-03	.1712E-03
9	14	.3413E-04	.6590E-04	.9544E-04	.1229E-03	.1484E-03
9	15	.2990E-04	.5776E-04	.8371E-04	.1078E-03	.1304E-03
9	16	.2652E-04	.5126E-04	.7431E-04	.9581E-04	.1158E-03
9	17	.2379E-04	.4598E-04	.6668E-04	.8599E-04	.1040E-03

## Appendix C. Series y3-C

Y 3.0- 5/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
10	11	.4535E-04	.8753E-04	.1267E-03	.1631E-03	.1969E-03
10	12	.3782E-04	.7317E-04	.1061E-03	.1369E-03	.1657E-03
10	13	.3196E-04	.6194E-04	.9003E-04	.1163E-03	.1409E-03
10	14	.2742E-04	.5320E-04	.7741E-04	.1001E-03	.1214E-03
10	15	.2387E-04	.4634E-04	.6748E-04	.8736E-04	.1060E-03
10	16	.2105E-04	.4090E-04	.5958E-04	.7718E-04	.9373E-04
10	17	.1879E-04	.3651E-04	.5321E-04	.6895E-04	.8377E-04
10	18	.1694E-04	.3293E-04	.4801E-04	.6221E-04	.7560E-04
11	12	.3070E-04	.5961E-04	.8682E-04	.1123E-03	.1364E-03
11	13	.2571E-04	.5003E-04	.7300E-04	.9468E-04	.1151E-03
11	14	.2188E-04	.4262E-04	.6228E-04	.8088E-04	.9847E-04
11	15	.1890E-04	.3686E-04	.5391E-04	.7008E-04	.8540E-04
11	16	.1657E-04	.3233E-04	.4731E-04	.6153E-04	.7503E-04
11	17	.1470E-04	.2870E-04	.4202E-04	.5468E-04	.6670E-04
11	18	.1319E-04	.2576E-04	.3772E-04	.4910E-04	.5992E-04
11	19	.1195E-04	.2334E-04	.3419E-04	.4451E-04	.5432E-04
12	13	.2084E-04	.4068E-04	.5955E-04	.7746E-04	.9446E-04
12	14	.1758E-04	.3437E-04	.5039E-04	.6564E-04	.8017E-04
12	15	.1507E-04	.2950E-04	.4329E-04	.5646E-04	.6903E-04
12	16	.1312E-04	.2569E-04	.3773E-04	.4925E-04	.6025E-04
12	17	.1157E-04	.2267E-04	.3331E-04	.4350E-04	.5325E-04
12	18	.1032E-04	.2024E-04	.2975E-04	.3886E-04	.4759E-04
12	19	.9310E-05	.1825E-04	.2683E-04	.3506E-04	.4295E-04
12	20	.8469E-05	.1660E-04	.2441E-04	.3191E-04	.3909E-04

Y 3.0- 5/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 4.0,4.2	Z= 4.0,4.4	Z= 4.0,4.6	Z= 4.0,4.8	Z= 4.0,5.0
13	14	.1433E-04	.2810E-04	.4129E-04	.5393E-04	.6602E-04
13	15	.1219E-04	.2392E-04	.3520E-04	.4603E-04	.5642E-04
13	16	.1053E-04	.2069E-04	.3047E-04	.3987E-04	.4892E-04
13	17	.9231E-05	.1814E-04	.2673E-04	.3500E-04	.4297E-04
13	18	.8190E-05	.1610E-04	.2373E-04	.3110E-04	.3819E-04
13	19	.7345E-05	.1444E-04	.2130E-04	.2792E-04	.3430E-04
13	20	.6651E-05	.1308E-04	.1929E-04	.2529E-04	.3108E-04
13	21	.6071E-05	.1194E-04	.1762E-04	.2310E-04	.2839E-04
14	15	.1003E-04	.1973E-04	.2908E-04	.3811E-04	.4680E-04
14	16	.8607E-05	.1694E-04	.2500E-04	.3278E-04	.4030E-04
14	17	.7492E-05	.1475E-04	.2179E-04	.2860E-04	.3518E-04
14	18	.6607E-05	.1302E-04	.1923E-04	.2526E-04	.3109E-04
14	19	.5894E-05	.1161E-04	.1717E-04	.2256E-04	.2778E-04
14	20	.5311E-05	.1047E-04	.1548E-04	.2034E-04	.2506E-04
14	21	.4827E-05	.9521E-05	.1408E-04	.1850E-04	.2280E-04
14	22	.4422E-05	.8722E-05	.1290E-04	.1696E-04	.2089E-04
15	16	.7158E-05	.1411E-04	.2085E-04	.2740E-04	.3373E-04
15	17	.6190E-05	.1221E-04	.1806E-04	.2375E-04	.2927E-04
15	18	.5426E-05	.1071E-04	.1585E-04	.2086E-04	.2572E-04
15	19	.4814E-05	.9509E-05	.1408E-04	.1853E-04	.2286E-04
15	20	.4317E-05	.8529E-05	.1263E-04	.1663E-04	.2052E-04
15	21	.3907E-05	.7720E-05	.1144E-04	.1506E-04	.1859E-04
15	22	.3564E-05	.7045E-05	.1044E-04	.1375E-04	.1697E-04
15	23	.3275E-05	.6474E-05	.9596E-05	.1264E-04	.1560E-04

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 6/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
1	2	.3137E-04	.6050E-04	.8753E-04	.1126E-03	.1359E-03
1	3	.3665E-04	.7044E-04	.1016E-03	.1303E-03	.1568E-03
1	4	.4176E-04	.8001E-04	.1150E-03	.1472E-03	.1767E-03
1	5	.4561E-04	.8717E-04	.1250E-03	.1597E-03	.1913E-03
1	6	.4704E-04	.8984E-04	.1288E-03	.1643E-03	.1968E-03
1	7	.4557E-04	.8710E-04	.1249E-03	.1595E-03	.1912E-03
1	8	.4169E-04	.7988E-04	.1148E-03	.1470E-03	.1764E-03
1	9	.3657E-04	.7030E-04	.1014E-03	.1301E-03	.1566E-03
2	3	.4270E-04	.8187E-04	.1178E-03	.1508E-03	.1811E-03
2	4	.4843E-04	.9257E-04	.1328E-03	.1695E-03	.2031E-03
2	5	.5273E-04	.1005E-03	.1440E-03	.1835E-03	.2194E-03
2	6	.5433E-04	.1035E-03	.1481E-03	.1886E-03	.2254E-03
2	7	.5268E-04	.1004E-03	.1438E-03	.1833E-03	.2193E-03
2	8	.4836E-04	.9243E-04	.1326E-03	.1693E-03	.2029E-03
2	9	.4262E-04	.8171E-04	.1175E-03	.1505E-03	.1808E-03
2	10	.3669E-04	.7056E-04	.1018E-03	.1307E-03	.1574E-03
3	4	.5570E-04	.1061E-03	.1519E-03	.1935E-03	.2314E-03
3	5	.6047E-04	.1150E-03	.1643E-03	.2089E-03	.2493E-03
3	6	.6225E-04	.1183E-03	.1689E-03	.2146E-03	.2560E-03
3	7	.6043E-04	.1149E-03	.1642E-03	.2088E-03	.2492E-03
3	8	.5562E-04	.1060E-03	.1518E-03	.1933E-03	.2311E-03
3	9	.4924E-04	.9414E-04	.1351E-03	.1725E-03	.2067E-03
3	10	.4262E-04	.8171E-04	.1175E-03	.1505E-03	.1808E-03
3	11	.3657E-04	.7030E-04	.1014E-03	.1301E-03	.1566E-03

### Appendix C. Series y3-C

Y 3.0- 6/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
4	5	.6788E-04	.1288E-03	.1835E-03	.2329E-03	.2774E-03
4	6	.6983E-04	.1324E-03	.1885E-03	.2391E-03	.2846E-03
4	7	.6784E-04	.1287E-03	.1835E-03	.2328E-03	.2773E-03
4	8	.6260E-04	.1190E-03	.1699E-03	.2160E-03	.2577E-03
4	9	.5562E-04	.1060E-03	.1518E-03	.1933E-03	.2311E-03
4	10	.4836E-04	.9243E-04	.1326E-03	.1693E-03	.2029E-03
4	11	.4169E-04	.7988E-04	.1148E-03	.1470E-03	.1764E-03
4	12	.3599E-04	.6909E-04	.9953E-04	.1275E-03	.1533E-03
5	6	.7550E-04	.1428E-03	.2031E-03	.2571E-03	.3056E-03
5	7	.7340E-04	.1390E-03	.1977E-03	.2505E-03	.2979E-03
5	8	.6784E-04	.1287E-03	.1835E-03	.2328E-03	.2773E-03
5	9	.6043E-04	.1149E-03	.1642E-03	.2088E-03	.2492E-03
5	10	.5268E-04	.1004E-03	.1438E-03	.1833E-03	.2193E-03
5	11	.4557E-04	.8710E-04	.1249E-03	.1595E-03	.1912E-03
5	12	.3946E-04	.7555E-04	.1085E-03	.1388E-03	.1666E-03
5	13	.3439E-04	.6592E-04	.9486E-04	.1214E-03	.1459E-03
6	7	.7550E-04	.1428E-03	.2031E-03	.2571E-03	.3056E-03
6	8	.6983E-04	.1324E-03	.1885E-03	.2391E-03	.2846E-03
6	9	.6225E-04	.1183E-03	.1689E-03	.2146E-03	.2560E-03
6	10	.5433E-04	.1035E-03	.1481E-03	.1886E-03	.2254E-03
6	11	.4704E-04	.8984E-04	.1288E-03	.1643E-03	.1968E-03
6	12	.4078E-04	.7801E-04	.1120E-03	.1431E-03	.1716E-03
6	13	.3557E-04	.6813E-04	.9796E-04	.1253E-03	.1504E-03
6	14	.3130E-04	.6000E-04	.8634E-04	.1105E-03	.1328E-03

## Appendix C. Series y3-C

Y 3.0- 6/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 5.0, 5.2	Z = 5.0, 5.4	Z = 5.0, 5.6	Z = 5.0, 5.8	Z = 5.0, 6.0
7	8	.6788E-04	.1288E-03	.1835E-03	.2329E-03	.2774E-03
7	9	.6047E-04	.1150E-03	.1643E-03	.2089E-03	.2493E-03
7	10	.5273E-04	.1005E-03	.1440E-03	.1835E-03	.2194E-03
7	11	.4561E-04	.8717E-04	.1250E-03	.1597E-03	.1913E-03
7	12	.3949E-04	.7561E-04	.1086E-03	.1389E-03	.1667E-03
7	13	.3442E-04	.6597E-04	.9494E-04	.1215E-03	.1460E-03
7	14	.3026E-04	.5805E-04	.8361E-04	.1071E-03	.1288E-03
7	15	.2686E-04	.5155E-04	.7430E-04	.9526E-04	.1146E-03
8	9	.5570E-04	.1061E-03	.1519E-03	.1935E-03	.2314E-03
8	10	.4843E-04	.9257E-04	.1328E-03	.1695E-03	.2031E-03
8	11	.4176E-04	.8001E-04	.1150E-03	.1472E-03	.1767E-03
8	12	.3605E-04	.6919E-04	.9968E-04	.1277E-03	.1536E-03
8	13	.3132E-04	.6020E-04	.8684E-04	.1114E-03	.1341E-03
8	14	.2746E-04	.5283E-04	.7628E-04	.9798E-04	.1180E-03
8	15	.2432E-04	.4681E-04	.6763E-04	.8692E-04	.1048E-03
8	16	.2174E-04	.4187E-04	.6051E-04	.7781E-04	.9386E-04
9	10	.4270E-04	.8187E-04	.1178E-03	.1508E-03	.1811E-03
9	11	.3665E-04	.7044E-04	.1016E-03	.1303E-03	.1568E-03
9	12	.3149E-04	.6064E-04	.8763E-04	.1126E-03	.1358E-03
9	13	.2724E-04	.5253E-04	.7602E-04	.9785E-04	.1181E-03
9	14	.2378E-04	.4591E-04	.6651E-04	.8570E-04	.1035E-03
9	15	.2097E-04	.4053E-04	.5875E-04	.7576E-04	.9162E-04
9	16	.1869E-04	.3612E-04	.5240E-04	.6760E-04	.8180E-04
9	17	.1681E-04	.3250E-04	.4716E-04	.6086E-04	.7367E-04

Y 3.0- 6/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.01S DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
10	11	.3137E-04	.6050E-04	.8753E-04	.1126E-03	.1359E-03
10	12	.2679E-04	.5178E-04	.7508E-04	.9680E-04	.1170E-03
10	13	.2304E-04	.4460E-04	.6477E-04	.8364E-04	.1013E-03
10	14	.2001E-04	.3878E-04	.5638E-04	.7289E-04	.8838E-04
10	15	.1756E-04	.3406E-04	.4957E-04	.6414E-04	.7784E-04
10	16	.1557E-04	.3023E-04	.4402E-04	.5700E-04	.6921E-04
10	17	.1395E-04	.2709E-04	.3947E-04	.5113E-04	.6210E-04
10	18	.1261E-04	.2450E-04	.3570E-04	.4625E-04	.5620E-04
11	12	.2256E-04	.4373E-04	.6360E-04	.8224E-04	.9972E-04
11	13	.1927E-04	.3743E-04	.5453E-04	.7064E-04	.8579E-04
11	14	.1663E-04	.3234E-04	.4719E-04	.6120E-04	.7444E-04
11	15	.1451E-04	.2825E-04	.4126E-04	.5357E-04	.6521E-04
11	16	.1280E-04	.2495E-04	.3646E-04	.4737E-04	.5771E-04
11	17	.1142E-04	.2226E-04	.3254E-04	.4230E-04	.5156E-04
11	18	.1027E-04	.2004E-04	.2931E-04	.3812E-04	.4648E-04
11	19	.9332E-05	.1820E-04	.2662E-04	.3463E-04	.4223E-04
12	13	.1612E-04	.3140E-04	.4587E-04	.5957E-04	.7253E-04
12	14	.1381E-04	.2695E-04	.3944E-04	.5129E-04	.6255E-04
12	15	.1198E-04	.2340E-04	.3428E-04	.4463E-04	.5449E-04
12	16	.1051E-04	.2055E-04	.3012E-04	.3926E-04	.4796E-04
12	17	.9326E-05	.1824E-04	.2675E-04	.3488E-04	.4265E-04
12	18	.8355E-05	.1634E-04	.2399E-04	.3129E-04	.3827E-04
12	19	.7554E-05	.1478E-04	.2170E-04	.2832E-04	.3464E-04
12	20	.6884E-05	.1347E-04	.1978E-04	.2582E-04	.3160E-04

### Appendix C. Series y3-C

### Appendix C. Series y3-C

Y 3.0- 6/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
13	14	.1156E-04	.2260E-04	.3315E-04	.4321E-04	.5281E-04
13	15	.9961E-05	.1950E-04	.2863E-04	.3738E-04	.4573E-04
13	16	.8687E-05	.1702E-04	.2502E-04	.3269E-04	.4003E-04
13	17	.7663E-05	.1502E-04	.2210E-04	.2889E-04	.3541E-04
13	18	.6831E-05	.1340E-04	.1972E-04	.2580E-04	.3164E-04
13	19	.6148E-05	.1206E-04	.1776E-04	.2324E-04	.2851E-04
13	20	.5580E-05	.1095E-04	.1613E-04	.2111E-04	.2591E-04
13	21	.5103E-05	.1002E-04	.1476E-04	.1932E-04	.2371E-04
14	15	.8369E-05	.1641E-04	.2415E-04	.3159E-04	.3872E-04
14	16	.7254E-05	.1424E-04	.2098E-04	.2747E-04	.3371E-04
14	17	.6363E-05	.1250E-04	.1843E-04	.2415E-04	.2966E-04
14	18	.5643E-05	.1109E-04	.1637E-04	.2146E-04	.2637E-04
14	19	.5055E-05	.9947E-05	.1467E-04	.1924E-04	.2366E-04
14	20	.4568E-05	.8993E-05	.1327E-04	.1741E-04	.2141E-04
14	21	.4162E-05	.8194E-05	.1209E-04	.1587E-04	.1953E-04
14	22	.3818E-05	.7519E-05	.1110E-04	.1457E-04	.1793E-04
15	16	.6134E-05	.1206E-04	.1780E-04	.2334E-04	.2869E-04
15	17	.5351E-05	.1053E-04	.1555E-04	.2041E-04	.2511E-04
15	18	.4721E-05	.9302E-05	.1374E-04	.1805E-04	.2222E-04
15	19	.4209E-05	.8297E-05	.1226E-04	.1611E-04	.1985E-04
15	20	.3787E-05	.7469E-05	.1104E-04	.1451E-04	.1788E-04
15	21	.3436E-05	.6779E-05	.1002E-04	.1318E-04	.1625E-04
15	22	.3141E-05	.6198E-05	.9171E-05	.1206E-04	.1486E-04
15	23	.2890E-05	.5704E-05	.8441E-05	.1110E-04	.1369E-04

Y 3.0- 7/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z*	6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
1	2		.2163E-04	.4173E-04	.6041E-04	.7778E-04	.9394E-04
1	3		.2450E-04	.4715E-04	.6809E-04	.8747E-04	.1054E-03
1	4		.2711E-04	.5205E-04	.7501E-04	.9617E-04	.1156E-03
1	5		.2898E-04	.5555E-04	.7993E-04	.1023E-03	.1229E-03
1	6		.2966E-04	.5682E-04	.8171E-04	.1045E-03	.1255E-03
1	7		.2897E-04	.5552E-04	.7989E-04	.1022E-03	.1228E-03
1	8		.2708E-04	.5200E-04	.7494E-04	.9608E-04	.1155E-03
1	9		.2447E-04	.4708E-04	.6800E-04	.8736E-04	.1052E-03
2	3		.2786E-04	.5350E-04	.7711E-04	.9887E-04	.1189E-03
2	4		.3073E-04	.5889E-04	.8470E-04	.1084E-03	.1301E-03
2	5		.3279E-04	.6273E-04	.9009E-04	.1151E-03	.1381E-03
2	6		.3354E-04	.6412E-04	.9205E-04	.1175E-03	.1409E-03
2	7		.3277E-04	.6270E-04	.9005E-04	.1150E-03	.1380E-03
2	8		.3071E-04	.5883E-04	.8463E-04	.1083E-03	.1300E-03
2	9		.2782E-04	.5343E-04	.7701E-04	.9875E-04	.1188E-03
2	10		.2466E-04	.4746E-04	.6857E-04	.8811E-04	.1062E-03
3	4		.3446E-04	.6588E-04	.9457E-04	.1208E-03	.1448E-03
3	5		.3669E-04	.7005E-04	.1004E-03	.1281E-03	.1534E-03
3	6		.3751E-04	.7157E-04	.1025E-03	.1307E-03	.1565E-03
3	7		.3668E-04	.7003E-04	.1003E-03	.1280E-03	.1533E-03
3	8		.3443E-04	.6583E-04	.9450E-04	.1207E-03	.1447E-03
3	9		.3129E-04	.5994E-04	.8622E-04	.1103E-03	.1324E-03
3	10		.2782E-04	.5343E-04	.7701E-04	.9875E-04	.1188E-03
3	11		.2447E-04	.4708E-04	.6800E-04	.8736E-04	.1052E-03

### Appendix C. Series y3-C

## Appendix C. Series y3-C

Y 3.0- 7/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
4	5	.4022E-04	.7665E-04	.1096E-03	.1396E-03	.1670E-03
4	6	.4110E-04	.7827E-04	.1119E-03	.1425E-03	.1703E-03
4	7	.4021E-04	.7662E-04	.1096E-03	.1396E-03	.1669E-03
4	8	.3780E-04	.7213E-04	.1033E-03	.1318E-03	.1577E-03
4	9	.3443E-04	.6583E-04	.9450E-04	.1207E-03	.1447E-03
4	10	.3071E-04	.5883E-04	.8463E-04	.1083E-03	.1300E-03
4	11	.2708E-04	.5200E-04	.7494E-04	.9608E-04	.1155E-03
4	12	.2382E-04	.4580E-04	.6611E-04	.8489E-04	.1022E-03
5	6	.4366E-04	.8303E-04	.1186E-03	.1508E-03	.1800E-03
5	7	.4273E-04	.8132E-04	.1162E-03	.1478E-03	.1765E-03
5	8	.4021E-04	.7662E-04	.1096E-03	.1396E-03	.1669E-03
5	9	.3668E-04	.7003E-04	.1003E-03	.1280E-03	.1533E-03
5	10	.3277E-04	.6270E-04	.9005E-04	.1150E-03	.1380E-03
5	11	.2897E-04	.5552E-04	.7989E-04	.1022E-03	.1228E-03
5	12	.2552E-04	.4900E-04	.7062E-04	.9054E-04	.1089E-03
5	13	.2254E-04	.4332E-04	.6251E-04	.8024E-04	.9665E-04
6	7	.4366E-04	.8303E-04	.1186E-03	.1508E-03	.1800E-03
6	8	.4110E-04	.7827E-04	.1119E-03	.1425E-03	.1703E-03
6	9	.3751E-04	.7157E-04	.1025E-03	.1307E-03	.1565E-03
6	10	.3354E-04	.6412E-04	.9205E-04	.1175E-03	.1409E-03
6	11	.2966E-04	.5682E-04	.8171E-04	.1045E-03	.1255E-03
6	12	.2616E-04	.5018E-04	.7228E-04	.9262E-04	.1113E-03
6	13	.2311E-04	.4440E-04	.6402E-04	.8213E-04	.9888E-04
6	14	.2052E-04	.3946E-04	.5696E-04	.7314E-04	.8813E-04

## Appendix C. Series y3-C

Y 3.0- 7/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
7	8	.4022E-04	.7665E-04	.1096E-03	.1396E-03	.1670E-03
7	9	.3669E-04	.7005E-04	.1004E-03	.1281E-03	.1534E-03
7	10	.3279E-04	.6273E-04	.9009E-04	.1151E-03	.1381E-03
7	11	.2898E-04	.5555E-04	.7993E-04	.1023E-03	.1229E-03
7	12	.2554E-04	.4903E-04	.7066E-04	.9059E-04	.1089E-03
7	13	.2255E-04	.4335E-04	.6254E-04	.8028E-04	.9670E-04
7	14	.2001E-04	.3850E-04	.5561E-04	.7145E-04	.8614E-04
7	15	.1788E-04	.3442E-04	.4975E-04	.6397E-04	.7717E-04
8	9	.3446E-04	.6588E-04	.9457E-04	.1208E-03	.1448E-03
8	10	.3073E-04	.5889E-04	.8470E-04	.1084E-03	.1301E-03
8	11	.2711E-04	.5205E-04	.7501E-04	.9617E-04	.1156E-03
8	12	.2384E-04	.4585E-04	.6618E-04	.8498E-04	.1023E-03
8	13	.2101E-04	.4045E-04	.5847E-04	.7517E-04	.9067E-04
8	14	.1861E-04	.3587E-04	.5189E-04	.6678E-04	.8063E-04
8	15	.1659E-04	.3201E-04	.4635E-04	.5969E-04	.7211E-04
8	16	.1491E-04	.2877E-04	.4168E-04	.5371E-04	.6492E-04
9	10	.2786E-04	.5350E-04	.7711E-04	.9887E-04	.1189E-03
9	11	.2450E-04	.4715E-04	.6809E-04	.8747E-04	.1054E-03
9	12	.2147E-04	.4140E-04	.5989E-04	.7706E-04	.9302E-04
9	13	.1886E-04	.3641E-04	.5275E-04	.6797E-04	.8215E-04
9	14	.1665E-04	.3219E-04	.4668E-04	.6021E-04	.7285E-04
9	15	.1481E-04	.2865E-04	.4158E-04	.5367E-04	.6499E-04
9	16	.1327E-04	.2568E-04	.3730E-04	.4818E-04	.5837E-04
9	17	.1198E-04	.2320E-04	.3370E-04	.4355E-04	.5279E-04

## Appendix C. Series y3-C

Y 3.0- 7/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.0 IS DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
10	11	.2163E-04	.4173E-04	.6041E-04	.7778E-04	.9394E-04
10	12	.1888E-04	.3650E-04	.5293E-04	.6827E-04	.8259E-04
10	13	.1651E-04	.3197E-04	.4644E-04	.5999E-04	.7267E-04
10	14	.1452E-04	.2815E-04	.4094E-04	.5295E-04	.6422E-04
10	15	.1286E-04	.2496E-04	.3633E-04	.4703E-04	.5709E-04
10	16	.1149E-04	.2230E-04	.3249E-04	.4208E-04	.5111E-04
10	17	.1034E-04	.2008E-04	.2927E-04	.3793E-04	.4609E-04
10	18	.9377E-05	.1822E-04	.2656E-04	.3443E-04	.4185E-04
11	12	.1638E-04	.3175E-04	.4617E-04	.5968E-04	.7236E-04
11	13	.1426E-04	.2769E-04	.4032E-04	.5221E-04	.6340E-04
11	14	.1248E-04	.2427E-04	.3539E-04	.4588E-04	.5579E-04
11	15	.1101E-04	.2142E-04	.3127E-04	.4059E-04	.4940E-04
11	16	.9793E-05	.1906E-04	.2785E-04	.3618E-04	.4406E-04
11	17	.8780E-05	.1710E-04	.2500E-04	.3249E-04	.3959E-04
11	18	.7934E-05	.1546E-04	.2261E-04	.2940E-04	.3584E-04
11	19	.7222E-05	.1408E-04	.2059E-04	.2678E-04	.3266E-04
12	13	.1226E-04	.2386E-04	.3483E-04	.4520E-04	.5500E-04
12	14	.1068E-04	.2081E-04	.3042E-04	.3953E-04	.4817E-04
12	15	.9373E-05	.1828E-04	.2676E-04	.3481E-04	.4247E-04
12	16	.8296E-05	.1620E-04	.2372E-04	.3089E-04	.3772E-04
12	17	.7407E-05	.1447E-04	.2121E-04	.2763E-04	.3376E-04
12	18	.6667E-05	.1303E-04	.1911E-04	.2491E-04	.3045E-04
12	19	.6048E-05	.1182E-04	.1735E-04	.2262E-04	.2766E-04
12	20	.5525E-05	.1080E-04	.1585E-04	.2068E-04	.2530E-04

Y 3.0- 7/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Y= 3.01S DELIMITED BY X= 5.5, 6.5  
 AND Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0,6.2	Z= 6.0,6.4	Z= 6.0,6.6	Z= 6.0,6.8	Z= 6.0,7.0
13	14	.9149E-05	.1786E-04	.2617E-04	.3408E-04	.4161E-04
13	15	.7988E-05	.1562E-04	.2291E-04	.2987E-04	.3651E-04
13	16	.7036E-05	.1377E-04	.2022E-04	.2638E-04	.3228E-04
13	17	.6253E-05	.1225E-04	.1799E-04	.2350E-04	.2877E-04
13	18	.5605E-05	.1098E-04	.1615E-04	.2110E-04	.2585E-04
13	19	.5065E-05	.9932E-05	.1460E-04	.1909E-04	.2340E-04
13	20	.4611E-05	.9044E-05	.1330E-04	.1739E-04	.2133E-04
13	21	.4226E-05	.8291E-05	.1219E-04	.1595E-04	.1956E-04
14	15	.6847E-05	.1341E-04	.1971E-04	.2574E-04	.3152E-04
14	16	.6001E-05	.1177E-04	.1731E-04	.2263E-04	.2774E-04
14	17	.5308E-05	.1042E-04	.1533E-04	.2007E-04	.2462E-04
14	18	.4738E-05	.9306E-05	.1370E-04	.1794E-04	.2203E-04
14	19	.4264E-05	.8379E-05	.1234E-04	.1617E-04	.1986E-04
14	20	.3867E-05	.7602E-05	.1120E-04	.1468E-04	.1804E-04
14	21	.3532E-05	.6946E-05	.1024E-04	.1342E-04	.1650E-04
14	22	.3247E-05	.6386E-05	.9420E-05	.1235E-04	.1518E-04
15	16	.5160E-05	.1013E-04	.1493E-04	.1955E-04	.2400E-04
15	17	.4543E-05	.8932E-05	.1317E-04	.1726E-04	.2121E-04
15	18	.4036E-05	.7942E-05	.1172E-04	.1537E-04	.1889E-04
15	19	.3618E-05	.7122E-05	.1051E-04	.1380E-04	.1697E-04
15	20	.3269E-05	.6438E-05	.9509E-05	.1248E-04	.1536E-04
15	21	.2975E-05	.5862E-05	.8661E-05	.1137E-04	.1400E-04
15	22	.2726E-05	.5372E-05	.7939E-05	.1042E-04	.1284E-04
15	23	.2512E-05	.4953E-05	.7321E-05	.9619E-05	.1184E-04

### Appendix C. Series y3-C

**Appendix D. Series zW-C**

### Appendix D. Series zW-C

ZW- 1/PAGE 1OF5  
 LECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 0.0	W= 0.2	W= 0.4	W= 0.6
1	2	.0000E-99	.1963E-03	.3882E-03	.5712E-03
1	3	.0000E-99	.3525E-03	.6924E-03	.1008E-02
1	4	.0000E-99	.8351E-03	.1608E-02	.2270E-02
1	5	.0000E-99	.4018E-02	.6707E-02	.7975E-02
1	6	.0000E-99	.3062E-01	.2804E-01	.2209E-01
1	7	.0000E-99	.3769E-02	.6341E-02	.7610E-02
1	8	.0000E-99	.8063E-03	.1554E-02	.2198E-02
1	9	.0000E-99	.3438E-03	.6756E-03	.9847E-03
2	3	.0000E-99	.4962E-03	.9732E-03	.1413E-02
2	4	.0000E-99	.1120E-02	.2155E-02	.3040E-02
2	5	.0000E-99	.5172E-02	.8636E-02	.1027E-01
2	6	.0000E-99	.3844E-01	.3529E-01	.2788E-01
2	7	.0000E-99	.4777E-02	.8057E-02	.9698E-02
2	8	.0000E-99	.1072E-02	.2067E-02	.2923E-02
2	9	.0000E-99	.4813E-03	.9446E-03	.1373E-02
2	10	.0000E-99	.2826E-03	.5576E-03	.8180E-03
3	4	.0000E-99	.1688E-02	.3239E-02	.4546E-02
3	5	.0000E-99	.7278E-02	.1214E-01	.1444E-01
3	6	.0000E-99	.5171E-01	.4769E-01	.3783E-01
3	7	.0000E-99	.6554E-02	.1109E-01	.1340E-01
3	8	.0000E-99	.1596E-02	.3070E-02	.4325E-02
3	9	.0000E-99	.7712E-03	.1507E-02	.2176E-02
3	10	.0000E-99	.4813E-03	.9446E-03	.1373E-02
3	11	.0000E-99	.3438E-03	.6756E-03	.9847E-03

### Appendix D. Series zW-C

ZW- 1/PAGE 20F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 0.0	W = 0.2	W = 0.4	W = 0.6
4	5	.0000E-99	.1230E-01	.2041E-01	.2400E-01
4	6	.0000E-99	.7937E-01	.7381E-01	.5880E-01
4	7	.0000E-99	.1055E-01	.1790E-01	.2162E-01
4	8	.0000E-99	.2972E-02	.5651E-02	.7819E-02
4	9	.0000E-99	.1596E-02	.3070E-02	.4325E-02
4	10	.0000E-99	.1072E-02	.2067E-02	.2923E-02
4	11	.0000E-99	.8063E-03	.1554E-02	.2198E-02
4	12	.0000E-99	.6466E-03	.1246E-02	.1762E-02
5	6	.0000E-99	.1768E-00	.1634E-00	.1245E-00
5	7	.0000E-99	.2783E-01	.4462E-01	.4982E-01
5	8	.0000E-99	.1055E-01	.1790E-01	.2162E-01
5	9	.0000E-99	.6554E-02	.1109E-01	.1340E-01
5	10	.0000E-99	.4777E-02	.8057E-02	.9698E-02
5	11	.0000E-99	.3769E-02	.6341E-02	.7610E-02
5	12	.0000E-99	.3117E-02	.5236E-02	.6270E-02
5	13	.0000E-99	.2661E-02	.4464E-02	.5337E-02
6	7	.0000E-99	.1768E-00	.1634E-00	.1245E-00
6	8	.0000E-99	.7937E-01	.7381E-01	.5880E-01
6	9	.0000E-99	.5171E-01	.4769E-01	.3783E-01
6	10	.0000E-99	.3844E-01	.3529E-01	.2788E-01
6	11	.0000E-99	.3062E-01	.2804E-01	.2209E-01
6	12	.0000E-99	.2545E-01	.2327E-01	.1830E-01
6	13	.0000E-99	.2178E-01	.1990E-01	.1563E-01
6	14	.0000E-99	.1904E-01	.1738E-01	.1364E-01

### Appendix D. Series zW-C

ZW- 1/PAGE 30F5

ELECTRODE CONFIGURATION POLE-POLE

SURFACE Z=W IS DELIMITED BY X=5.5,6.5

AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN

THE NUMERICAL VALUES ARE

SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 0.0	W= 0.2	W= 0.4	W= 0.6
7	8	.0000E-99	.1230E-01	.2041E-01	.2400E-01
7	9	.0000E-99	.7278E-02	.1214E-01	.1444E-01
7	10	.0000E-99	.5172E-02	.8636E-02	.1027E-01
7	11	.0000E-99	.4018E-02	.6707E-02	.7975E-02
7	12	.0000E-99	.3289E-02	.5489E-02	.6523E-02
7	13	.0000E-99	.2786E-02	.4648E-02	.5522E-02
7	14	.0000E-99	.2418E-02	.4034E-02	.4790E-02
7	15	.0000E-99	.2137E-02	.3564E-02	.4231E-02
8	9	.0000E-99	.1688E-02	.3239E-02	.4546E-02
8	10	.0000E-99	.1120E-02	.2155E-02	.3040E-02
8	11	.0000E-99	.8351E-03	.1608E-02	.2270E-02
8	12	.0000E-99	.6660E-03	.1282E-02	.1811E-02
8	13	.0000E-99	.5546E-03	.1067E-02	.1508E-02
8	14	.0000E-99	.4756E-03	.9158E-03	.1293E-02
8	15	.0000E-99	.4167E-03	.8024E-03	.1132E-02
8	16	.0000E-99	.3711E-03	.7144E-03	.1008E-02
9	10	.0000E-99	.4962E-03	.9732E-03	.1413E-02
9	11	.0000E-99	.3525E-03	.6924E-03	.1008E-02
9	12	.0000E-99	.2718E-03	.5343E-03	.7790E-03
9	13	.0000E-99	.2211E-03	.4347E-03	.6339E-03
9	14	.0000E-99	.1864E-03	.3665E-03	.5346E-03
9	15	.0000E-99	.1613E-03	.3172E-03	.4626E-03
9	16	.0000E-99	.1423E-03	.2798E-03	.4080E-03
9	17	.0000E-99	.1274E-03	.2504E-03	.3652E-03

## Appendix D. Series zW-C

ZW- 1/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 0.0	W= 0.2	W= 0.4	W= 0.6
10	11	.0000E-99	.1963E-03	.3882E-03	.5712E-03
10	12	.0000E-99	.1463E-03	.2894E-03	.4266E-03
10	13	.0000E-99	.1159E-03	.2294E-03	.3384E-03
10	14	.0000E-99	.9585E-04	.1897E-03	.2799E-03
10	15	.0000E-99	.8171E-04	.1618E-03	.2387E-03
10	16	.0000E-99	.7125E-04	.1410E-03	.2081E-03
10	17	.0000E-99	.6321E-04	.1251E-03	.1846E-03
10	18	.0000E-99	.5683E-04	.1125E-03	.1660E-03
11	12	.0000E-99	.9237E-04	.1833E-03	.2714E-03
11	13	.0000E-99	.7134E-04	.1416E-03	.2099E-03
11	14	.0000E-99	.5780E-04	.1148E-03	.1702E-03
11	15	.0000E-99	.4848E-04	.9632E-04	.1428E-03
11	16	.0000E-99	.4173E-04	.8292E-04	.1230E-03
11	17	.0000E-99	.3664E-04	.7281E-04	.1080E-03
11	18	.0000E-99	.3268E-04	.6493E-04	.9635E-04
11	19	.0000E-99	.2950E-04	.5862E-04	.8698E-04
12	13	.0000E-99	.4885E-04	.9716E-04	.1443E-03
12	14	.0000E-99	.3880E-04	.7721E-04	.1148E-03
12	15	.0000E-99	.3203E-04	.6375E-04	.9484E-04
12	16	.0000E-99	.2721E-04	.5416E-04	.8060E-04
12	17	.0000E-99	.2363E-04	.4705E-04	.7002E-04
12	18	.0000E-99	.2088E-04	.4158E-04	.6189E-04
12	19	.0000E-99	.1871E-04	.3726E-04	.5546E-04
12	20	.0000E-99	.1696E-04	.3376E-04	.5026E-04

### Appendix D. Series zW-C

ZW- 1/PAGE 50F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE      GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 0.0	W= 0.2	W= 0.4	W= 0.6
13	14	.0000E-99	.2814E-04	.5604E-04	.8348E-04
13	15	.0000E-99	.2287E-04	.4556E-04	.6791E-04
13	16	.0000E-99	.1918E-04	.3821E-04	.5697E-04
13	17	.0000E-99	.1647E-04	.3283E-04	.4895E-04
13	18	.0000E-99	.1442E-04	.2875E-04	.4287E-04
13	19	.0000E-99	.1282E-04	.2556E-04	.3812E-04
13	20	.0000E-99	.1154E-04	.2301E-04	.3432E-04
13	21	.0000E-99	.1050E-04	.2093E-04	.3122E-04
14	15	.0000E-99	.1730E-04	.3450E-04	.5147E-04
14	16	.0000E-99	.1433E-04	.2858E-04	.4265E-04
14	17	.0000E-99	.1218E-04	.2429E-04	.3626E-04
14	18	.0000E-99	.1057E-04	.2108E-04	.3147E-04
14	19	.0000E-99	.9325E-05	.1859E-04	.2777E-04
14	20	.0000E-99	.8337E-05	.1663E-04	.2483E-04
14	21	.0000E-99	.7538E-05	.1503E-04	.2245E-04
14	22	.0000E-99	.6879E-05	.1372E-04	.2049E-04
15	16	.0000E-99	.1121E-04	.2236E-04	.3339E-04
15	17	.0000E-99	.9432E-05	.1881E-04	.2811E-04
15	18	.0000E-99	.8111E-05	.1618E-04	.2418E-04
15	19	.0000E-99	.7099E-05	.1416E-04	.2116E-04
15	20	.0000E-99	.6304E-05	.1258E-04	.1880E-04
15	21	.0000E-99	.5666E-05	.1130E-04	.1690E-04
15	22	.0000E-99	.5144E-05	.1026E-04	.1534E-04
15	23	.0000E-99	.4710E-05	.9401E-05	.1405E-04

### Appendix D. Series zW-C

ZW- 2/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 0.8	W= 1.0	W= 1.2	W= 1.4
1	2	.7416E-03	.8963E-03	.1033E-02	.1150E-02
1	3	.1291E-02	.1535E-02	.1736E-02	.1895E-02
1	4	.2796E-02	.3179E-02	.3430E-02	.3567E-02
1	5	.8314E-02	.8150E-02	.7741E-02	.7227E-02
1	6	.1765E-01	.1449E-01	.1216E-01	.1039E-01
1	7	.8001E-02	.7900E-02	.7546E-02	.7078E-02
1	8	.2713E-02	.3092E-02	.3345E-02	.3488E-02
1	9	.1262E-02	.1502E-02	.1701E-02	.1858E-02
2	3	.1804E-02	.2135E-02	.2403E-02	.2606E-02
2	4	.3737E-02	.4239E-02	.4561E-02	.4728E-02
2	5	.1071E-01	.1050E-01	.9973E-02	.9303E-02
2	6	.2234E-01	.1837E-01	.1545E-01	.1321E-01
2	7	.1022E-01	.1011E-01	.9674E-02	.9076E-02
2	8	.3604E-02	.4102E-02	.4428E-02	.4605E-02
2	9	.1755E-02	.2080E-02	.2344E-02	.2547E-02
2	10	.1057E-02	.1271E-02	.1456E-02	.1611E-02
3	4	.5553E-02	.6250E-02	.6661E-02	.6831E-02
3	5	.1503E-01	.1469E-01	.1389E-01	.1289E-01
3	6	.3040E-01	.2505E-01	.2105E-01	.1796E-01
3	7	.1416E-01	.1401E-01	.1338E-01	.1251E-01
3	8	.5305E-02	.5998E-02	.6423E-02	.6618E-02
3	9	.2755E-02	.3229E-02	.3592E-02	.3847E-02
3	10	.1755E-02	.2080E-02	.2344E-02	.2547E-02
3	11	.1262E-02	.1502E-02	.1701E-02	.1858E-02

### Appendix D. Series zW-C

ZW- 2/PAGE 20F5

ELECTRODE CONFIGURATION            POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE       GSRI  
 OURCE POSIWION=S, RECEIVER POSITION=R

S	R	W= 0.8	W= 1.0	W= 1.2	W= 1.4
4	5	.2462E-01	.2363E-01	.2188E-01	.1984E-01
4	6	.4718E-01	.3859E-01	.3204E-01	.2691E-01
4	7	.2271E-01	.2222E-01	.2088E-01	.1915E-01
4	8	.9371E-02	.1031E-01	.1072E-01	.1072E-01
4	9	.5305E-02	.5998E-02	.6423E-02	.6618E-02
4	10	.3604E-02	.4102E-02	.4428E-02	.4605E-02
4	11	.2713E-02	.3092E-02	.3345E-02	.3488E-02
4	12	.2175E-02	.2479E-02	.2682E-02	.2798E-02
5	6	.9365E-01	.7146E-01	.5553E-01	.4390E-01
5	7	.4803E-01	.4321E-01	.3759E-01	.3218E-01
5	8	.2271E-01	.2222E-01	.2088E-01	.1915E-01
5	9	.1416E-01	.1401E-01	.1338E-01	.1251E-01
5	10	.1022E-01	.1011E-01	.9674E-02	.9076E-02
5	11	.8001E-02	.7900E-02	.7546E-02	.7078E-02
5	12	.6579E-02	.6484E-02	.6184E-02	.5793E-02
5	13	.5591E-02	.5502E-02	.5241E-02	.4904E-02
6	7	.9365E-01	.7146E-01	.5553E-01	.4390E-01
6	8	.4718E-01	.3859E-01	.3204E-01	.2691E-01
6	9	.3040E-01	.2505E-01	.2105E-01	.1796E-01
6	10	.2234E-01	.1837E-01	.1545E-01	.1321E-01
6	11	.1765E-01	.1449E-01	.1216E-01	.1039E-01
6	12	.1460E-01	.1196E-01	.1003E-01	.8560E-02
6	13	.1245E-01	.1019E-01	.8535E-02	.7274E-02
6	14	.1086E-01	.8881E-02	.7429E-02	.6326E-02

### Appendix D. Series zW-C

ZW- 2/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 0.8	W= 1.0	W= 1.2	W= 1.4
7	8	.2462E-01	.2363E-01	.2188E-01	.1984E-01
7	9	.1503E-01	.1469E-01	.1389E-01	.1289E-01
7	10	.1071E-01	.1050E-01	.9973E-02	.9303E-02
7	11	.8314E-02	.8150E-02	.7741E-02	.7227E-02
7	12	.6796E-02	.6658E-02	.6320E-02	.5898E-02
7	13	.5750E-02	.5630E-02	.5341E-02	.4982E-02
7	14	.4986E-02	.4879E-02	.4626E-02	.4313E-02
7	15	.4403E-02	.4307E-02	.4082E-02	.3804E-02
8	9	.5553E-02	.6250E-02	.6661E-02	.6831E-02
8	10	.3737E-02	.4239E-02	.4561E-02	.4728E-02
8	11	.2796E-02	.3179E-02	.3430E-02	.3567E-02
8	12	.2231E-02	.2538E-02	.2740E-02	.2853E-02
8	13	.1857E-02	.2113E-02	.2281E-02	.2375E-02
8	14	.1592E-02	.1811E-02	.1955E-02	.2035E-02
8	15	.1394E-02	.1586E-02	.1711E-02	.1781E-02
8	16	.1241E-02	.1411E-02	.1523E-02	.1584E-02
9	10	.1804E-02	.2135E-02	.2403E-02	.2606E-02
9	11	.1291E-02	.1535E-02	.1736E-02	.1895E-02
9	12	.9990E-03	.1189E-02	.1348E-02	.1474E-02
9	13	.8133E-03	.9691E-03	.1099E-02	.1203E-02
9	14	.6860E-03	.8176E-03	.9277E-03	.1016E-02
9	15	.5936E-03	.7074E-03	.8028E-03	.8792E-03
9	16	.5235E-03	.6239E-03	.7079E-03	.7754E-03
9	17	.4686E-03	.5584E-03	.6336E-03	.6938E-03

### Appendix D. Series zW-C

ZW- 2/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 0.8	W = 1.0	W = 1.2	W = 1.4
10	11	.7416E-03	.8963E-03	.1033E-02	.1150E-02
10	12	.5550E-03	.6727E-03	.7779E-03	.8697E-03
10	13	.4407E-03	.5348E-03	.6194E-03	.6938E-03
10	14	.3648E-03	.4429E-03	.5133E-03	.5754E-03
10	15	.3111E-03	.3778E-03	.4380E-03	.4912E-03
10	16	.2713E-03	.3295E-03	.3821E-03	.4285E-03
10	17	.2407E-03	.2923E-03	.3390E-03	.3802E-03
10	18	.2164E-03	.2628E-03	.3048E-03	.3419E-03
11	12	.3555E-03	.4343E-03	.5070E-03	.5729E-03
11	13	.2753E-03	.3370E-03	.3943E-03	.4467E-03
11	14	.2234E-03	.2737E-03	.3206E-03	.3637E-03
11	15	.1876E-03	.2299E-03	.2695E-03	.3059E-03
11	16	.1615E-03	.1980E-03	.2322E-03	.2637E-03
11	17	.1418E-03	.1739E-03	.2040E-03	.2317E-03
11	18	.1265E-03	.1551E-03	.1819E-03	.2067E-03
11	19	.1142E-03	.1401E-03	.1643E-03	.1866E-03
12	13	.1900E-03	.2336E-03	.2748E-03	.3133E-03
12	14	.1512E-03	.1862E-03	.2194E-03	.2505E-03
12	15	.1250E-03	.1540E-03	.1816E-03	.2075E-03
12	16	.1062E-03	.1309E-03	.1545E-03	.1767E-03
12	17	.9235E-04	.1138E-03	.1343E-03	.1536E-03
12	18	.8163E-04	.1006E-03	.1187E-03	.1359E-03
12	19	.7316E-04	.9021E-04	.1064E-03	.1218E-03
12	20	.6630E-04	.8176E-04	.9650E-04	.1104E-03

### Appendix D. Series zW-C

ZW- 2/PAGE 5OF5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 0.8	W = 1.0	W = 1.2	W = 1.4
13	14	.1102E-03	.1360E-03	.1608E-03	.1843E-03
13	15	.8973E-04	.1108E-03	.1311E-03	.1505E-03
13	16	.7531E-04	.9310E-04	.1102E-03	.1266E-03
13	17	.6473E-04	.8005E-04	.9482E-04	.1089E-03
13	18	.5670E-04	.7013E-04	.8310E-04	.9551E-04
13	19	.5042E-04	.6238E-04	.7392E-04	.8498E-04
13	20	.4540E-04	.5617E-04	.6657E-04	.7654E-04
13	21	.4129E-04	.5109E-04	.6055E-04	.6963E-04
14	15	.6810E-04	.8431E-04	.9997E-04	.1150E-03
14	16	.5647E-04	.6995E-04	.8301E-04	.9560E-04
14	17	.4803E-04	.5952E-04	.7067E-04	.8144E-04
14	18	.4169E-04	.5168E-04	.6138E-04	.7076E-04
14	19	.3679E-04	.4561E-04	.5419E-04	.6248E-04
14	20	.3290E-04	.4079E-04	.4847E-04	.5590E-04
14	21	.2975E-04	.3689E-04	.4384E-04	.5056E-04
14	22	.2715E-04	.3367E-04	.4002E-04	.4616E-04
15	16	.4425E-04	.5488E-04	.6523E-04	.7526E-04
15	17	.3726E-04	.4624E-04	.5499E-04	.6349E-04
15	18	.3206E-04	.3980E-04	.4735E-04	.5470E-04
15	19	.2807E-04	.3486E-04	.4148E-04	.4793E-04
15	20	.2494E-04	.3097E-04	.3686E-04	.4260E-04
15	21	.2242E-04	.2784E-04	.3315E-04	.3831E-04
15	22	.2035E-04	.2528E-04	.3010E-04	.3480E-04
15	23	.1864E-04	.2315E-04	.2757E-04	.3187E-04

### Appendix D. Series zW-C

ZW- 3/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 1.6	W = 1.8	W = 2.0	W = 2.2
1	2	.1241E-02	.1319E-02	.1378E-02	.1420E-02
1	3	.1998E-02	.2077E-02	.2123E-02	.2139E-02
1	4	.3588E-02	.3568E-02	.3497E-02	.3388E-02
1	5	.6665E-02	.6137E-02	.5634E-02	.5164E-02
1	6	.9051E-02	.7912E-02	.6977E-02	.6197E-02
1	7	.6574E-02	.6068E-02	.5580E-02	.5123E-02
1	8	.3532E-02	.3519E-02	.3454E-02	.3351E-02
1	9	.1970E-02	.2050E-02	.2097E-02	.2115E-02
2	3	.2728E-02	.2816E-02	.2856E-02	.2855E-02
2	4	.4733E-02	.4687E-02	.4570E-02	.4404E-02
2	5	.8561E-02	.7867E-02	.7202E-02	.6580E-02
2	6	.1149E-01	.1004E-01	.8841E-02	.7834E-02
2	7	.8425E-02	.7764E-02	.7124E-02	.6520E-02
2	8	.4647E-02	.4612E-02	.4505E-02	.4349E-02
2	9	.2684E-02	.2774E-02	.2817E-02	.2819E-02
2	10	.1730E-02	.1823E-02	.1888E-02	.1927E-02
3	4	.6754E-02	.6607E-02	.6361E-02	.6051E-02
3	5	.1177E-01	.1073E-01	.9743E-02	.8818E-02
3	6	.1555E-01	.1351E-01	.1182E-01	.1039E-01
3	7	.1155E-01	.1057E-01	.9623E-02	.8730E-02
3	8	.6610E-02	.6485E-02	.6260E-02	.5969E-02
3	9	.3992E-02	.4061E-02	.4058E-02	.3995E-02
3	10	.2684E-02	.2774E-02	.2817E-02	.2820E-02
3	11	.1970E-02	.2050E-02	.2097E-02	.2115E-02

### Appendix D. Series zW-C

ZW- 3/PAGE 20F5

ELECTRODE CONFIGURATION            POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 1.6	W= 1.8	W= 2.0	W= 2.2
4	5	.1768E-01	.1576E-01	.1398E-01	.1237E-01
4	6	.2287E-01	.1950E-01	.1672E-01	.1442E-01
4	7	.1731E-01	.1550E-01	.1380E-01	.1225E-01
4	8	.1039E-01	.9896E-02	.9285E-02	.8617E-02
4	9	.6610E-02	.6485E-02	.6260E-02	.5969E-02
4	10	.4647E-02	.4612E-02	.4505E-02	.4349E-02
4	11	.3532E-02	.3519E-02	.3454E-02	.3351E-02
4	12	.2835E-02	.2828E-02	.2780E-02	.2703E-02
5	6	.3544E-01	.2883E-01	.2374E-01	.1975E-01
5	7	.2746E-01	.2334E-01	.1987E-01	.1697E-01
5	8	.1731E-01	.1550E-01	.1380E-01	.1225E-01
5	9	.1155E-01	.1057E-01	.9623E-02	.8730E-02
5	10	.8425E-02	.7764E-02	.7124E-02	.6520E-02
5	11	.6574E-02	.6068E-02	.5580E-02	.5123E-02
5	12	.5378E-02	.4962E-02	.4565E-02	.4194E-02
5	13	.4548E-02	.4194E-02	.3856E-02	.3542E-02
6	7	.3544E-01	.2883E-01	.2374E-01	.1975E-01
6	8	.2287E-01	.1950E-01	.1672E-01	.1442E-01
6	9	.1555E-01	.1351E-01	.1182E-01	.1039E-01
6	10	.1149E-01	.1004E-01	.8841E-02	.7834E-02
6	11	.9051E-02	.7912E-02	.6977E-02	.6197E-02
6	12	.7448E-02	.6507E-02	.5738E-02	.5098E-02
6	13	.6325E-02	.5522E-02	.4866E-02	.4321E-02
6	14	.5496E-02	.4794E-02	.4222E-02	.3748E-02

### Appendix D. Series zW-C

ZW- 3/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 1.6	W= 1.8	W= 2.0	W= 2.2
7	8	.1768E-01	.1576E-01	.1398E-01	.1237E-01
7	9	.1177E-01	.1073E-01	.9743E-02	.8818E-02
7	10	.8561E-02	.7867E-02	.7202E-02	.6580E-02
7	11	.6665E-02	.6137E-02	.5634E-02	.5164E-02
7	12	.5442E-02	.5012E-02	.4603E-02	.4224E-02
7	13	.4596E-02	.4231E-02	.3885E-02	.3565E-02
7	14	.3977E-02	.3660E-02	.3359E-02	.3081E-02
7	15	.3507E-02	.3225E-02	.2959E-02	.2713E-02
8	9	.6754E-02	.6607E-02	.6361E-02	.6051E-02
8	10	.4733E-02	.4687E-02	.4570E-02	.4404E-02
8	11	.3588E-02	.3568E-02	.3497E-02	.3388E-02
8	12	.2874E-02	.2863E-02	.2811E-02	.2730E-02
8	13	.2394E-02	.2386E-02	.2344E-02	.2278E-02
8	14	.2052E-02	.2044E-02	.2008E-02	.1952E-02
8	15	.1795E-02	.1789E-02	.1757E-02	.1707E-02
8	16	.1597E-02	.1590E-02	.1562E-02	.1517E-02
9	10	.2728E-02	.2816E-02	.2856E-02	.2855E-02
9	11	.1998E-02	.2077E-02	.2123E-02	.2139E-02
9	12	.1560E-02	.1627E-02	.1668E-02	.1687E-02
9	13	.1275E-02	.1331E-02	.1367E-02	.1385E-02
9	14	.1077E-02	.1125E-02	.1156E-02	.1172E-02
9	15	.9323E-03	.9742E-03	.1001E-02	.1015E-02
9	16	.8222E-03	.8592E-03	.8831E-03	.8956E-03
9	17	.7357E-03	.7687E-03	.7901E-03	.8012E-03

### Appendix D. Series zW-C

ZW- 3/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 OURCE POSIWIION=S, RECEIVER POSITION=R

S	R	W= 1.6	W= 1.8	W= 2.0	W= 2.2
10	11	.1241E-02	.1319E-02	.1378E-02	.1420E-02
10	12	.9426E-03	.1006E-02	.1056E-02	.1094E-02
10	13	.7537E-03	.8065E-03	.8489E-03	.8815E-03
10	14	.6258E-03	.6705E-03	.7066E-03	.7347E-03
10	15	.5346E-03	.5730E-03	.6043E-03	.6288E-03
10	16	.4665E-03	.5002E-03	.5276E-03	.5492E-03
10	17	.4140E-03	.4439E-03	.4683E-03	.4875E-03
10	18	.3722E-03	.3991E-03	.4211E-03	.4384E-03
11	12	.6288E-03	.6797E-03	.7229E-03	.7585E-03
11	13	.4918E-03	.5332E-03	.5690E-03	.5992E-03
11	14	.4011E-03	.4356E-03	.4657E-03	.4915E-03
11	15	.3377E-03	.3671E-03	.3929E-03	.4150E-03
11	16	.2912E-03	.3168E-03	.3392E-03	.3586E-03
11	17	.2560E-03	.2785E-03	.2983E-03	.3155E-03
11	18	.2284E-03	.2485E-03	.2662E-03	.2816E-03
11	19	.2062E-03	.2244E-03	.2404E-03	.2543E-03
12	13	.3475E-03	.3795E-03	.4082E-03	.4335E-03
12	14	.2785E-03	.3048E-03	.3287E-03	.3499E-03
12	15	.2310E-03	.2532E-03	.2734E-03	.2915E-03
12	16	.1968E-03	.2159E-03	.2333E-03	.2490E-03
12	17	.1712E-03	.1879E-03	.2032E-03	.2170E-03
12	18	.1515E-03	.1663E-03	.1798E-03	.1921E-03
12	19	.1358E-03	.1491E-03	.1613E-03	.1723E-03
12	20	.1231E-03	.1352E-03	.1462E-03	.1563E-03

### Appendix D. Series zW-C

ZW- 3/PAGE 50F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 1.6	W= 1.8	W= 2.0	W= 2.2
---	---	--------	--------	--------	--------

13 14		.2059E-03	.2264E-03	.2454E-03	.2627E-03
13 15		.1684E-03	.1855E-03	.2014E-03	.2160E-03
13 16		.1417E-03	.1563E-03	.1699E-03	.1824E-03
13 17		.1221E-03	.1347E-03	.1465E-03	.1574E-03
13 18		.1070E-03	.1182E-03	.1286E-03	.1382E-03
13 19		.9530E-04	.1052E-03	.1145E-03	.1231E-03
13 20		.8585E-04	.9480E-04	.1031E-03	.1109E-03
13 21		.7811E-04	.8626E-04	.9390E-04	.1010E-03
	14 15	.1291E-03	.1426E-03	.1554E-03	.1673E-03
	14 16	.1074E-03	.1188E-03	.1296E-03	.1397E-03
	14 17	.9159E-04	.1014E-03	.1107E-03	.1194E-03
	14 18	.7963E-04	.8821E-04	.9636E-04	.1040E-03
	14 19	.7033E-04	.7794E-04	.8518E-04	.9200E-04
	14 20	.6294E-04	.6977E-04	.7626E-04	.8240E-04
	14 21	.5694E-04	.6313E-04	.6902E-04	.7458E-04
	14 22	.5199E-04	.5764E-04	.6302E-04	.6812E-04
	15 16	.8476E-04	.9399E-04	.1027E-03	.1110E-03
	15 17	.7157E-04	.7944E-04	.8695E-04	.9409E-04
	15 18	.6170E-04	.6852E-04	.7505E-04	.8127E-04
	15 19	.5409E-04	.6010E-04	.6586E-04	.7136E-04
	15 20	.4809E-04	.5345E-04	.5859E-04	.6351E-04
	15 21	.4326E-04	.4809E-04	.5273E-04	.5716E-04
	15 22	.3930E-04	.4369E-04	.4791E-04	.5195E-04
	15 23	.3600E-04	.4002E-04	.4390E-04	.4760E-04

### Appendix D. Series zW-C

ZW- 4/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 2.4	W = 2.6	W = 2.8	W = 3.0
1	2	.1445E-02	.1456E-02	.1454E-02	.1442E-02
1	3	.2130E-02	.2102E-02	.2057E-02	.2001E-02
1	4	.3255E-02	.3107E-02	.2950E-02	.2790E-02
1	5	.4732E-02	.4337E-02	.3977E-02	.3651E-02
1	6	.5537E-02	.4971E-02	.4483E-02	.4058E-02
1	7	.4700E-02	.4312E-02	.3957E-02	.3635E-02
1	8	.3223E-02	.3080E-02	.2927E-02	.2771E-02
1	9	.2109E-02	.2083E-02	.2040E-02	.1985E-02
2	3	.2820E-02	.2759E-02	.2677E-02	.2581E-02
2	4	.4206E-02	.3989E-02	.3762E-02	.3535E-02
2	5	.6006E-02	.5480E-02	.5001E-02	.4566E-02
2	6	.6978E-02	.6243E-02	.5606E-02	.5050E-02
2	7	.5960E-02	.5444E-02	.4973E-02	.4544E-02
2	8	.4160E-02	.3950E-02	.3731E-02	.3509E-02
2	9	.2788E-02	.2731E-02	.2653E-02	.2560E-02
2	10	.1943E-02	.1938E-02	.1917E-02	.1882E-02
3	4	.5704E-02	.5340E-02	.4973E-02	.4614E-02
3	5	.7969E-02	.7197E-02	.6500E-02	.5873E-02
3	6	.9181E-02	.8140E-02	.7241E-02	.6461E-02
3	7	.7903E-02	.7148E-02	.6463E-02	.5845E-02
3	8	.5637E-02	.5286E-02	.4930E-02	.4579E-02
3	9	.3888E-02	.3748E-02	.3585E-02	.3408E-02
3	10	.2788E-02	.2731E-02	.2653E-02	.2560E-02
3	11	.2109E-02	.2083E-02	.2040E-02	.1985E-02

### Appendix D. Series zW-C

ZW- 4/PAGE 20F5

ELECTRODE CONFIGURATION                    POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 2.4	W = 2.6	W = 2.8	W = 3.0
4	5	.1095E-01	.9692E-02	.8588E-02	.7623E-02
4	6	.1249E-01	.1087E-01	.9506E-02	.8342E-02
4	7	.1086E-01	.9628E-02	.8543E-02	.7590E-02
4	8	.7934E-02	.7266E-02	.6630E-02	.6034E-02
4	9	.5637E-02	.5286E-02	.4930E-02	.4579E-02
4	10	.4160E-02	.3950E-02	.3731E-02	.3509E-02
4	11	.3223E-02	.3080E-02	.2927E-02	.2771E-02
4	12	.2606E-02	.2496E-02	.2380E-02	.2260E-02
5	6	.1659E-01	.1405E-01	.1200E-01	.1031E-01
5	7	.1456E-01	.1254E-01	.1085E-01	.9433E-02
5	8	.1086E-01	.9628E-02	.8543E-02	.7590E-02
5	9	.7903E-02	.7148E-02	.6463E-02	.5845E-02
5	10	.5960E-02	.5444E-02	.4973E-02	.4544E-02
5	11	.4700E-02	.4312E-02	.3957E-02	.3635E-02
5	12	.3852E-02	.3539E-02	.3254E-02	.2996E-02
5	13	.3253E-02	.2990E-02	.2752E-02	.2535E-02
6	7	.1659E-01	.1405E-01	.1200E-01	.1031E-01
6	8	.1249E-01	.1087E-01	.9506E-02	.8342E-02
6	9	.9181E-02	.8140E-02	.7241E-02	.6461E-02
6	10	.6978E-02	.6243E-02	.5606E-02	.5050E-02
6	11	.5537E-02	.4971E-02	.4483E-02	.4058E-02
6	12	.4558E-02	.4098E-02	.3701E-02	.3357E-02
6	13	.3863E-02	.3474E-02	.3139E-02	.2848E-02
6	14	.3349E-02	.3010E-02	.2720E-02	.2468E-02

### Appendix D. Series zW-C

ZW- 4/PAGE 30F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE      GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 2.4	W= 2.6	W= 2.8	W= 3.0
7	8	.1095E-01	.9692E-02	.8588E-02	.7623E-02
7	9	.7969E-02	.7197E-02	.6500E-02	.5873E-02
7	10	.6006E-02	.5480E-02	.5001E-02	.4566E-02
7	11	.4732E-02	.4337E-02	.3977E-02	.3651E-02
7	12	.3875E-02	.3558E-02	.3269E-02	.3008E-02
7	13	.3271E-02	.3005E-02	.2763E-02	.2545E-02
7	14	.2827E-02	.2596E-02	.2388E-02	.2199E-02
7	15	.2488E-02	.2285E-02	.2101E-02	.1935E-02
8	9	.5704E-02	.5340E-02	.4973E-02	.4614E-02
8	10	.4206E-02	.3989E-02	.3762E-02	.3535E-02
8	11	.3255E-02	.3107E-02	.2950E-02	.2790E-02
8	12	.2629E-02	.2516E-02	.2397E-02	.2275E-02
8	13	.2196E-02	.2104E-02	.2007E-02	.1908E-02
8	14	.1882E-02	.1804E-02	.1722E-02	.1638E-02
8	15	.1646E-02	.1578E-02	.1506E-02	.1433E-02
8	16	.1463E-02	.1402E-02	.1338E-02	.1273E-02
9	10	.2820E-02	.2759E-02	.2677E-02	.2581E-02
9	11	.2130E-02	.2102E-02	.2057E-02	.2001E-02
9	12	.1687E-02	.1672E-02	.1644E-02	.1606E-02
9	13	.1388E-02	.1378E-02	.1358E-02	.1330E-02
9	14	.1175E-02	.1168E-02	.1153E-02	.1130E-02
9	15	.1018E-02	.1013E-02	.1000E-02	.9813E-03
9	16	.8986E-03	.8936E-03	.8823E-03	.8660E-03
9	17	.8038E-03	.7994E-03	.7893E-03	.7747E-03

### Appendix D. Series zW-C

ZW- 4/PAGE 4OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 2.4	W = 2.6	W = 2.8	W = 3.0
10	11	.1445E-02	.1456E-02	.1454E-02	.1442E-02
10	12	.1119E-02	.1134E-02	.1140E-02	.1137E-02
10	13	.9048E-03	.9197E-03	.9272E-03	.9280E-03
10	14	.7554E-03	.7691E-03	.7767E-03	.7789E-03
10	15	.6469E-03	.6593E-03	.6664E-03	.6690E-03
10	16	.5653E-03	.5763E-03	.5829E-03	.5855E-03
10	17	.5018E-03	.5117E-03	.5177E-03	.5201E-03
10	18	.4513E-03	.4602E-03	.4656E-03	.4679E-03
11	12	.7869E-03	.8082E-03	.8231E-03	.8320E-03
11	13	.6240E-03	.6435E-03	.6581E-03	.6682E-03
11	14	.5129E-03	.5302E-03	.5436E-03	.5533E-03
11	15	.4337E-03	.4489E-03	.4609E-03	.4699E-03
11	16	.3750E-03	.3884E-03	.3991E-03	.4073E-03
11	17	.3300E-03	.3420E-03	.3516E-03	.3590E-03
11	18	.2946E-03	.3054E-03	.3141E-03	.3207E-03
11	19	.2661E-03	.2759E-03	.2838E-03	.2898E-03
12	13	.4553E-03	.4738E-03	.4889E-03	.5009E-03
12	14	.3685E-03	.3846E-03	.3981E-03	.4091E-03
12	15	.3075E-03	.3215E-03	.3334E-03	.3434E-03
12	16	.2630E-03	.2752E-03	.2857E-03	.2946E-03
12	17	.2293E-03	.2401E-03	.2495E-03	.2575E-03
12	18	.2031E-03	.2128E-03	.2212E-03	.2284E-03
12	19	.1822E-03	.1910E-03	.1986E-03	.2051E-03
12	20	.1653E-03	.1732E-03	.1801E-03	.1861E-03

### Appendix D. Series zW-C

ZW- 4/PAGE 5OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 2.4	W= 2.6	W= 2.8	W= 3.0
13	14	.2783E-03	.2921E-03	.3042E-03	.3147E-03
13	15	.2293E-03	.2412E-03	.2518E-03	.2610E-03
13	16	.1939E-03	.2042E-03	.2135E-03	.2217E-03
13	17	.1674E-03	.1766E-03	.1848E-03	.1921E-03
13	18	.1471E-03	.1552E-03	.1625E-03	.1691E-03
13	19	.1311E-03	.1383E-03	.1449E-03	.1508E-03
13	20	.1182E-03	.1247E-03	.1307E-03	.1361E-03
13	21	.1075E-03	.1136E-03	.1190E-03	.1239E-03
14	15	.1782E-03	.1883E-03	.1974E-03	.2056E-03
14	16	.1491E-03	.1578E-03	.1657E-03	.1729E-03
14	17	.1276E-03	.1352E-03	.1421E-03	.1485E-03
14	18	.1112E-03	.1179E-03	.1241E-03	.1297E-03
14	19	.9841E-04	.1043E-03	.1099E-03	.1149E-03
14	20	.8816E-04	.9354E-04	.9853E-04	.1031E-03
14	21	.7982E-04	.8471E-04	.8925E-04	.9343E-04
14	22	.7291E-04	.7739E-04	.8155E-04	.8538E-04
15	16	.1189E-03	.1261E-03	.1329E-03	.1391E-03
15	17	.1008E-03	.1071E-03	.1130E-03	.1185E-03
15	18	.8717E-04	.9271E-04	.9791E-04	.1027E-03
15	19	.7657E-04	.8150E-04	.8612E-04	.9043E-04
15	20	.6818E-04	.7259E-04	.7674E-04	.8063E-04
15	21	.6138E-04	.6538E-04	.6914E-04	.7267E-04
15	22	.5580E-04	.5944E-04	.6288E-04	.6610E-04
15	23	.5113E-04	.5448E-04	.5764E-04	.6060E-04

### Appendix D. Series zW-C

ZW- 5/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 3.2	W= 3.4	W= 3.6	W= 3.8
1	2	.1420E-02	.1391E-02	.1356E-02	.1317E-02
1	3	.1935E-02	.1863E-02	.1787E-02	.1709E-02
1	4	.2631E-02	.2476E-02	.2326E-02	.2182E-02
1	5	.3354E-02	.3086E-02	.2841E-02	.2620E-02
1	6	.3685E-02	.3356E-02	.3064E-02	.2805E-02
1	7	.3342E-02	.3075E-02	.2833E-02	.2613E-02
1	8	.2615E-02	.2463E-02	.2315E-02	.2173E-02
1	9	.1922E-02	.1851E-02	.1777E-02	.1700E-02
2	3	.2475E-02	.2362E-02	.2247E-02	.2130E-02
2	4	.3311E-02	.3093E-02	.2885E-02	.2688E-02
2	5	.4172E-02	.3815E-02	.3492E-02	.3201E-02
2	6	.4563E-02	.4134E-02	.3754E-02	.3416E-02
2	7	.4155E-02	.3802E-02	.3482E-02	.3192E-02
2	8	.3289E-02	.3076E-02	.2871E-02	.2676E-02
2	9	.2456E-02	.2347E-02	.2233E-02	.2119E-02
2	10	.1836E-02	.1782E-02	.1721E-02	.1656E-02
3	4	.4268E-02	.3941E-02	.3635E-02	.3350E-02
3	5	.5310E-02	.4807E-02	.4356E-02	.3954E-02
3	6	.5781E-02	.5187E-02	.4666E-02	.4207E-02
3	7	.5289E-02	.4790E-02	.4344E-02	.3944E-02
3	8	.4241E-02	.3919E-02	.3617E-02	.3335E-02
3	9	.3223E-02	.3037E-02	.2853E-02	.2674E-02
3	10	.2456E-02	.2347E-02	.2233E-02	.2119E-02
3	11	.1922E-02	.1851E-02	.1777E-02	.1700E-02

### Appendix D. Series zW-C

ZW- 5/PAGE 20F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 3.2	W= 3.4	W= 3.6	W= 3.8
4	5	.6780E-02	.6043E-02	.5399E-02	.4836E-02
4	6	.7348E-02	.6497E-02	.5764E-02	.5132E-02
4	7	.6755E-02	.6025E-02	.5386E-02	.4826E-02
4	8	.5485E-02	.4983E-02	.4527E-02	.4114E-02
4	9	.4241E-02	.3919E-02	.3617E-02	.3335E-02
4	10	.3289E-02	.3076E-02	.2871E-02	.2676E-02
4	11	.2615E-02	.2463E-02	.2315E-02	.2173E-02
4	12	.2141E-02	.2023E-02	.1909E-02	.1800E-02
5	6	.8921E-02	.7761E-02	.6788E-02	.5967E-02
5	7	.8237E-02	.7224E-02	.6362E-02	.5625E-02
5	8	.6755E-02	.6025E-02	.5386E-02	.4826E-02
5	9	.5289E-02	.4790E-02	.4344E-02	.3944E-02
5	10	.4155E-02	.3802E-02	.3482E-02	.3192E-02
5	11	.3342E-02	.3075E-02	.2833E-02	.2613E-02
5	12	.2762E-02	.2549E-02	.2356E-02	.2180E-02
5	13	.2339E-02	.2162E-02	.2001E-02	.1856E-02
6	7	.8921E-02	.7761E-02	.6788E-02	.5967E-02
6	8	.7348E-02	.6497E-02	.5764E-02	.5132E-02
6	9	.5781E-02	.5187E-02	.4666E-02	.4207E-02
6	10	.4563E-02	.4134E-02	.3754E-02	.3416E-02
6	11	.3685E-02	.3356E-02	.3064E-02	.2805E-02
6	12	.3055E-02	.2790E-02	.2555E-02	.2346E-02
6	13	.2595E-02	.2372E-02	.2175E-02	.2001E-02
6	14	.2249E-02	.2057E-02	.1887E-02	.1737E-02

### Appendix D. Series zW-C

ZW- 5/PAGE 30F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE      GSRI  
 OURCE POSIWIION=S, RECEIVER POSITION=R

S	R	W= 3.2	W= 3.4	W= 3.6	W= 3.8
7	8	.6780E-02	.6043E-02	.5399E-02	.4836E-02
7	9	.5310E-02	.4807E-02	.4356E-02	.3954E-02
7	10	.4172E-02	.3815E-02	.3492E-02	.3201E-02
7	11	.3354E-02	.3086E-02	.2841E-02	.2620E-02
7	12	.2771E-02	.2557E-02	.2362E-02	.2186E-02
7	13	.2347E-02	.2168E-02	.2007E-02	.1860E-02
7	14	.2029E-02	.1876E-02	.1737E-02	.1612E-02
7	15	.1785E-02	.1650E-02	.1529E-02	.1419E-02
8	9	.4268E-02	.3941E-02	.3635E-02	.3350E-02
8	10	.3311E-02	.3093E-02	.2885E-02	.2688E-02
8	11	.2631E-02	.2476E-02	.2326E-02	.2182E-02
8	12	.2153E-02	.2034E-02	.1918E-02	.1807E-02
8	13	.1809E-02	.1712E-02	.1618E-02	.1528E-02
8	14	.1554E-02	.1472E-02	.1393E-02	.1317E-02
8	15	.1360E-02	.1289E-02	.1220E-02	.1155E-02
8	16	.1208E-02	.1145E-02	.1084E-02	.1026E-02
9	10	.2475E-02	.2362E-02	.2247E-02	.2130E-02
9	11	.1935E-02	.1863E-02	.1787E-02	.1709E-02
9	12	.1561E-02	.1511E-02	.1456E-02	.1400E-02
9	13	.1296E-02	.1258E-02	.1216E-02	.1172E-02
9	14	.1103E-02	.1072E-02	.1038E-02	.1003E-02
9	15	.9582E-03	.9319E-03	.9034E-03	.8733E-03
9	16	.8459E-03	.8230E-03	.7981E-03	.7719E-03
9	17	.7568E-03	.7364E-03	.7142E-03	.6910E-03

### Appendix D. Series zW-C

ZW- 5/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 3.2	W = 3.4	W = 3.6	W = 3.8
10	11	.1420E-02	.1391E-02	.1356E-02	.1317E-02
10	12	.1127E-02	.1111E-02	.1090E-02	.1065E-02
10	13	.9231E-03	.9133E-03	.8995E-03	.8824E-03
10	14	.7764E-03	.7698E-03	.7599E-03	.7472E-03
10	15	.6676E-03	.6628E-03	.6551E-03	.6450E-03
10	16	.5846E-03	.5808E-03	.5745E-03	.5661E-03
10	17	.5195E-03	.5164E-03	.5110E-03	.5037E-03
10	18	.4674E-03	.4646E-03	.4598E-03	.4535E-03
11	12	.8355E-03	.8342E-03	.8287E-03	.8194E-03
11	13	.6740E-03	.6760E-03	.6746E-03	.6703E-03
11	14	.5596E-03	.5629E-03	.5634E-03	.5614E-03
11	15	.4760E-03	.4796E-03	.4809E-03	.4801E-03
11	16	.4130E-03	.4165E-03	.4181E-03	.4179E-03
11	17	.3642E-03	.3676E-03	.3692E-03	.3693E-03
11	18	.3255E-03	.3287E-03	.3303E-03	.3305E-03
11	19	.2942E-03	.2971E-03	.2986E-03	.2989E-03
12	13	.5099E-03	.5161E-03	.5197E-03	.5209E-03
12	14	.4179E-03	.4244E-03	.4289E-03	.4314E-03
12	15	.3514E-03	.3577E-03	.3623E-03	.3653E-03
12	16	.3020E-03	.3078E-03	.3122E-03	.3152E-03
12	17	.2641E-03	.2694E-03	.2735E-03	.2765E-03
12	18	.2344E-03	.2392E-03	.2430E-03	.2458E-03
12	19	.2105E-03	.2150E-03	.2184E-03	.2210E-03
12	20	.1910E-03	.1951E-03	.1983E-03	.2007E-03

### Appendix D. Series zW-C

ZW- 5/PAGE 5OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 3.2	W = 3.4	W = 3.6	W = 3.8
13	14	.3235E-03	.3307E-03	.3363E-03	.3406E-03
13	15	.2690E-03	.2757E-03	.2812E-03	.2855E-03
13	16	.2289E-03	.2350E-03	.2401E-03	.2442E-03
13	17	.1985E-03	.2040E-03	.2086E-03	.2125E-03
13	18	.1748E-03	.1798E-03	.1841E-03	.1876E-03
13	19	.1560E-03	.1606E-03	.1645E-03	.1677E-03
13	20	.1408E-03	.1449E-03	.1485E-03	.1515E-03
13	21	.1282E-03	.1321E-03	.1353E-03	.1381E-03
14	15	.2129E-03	.2192E-03	.2246E-03	.2292E-03
14	16	.1794E-03	.1851E-03	.1901E-03	.1944E-03
14	17	.1542E-03	.1594E-03	.1639E-03	.1678E-03
14	18	.1348E-03	.1394E-03	.1435E-03	.1471E-03
14	19	.1196E-03	.1237E-03	.1274E-03	.1307E-03
14	20	.1073E-03	.1111E-03	.1144E-03	.1175E-03
14	21	.9725E-04	.1007E-03	.1038E-03	.1066E-03
14	22	.8889E-04	.9208E-04	.9495E-04	.9750E-04
15	16	.1448E-03	.1499E-03	.1545E-03	.1586E-03
15	17	.1235E-03	.1281E-03	.1322E-03	.1359E-03
15	18	.1072E-03	.1113E-03	.1150E-03	.1183E-03
15	19	.9443E-04	.9812E-04	.1014E-03	.1045E-03
15	20	.8424E-04	.8757E-04	.9063E-04	.9342E-04
15	21	.7595E-04	.7899E-04	.8178E-04	.8433E-04
15	22	.6910E-04	.7189E-04	.7445E-04	.7680E-04
15	23	.6337E-04	.6594E-04	.6830E-04	.7047E-04

### Appendix D. Series zW-C

ZW- 6/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 4.0	W = 4.2	W = 4.4	W = 4.6
1	2	.1275E-02	.1230E-02	.1183E-02	.1136E-02
1	3	.1630E-02	.1551E-02	.1474E-02	.1398E-02
1	4	.2046E-02	.1917E-02	.1796E-02	.1682E-02
1	5	.2419E-02	.2235E-02	.2069E-02	.1917E-02
1	6	.2573E-02	.2365E-02	.2178E-02	.2009E-02
1	7	.2413E-02	.2231E-02	.2065E-02	.1914E-02
1	8	.2038E-02	.1910E-02	.1790E-02	.1677E-02
1	9	.1622E-02	.1544E-02	.1468E-02	.1393E-02
2	3	.2015E-02	.1903E-02	.1794E-02	.1690E-02
2	4	.2503E-02	.2329E-02	.2167E-02	.2016E-02
2	5	.2937E-02	.2698E-02	.2481E-02	.2285E-02
2	6	.3116E-02	.2847E-02	.2607E-02	.2391E-02
2	7	.2930E-02	.2692E-02	.2477E-02	.2281E-02
2	8	.2493E-02	.2321E-02	.2160E-02	.2010E-02
2	9	.2006E-02	.1895E-02	.1787E-02	.1684E-02
2	10	.1588E-02	.1519E-02	.1450E-02	.1381E-02
3	4	.3086E-02	.2843E-02	.2620E-02	.2416E-02
3	5	.3594E-02	.3271E-02	.2983E-02	.2725E-02
3	6	.3803E-02	.3445E-02	.3128E-02	.2846E-02
3	7	.3586E-02	.3265E-02	.2978E-02	.2721E-02
3	8	.3074E-02	.2834E-02	.2613E-02	.2410E-02
3	9	.2501E-02	.2336E-02	.2181E-02	.2034E-02
3	10	.2006E-02	.1895E-02	.1787E-02	.1684E-02
3	11	.1622E-02	.1544E-02	.1468E-02	.1393E-02

### Appendix D. Series zW-C

ZW- 6/PAGE 20F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 4.0	W= 4.2	W= 4.4	W= 4.6
4	5	.4342E-02	.3908E-02	.3526E-02	.3190E-02
4	6	.4584E-02	.4107E-02	.3691E-02	.3327E-02
4	7	.4334E-02	.3902E-02	.3522E-02	.3186E-02
4	8	.3742E-02	.3407E-02	.3106E-02	.2836E-02
4	9	.3074E-02	.2834E-02	.2613E-02	.2410E-02
4	10	.2493E-02	.2321E-02	.2160E-02	.2010E-02
4	11	.2038E-02	.1910E-02	.1790E-02	.1677E-02
4	12	.1695E-02	.1596E-02	.1502E-02	.1413E-02
5	6	.5269E-02	.4673E-02	.4162E-02	.3720E-02
5	7	.4993E-02	.4449E-02	.3977E-02	.3568E-02
5	8	.4334E-02	.3902E-02	.3522E-02	.3186E-02
5	9	.3586E-02	.3265E-02	.2978E-02	.2721E-02
5	10	.2930E-02	.2692E-02	.2477E-02	.2281E-02
5	11	.2413E-02	.2231E-02	.2065E-02	.1914E-02
5	12	.2021E-02	.1875E-02	.1742E-02	.1621E-02
5	13	.1723E-02	.1602E-02	.1492E-02	.1392E-02
6	7	.5269E-02	.4673E-02	.4162E-02	.3720E-02
6	8	.4584E-02	.4107E-02	.3691E-02	.3327E-02
6	9	.3803E-02	.3445E-02	.3128E-02	.2846E-02
6	10	.3116E-02	.2847E-02	.2607E-02	.2391E-02
6	11	.2573E-02	.2365E-02	.2178E-02	.2009E-02
6	12	.2159E-02	.1992E-02	.1841E-02	.1705E-02
6	13	.1845E-02	.1705E-02	.1580E-02	.1466E-02
6	14	.1603E-02	.1483E-02	.1376E-02	.1279E-02

### Appendix D. Series zW-C

ZW- 6/PAGE 3OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 4.0	W = 4.2	W = 4.4	W = 4.6
7	8	.4342E-02	.3908E-02	.3526E-02	.3190E-02
7	9	.3594E-02	.3271E-02	.2983E-02	.2725E-02
7	10	.2937E-02	.2698E-02	.2481E-02	.2285E-02
7	11	.2419E-02	.2235E-02	.2069E-02	.1917E-02
7	12	.2025E-02	.1879E-02	.1745E-02	.1623E-02
7	13	.1727E-02	.1605E-02	.1495E-02	.1394E-02
7	14	.1498E-02	.1394E-02	.1300E-02	.1214E-02
7	15	.1319E-02	.1228E-02	.1146E-02	.1071E-02
8	9	.3086E-02	.2843E-02	.2620E-02	.2416E-02
8	10	.2503E-02	.2329E-02	.2167E-02	.2016E-02
8	11	.2046E-02	.1917E-02	.1796E-02	.1682E-02
8	12	.1702E-02	.1601E-02	.1507E-02	.1417E-02
8	13	.1442E-02	.1361E-02	.1284E-02	.1211E-02
8	14	.1245E-02	.1177E-02	.1112E-02	.1051E-02
8	15	.1092E-02	.1033E-02	.9771E-03	.9243E-03
8	16	.9713E-03	.9189E-03	.8695E-03	.8230E-03
9	10	.2015E-02	.1903E-02	.1794E-02	.1690E-02
9	11	.1630E-02	.1551E-02	.1474E-02	.1398E-02
9	12	.1342E-02	.1284E-02	.1226E-02	.1169E-02
9	13	.1128E-02	.1082E-02	.1037E-02	.9930E-03
9	14	.9665E-03	.9296E-03	.8926E-03	.8561E-03
9	15	.8424E-03	.8111E-03	.7798E-03	.7489E-03
9	16	.7450E-03	.7178E-03	.6906E-03	.6637E-03
9	17	.6671E-03	.6429E-03	.6188E-03	.5950E-03

### Appendix D. Series zW-C

ZW- 6/PAGE 40F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 4.0	W = 4.2	W = 4.4	W = 4.6
10	11	.1275E-02	.1230E-02	.1183E-02	.1136E-02
10	12	.1037E-02	.1007E-02	.9748E-03	.9416E-03
10	13	.8625E-03	.8406E-03	.8170E-03	.7924E-03
10	14	.7321E-03	.7153E-03	.6971E-03	.6779E-03
10	15	.6330E-03	.6194E-03	.6047E-03	.5890E-03
10	16	.5561E-03	.5447E-03	.5322E-03	.5189E-03
10	17	.4951E-03	.4852E-03	.4744E-03	.4628E-03
10	18	.4458E-03	.4370E-03	.4274E-03	.4172E-03
11	12	.8071E-03	.7922E-03	.7751E-03	.7562E-03
11	13	.6633E-03	.6541E-03	.6430E-03	.6303E-03
11	14	.5572E-03	.5512E-03	.5436E-03	.5346E-03
11	15	.4775E-03	.4732E-03	.4677E-03	.4609E-03
11	16	.4161E-03	.4130E-03	.4087E-03	.4033E-03
11	17	.3680E-03	.3655E-03	.3620E-03	.3576E-03
11	18	.3295E-03	.3274E-03	.3245E-03	.3207E-03
11	19	.2981E-03	.2963E-03	.2937E-03	.2904E-03
12	13	.5200E-03	.5172E-03	.5127E-03	.5067E-03
12	14	.4322E-03	.4315E-03	.4293E-03	.4258E-03
12	15	.3668E-03	.3671E-03	.3661E-03	.3641E-03
12	16	.3171E-03	.3178E-03	.3175E-03	.3163E-03
12	17	.2784E-03	.2793E-03	.2794E-03	.2786E-03
12	18	.2477E-03	.2487E-03	.2489E-03	.2484E-03
12	19	.2228E-03	.2238E-03	.2242E-03	.2239E-03
12	20	.2024E-03	.2034E-03	.2038E-03	.2036E-03

### Appendix D. Series zW-C

ZW- 6/PAGE 50F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 4.0	W= 4.2	W= 4.4	W= 4.6
13	14	.3435E-03	.3451E-03	.3456E-03	.3450E-03
13	15	.2887E-03	.2909E-03	.2922E-03	.2925E-03
13	16	.2474E-03	.2498E-03	.2514E-03	.2522E-03
13	17	.2156E-03	.2179E-03	.2196E-03	.2206E-03
13	18	.1905E-03	.1928E-03	.1944E-03	.1955E-03
13	19	.1704E-03	.1726E-03	.1742E-03	.1753E-03
13	20	.1540E-03	.1560E-03	.1575E-03	.1586E-03
13	21	.1404E-03	.1423E-03	.1437E-03	.1447E-03
14	15	.2329E-03	.2359E-03	.2380E-03	.2395E-03
14	16	.1980E-03	.2009E-03	.2032E-03	.2049E-03
14	17	.1712E-03	.1740E-03	.1763E-03	.1781E-03
14	18	.1503E-03	.1529E-03	.1551E-03	.1569E-03
14	19	.1336E-03	.1361E-03	.1381E-03	.1398E-03
14	20	.1201E-03	.1224E-03	.1243E-03	.1259E-03
14	21	.1090E-03	.1111E-03	.1129E-03	.1144E-03
14	22	.9975E-04	.1017E-03	.1033E-03	.1047E-03
15	16	.1621E-03	.1652E-03	.1677E-03	.1698E-03
15	17	.1392E-03	.1420E-03	.1445E-03	.1465E-03
15	18	.1213E-03	.1240E-03	.1263E-03	.1283E-03
15	19	.1072E-03	.1097E-03	.1118E-03	.1137E-03
15	20	.9594E-04	.9819E-04	.1001E-03	.1019E-03
15	21	.8664E-04	.8872E-04	.9057E-04	.9219E-04
15	22	.7893E-04	.8085E-04	.8256E-04	.8407E-04
15	23	.7245E-04	.7423E-04	.7582E-04	.7723E-04

### Appendix D. Series zW-C

ZW- 7/PAGE 10F5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE      GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 4.8	W= 5.0	W= 5.2	W= 5.4
1	2	.1089E-02	.1042E-02	.9959E-03	.9507E-03
1	3	.1325E-02	.1255E-02	.1188E-02	.1124E-02
1	4	.1575E-02	.1476E-02	.1383E-02	.1296E-02
1	5	.1778E-02	.1651E-02	.1535E-02	.1429E-02
1	6	.1857E-02	.1719E-02	.1593E-02	.1479E-02
1	7	.1775E-02	.1649E-02	.1533E-02	.1428E-02
1	8	.1571E-02	.1472E-02	.1380E-02	.1294E-02
1	9	.1321E-02	.1251E-02	.1185E-02	.1121E-02
2	3	.1590E-02	.1495E-02	.1406E-02	.1321E-02
2	4	.1876E-02	.1746E-02	.1626E-02	.1516E-02
2	5	.2107E-02	.1946E-02	.1799E-02	.1665E-02
2	6	.2197E-02	.2022E-02	.1864E-02	.1722E-02
2	7	.2104E-02	.1943E-02	.1797E-02	.1663E-02
2	8	.1871E-02	.1742E-02	.1623E-02	.1513E-02
2	9	.1585E-02	.1491E-02	.1402E-02	.1318E-02
2	10	.1313E-02	.1247E-02	.1183E-02	.1122E-02
3	4	.2229E-02	.2059E-02	.1903E-02	.1761E-02
3	5	.2493E-02	.2284E-02	.2097E-02	.1928E-02
3	6	.2595E-02	.2371E-02	.2171E-02	.1991E-02
3	7	.2489E-02	.2282E-02	.2095E-02	.1926E-02
3	8	.2224E-02	.2055E-02	.1900E-02	.1758E-02
3	9	.1897E-02	.1769E-02	.1650E-02	.1539E-02
3	10	.1585E-02	.1491E-02	.1402E-02	.1318E-02
3	11	.1321E-02	.1251E-02	.1185E-02	.1121E-02

### Appendix D. Series zW-C

ZW- 7/PAGE 20F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 4.8	W = 5.0	W = 5.2	W = 5.4
4	5	.2892E-02	.2628E-02	.2394E-02	.2186E-02
4	6	.3007E-02	.2725E-02	.2476E-02	.2255E-02
4	7	.2889E-02	.2626E-02	.2392E-02	.2184E-02
4	8	.2592E-02	.2374E-02	.2177E-02	.1999E-02
4	9	.2224E-02	.2055E-02	.1900E-02	.1758E-02
4	10	.1871E-02	.1742E-02	.1623E-02	.1513E-02
4	11	.1571E-02	.1472E-02	.1380E-02	.1294E-02
4	12	.1330E-02	.1252E-02	.1179E-02	.1110E-02
5	6	.3337E-02	.3004E-02	.2713E-02	.2457E-02
5	7	.3211E-02	.2898E-02	.2624E-02	.2382E-02
5	8	.2889E-02	.2626E-02	.2392E-02	.2184E-02
5	9	.2489E-02	.2282E-02	.2095E-02	.1926E-02
5	10	.2104E-02	.1943E-02	.1797E-02	.1663E-02
5	11	.1775E-02	.1649E-02	.1533E-02	.1428E-02
5	12	.1510E-02	.1408E-02	.1315E-02	.1229E-02
5	13	.1300E-02	.1215E-02	.1138E-02	.1066E-02
6	7	.3337E-02	.3004E-02	.2713E-02	.2457E-02
6	8	.3007E-02	.2725E-02	.2476E-02	.2255E-02
6	9	.2595E-02	.2371E-02	.2171E-02	.1991E-02
6	10	.2197E-02	.2022E-02	.1864E-02	.1722E-02
6	11	.1857E-02	.1719E-02	.1593E-02	.1479E-02
6	12	.1582E-02	.1470E-02	.1368E-02	.1275E-02
6	13	.1364E-02	.1270E-02	.1185E-02	.1108E-02
6	14	.1191E-02	.1111E-02	.1038E-02	.9726E-03

### Appendix D. Series zW-C

ZW- 7/PAGE 30F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 4.8	W = 5.0	W = 5.2	W = 5.4
7	8	.2892E-02	.2628E-02	.2394E-02	.2186E-02
7	9	.2493E-02	.2284E-02	.2097E-02	.1928E-02
7	10	.2107E-02	.1946E-02	.1799E-02	.1665E-02
7	11	.1778E-02	.1651E-02	.1535E-02	.1429E-02
7	12	.1512E-02	.1410E-02	.1316E-02	.1230E-02
7	13	.1301E-02	.1217E-02	.1139E-02	.1068E-02
7	14	.1135E-02	.1063E-02	.9972E-03	.9364E-03
7	15	.1002E-02	.9401E-03	.8826E-03	.8297E-03
8	9	.2229E-02	.2059E-02	.1903E-02	.1761E-02
8	10	.1876E-02	.1746E-02	.1626E-02	.1516E-02
8	11	.1575E-02	.1476E-02	.1383E-02	.1296E-02
8	12	.1333E-02	.1255E-02	.1181E-02	.1112E-02
8	13	.1143E-02	.1079E-02	.1018E-02	.9623E-03
8	14	.9936E-03	.9395E-03	.8888E-03	.8412E-03
8	15	.8747E-03	.8281E-03	.7844E-03	.7433E-03
8	16	.7793E-03	.7382E-03	.6998E-03	.6637E-03
9	10	.1590E-02	.1495E-02	.1406E-02	.1321E-02
9	11	.1325E-02	.1255E-02	.1188E-02	.1124E-02
9	12	.1114E-02	.1060E-02	.1009E-02	.9593E-03
9	13	.9493E-03	.9067E-03	.8654E-03	.8256E-03
9	14	.8202E-03	.7852E-03	.7512E-03	.7183E-03
9	15	.7185E-03	.6888E-03	.6600E-03	.6321E-03
9	16	.6373E-03	.6116E-03	.5865E-03	.5624E-03
9	17	.5716E-03	.5488E-03	.5267E-03	.5053E-03

## Appendix D. Series zW-C

ZW- 7/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 4.8	W = 5.0	W = 5.2	W = 5.4
10	11	.1089E-02	.1042E-02	.9959E-03	.9507E-03
10	12	.9077E-03	.8736E-03	.8395E-03	.8058E-03
10	13	.7670E-03	.7411E-03	.7150E-03	.6890E-03
10	14	.6579E-03	.6374E-03	.6167E-03	.5960E-03
10	15	.5726E-03	.5558E-03	.5388E-03	.5216E-03
10	16	.5051E-03	.4909E-03	.4764E-03	.4618E-03
10	17	.4508E-03	.4384E-03	.4259E-03	.4132E-03
10	18	.4065E-03	.3956E-03	.3844E-03	.3732E-03
11	12	.7361E-03	.7149E-03	.6931E-03	.6708E-03
11	13	.6164E-03	.6015E-03	.5858E-03	.5695E-03
11	14	.5244E-03	.5134E-03	.5016E-03	.4892E-03
11	15	.4531E-03	.4445E-03	.4353E-03	.4255E-03
11	16	.3971E-03	.3902E-03	.3826E-03	.3746E-03
11	17	.3524E-03	.3466E-03	.3403E-03	.3335E-03
11	18	.3162E-03	.3112E-03	.3058E-03	.2999E-03
11	19	.2865E-03	.2821E-03	.2772E-03	.2721E-03
12	13	.4995E-03	.4911E-03	.4818E-03	.4717E-03
12	14	.4213E-03	.4157E-03	.4094E-03	.4023E-03
12	15	.3611E-03	.3573E-03	.3528E-03	.3476E-03
12	16	.3143E-03	.3115E-03	.3081E-03	.3042E-03
12	17	.2772E-03	.2751E-03	.2724E-03	.2693E-03
12	18	.2474E-03	.2457E-03	.2435E-03	.2409E-03
12	19	.2230E-03	.2216E-03	.2198E-03	.2176E-03
12	20	.2028E-03	.2017E-03	.2001E-03	.1982E-03

### Appendix D. Series zW-C

ZW- 7/PAGE 5OF5

ELECTRODE CONFIGURATION      POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 4.8	W= 5.0	W= 5.2	W= 5.4
13	14	.3434E-03	.3410E-03	.3378E-03	.3339E-03
13	15	.2920E-03	.2908E-03	.2890E-03	.2865E-03
13	16	.2523E-03	.2518E-03	.2507E-03	.2491E-03
13	17	.2211E-03	.2209E-03	.2203E-03	.2192E-03
13	18	.1961E-03	.1962E-03	.1959E-03	.1951E-03
13	19	.1759E-03	.1761E-03	.1759E-03	.1754E-03
13	20	.1593E-03	.1595E-03	.1595E-03	.1591E-03
13	21	.1454E-03	.1457E-03	.1457E-03	.1454E-03
14	15	.2403E-03	.2405E-03	.2401E-03	.2391E-03
14	16	.2061E-03	.2067E-03	.2069E-03	.2066E-03
14	17	.1794E-03	.1803E-03	.1807E-03	.1808E-03
14	18	.1582E-03	.1592E-03	.1598E-03	.1600E-03
14	19	.1411E-03	.1421E-03	.1428E-03	.1431E-03
14	20	.1272E-03	.1281E-03	.1288E-03	.1292E-03
14	21	.1156E-03	.1165E-03	.1172E-03	.1176E-03
14	22	.1059E-03	.1068E-03	.1074E-03	.1079E-03
15	16	.1714E-03	.1726E-03	.1734E-03	.1738E-03
15	17	.1482E-03	.1495E-03	.1505E-03	.1512E-03
15	18	.1299E-03	.1313E-03	.1323E-03	.1331E-03
15	19	.1153E-03	.1166E-03	.1177E-03	.1185E-03
15	20	.1034E-03	.1046E-03	.1057E-03	.1065E-03
15	21	.9359E-04	.9478E-04	.9577E-04	.9657E-04
15	22	.8539E-04	.8651E-04	.8745E-04	.8822E-04
15	23	.7846E-04	.7951E-04	.8041E-04	.8114E-04

### Appendix D. Series zW-C

ZW- 8/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 5.6	W= 5.8	W= 6.0	W= 6.2
1	2	.9068E-03	.8642E-03	.8233E-03	.7839E-03
1	3	.1063E-02	.1005E-02	.9507E-03	.8990E-03
1	4	.1216E-02	.1141E-02	.1071E-02	.1006E-02
1	5	.1332E-02	.1242E-02	.1160E-02	.1085E-02
1	6	.1375E-02	.1280E-02	.1193E-02	.1114E-02
1	7	.1330E-02	.1241E-02	.1159E-02	.1084E-02
1	8	.1214E-02	.1139E-02	.1070E-02	.1005E-02
1	9	.1060E-02	.1003E-02	.9490E-03	.8975E-03
2	3	.1242E-02	.1167E-02	.1098E-02	.1032E-02
2	4	.1413E-02	.1319E-02	.1232E-02	.1151E-02
2	5	.1543E-02	.1432E-02	.1331E-02	.1238E-02
2	6	.1592E-02	.1475E-02	.1368E-02	.1270E-02
2	7	.1542E-02	.1431E-02	.1330E-02	.1238E-02
2	8	.1411E-02	.1317E-02	.1230E-02	.1150E-02
2	9	.1239E-02	.1165E-02	.1096E-02	.1031E-02
2	10	.1063E-02	.1007E-02	.9538E-03	.9030E-03
3	4	.1631E-02	.1512E-02	.1404E-02	.1305E-02
3	5	.1775E-02	.1638E-02	.1513E-02	.1400E-02
3	6	.1830E-02	.1684E-02	.1554E-02	.1435E-02
3	7	.1774E-02	.1637E-02	.1512E-02	.1399E-02
3	8	.1629E-02	.1510E-02	.1402E-02	.1303E-02
3	9	.1437E-02	.1342E-02	.1253E-02	.1172E-02
3	10	.1239E-02	.1165E-02	.1096E-02	.1031E-02
3	11	.1060E-02	.1003E-02	.9490E-03	.8975E-03

### Appendix D. Series zW-C

ZW- 8/PAGE 20F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 5.6	W = 5.8	W = 6.0	W = 6.2
4	5	.2000E-02	.1833E-02	.1684E-02	.1550E-02
4	6	.2059E-02	.1884E-02	.1728E-02	.1588E-02
4	7	.1998E-02	.1832E-02	.1683E-02	.1549E-02
4	8	.1839E-02	.1695E-02	.1564E-02	.1446E-02
4	9	.1629E-02	.1510E-02	.1402E-02	.1303E-02
4	10	.1411E-02	.1317E-02	.1230E-02	.1150E-02
4	11	.1214E-02	.1139E-02	.1070E-02	.1005E-02
4	12	.1046E-02	.9859E-03	.9297E-03	.8771E-03
5	6	.2232E-02	.2033E-02	.1856E-02	.1699E-02
5	7	.2168E-02	.1978E-02	.1809E-02	.1658E-02
5	8	.1998E-02	.1832E-02	.1683E-02	.1549E-02
5	9	.1774E-02	.1637E-02	.1512E-02	.1399E-02
5	10	.1542E-02	.1431E-02	.1330E-02	.1238E-02
5	11	.1330E-02	.1241E-02	.1159E-02	.1084E-02
5	12	.1150E-02	.1077E-02	.1010E-02	.9484E-03
5	13	.1001E-02	.9406E-03	.8845E-03	.8327E-03
6	7	.2232E-02	.2033E-02	.1856E-02	.1699E-02
6	8	.2059E-02	.1884E-02	.1728E-02	.1588E-02
6	9	.1830E-02	.1684E-02	.1554E-02	.1435E-02
6	10	.1592E-02	.1475E-02	.1368E-02	.1270E-02
6	11	.1375E-02	.1280E-02	.1193E-02	.1114E-02
6	12	.1190E-02	.1112E-02	.1040E-02	.9752E-03
6	13	.1037E-02	.9719E-03	.9120E-03	.8568E-03
6	14	.9119E-03	.8562E-03	.8050E-03	.7579E-03

### Appendix D. Series zW-C

ZW- 8/PAGE 30F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 5.6	W = 5.8	W = 6.0	W = 6.2
7	8	.2000E-02	.1833E-02	.1684E-02	.1550E-02
7	9	.1775E-02	.1638E-02	.1513E-02	.1400E-02
7	10	.1543E-02	.1432E-02	.1331E-02	.1238E-02
7	11	.1332E-02	.1242E-02	.1160E-02	.1085E-02
7	12	.1151E-02	.1078E-02	.1011E-02	.9491E-03
7	13	.1002E-02	.9414E-03	.8852E-03	.8332E-03
7	14	.8803E-03	.8286E-03	.7807E-03	.7364E-03
7	15	.7809E-03	.7360E-03	.6944E-03	.6560E-03
8	9	.1631E-02	.1512E-02	.1404E-02	.1305E-02
8	10	.1413E-02	.1319E-02	.1232E-02	.1151E-02
8	11	.1216E-02	.1141E-02	.1071E-02	.1006E-02
8	12	.1047E-02	.9874E-03	.9310E-03	.8782E-03
8	13	.9092E-03	.8595E-03	.8129E-03	.7692E-03
8	14	.7965E-03	.7545E-03	.7152E-03	.6782E-03
8	15	.7048E-03	.6687E-03	.6348E-03	.6029E-03
8	16	.6299E-03	.5982E-03	.5684E-03	.5405E-03
9	10	.1242E-02	.1167E-02	.1098E-02	.1032E-02
9	11	.1063E-02	.1005E-02	.9507E-03	.8990E-03
9	12	.9116E-03	.8661E-03	.8227E-03	.7814E-03
9	13	.7873E-03	.7505E-03	.7154E-03	.6818E-03
9	14	.6867E-03	.6562E-03	.6270E-03	.5991E-03
9	15	.6053E-03	.5794E-03	.5546E-03	.5308E-03
9	16	.5390E-03	.5166E-03	.4951E-03	.4744E-03
9	17	.4847E-03	.4648E-03	.4458E-03	.4276E-03

### Appendix D. Series zW-C

ZW- 8/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 5.6	W = 5.8	W = 6.0	W = 6.2
10	11	.9068E-03	.8642E-03	.8233E-03	.7839E-03
10	12	.7726E-03	.7402E-03	.7086E-03	.6780E-03
10	13	.6633E-03	.6379E-03	.6130E-03	.5888E-03
10	14	.5753E-03	.5548E-03	.5347E-03	.5150E-03
10	15	.5045E-03	.4876E-03	.4708E-03	.4544E-03
10	16	.4473E-03	.4328E-03	.4186E-03	.4045E-03
10	17	.4005E-03	.3880E-03	.3755E-03	.3633E-03
10	18	.3620E-03	.3508E-03	.3398E-03	.3290E-03
11	12	.6483E-03	.6257E-03	.6033E-03	.5812E-03
11	13	.5528E-03	.5359E-03	.5189E-03	.5019E-03
11	14	.4764E-03	.4633E-03	.4500E-03	.4367E-03
11	15	.4153E-03	.4049E-03	.3942E-03	.3834E-03
11	16	.3663E-03	.3576E-03	.3487E-03	.3398E-03
11	17	.3264E-03	.3191E-03	.3115E-03	.3039E-03
11	18	.2937E-03	.2874E-03	.2808E-03	.2741E-03
11	19	.2666E-03	.2610E-03	.2551E-03	.2492E-03
12	13	.4611E-03	.4499E-03	.4384E-03	.4266E-03
12	14	.3946E-03	.3865E-03	.3779E-03	.3691E-03
12	15	.3419E-03	.3357E-03	.3291E-03	.3223E-03
12	16	.2997E-03	.2948E-03	.2896E-03	.2842E-03
12	17	.2657E-03	.2618E-03	.2575E-03	.2530E-03
12	18	.2380E-03	.2347E-03	.2311E-03	.2272E-03
12	19	.2151E-03	.2122E-03	.2091E-03	.2058E-03
12	20	.1960E-03	.1935E-03	.1907E-03	.1878E-03

### Appendix D. Series zW-C

ZW- 8/PAGE 5OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 5.6	W= 5.8	W= 6.0	W= 6.2
13	14	.3294E-03	.3244E-03	.3189E-03	.3131E-03
13	15	.2835E-03	.2800E-03	.2761E-03	.2718E-03
13	16	.2470E-03	.2445E-03	.2416E-03	.2384E-03
13	17	.2177E-03	.2159E-03	.2137E-03	.2112E-03
13	18	.1940E-03	.1926E-03	.1909E-03	.1889E-03
13	19	.1746E-03	.1734E-03	.1720E-03	.1704E-03
13	20	.1584E-03	.1575E-03	.1563E-03	.1549E-03
13	21	.1448E-03	.1440E-03	.1430E-03	.1418E-03
14	15	.2377E-03	.2359E-03	.2336E-03	.2311E-03
14	16	.2059E-03	.2048E-03	.2033E-03	.2016E-03
14	17	.1805E-03	.1798E-03	.1789E-03	.1776E-03
14	18	.1600E-03	.1596E-03	.1590E-03	.1581E-03
14	19	.1432E-03	.1431E-03	.1426E-03	.1420E-03
14	20	.1294E-03	.1293E-03	.1291E-03	.1286E-03
14	21	.1179E-03	.1179E-03	.1177E-03	.1173E-03
14	22	.1081E-03	.1082E-03	.1080E-03	.1077E-03
15	16	.1738E-03	.1735E-03	.1730E-03	.1721E-03
15	17	.1515E-03	.1516E-03	.1514E-03	.1509E-03
15	18	.1336E-03	.1339E-03	.1339E-03	.1337E-03
15	19	.1191E-03	.1194E-03	.1196E-03	.1195E-03
15	20	.1071E-03	.1075E-03	.1077E-03	.1078E-03
15	21	.9719E-04	.9763E-04	.9791E-04	.9804E-04
15	22	.8883E-04	.8928E-04	.8958E-04	.8974E-04
15	23	.8173E-04	.8217E-04	.8247E-04	.8265E-04

### Appendix D. Series zW-C

ZW- 9/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 6.4	W = 6.6	W = 6.8	W = 7.0
1	2	.7102E-03	.6758E-03	.6431E-03	.6120E-03
1	3	.8043E-03	.7611E-03	.7204E-03	.6821E-03
1	4	.8901E-03	.8379E-03	.7893E-03	.7440E-03
1	5	.9516E-03	.8924E-03	.8378E-03	.7872E-03
1	6	.9739E-03	.9121E-03	.8552E-03	.8027E-03
1	7	.9510E-03	.8919E-03	.8374E-03	.7869E-03
1	8	.8892E-03	.8371E-03	.7886E-03	.7434E-03
1	9	.8032E-03	.7601E-03	.7195E-03	.6814E-03
2	3	.9146E-03	.8613E-03	.8116E-03	.7651E-03
2	4	.1009E-02	.9455E-03	.8869E-03	.8326E-03
2	5	.1076E-02	.1005E-02	.9398E-03	.8796E-03
2	6	.1101E-02	.1026E-02	.9588E-03	.8965E-03
2	7	.1075E-02	.1004E-02	.9394E-03	.8792E-03
2	8	.1008E-02	.9447E-03	.8861E-03	.8320E-03
2	9	.9134E-03	.8603E-03	.8107E-03	.7644E-03
2	10	.8094E-03	.7665E-03	.7260E-03	.6878E-03
3	4	.1131E-02	.1055E-02	.9850E-03	.9207E-03
3	5	.1204E-02	.1119E-02	.1042E-02	.9714E-03
3	6	.1231E-02	.1143E-02	.1062E-02	.9896E-03
3	7	.1204E-02	.1119E-02	.1041E-02	.9711E-03
3	8	.1130E-02	.1054E-02	.9843E-03	.9202E-03
3	9	.1027E-02	.9624E-03	.9026E-03	.8472E-03
3	10	.9134E-03	.8603E-03	.8107E-03	.7644E-03
3	11	.8032E-03	.7601E-03	.7195E-03	.6814E-03

## Appendix D. Series zW-C

ZW- 9/PAGE 20F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W= 6.4	W= 6.6	W= 6.8	W= 7.0
4	5	.1320E-02	.1222E-02	.1133E-02	.1052E-02
4	6	.1349E-02	.1247E-02	.1155E-02	.1071E-02
4	7	.1320E-02	.1221E-02	.1132E-02	.1051E-02
4	8	.1241E-02	.1152E-02	.1071E-02	.9977E-03
4	9	.1130E-02	.1054E-02	.9843E-03	.9202E-03
4	10	.1008E-02	.9447E-03	.8861E-03	.8320E-03
4	11	.8892E-03	.8371E-03	.7886E-03	.7434E-03
4	12	.7819E-03	.7389E-03	.6987E-03	.6610E-03
5	6	.1433E-02	.1321E-02	.1219E-02	.1128E-02
5	7	.1403E-02	.1294E-02	.1196E-02	.1108E-02
5	8	.1320E-02	.1221E-02	.1132E-02	.1051E-02
5	9	.1204E-02	.1119E-02	.1041E-02	.9711E-03
5	10	.1075E-02	.1004E-02	.9394E-03	.8792E-03
5	11	.9510E-03	.8919E-03	.8374E-03	.7869E-03
5	12	.8380E-03	.7888E-03	.7432E-03	.7008E-03
5	13	.7400E-03	.6985E-03	.6600E-03	.6241E-03
6	7	.1433E-02	.1321E-02	.1219E-02	.1128E-02
6	8	.1349E-02	.1247E-02	.1155E-02	.1071E-02
6	9	.1231E-02	.1143E-02	.1062E-02	.9896E-03
6	10	.1101E-02	.1026E-02	.9588E-03	.8965E-03
6	11	.9739E-03	.9121E-03	.8552E-03	.8027E-03
6	12	.8588E-03	.8072E-03	.7595E-03	.7153E-03
6	13	.7589E-03	.7153E-03	.6749E-03	.6374E-03
6	14	.6740E-03	.6366E-03	.6019E-03	.5697E-03

### Appendix D. Series zW-C

ZW- 9/PAGE 30F5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 6.4	W = 6.6	W = 6.8	W = 7.0
7	8	.1320E-02	.1222E-02	.1133E-02	.1052E-02
7	9	.1204E-02	.1119E-02	.1042E-02	.9714E-03
7	10	.1076E-02	.1005E-02	.9398E-03	.8796E-03
7	11	.9516E-03	.8924E-03	.8378E-03	.7872E-03
7	12	.8385E-03	.7892E-03	.7435E-03	.7011E-03
7	13	.7404E-03	.6989E-03	.6603E-03	.6244E-03
7	14	.6571E-03	.6217E-03	.5886E-03	.5578E-03
7	15	.5871E-03	.5563E-03	.5276E-03	.5007E-03
8	9	.1131E-02	.1055E-02	.9850E-03	.9207E-03
8	10	.1009E-02	.9455E-03	.8869E-03	.8326E-03
8	11	.8901E-03	.8379E-03	.7893E-03	.7440E-03
8	12	.7828E-03	.7396E-03	.6993E-03	.6616E-03
8	13	.6898E-03	.6537E-03	.6199E-03	.5882E-03
8	14	.6110E-03	.5804E-03	.5517E-03	.5246E-03
8	15	.5449E-03	.5185E-03	.4937E-03	.4703E-03
8	16	.4896E-03	.4664E-03	.4446E-03	.4241E-03
9	10	.9146E-03	.8613E-03	.8116E-03	.7651E-03
9	11	.8043E-03	.7611E-03	.7204E-03	.6821E-03
9	12	.7050E-03	.6698E-03	.6365E-03	.6050E-03
9	13	.6193E-03	.5903E-03	.5627E-03	.5365E-03
9	14	.5469E-03	.5226E-03	.4994E-03	.4773E-03
9	15	.4863E-03	.4656E-03	.4458E-03	.4269E-03
9	16	.4358E-03	.4177E-03	.4005E-03	.3841E-03
9	17	.3935E-03	.3775E-03	.3623E-03	.3478E-03

### Appendix D. Series zW-C

ZW- 9/PAGE 40F5

ELECTRODE CONFIGURATION            POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 6.4	W = 6.6	W = 6.8	W = 7.0
10	11	.7102E-03	.6758E-03	.6431E-03	.6120E-03
10	12	.6199E-03	.5925E-03	.5662E-03	.5410E-03
10	13	.5423E-03	.5201E-03	.4987E-03	.4782E-03
10	14	.4769E-03	.4587E-03	.4411E-03	.4240E-03
10	15	.4225E-03	.4072E-03	.3924E-03	.3780E-03
10	16	.3773E-03	.3642E-03	.3515E-03	.3391E-03
10	17	.3396E-03	.3282E-03	.3170E-03	.3062E-03
10	18	.3079E-03	.2978E-03	.2879E-03	.2784E-03
11	12	.5380E-03	.5172E-03	.4969E-03	.4773E-03
11	13	.4684E-03	.4520E-03	.4359E-03	.4202E-03
11	14	.4100E-03	.3969E-03	.3839E-03	.3712E-03
11	15	.3617E-03	.3509E-03	.3402E-03	.3296E-03
11	16	.3216E-03	.3126E-03	.3036E-03	.2947E-03
11	17	.2884E-03	.2806E-03	.2729E-03	.2653E-03
11	18	.2606E-03	.2538E-03	.2471E-03	.2404E-03
11	19	.2372E-03	.2312E-03	.2252E-03	.2193E-03
12	13	.4027E-03	.3907E-03	.3788E-03	.3669E-03
12	14	.3508E-03	.3414E-03	.3321E-03	.3227E-03
12	15	.3079E-03	.3005E-03	.2930E-03	.2854E-03
12	16	.2725E-03	.2665E-03	.2604E-03	.2542E-03
12	17	.2433E-03	.2383E-03	.2331E-03	.2279E-03
12	18	.2190E-03	.2147E-03	.2103E-03	.2059E-03
12	19	.1987E-03	.1950E-03	.1911E-03	.1872E-03
12	20	.1815E-03	.1782E-03	.1748E-03	.1713E-03

### Appendix D. Series zW-C

ZW- 9/PAGE 5OF5

ELECTRODE CONFIGURATION POLE-POLE  
 SURFACE Z=W IS DELIMITED BY X=5.5,6.5  
 AND BY Y= 3.0,0.0. THE VALUES OF W ARE AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	W = 6.4	W = 6.6	W = 6.8	W = 7.0
13	14	.3005E-03	.2940E-03	.2872E-03	.2804E-03
13	15	.2624E-03	.2574E-03	.2522E-03	.2469E-03
13	16	.2312E-03	.2273E-03	.2232E-03	.2189E-03
13	17	.2055E-03	.2023E-03	.1990E-03	.1955E-03
13	18	.1842E-03	.1816E-03	.1788E-03	.1760E-03
13	19	.1665E-03	.1643E-03	.1619E-03	.1595E-03
13	20	.1515E-03	.1496E-03	.1476E-03	.1455E-03
13	21	.1389E-03	.1372E-03	.1354E-03	.1335E-03
14	15	.2250E-03	.2216E-03	.2180E-03	.2142E-03
14	16	.1972E-03	.1947E-03	.1920E-03	.1891E-03
14	17	.1745E-03	.1726E-03	.1705E-03	.1682E-03
14	18	.1557E-03	.1542E-03	.1526E-03	.1508E-03
14	19	.1402E-03	.1390E-03	.1376E-03	.1362E-03
14	20	.1271E-03	.1262E-03	.1250E-03	.1238E-03
14	21	.1161E-03	.1153E-03	.1144E-03	.1133E-03
14	22	.1067E-03	.1060E-03	.1052E-03	.1043E-03
15	16	.1696E-03	.1680E-03	.1663E-03	.1643E-03
15	17	.1493E-03	.1483E-03	.1470E-03	.1456E-03
15	18	.1327E-03	.1319E-03	.1310E-03	.1300E-03
15	19	.1189E-03	.1184E-03	.1177E-03	.1169E-03
15	20	.1075E-03	.1071E-03	.1066E-03	.1059E-03
15	21	.9787E-04	.9759E-04	.9719E-04	.9669E-04
15	22	.8968E-04	.8947E-04	.8916E-04	.8875E-04
15	23	.8266E-04	.8251E-04	.8225E-04	.8191E-04

**Appendix E. Series DV-C**

## Appendix E. Series DV-C

DV- 1/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 0.0,0.2	Z = 0.0,0.4	Z = 0.0,0.6	Z = 0.0,0.8	Z = 0.0,1.0
1	2	-7805E-03	-1548E-02	-2293E-02	-3004E-02	-3673E-02
1	3	-1340E-02	-2648E-02	-3893E-02	-5052E-02	-6107E-02
1	4	-2869E-02	-5585E-02	-8025E-02	-1012E-01	-1185E-01
1	5	-1123E-01	-1929E-01	-2404E-01	-2657E-01	-2779E-01
1	6	.2359E-01	.4161E-01	.5374E-01	.6181E-01	.6734E-01
1	7	-5589E-02	-8920E-02	-1001E-01	-9762E-02	-8860E-02
1	8	-7908E-03	-1496E-02	-2053E-02	-2430E-02	-2626E-02
1	9	-2211E-03	-4286E-03	-6106E-03	-7577E-03	-8639E-03
2	3	-1961E-02	-3871E-02	-5684E-02	-7361E-02	-8877E-02
2	4	-4097E-02	-7978E-02	-1147E-01	-1447E-01	-1695E-01
2	5	-1539E-01	-2663E-01	-3347E-01	-3732E-01	-3936E-01
2	6	.2890E-01	.5085E-01	.6548E-01	.7509E-01	.8160E-01
2	7	-6666E-02	-1060E-01	-1185E-01	-1151E-01	-1040E-01
2	8	-9529E-03	-1802E-02	-2470E-02	-2919E-02	-3147E-02
2	9	-2888E-03	-5594E-03	-7956E-03	-9848E-03	-1119E-02
2	10	-1328E-03	-2590E-03	-3720E-03	-4667E-03	-5389E-03
3	4	-6585E-02	-1280E-01	-1837E-01	-2311E-01	-2698E-01
3	5	-2368E-01	-4127E-01	-5234E-01	-5888E-01	-6259E-01
3	6	.3704E-01	.6486E-01	.8305E-01	.9477E-01	.1025E-00
3	7	-8404E-02	-1335E-01	-1492E-01	-1449E-01	-1311E-01
3	8	-1309E-02	-2476E-02	-3394E-02	-4010E-02	-4320E-02
3	9	-4888E-03	-9436E-03	-1334E-02	-1639E-02	-1846E-02
3	10	-2888E-03	-5594E-03	-7956E-03	-9848E-03	-1119E-02
3	11	-2211E-03	-4286E-03	-6106E-03	-7577E-03	-8639E-03

## Appendix E. Series DV-C

DV- 1/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
4	5	-4552E-01	-7964E-01	-1013E-00	-1141E-00	-1212E-00
4	6	.5037E-01	.8730E-01	.1106E-00	.1253E-00	.1351E-00
4	7	-1205E-01	-1928E-01	-2174E-01	-2130E-01	-1943E-01
4	8	-2502E-02	-4694E-02	-6351E-02	-7376E-02	-7792E-02
4	9	-1309E-02	-2476E-02	-3394E-02	-4010E-02	-4320E-02
4	10	-9529E-03	-1802E-02	-2470E-02	-2919E-02	-3147E-02
4	11	-7908E-03	-1496E-02	-2053E-02	-2430E-02	-2626E-02
4	12	-6940E-03	-1315E-02	-1808E-02	-2146E-02	-2328E-02
5	6	.6119E-01	.1104E-00	.1464E-00	.1722E-00	.1910E-00
5	7	-2966E-01	-4528E-01	-4802E-01	-4410E-01	-3775E-01
5	8	-1205E-01	-1928E-01	-2174E-01	-2130E-01	-1943E-01
5	9	-8404E-02	-1335E-01	-1492E-01	-1449E-01	-1311E-01
5	10	-6666E-02	-1060E-01	-1185E-01	-1151E-01	-1040E-01
5	11	-5589E-02	-8920E-02	-1001E-01	-9762E-02	-8860E-02
5	12	-4835E-02	-7743E-02	-8733E-02	-8560E-02	-7816E-02
5	13	-4271E-02	-6860E-02	-7770E-02	-7656E-02	-7033E-02
6	7	.6119E-01	.1104E-00	.1464E-00	.1722E-00	.1910E-00
6	8	.5037E-01	.8730E-01	.1106E-00	.1253E-00	.1351E-00
6	9	.3704E-01	.6486E-01	.8305E-01	.9477E-01	.1025E-00
6	10	.2890E-01	.5085E-01	.6548E-01	.7509E-01	.8160E-01
6	11	.2359E-01	.4161E-01	.5374E-01	.6181E-01	.6734E-01
6	12	.1989E-01	.3513E-01	.4545E-01	.5237E-01	.5715E-01
6	13	.1717E-01	.3036E-01	.3933E-01	.4536E-01	.4955E-01
6	14	.1510E-01	.2671E-01	.3462E-01	.3997E-01	.4370E-01

## Appendix E. Series DV-C

DV- 1/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
7	8	-4552E-01	-7964E-01	-1013E-00	-1141E-00	-1212E-00
7	9	-2368E-01	-4127E-01	-5234E-01	-5888E-01	-6259E-01
7	10	-1539E-01	-2663E-01	-3347E-01	-3732E-01	-3936E-01
7	11	-1123E-01	-1929E-01	-2404E-01	-2657E-01	-2779E-01
7	12	-8775E-02	-1499E-01	-1856E-01	-2035E-01	-2113E-01
7	13	-7176E-02	-1221E-01	-1503E-01	-1638E-01	-1689E-01
7	14	-6059E-02	-1027E-01	-1259E-01	-1365E-01	-1399E-01
7	15	-5237E-02	-8860E-02	-1081E-01	-1167E-01	-1191E-01
8	9	-6585E-02	-1280E-01	-1837E-01	-2311E-01	-2698E-01
8	10	-4097E-02	-7978E-02	-1147E-01	-1447E-01	-1695E-01
8	11	-2869E-02	-5585E-02	-8025E-02	-1012E-01	-1185E-01
8	12	-2165E-02	-4212E-02	-6045E-02	-7612E-02	-8898E-02
8	13	-1720E-02	-3343E-02	-4792E-02	-6024E-02	-7027E-02
8	14	-1418E-02	-2753E-02	-3941E-02	-4946E-02	-5759E-02
8	15	-1201E-02	-2330E-02	-3332E-02	-4176E-02	-4853E-02
8	16	-1039E-02	-2015E-02	-2878E-02	-3602E-02	-4179E-02
9	10	-1961E-02	-3871E-02	-5684E-02	-7361E-02	-8877E-02
9	11	-1340E-02	-2648E-02	-3893E-02	-5052E-02	-6107E-02
9	12	-9898E-03	-1955E-02	-2876E-02	-3724E-02	-4516E-02
9	13	-7714E-03	-1524E-02	-2241E-02	-2909E-02	-3517E-02
9	14	-6253E-03	-1235E-02	-1815E-02	-2355E-02	-2846E-02
9	15	-5221E-03	-1031E-02	-1515E-02	-1964E-02	-2372E-02
9	16	-4461E-03	-8807E-03	-1293E-02	-1676E-02	-2022E-02
9	17	-3881E-03	-7661E-03	-1124E-02	-1456E-02	-1756E-02

## Appendix E. Series DV-C

DV- 1/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
10	11	- .7805E-03	- .1548E-02	- .2293E-02	- .3004E-02	- .3673E-02
10	12	- .5666E-03	- .1125E-02	- .1667E-02	- .2187E-02	- .2678E-02
10	13	- .4350E-03	- .8639E-03	- .1280E-02	- .1680E-02	- .2059E-02
10	14	- .3480E-03	- .6911E-03	- .1024E-02	- .1344E-02	- .1648E-02
10	15	- .2872E-03	- .5704E-03	- .8457E-03	- .1109E-02	- .1359E-02
10	16	- .2428E-03	- .4823E-03	- .7150E-03	- .9381E-03	- .1149E-02
10	17	- .2094E-03	- .4158E-03	- .6163E-03	- .8084E-03	- .9899E-03
10	18	- .1834E-03	- .3641E-03	- .5396E-03	- .7076E-03	- .8662E-03
11	12	- .3681E-03	- .7325E-03	- .1089E-02	- .1435E-02	- .1767E-02
11	13	- .2790E-03	- .5554E-03	- .8265E-03	- .1090E-02	- .1343E-02
11	14	- .2207E-03	- .4394E-03	- .6541E-03	- .8629E-03	- .1064E-02
11	15	- .1804E-03	- .3591E-03	- .5346E-03	- .7054E-03	- .8701E-03
11	16	- .1512E-03	- .3010E-03	- .4482E-03	- .5913E-03	- .7294E-03
11	17	- .1293E-03	- .2575E-03	- .3834E-03	- .5058E-03	- .6239E-03
11	18	- .1125E-03	- .2240E-03	- .3334E-03	- .4398E-03	- .5424E-03
11	19	- .9922E-04	- .1975E-03	- .2939E-03	- .3877E-03	- .4780E-03
12	13	- .1949E-03	- .3885E-03	- .5791E-03	- .7656E-03	- .9466E-03
12	14	- .1527E-03	- .3044E-03	- .4540E-03	- .6005E-03	- .7430E-03
12	15	- .1237E-03	- .2466E-03	- .3679E-03	- .4868E-03	- .6026E-03
12	16	- .1029E-03	- .2051E-03	- .3061E-03	- .4051E-03	- .5015E-03
12	17	- .8744E-04	- .1743E-03	- .2601E-03	- .3442E-03	- .4262E-03
12	18	- .7558E-04	- .1506E-03	- .2248E-03	- .2975E-03	- .3683E-03
12	19	- .6627E-04	- .1321E-03	- .1971E-03	- .2608E-03	- .3229E-03
12	20	- .5880E-04	- .1172E-03	- .1748E-03	- .2314E-03	- .2865E-03

## Appendix E. Series DV-C

DV- 1/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 0.0,0.2	Z= 0.0,0.4	Z= 0.0,0.6	Z= 0.0,0.8	Z= 0.0,1.0
13	14	- .1124E-03	- .2242E-03	- .3347E-03	- .4434E-03	- .5497E-03
13	15	- .9037E-04	- .1802E-03	- .2692E-03	- .3568E-03	- .4426E-03
13	16	- .7465E-04	- .1489E-03	- .2224E-03	- .2949E-03	- .3659E-03
13	17	- .6303E-04	- .1257E-03	- .1878E-03	- .2490E-03	- .3091E-03
13	18	- .5418E-04	- .1081E-03	- .1615E-03	- .2141E-03	- .2657E-03
13	19	- .4726E-04	- .9430E-04	- .1408E-03	- .1868E-03	- .2318E-03
13	20	- .4174E-04	- .8328E-04	- .1244E-03	- .1649E-03	- .2047E-03
13	21	- .3726E-04	- .7434E-04	- .1110E-03	- .1472E-03	- .1827E-03
14	15	- .6917E-04	- .1380E-03	- .2063E-03	- .2736E-03	- .3398E-03
14	16	- .5679E-04	- .1133E-03	- .1694E-03	- .2248E-03	- .2793E-03
14	17	- .4768E-04	- .9517E-04	- .1423E-03	- .1888E-03	- .2347E-03
14	18	- .4077E-04	- .8139E-04	- .1217E-03	- .1615E-03	- .2008E-03
14	19	- .3540E-04	- .7068E-04	- .1056E-03	- .1403E-03	- .1744E-03
14	20	- .3114E-04	- .6216E-04	- .9295E-04	- .1234E-03	- .1534E-03
14	21	- .2768E-04	- .5527E-04	- .8265E-04	- .1097E-03	- .1364E-03
14	22	- .2485E-04	- .4960E-04	- .7418E-04	- .9848E-04	- .1224E-03
15	16	- .4481E-04	- .8946E-04	- .1338E-03	- .1776E-03	- .2209E-03
15	17	- .3743E-04	- .7474E-04	- .1118E-03	- .1485E-03	- .1847E-03
15	18	- .3186E-04	- .6363E-04	- .9519E-04	- .1264E-03	- .1573E-03
15	19	- .2755E-04	- .5502E-04	- .8232E-04	- .1093E-03	- .1361E-03
15	20	- .2414E-04	- .4820E-04	- .7213E-04	- .9584E-04	- .1192E-03
15	21	- .2138E-04	- .4271E-04	- .6391E-04	- .8492E-04	- .1056E-03
15	22	- .1913E-04	- .3820E-04	- .5717E-04	- .7597E-04	- .9454E-04
15	23	- .1725E-04	- .3446E-04	- .5157E-04	- .6853E-04	- .8529E-04

## Appendix E. Series DV-C

DV- 2/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
1	2	-6198E-03	-1186E-02	-1697E-02	-2151E-02	-2550E-02
1	3	-9407E-03	-1763E-02	-2469E-02	-3065E-02	-3560E-02
1	4	-1381E-02	-2452E-02	-3261E-02	-3855E-02	-4278E-02
1	5	-4780E-03	-5436E-03	-3838E-03	-1060E-03	-2282E-03
1	6	.3946E-02	.6865E-02	.9093E-02	.1084E-01	.1223E-01
1	7	.1155E-02	.2357E-02	.3510E-02	.4570E-02	.5525E-02
1	8	-.3593E-04	.5727E-04	.2466E-03	.5023E-03	.7994E-03
1	9	-.6301E-04	-.8343E-04	-.6427E-04	-.1014E-04	.7348E-04
2	3	-.1338E-02	-.2495E-02	-.3475E-02	-.4288E-02	-.4950E-02
2	4	-.1984E-02	-.3524E-02	-.4685E-02	-.5536E-02	-.6138E-02
2	5	-.9962E-03	-.1379E-02	-.1406E-02	-.1227E-02	-.9318E-03
2	6	.4599E-02	.7978E-02	.1054E-01	.1256E-01	.1417E-01
2	7	.1397E-02	.2841E-02	.4220E-02	.5487E-02	.6628E-02
2	8	-.3330E-04	.9119E-04	.3336E-03	.6576E-03	.1033E-02
2	9	-.7602E-04	-.9477E-04	-.6041E-04	.2069E-04	.1409E-03
2	10	-.4714E-04	-.6803E-04	-.6281E-04	-.3275E-04	.1998E-04
3	4	-.3041E-02	-.5347E-02	-.7037E-02	-.8227E-02	-.9027E-02
3	5	-.2008E-02	-.2974E-02	-.3302E-02	-.3240E-02	-.2945E-02
3	6	.5463E-02	.9469E-02	.1253E-01	.1495E-01	.1693E-01
3	7	.1739E-02	.3544E-02	.5277E-02	.6882E-02	.8339E-02
3	8	-.3845E-04	.1441E-03	.4923E-03	.9551E-03	.1489E-02
3	9	-.1041E-03	-.1105E-03	-.2937E-04	.1258E-03	.3399E-03
3	10	-.7602E-04	-.9477E-04	-.6041E-04	.2069E-04	.1409E-03
3	11	-.6301E-04	-.8343E-04	-.6427E-04	-.1014E-04	.7348E-04

Appendix E. Series DV-C

DV- 2/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0+1.2	Z= 1.0+1.4	Z= 1.0+1.6	Z= 1.0+1.8	Z= 1.0+2.0
4	5	- .3700E-02	- .5324E-02	- .5719E-02	- .5407E-02	- .4709E-02
4	6	.6977E-02	.1226E-01	.1644E-01	.1985E-01	.2269E-01
4	7	.2476E-02	.5113E-02	.7687E-02	.1009E-01	.1227E-01
4	8	.9809E-04	.5840E-03	.1333E-02	.2241E-02	.3225E-02
4	9	- .3845E-04	.1441E-03	.4923E-03	.9551E-03	.1489E-02
4	10	- .3330E-04	.9119E-04	.3336E-03	.6576E-03	.1033E-02
4	11	- .3593E-04	.5727E-04	.2466E-03	.5023E-03	.7994E-03
4	12	- .4363E-04	.2473E-04	.1768E-03	.3867E-03	.6330E-03
5	6	.1403E-01	.2469E-01	.3293E-01	.3938E-01	.4452E-01
5	7	.6718E-02	.1295E-01	.1841E-01	.2309E-01	.2704E-01
5	8	.2476E-02	.5113E-02	.7687E-02	.1009E-01	.1227E-01
5	9	.1739E-02	.3544E-02	.5277E-02	.6882E-02	.8339E-02
5	10	.1397E-02	.2841E-02	.4220E-02	.5487E-02	.6628E-02
5	11	.1155E-02	.2357E-02	.3510E-02	.4570E-02	.5525E-02
5	12	.9719E-03	.1994E-02	.2979E-02	.3889E-02	.4711E-02
5	13	.8312E-03	.1713E-02	.2569E-02	.3363E-02	.4083E-02
6	7	.1403E-01	.2469E-01	.3293E-01	.3938E-01	.4452E-01
6	8	.6977E-02	.1226E-01	.1644E-01	.1985E-01	.2269E-01
6	9	.5463E-02	.9469E-02	.1253E-01	.1495E-01	.1693E-01
6	10	.4599E-02	.7978E-02	.1054E-01	.1256E-01	.1417E-01
6	11	.3946E-02	.6865E-02	.9093E-02	.1084E-01	.1223E-01
6	12	.3433E-02	.5990E-02	.7950E-02	.9492E-02	.1072E-01
6	13	.3027E-02	.5291E-02	.7035E-02	.8410E-02	.9517E-02
6	14	.2700E-02	.4727E-02	.6292E-02	.7531E-02	.8529E-02

## Appendix E. Series DV-C

DV- 2/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
7	8	-.3700E-02	-.5324E-02	-.5719E-02	-.5407E-02	-.4709E-02
7	9	-.2008E-02	-.2974E-02	-.3302E-02	-.3240E-02	-.2945E-02
7	10	-.9962E-03	-.1379E-02	-.1406E-02	-.1227E-02	-.9318E-03
7	11	-.4780E-03	-.5436E-03	-.3838E-03	-.1060E-03	.2282E-03
7	12	-.2043E-03	-.1047E-03	.1509E-03	.4796E-03	.8349E-03
7	13	-.5291E-04	.1319E-03	.4325E-03	.7809E-03	.1140E-02
7	14	.3413E-04	.2622E-03	.5803E-03	.9311E-03	.1283E-02
7	15	.8544E-04	.3340E-03	.6551E-03	.9993E-03	.1340E-02
8	9	-.3041E-02	-.5347E-02	-.7037E-02	-.8227E-02	-.9027E-02
8	10	-.1984E-02	-.3524E-02	-.4685E-02	-.5536E-02	-.6138E-02
8	11	-.1381E-02	-.2452E-02	-.3261E-02	-.3855E-02	-.4278E-02
8	12	-.1018E-02	-.1801E-02	-.2386E-02	-.2810E-02	-.3107E-02
8	13	-.7875E-03	-.1385E-02	-.1824E-02	-.2135E-02	-.2347E-02
8	14	-.6313E-03	-.1104E-02	-.1445E-02	-.1680E-02	-.1833E-02
8	15	-.5210E-03	-.9059E-03	-.1178E-02	-.1360E-02	-.1473E-02
8	16	-.4400E-03	-.7608E-03	-.9831E-03	-.1127E-02	-.1211E-02
9	10	-.1338E-02	-.2495E-02	-.3475E-02	-.4288E-02	-.4950E-02
9	11	-.9407E-03	-.1763E-02	-.2469E-02	-.3065E-02	-.3560E-02
9	12	-.6989E-03	-.1311E-02	-.1840E-02	-.2288E-02	-.2662E-02
9	13	-.5431E-03	-.1019E-02	-.1429E-02	-.1776E-02	-.2066E-02
9	14	-.4374E-03	-.8198E-03	-.1148E-02	-.1425E-02	-.1655E-02
9	15	-.3623E-03	-.6780E-03	-.9480E-03	-.1175E-02	-.1362E-02
9	16	-.3070E-03	-.5736E-03	-.8005E-03	-.9903E-03	-.1146E-02
9	17	-.2650E-03	-.4942E-03	-.6885E-03	-.8500E-03	-.9818E-03

DV- 2/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN GSRI  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
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10	11	- .6198E-03	- .1186E-02	- .1697E-02	- .2151E-02	- .2550E-02
10	12	- .4578E-03	- .8792E-03	- .1262E-02	- .1606E-02	- .1912E-02
10	13	- .3537E-03	- .6802E-03	- .9780E-03	- .1246E-02	- .1486E-02
10	14	- .2833E-03	- .5449E-03	- .7838E-03	- .9995E-03	- .1192E-02
10	15	- .2335E-03	- .4490E-03	- .6457E-03	- .8231E-03	- .9816E-03
10	16	- .1969E-03	- .3785E-03	- .5440E-03	- .6931E-03	- .8260E-03
10	17	- .1692E-03	- .3250E-03	- .4668E-03	- .5944E-03	- .7078E-03
10	18	- .1477E-03	- .2835E-03	- .4068E-03	- .5176E-03	- .6158E-03
11	12	- .3153E-03	- .6119E-03	- .8884E-03	- .1143E-02	- .1377E-02
11	13	- .2417E-03	- .4703E-03	- .6844E-03	- .8833E-03	- .1066E-02
11	14	- .1922E-03	- .3744E-03	- .5455E-03	- .7049E-03	- .8524E-03
11	15	- .1574E-03	- .3067E-03	- .4471E-03	- .5781E-03	- .6994E-03
11	16	- .1320E-03	- .2572E-03	- .3749E-03	- .4848E-03	- .5866E-03
11	17	- .1128E-03	- .2198E-03	- .3204E-03	- .4142E-03	- .5011E-03
11	18	- .9802E-04	- .1908E-03	- .2781E-03	- .3595E-03	- .4347E-03
11	19	- .8628E-04	- .1679E-03	- .2446E-03	- .3161E-03	- .3821E-03
12	13	- .1744E-03	- .3413E-03	- .4999E-03	- .6495E-03	- .7897E-03
12	14	- .1377E-03	- .2699E-03	- .3960E-03	- .5155E-03	- .6281E-03
12	15	- .1120E-03	- .2198E-03	- .3228E-03	- .4206E-03	- .5129E-03
12	16	- .9340E-04	- .1833E-03	- .2693E-03	- .3510E-03	- .4284E-03
12	17	- .7941E-04	- .1558E-03	- .2290E-03	- .2986E-03	- .3645E-03
12	18	- .6864E-04	- .1347E-03	- .1979E-03	- .2581E-03	- .3151E-03
12	19	- .6015E-04	- .1180E-03	- .1734E-03	- .2261E-03	- .2760E-03
12	20	- .5333E-04	- .1046E-03	- .1537E-03	- .2004E-03	- .2445E-03

## Appendix E. Series DV-C

DV- 2/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 1.0,1.2	Z= 1.0,1.4	Z= 1.0,1.6	Z= 1.0,1.8	Z= 1.0,2.0
13	14	-1033E-03	-2033E-03	-2995E-03	-3915E-03	-4791E-03
13	15	-8357E-04	-1646E-03	-2427E-03	-3177E-03	-3894E-03
13	16	-6927E-04	-1365E-03	-2014E-03	-2639E-03	-3237E-03
13	17	-5860E-04	-1155E-03	-1705E-03	-2235E-03	-2743E-03
13	18	-5041E-04	-9941E-04	-1468E-03	-1924E-03	-2362E-03
13	19	-4399E-04	-8675E-04	-1281E-03	-1679E-03	-2062E-03
13	20	-3885E-04	-7662E-04	-1131E-03	-1483E-03	-1821E-03
13	21	-3467E-04	-6836E-04	-1009E-03	-1323E-03	-1624E-03
14	15	-6477E-04	-1278E-03	-1891E-03	-2482E-03	-3051E-03
14	16	-5341E-04	-1055E-03	-1562E-03	-2052E-03	-2526E-03
14	17	-4496E-04	-8890E-04	-1316E-03	-1731E-03	-2131E-03
14	18	-3851E-04	-7617E-04	-1128E-03	-1484E-03	-1828E-03
14	19	-3347E-04	-6621E-04	-9812E-04	-1291E-03	-1590E-03
14	20	-2945E-04	-5827E-04	-8635E-04	-1136E-03	-1400E-03
14	21	-2619E-04	-5182E-04	-7680E-04	-1010E-03	-1245E-03
14	22	-2350E-04	-4650E-04	-6892E-04	-9070E-04	-1117E-03
15	16	-4251E-04	-8414E-04	-1247E-03	-1642E-03	-2026E-03
15	17	-3563E-04	-7057E-04	-1047E-03	-1380E-03	-1703E-03
15	18	-3039E-04	-6023E-04	-8941E-04	-1178E-03	-1455E-03
15	19	-2632E-04	-5216E-04	-7746E-04	-1021E-03	-1262E-03
15	20	-2307E-04	-4575E-04	-6795E-04	-8964E-04	-1107E-03
15	21	-2045E-04	-4055E-04	-6025E-04	-7948E-04	-9823E-04
15	22	-1830E-04	-3629E-04	-5391E-04	-7113E-04	-8791E-04
15	23	-1651E-04	-3274E-04	-4864E-04	-6418E-04	-7932E-04

DV- 3/PAGE 10F5

ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
1	2	-3462E-03	-6427E-03	.8933E-03	-1102E-02	.1274E-02
1	3	-4034E-03	-7267E-03	.9806E-03	-1175E-02	-1320E-02
1	4	-2884E-03	-4731E-03	.5788E-03	-6250E-03	-6270E-03
1	5	.3553E-03	.7113E-03	.1056E-02	.1385E-02	.1695E-02
1	6	.1142E-02	.2089E-02	.2885E-02	.3562E-02	.4143E-02
1	7	.8505E-03	.1604E-02	.2270E-02	.2859E-02	.3380E-02
1	8	.3193E-03	.6466E-03	.9719E-03	.1288E-02	.1591E-02
1	9	.1074E-03	.2331E-03	.3719E-03	.5196E-03	.6723E-03
2	3	-5271E-03	-9377E-03	-1249E-02	-1478E-02	-1638E-02
2	4	-4070E-03	-6637E-03	-8062E-03	-8633E-03	-8576E-03
2	5	.3564E-03	.7404E-03	.1131E-02	.1515E-02	.1886E-02
2	6	.1326E-02	.2433E-02	.3370E-02	.4173E-02	.4867E-02
2	7	.1019E-02	.1924E-02	.2728E-02	.3441E-02	.4075E-02
2	8	.4032E-03	.8167E-03	.1227E-02	.1628E-02	.2011E-02
2	9	.1515E-03	.3267E-03	.5186E-03	.7210E-03	.9287E-03
2	10	.7270E-04	.1622E-03	.2656E-03	.3795E-03	.5012E-03
3	4	-5011E-03	-7789E-03	-8935E-03	-8912E-03	-8077E-03
3	5	.4294E-03	.9291E-03	.1457E-02	.1989E-02	.2506E-02
3	6	.1646E-02	.3039E-02	.4234E-02	.5268E-02	.6168E-02
3	7	.1311E-02	.2483E-02	.3529E-02	.4461E-02	.5290E-02
3	8	.5716E-03	.1155E-02	.1732E-02	.2290E-02	.2821E-02
3	9	.2582E-03	.5468E-03	.8541E-03	.1170E-02	.1487E-02
3	10	.1515E-03	.3267E-03	.5186E-03	.7210E-03	.9287E-03
3	11	.1074E-03	.2331E-03	.3719E-03	.5196E-03	.6723E-03

## Appendix E. Series DV-C

## Appendix E. Series DV-C

DV- 3/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
4	5	.8872E-03	.1845E-02	.2804E-02	.3725E-02	.4587E-02
4	6	.2398E-02	.4440E-02	.6187E-02	.7690E-02	.8987E-02
4	7	.1959E-02	.3698E-02	.5233E-02	.6582E-02	.7766E-02
4	8	.1002E-02	.1982E-02	.2916E-02	.3789E-02	.4595E-02
4	9	.5716E-03	.1155E-02	.1732E-02	.2290E-02	.2821E-02
4	10	.4032E-03	.8167E-03	.1227E-02	.1628E-02	.2011E-02
4	11	.3193E-03	.6466E-03	.9719E-03	.1288E-02	.1591E-02
4	12	.2660E-03	.5393E-03	.8113E-03	.1075E-02	.1329E-02
5	6	.4128E-02	.7481E-02	.1023E-01	.1250E-01	.1439E-01
5	7	.3323E-02	.6116E-02	.8468E-02	.1045E-01	.1213E-01
5	8	.1959E-02	.3698E-02	.5233E-02	.6582E-02	.7766E-02
5	9	.1311E-02	.2483E-02	.3529E-02	.4461E-02	.5290E-02
5	10	.1019E-02	.1924E-02	.2728E-02	.3441E-02	.4075E-02
5	11	.8505E-03	.1604E-02	.2270E-02	.2859E-02	.3380E-02
5	12	.7330E-03	.1382E-02	.1956E-02	.2464E-02	.2912E-02
5	13	.6434E-03	.1214E-02	.1720E-02	.2166E-02	.2561E-02
6	7	.4128E-02	.7481E-02	.1023E-01	.1250E-01	.1439E-01
6	8	.2398E-02	.4440E-02	.6187E-02	.7690E-02	.8987E-02
6	9	.1646E-02	.3039E-02	.4234E-02	.5268E-02	.6168E-02
6	10	.1326E-02	.2433E-02	.3370E-02	.4173E-02	.4867E-02
6	11	.1142E-02	.2089E-02	.2885E-02	.3562E-02	.4143E-02
6	12	.1010E-02	.1846E-02	.2547E-02	.3142E-02	.3650E-02
6	13	.9049E-03	.1655E-02	.2283E-02	.2816E-02	.3270E-02
6	14	.8181E-03	.1497E-02	.2067E-02	.2549E-02	.2962E-02

**Appendix E. Series DV-C**

DV- 3/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
7	8	.8872E-03	.1845E-02	.2804E-02	.3725E-02	.4587E-02
7	9	.4294E-03	.9291E-03	.1457E-02	.1989E-02	.2506E-02
7	10	.3564E-03	.7404E-03	.1131E-02	.1515E-02	.1886E-02
7	11	.3553E-03	.7113E-03	.1056E-02	.1385E-02	.1695E-02
7	12	.3562E-03	.6998E-03	.1023E-02	.1325E-02	.1604E-02
7	13	.3500E-03	.6810E-03	.9885E-03	.1271E-02	.1529E-02
7	14	.3385E-03	.6552E-03	.9469E-03	.1213E-02	.1454E-02
7	15	.3242E-03	.6256E-03	.9018E-03	.1153E-02	.1380E-02
8	9	-.5011E-03	-.7789E-03	-.8935E-03	-.8912E-03	-.8077E-03
8	10	-.4070E-03	-.6637E-03	-.8062E-03	-.8633E-03	-.8576E-03
8	11	-.2884E-03	-.4731E-03	-.5788E-03	-.6250E-03	-.6270E-03
8	12	-.1975E-03	-.3194E-03	-.3842E-03	-.4065E-03	-.3974E-03
8	13	-.1341E-03	-.2102E-03	-.2429E-03	-.2440E-03	-.2221E-03
8	14	-.9068E-04	-.1347E-03	-.1445E-03	-.1298E-03	-.9787E-04
8	15	-.6056E-04	-.8248E-04	-.7649E-04	-.5082E-04	-.1167E-04
8	16	-.3939E-04	-.4597E-04	-.2914E-04	.3888E-05	.4773E-04
9	10	-.5271E-03	-.9377E-03	-.1249E-02	-.1478E-02	-.1638E-02
9	11	-.4034E-03	-.7267E-03	-.9806E-03	-.1175E-02	-.1320E-02
9	12	-.3075E-03	-.5563E-03	-.7541E-03	-.9083E-03	-.1025E-02
9	13	-.2383E-03	-.4311E-03	-.5846E-03	-.7044E-03	-.7958E-03
9	14	-.1886E-03	-.3405E-03	-.4606E-03	-.5538E-03	-.6242E-03
9	15	-.1524E-03	-.2742E-03	-.3696E-03	-.4425E-03	-.4968E-03
9	16	-.1256E-03	-.2249E-03	-.3016E-03	-.3594E-03	-.4013E-03
9	17	-.1052E-03	-.1875E-03	-.2501E-03	-.2963E-03	-.3287E-03

## Appendix E. Series DV-C

DV- 3/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
10	11	- .3462E-03	- .6427E-03	- .8933E-03	- .1102E-02	- .1274E-02
10	12	- .2684E-03	- .5017E-03	- .7020E-03	- .8722E-03	- .1015E-02
10	13	- .2116E-03	- .3967E-03	- .5568E-03	- .6940E-03	- .8104E-03
10	14	- .1704E-03	- .3197E-03	- .4492E-03	- .5606E-03	- .6553E-03
10	15	- .1401E-03	- .2627E-03	- .3691E-03	- .4605E-03	- .5383E-03
10	16	- .1173E-03	- .2198E-03	- .3086E-03	- .3847E-03	- .4492E-03
10	17	- .9989E-04	- .1869E-03	- .2620E-03	- .3262E-03	- .3804E-03
10	18	- .8627E-04	- .1612E-03	- .2256E-03	- .2804E-03	- .3264E-03
11	12	- .2116E-03	- .4019E-03	- .5714E-03	- .7211E-03	- .8521E-03
11	13	- .1674E-03	- .3193E-03	- .4559E-03	- .5778E-03	- .6859E-03
11	14	- .1352E-03	- .2584E-03	- .3698E-03	- .4698E-03	- .5590E-03
11	15	- .1114E-03	- .2132E-03	- .3054E-03	- .3884E-03	- .4626E-03
11	16	- .9358E-04	- .1790E-03	- .2565E-03	- .3263E-03	- .3889E-03
11	17	- .7986E-04	- .1527E-03	- .2188E-03	- .2783E-03	- .3316E-03
11	18	- .6912E-04	- .1321E-03	- .1892E-03	- .2406E-03	- .2865E-03
11	19	- .6056E-04	- .1157E-03	- .1656E-03	- .2104E-03	- .2504E-03
12	13	- .1305E-03	- .2513E-03	- .3623E-03	- .4636E-03	- .5556E-03
12	14	- .1053E-03	- .2033E-03	- .2940E-03	- .3774E-03	- .4536E-03
12	15	- .8672E-04	- .1676E-03	- .2428E-03	- .3122E-03	- .3760E-03
12	16	- .7272E-04	- .1407E-03	- .2040E-03	- .2625E-03	- .3165E-03
12	17	- .6198E-04	- .1200E-03	- .1740E-03	- .2240E-03	- .2702E-03
12	18	- .5359E-04	- .1037E-03	- .1504E-03	- .1937E-03	- .2337E-03
12	19	- .4691E-04	- .9081E-04	- .1316E-03	- .1695E-03	- .2044E-03
12	20	- .4151E-04	- .8034E-04	- .1164E-03	- .1499E-03	- .1807E-03

### Appendix E. Series DV-C

DV- 3/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 2.0,2.2	Z= 2.0,2.4	Z= 2.0,2.6	Z= 2.0,2.8	Z= 2.0,3.0
13	14	- .8297E-04	- .1611E-03	- .2344E-03	- .3028E-03	- .3663E-03
13	15	- .6813E-04	- .1326E-03	- .1933E-03	- .2502E-03	- .3034E-03
13	16	- .5699E-04	- .1110E-03	- .1621E-03	- .2101E-03	- .2551E-03
13	17	- .4846E-04	- .9451E-04	- .1380E-03	- .1791E-03	- .2176E-03
13	18	- .4180E-04	- .8156E-04	- .1192E-03	- .1547E-03	- .1880E-03
13	19	- .3652E-04	- .7126E-04	- .1041E-03	- .1352E-03	- .1644E-03
13	20	- .3225E-04	- .6293E-04	- .9200E-04	- .1194E-03	- .1452E-03
13	21	- .2876E-04	- .5611E-04	- .8202E-04	- .1064E-03	- .1294E-03
14	15	- .5452E-04	- .1065E-03	- .1560E-03	- .2028E-03	- .2470E-03
14	16	- .4547E-04	- .8901E-04	- .1305E-03	- .1700E-03	- .2073E-03
14	17	- .3856E-04	- .7555E-04	- .1109E-03	- .1446E-03	- .1765E-03
14	18	- .3318E-04	- .6504E-04	- .9555E-04	- .1246E-03	- .1523E-03
14	19	- .2891E-04	- .5670E-04	- .8332E-04	- .1087E-03	- .1329E-03
14	20	- .2547E-04	- .4997E-04	- .7344E-04	- .9587E-04	- .1172E-03
14	21	- .2266E-04	- .4446E-04	- .6535E-04	- .8532E-04	- .1043E-03
14	22	- .2034E-04	- .3990E-04	- .5865E-04	- .7656E-04	- .9363E-04
15	16	- .3701E-04	- .7265E-04	- .1068E-03	- .1395E-03	- .1708E-03
15	17	- .3129E-04	- .6149E-04	- .9056E-04	- .1184E-03	- .1451E-03
15	18	- .2684E-04	- .5280E-04	- .7783E-04	- .1018E-03	- .1249E-03
15	19	- .2333E-04	- .4592E-04	- .6771E-04	- .8869E-04	- .1088E-03
15	20	- .2051E-04	- .4037E-04	- .5956E-04	- .7804E-04	- .9580E-04
15	21	- .1820E-04	- .3584E-04	- .5289E-04	- .6932E-04	- .8511E-04
15	22	- .1630E-04	- .3210E-04	- .4737E-04	- .6209E-04	- .7625E-04
15	23	- .1471E-04	- .2897E-04	- .4275E-04	- .5604E-04	- .6881E-04

## Appendix E. Series DV-C

DV- 4/PAGE 1OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
1	2	- .1387E-03	- .2487E-03	- .3337E-03	- .3975E-03	- .4431E-03
1	3	- .1038E-03	- .1738E-03	- .2162E-03	- .2364E-03	- .2389E-03
1	4	.3041E-04	.8403E-04	.1538E-03	.2345E-03	.3219E-03
1	5	.2890E-03	.5576E-03	.8064E-03	.1036E-02	.1248E-02
1	6	.5029E-03	.9418E-03	.1327E-02	.1667E-02	.1969E-02
1	7	.4625E-03	.8737E-03	.1240E-02	.1568E-02	.1861E-02
1	8	.2874E-03	.5578E-03	.8106E-03	.1046E-02	.1264E-02
1	9	.1545E-03	.3086E-03	.4602E-03	.6078E-03	.7505E-03
2	3	- .1052E-03	- .1662E-03	- .1922E-03	- .1910E-03	- .1691E-03
2	4	.5090E-04	.1335E-03	.2376E-03	.3554E-03	.4810E-03
2	5	.3527E-03	.6850E-03	.9958E-03	.1285E-02	.1553E-02
2	6	.6055E-03	.1137E-02	.1606E-02	.2022E-02	.2393E-02
2	7	.5640E-03	.1067E-02	.1516E-02	.1919E-02	.2280E-02
2	8	.3637E-03	.7056E-03	.1025E-02	.1321E-02	.1597E-02
2	9	.2088E-03	.4155E-03	.6174E-03	.8127E-03	.1000E-02
2	10	.1267E-03	.2563E-03	.3866E-03	.5162E-03	.6437E-03
3	4	.1380E-03	.3109E-03	.5042E-03	.7073E-03	.9130E-03
3	5	.4938E-03	.9583E-03	.1391E-02	.1791E-02	.2159E-02
3	6	.7890E-03	.1483E-02	.2096E-02	.2638E-02	.3120E-02
3	7	.7382E-03	.1395E-02	.1981E-02	.2504E-02	.2970E-02
3	8	.4994E-03	.9648E-03	.1395E-02	.1792E-02	.2156E-02
3	9	.3118E-03	.6143E-03	.9042E-03	.1179E-02	.1439E-02
3	10	.2088E-03	.4155E-03	.6174E-03	.8127E-03	.1000E-02
3	11	.1545E-03	.3086E-03	.4602E-03	.6078E-03	.7505E-03

## Appendix E. Series DV-C

DV- 4/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THF NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
4	5	.7937E-03	.1516E-02	.2170E-02	.2759E-02	.3288E-02
4	6	.1122E-02	.2096E-02	.2944E-02	.3684E-02	.4332E-02
4	7	.1038E-02	.1949E-02	.2748E-02	.3450E-02	.4068E-02
4	8	.7369E-03	.1406E-02	.2011E-02	.2557E-02	.3048E-02
4	9	.4994E-03	.9648E-03	.1395E-02	.1792E-02	.2156E-02
4	10	.3637E-03	.7056E-03	.1025E-02	.1321E-02	.1597E-02
4	11	.2874E-03	.5578E-03	.8106E-03	.1046E-02	.1264E-02
4	12	.2401E-03	.4659E-03	.6768E-03	.8732E-03	.1055E-02
5	6	.1587E-02	.2927E-02	.4063E-02	.5033E-02	.5864E-02
5	7	.1429E-02	.2648E-02	.3693E-02	.4591E-02	.5367E-02
5	8	.1038E-02	.1949E-02	.2748E-02	.3450E-02	.4068E-02
5	9	.7382E-03	.1395E-02	.1981E-02	.2504E-02	.2970E-02
5	10	.5640E-03	.1067E-02	.1516E-02	.1919E-02	.2280E-02
5	11	.4625E-03	.8737E-03	.1240E-02	.1568E-02	.1861E-02
5	12	.3966E-03	.7485E-03	.1061E-02	.1340E-02	.1590E-02
5	13	.3492E-03	.6588E-03	.9339E-03	.1178E-02	.1397E-02
6	7	.1587E-02	.2927E-02	.4063E-02	.5033E-02	.5864E-02
6	8	.1122E-02	.2096E-02	.2944E-02	.3684E-02	.4332E-02
6	9	.7890E-03	.1483E-02	.2096E-02	.2638E-02	.3120E-02
6	10	.6055E-03	.1137E-02	.1606E-02	.2022E-02	.2393E-02
6	11	.5029E-03	.9418E-03	.1327E-02	.1667E-02	.1969E-02
6	12	.4380E-03	.8184E-03	.1151E-02	.1443E-02	.1702E-02
6	13	.3913E-03	.7304E-03	.1026E-02	.1285E-02	.1514E-02
6	14	.3547E-03	.6619E-03	.9296E-03	.1164E-02	.1370E-02

## Appendix E. Series DV-C

DV- 4/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
7	8	.7937E-03	.1516E-02	.2170E-02	.2759E-02	.3288E-02
7	9	.4938E-03	.9583E-03	.1391E-02	.1791E-02	.2159E-02
7	10	.3527E-03	.6850E-03	.9958E-03	.1285E-02	.1553E-02
7	11	.2890E-03	.5576E-03	.8064E-03	.1036E-02	.1248E-02
7	12	.2561E-03	.4910E-03	.7061E-03	.9031E-03	.1083E-02
7	13	.2350E-03	.4486E-03	.6427E-03	.8192E-03	.9797E-03
7	14	.2188E-03	.4167E-03	.5956E-03	.7574E-03	.9039E-03
7	15	.2050E-03	.3899E-03	.5566E-03	.7069E-03	.8426E-03
8	9	.1380E-03	.3109E-03	.5042E-03	.7073E-03	.9130E-03
8	10	.5090E-04	.1335E-03	.2376E-03	.3554E-03	.4810E-03
8	11	.3041E-04	.8403E-04	.1538E-03	.2345E-03	.3219E-03
8	12	.3173E-04	.7953E-04	.1384E-03	.2045E-03	.2751E-03
8	13	.3794E-04	.8696E-04	.1432E-03	.2040E-03	.2671E-03
8	14	.4377E-04	.9524E-04	.1514E-03	.2100E-03	.2696E-03
8	15	.4799E-04	.1014E-03	.1578E-03	.2153E-03	.2727E-03
8	16	.5064E-04	.1051E-03	.1614E-03	.2179E-03	.2737E-03
9	10	-.1052E-03	-.1662E-03	-.1922E-03	-.1910E-03	-.1691E-03
9	11	-.1038E-03	-.1738E-03	-.2162E-03	-.2364E-03	-.2389E-03
9	12	-.8642E-04	-.1472E-03	-.1869E-03	-.2095E-03	-.2183E-03
9	13	-.6757E-04	-.1153E-03	-.1469E-03	-.1653E-03	-.1729E-03
9	14	-.5146E-04	-.8727E-04	-.1102E-03	-.1228E-03	-.1270E-03
9	15	-.3868E-04	-.6461E-04	-.8015E-04	-.8731E-04	-.8777E-04
9	16	-.2881E-04	-.4696E-04	-.5650E-04	-.5914E-04	-.5633E-04
9	17	-.2123E-04	-.3336E-04	-.3821E-04	-.3727E-04	-.3181E-04

### Appendix E. Series DV-C

DV- 4/PAGE 4OF5

ELECTRODE CONFIGURATION      POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE      GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
10	11	-•1387E-03	-•2487E-03	-•3337E-03	-•3975E-03	-•4431E-03
10	12	-•1183E-03	-•2149E-03	-•2925E-03	-•3534E-03	-•4000E-03
10	13	-•9752E-04	-•1782E-03	-•2442E-03	-•2971E-03	-•3388E-03
10	14	-•7978E-04	-•1462E-03	-•2008E-03	-•2450E-03	-•2802E-03
10	15	-•6551E-04	-•1200E-03	-•1649E-03	-•2013E-03	-•2303E-03
10	16	-•5423E-04	-•9927E-04	-•1362E-03	-•1660E-03	-•1896E-03
10	17	-•4533E-04	-•8278E-04	-•1132E-03	-•1376E-03	-•1568E-03
10	18	-•3827E-04	-•6965E-04	-•9497E-04	-•1150E-03	-•1304E-03
11	12	-•1136E-03	-•2112E-03	-•2942E-03	-•3640E-03	-•4219E-03
11	13	-•9495E-04	-•1777E-03	-•2493E-03	-•3106E-03	-•3626E-03
11	14	-•7893E-04	-•1483E-03	-•2088E-03	-•2612E-03	-•3061E-03
11	15	-•6595E-04	-•1241E-03	-•1751E-03	-•2195E-03	-•2578E-03
11	16	-•5561E-04	-•1047E-03	-•1479E-03	-•1855E-03	-•2181E-03
11	17	-•4737E-04	-•8923E-04	-•1259E-03	-•1580E-03	-•1857E-03
11	18	-•4078E-04	-•7676E-04	-•1083E-03	-•1357E-03	-•1595E-03
11	19	-•3545E-04	-•6667E-04	-•9397E-04	-•1176E-03	-•1381E-03
12	13	-•8290E-04	-•1571E-03	-•2232E-03	-•2816E-03	-•3329E-03
12	14	-•6932E-04	-•1320E-03	-•1883E-03	-•2386E-03	-•2834E-03
12	15	-•5826E-04	-•1112E-03	-•1591E-03	-•2022E-03	-•2407E-03
12	16	-•4941E-04	-•9447E-04	-•1353E-03	-•1722E-03	-•2054E-03
12	17	-•4233E-04	-•8100E-04	-•1161E-03	-•1479E-03	-•1765E-03
12	18	-•3665E-04	-•7013E-04	-•1005E-03	-•1281E-03	-•1530E-03
12	19	-•3204E-04	-•6130E-04	-•8792E-04	-•1120E-03	-•1337E-03
12	20	-•2826E-04	-•5406E-04	-•7750E-04	-•9870E-04	-•1177E-03

### Appendix E. Series DV-C

DV- 4/PAGE 5OF5

ELECTRODE CONFIGURATION      POLE-POLE

THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
AND THE Z LIMITS AS SHOWN      GSRI

THE NUMERICAL VALUES ARE      SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 3.0,3.2	Z= 3.0,3.4	Z= 3.0,3.6	Z= 3.0,3.8	Z= 3.0,4.0
13	14	-•5866E-04	-•1125E-03	-•1619E-03	-•2068E-03	-•2476E-03
13	15	-•4940E-04	-•9511E-04	-•1372E-03	-•1758E-03	-•2111E-03
13	16	-•4197E-04	-•8096E-04	-•1170E-03	-•1502E-03	-•1807E-03
13	17	-•3602E-04	-•6956E-04	-•1006E-03	-•1294E-03	-•1559E-03
13	18	-•3123E-04	-•6035E-04	-•8741E-04	-•1124E-03	-•1355E-03
13	19	-•2734E-04	-•5286E-04	-•7658E-04	-•9856E-04	-•1188E-03
13	20	-•2415E-04	-•4670E-04	-•6767E-04	-•8710E-04	-•1050E-03
13	21	-•2152E-04	-•4160E-04	-•6027E-04	-•7757E-04	-•9354E-04
14	15	-•4148E-04	-•8031E-04	-•1165E-03	-•1501E-03	-•1812E-03
14	16	-•3525E-04	-•6839E-04	-•9945E-04	-•1284E-03	-•1554E-03
14	17	-•3025E-04	-•5878E-04	-•8560E-04	-•1107E-03	-•1342E-03
14	18	-•2623E-04	-•5101E-04	-•7436E-04	-•9628E-04	-•1168E-03
14	19	-•2296E-04	-•4468E-04	-•6517E-04	-•8444E-04	-•1025E-03
14	20	-•2028E-04	-•3948E-04	-•5761E-04	-•7466E-04	-•9067E-04
14	21	-•1806E-04	-•3517E-04	-•5132E-04	-•6653E-04	-•8081E-04
14	22	-•1621E-04	-•3156E-04	-•4606E-04	-•5971E-04	-•7253E-04
15	16	-•2967E-04	-•5780E-04	-•8438E-04	-•1094E-03	-•1329E-03
15	17	-•2544E-04	-•4965E-04	-•7260E-04	-•9431E-04	-•1147E-03
15	18	-•2204E-04	-•4305E-04	-•6304E-04	-•8198E-04	-•9990E-04
15	19	-•1928E-04	-•3769E-04	-•5522E-04	-•7187E-04	-•8766E-04
15	20	-•1701E-04	-•3328E-04	-•4878E-04	-•6353E-04	-•7753E-04
15	21	-•1514E-04	-•2962E-04	-•4344E-04	-•5660E-04	-•6909E-04
15	22	-•1357E-04	-•2657E-04	-•3897E-04	-•5078E-04	-•6200E-04
15	23	-•1225E-04	-•2399E-04	-•3519E-04	-•4585E-04	-•5599E-04

**Appendix E. Series DV-C**

DV- 5/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 4.0,4.2	Z= 4.0,4.4	Z= 4.0,4.6	Z= 4.0,4.8	Z= 4.0,5.0
1	2	-3043E-04	-4821E-04	-5554E-04	-5435E-04	-4629E-04
1	3	.1122E-04	.3312E-04	.6310E-04	.9904E-04	.1392E-03
1	4	.9115E-04	.1837E-03	.2760E-03	.3668E-03	.4553E-03
1	5	.1959E-03	.3766E-03	.5433E-03	.6970E-03	.8389E-03
1	6	.2694E-03	.5107E-03	.7275E-03	.9229E-03	.1099E-02
1	7	.2639E-03	.5016E-03	.7163E-03	.9106E-03	.1086E-02
1	8	.2025E-03	.3898E-03	.5630E-03	.7229E-03	.8705E-03
1	9	.1369E-03	.2677E-03	.3921E-03	.5099E-03	.6212E-03
2	3	.3751E-04	.8637E-04	.1432E-03	.2053E-03	.2707E-03
2	4	.1291E-03	.2586E-03	.3862E-03	.5104E-03	.6300E-03
2	5	.2481E-03	.4771E-03	.6882E-03	.8826E-03	.1061E-02
2	6	.3311E-03	.6280E-03	.8948E-03	.1135E-02	.1352E-02
2	7	.3244E-03	.6166E-03	.8801E-03	.1118E-02	.1333E-02
2	8	.2541E-03	.4885E-03	.7043E-03	.9029E-03	.1085E-02
2	9	.1785E-03	.3479E-03	.5077E-03	.6580E-03	.7990E-03
2	10	.1243E-03	.2446E-03	.3605E-03	.4715E-03	.5774E-03
3	4	.2030E-03	.4001E-03	.5889E-03	.7682E-03	.9373E-03
3	5	.3374E-03	.6460E-03	.9277E-03	.1184E-02	.1418E-02
3	6	.4286E-03	.8108E-03	.1152E-02	.1458E-02	.1732E-02
3	7	.4169E-03	.7901E-03	.1124E-02	.1424E-02	.1694E-02
3	8	.3332E-03	.6376E-03	.9153E-03	.1168E-02	.1399E-02
3	9	.2437E-03	.4713E-03	.6832E-03	.8798E-03	.1061E-02
3	10	.1785E-03	.3479E-03	.5077E-03	.6580E-03	.7990E-03
3	11	.1369E-03	.2677E-03	.3921E-03	.5099E-03	.6212E-03

## Appendix E. Series DV-C

DV- 5/PAGE 20F5

ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
4	5	.4740E-03	.8986E-03	.1278E-02	.1619E-02	.1925E-02
4	-6	.5680E-03	.1067E-02	.1508E-02	.1897E-02	.2243E-02
4	7	.5445E-03	.1025E-02	.1451E-02	.1828E-02	.2163E-02
4	8	.4412E-03	.8375E-03	.1193E-02	.1513E-02	.1800E-02
4	9	.3332E-03	.6376E-03	.9153E-03	.1168E-02	.1399E-02
4	10	.2541E-03	.4885E-03	.7043E-03	.9029E-03	.1085E-02
4	11	.2025E-03	.3898E-03	.5630E-03	.7229E-03	.8705E-03
4	12	.1687E-03	.3249E-03	.4693E-03	.6027E-03	.7260E-03
5	6	.7160E-03	.1335E-02	.1873E-02	.2343E-02	.2754E-02
5	7	.6721E-03	.1256E-02	.1767E-02	.2213E-02	.2606E-02
5	8	.5445E-03	.1025E-02	.1451E-02	.1828E-02	.2163E-02
5	9	.4169E-03	.7901E-03	.1124E-02	.1424E-02	.1694E-02
5	10	.3244E-03	.6166E-03	.8801E-03	.1118E-02	.1333E-02
5	11	.2639E-03	.5016E-03	.7163E-03	.9106E-03	.1086E-02
5	12	.2239E-03	.4252E-03	.6069E-03	.7711E-03	.9200E-03
5	13	.1959E-03	.3719E-03	.5303E-03	.6734E-03	.8030E-03
6	7	.7160E-03	.1335E-02	.1873E-02	.2343E-02	.2754E-02
6	8	.5680E-03	.1067E-02	.1508E-02	.1897E-02	.2243E-02
6	9	.4286E-03	.8108E-03	.1152E-02	.1458E-02	.1732E-02
6	10	.3311E-03	.6280E-03	.8948E-03	.1135E-02	.1352E-02
6	11	.2694E-03	.5107E-03	.7275E-03	.9229E-03	.1099E-02
6	12	.2298E-03	.4349E-03	.6188E-03	.7842E-03	.9336E-03
6	13	.2026E-03	.3830E-03	.5443E-03	.6890E-03	.8194E-03
6	14	.1825E-03	.3448E-03	.4895E-03	.6192E-03	.7358E-03

### Appendix E. Series DV-C

DV- 5/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
7	8	.4740E-03	.8986E-03	.1278E-02	.1619E-02	.1925E-02
7	9	.3374E-03	.6460E-03	.9277E-03	.1184E-02	.1418E-02
7	10	.2481E-03	.4771E-03	.6882E-03	.8826E-03	.1061E-02
7	11	.1959E-03	.3766E-03	.5433E-03	.6970E-03	.8389E-03
7	12	.1654E-03	.3171E-03	.4565E-03	.5846E-03	.7026E-03
7	13	.1462E-03	.2796E-03	.4015E-03	.5131E-03	.6155E-03
7	14	.1328E-03	.2536E-03	.3635E-03	.4637E-03	.5553E-03
7	15	.1227E-03	.2339E-03	.3349E-03	.4267E-03	.5104E-03
8	9	.2030E-03	.4001E-03	.5889E-03	.7682E-03	.9373E-03
8	10	.1291E-03	.2586E-03	.3862E-03	.5104E-03	.6300E-03
8	11	.9115E-04	.1837E-03	.2760E-03	.3668E-03	.4553E-03
8	12	.7288E-04	.1465E-03	.2196E-03	.2916E-03	.3617E-03
8	13	.6402E-04	.1278E-03	.1906E-03	.2518E-03	.3111E-03
8	14	.5936E-04	.1177E-03	.1745E-03	.2294E-03	.2821E-03
8	15	.5647E-04	.1113E-03	.1643E-03	.2151E-03	.2636E-03
8	16	.5431E-04	.1066E-03	.1568E-03	.2046E-03	.2501E-03
9	10	.3751E-04	.8637E-04	.1432E-03	.2053E-03	.2707E-03
9	11	.1122E-04	.3312E-04	.6310E-04	.9904E-04	.1392E-03
9	12	.2297E-05	.1332E-04	.3116E-04	.5420E-04	.8115E-04
9	13	.9974E-06	.8834E-05	.2204E-04	.3940E-04	.5993E-04
9	14	.2546E-05	.1040E-04	.2242E-04	.3763E-04	.5528E-04
9	15	.4849E-05	.1385E-04	.2607E-04	.4073E-04	.5720E-04
9	16	.7077E-05	.1745E-04	.3032E-04	.4505E-04	.6112E-04
9	17	.8956E-05	.2056E-04	.3414E-04	.4913E-04	.6510E-04

## Appendix E. Series DV-C

DV- 5/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 4.0, 4.2	Z = 4.0, 4.4	Z = 4.0, 4.6	Z = 4.0, 4.8	Z = 4.0, 5.0
10	11	- .3043E-04	- .4821E-04	- .5554E-04	- .5435E-04	- .4629E-04
10	12	- .3430E-04	- .5816E-04	- .7319E-04	- .8082E-04	- .8232E-04
10	13	- .3183E-04	- .5525E-04	- .7149E-04	- .8163E-04	- .8663E-04
10	14	- .2730E-04	- .4782E-04	- .6252E-04	- .7225E-04	- .7776E-04
10	15	- .2255E-04	- .3955E-04	- .5179E-04	- .5996E-04	- .6468E-04
10	16	- .1824E-04	- .3188E-04	- .4156E-04	- .4787E-04	- .5133E-04
10	17	- .1458E-04	- .2525E-04	- .3260E-04	- .3711E-04	- .3924E-04
10	18	- .1154E-04	- .1972E-04	- .2505E-04	- .2797E-04	- .2887E-04
11	12	- .4732E-04	- .8528E-04	- .1150E-03	- .1375E-03	- .1539E-03
11	13	- .4359E-04	- .7965E-04	- .1090E-03	- .1324E-03	- .1507E-03
11	14	- .3822E-04	- .7036E-04	- .9706E-04	- .1189E-03	- .1364E-03
11	15	- .3282E-04	- .6066E-04	- .8402E-04	- .1033E-03	- .1191E-03
11	16	- .2798E-04	- .5180E-04	- .7188E-04	- .8860E-04	- .1023E-03
11	17	- .2383E-04	- .4413E-04	- .6125E-04	- .7552E-04	- .8725E-04
11	18	- .2035E-04	- .3766E-04	- .5221E-04	- .6432E-04	- .7423E-04
11	19	- .1746E-04	- .3224E-04	- .4463E-04	- .5486E-04	- .6320E-04
12	13	- .4465E-04	- .8322E-04	- .1162E-03	- .1441E-03	- .1675E-03
12	14	- .3946E-04	- .7406E-04	- .1041E-03	- .1301E-03	- .1523E-03
12	15	- .3428E-04	- .6461E-04	- .9126E-04	- .1145E-03	- .1346E-03
12	16	- .2964E-04	- .5599E-04	- .7929E-04	- .9977E-04	- .1176E-03
12	17	- .2565E-04	- .4852E-04	- .6880E-04	- .8669E-04	- .1023E-03
12	18	- .2228E-04	- .4217E-04	- .5984E-04	- .7545E-04	- .8915E-04
12	19	- .1946E-04	- .3683E-04	- .5226E-04	- .6589E-04	- .7787E-04
12	20	- .1710E-04	- .3235E-04	- .4588E-04	- .5782E-04	- .6829E-04

### Appendix E. Series DV-C

DV- 5/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 4.0, 4.2	Z= 4.0, 4.4	Z= 4.0, 4.6	Z= 4.0, 4.8	Z= 4.0, 5.0
13	14	- .3671E-04	- .6963E-04	- .9899E-04	- .1250E-03	- .1479E-03
13	15	- .3207E-04	- .6109E-04	- .8724E-04	- .1106E-03	- .1315E-03
13	16	- .2789E-04	- .5328E-04	- .7629E-04	- .9707E-04	- .1157E-03
13	17	- .2428E-04	- .4648E-04	- .6667E-04	- .8499E-04	- .1015E-03
13	18	- .2123E-04	- .4068E-04	- .5843E-04	- .7456E-04	- .8917E-04
13	19	- .1867E-04	- .3579E-04	- .5143E-04	- .6567E-04	- .7859E-04
13	20	- .1651E-04	- .3166E-04	- .4551E-04	- .5813E-04	- .6958E-04
13	21	- .1470E-04	- .2818E-04	- .4050E-04	- .5172E-04	- .6191E-04
14	15	- .2868E-04	- .5501E-04	- .7910E-04	- .1010E-03	- .1209E-03
14	16	- .2501E-04	- .4813E-04	- .6941E-04	- .8894E-04	- .1068E-03
14	17	- .2184E-04	- .4212E-04	- .6087E-04	- .7816E-04	- .9405E-04
14	18	- .1915E-04	- .3698E-04	- .5352E-04	- .6882E-04	- .8293E-04
14	19	- .1689E-04	- .3264E-04	- .4728E-04	- .6085E-04	- .7339E-04
14	20	- .1498E-04	- .2896E-04	- .4198E-04	- .5406E-04	- .6525E-04
14	21	- .1337E-04	- .2586E-04	- .3749E-04	- .4829E-04	- .5830E-04
14	22	- .1200E-04	- .2321E-04	- .3366E-04	- .4336E-04	- .5235E-04
15	16	- .2201E-04	- .4255E-04	- .6167E-04	- .7940E-04	- .9580E-04
15	17	- .1924E-04	- .3729E-04	- .5417E-04	- .6991E-04	- .8454E-04
15	18	- .1689E-04	- .3279E-04	- .4771E-04	- .6167E-04	- .7470E-04
15	19	- .1491E-04	- .2898E-04	- .4221E-04	- .5462E-04	- .6624E-04
15	20	- .1324E-04	- .2575E-04	- .3754E-04	- .4861E-04	- .5900E-04
15	21	- .1183E-04	- .2302E-04	- .3356E-04	- .4349E-04	- .5281E-04
15	22	- .1063E-04	- .2069E-04	- .3018E-04	- .3912E-04	- .4751E-04
15	23	- .9611E-05	- .1870E-04	- .2728E-04	- .3537E-04	- .4297E-04

### Appendix E. Series DV-C

DV- 6/PAGE 10F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
1	2	.1353E-04	.3136E-04	.5247E-04	.7605E-04	.1014E-03
1	3	.4307E-04	.8791E-04	.1336E-03	.1796E-03	.2252E-03
1	4	.8549E-04	.1676E-03	.2461E-03	.3208E-03	.3918E-03
1	5	.1309E-03	.2518E-03	.3635E-03	.4668E-03	.5624E-03
1	6	.1602E-03	.3059E-03	.4386E-03	.5597E-03	.6705E-03
1	7	.1601E-03	.3060E-03	.4390E-03	.5606E-03	.6720E-03
1	8	.1362E-03	.2621E-03	.3783E-03	.4857E-03	.5849E-03
1	9	.1049E-03	.2035E-03	.2962E-03	.3832E-03	.4647E-03
2	3	.6697E-04	.1342E-03	.2010E-03	.2664E-03	.3301E-03
2	4	.1144E-03	.2232E-03	.3262E-03	.4234E-03	.5149E-03
2	5	.1646E-03	.3160E-03	.4553E-03	.5835E-03	.7015E-03
2	6	.1964E-03	.3744E-03	.5361E-03	.6833E-03	.8174E-03
2	7	.1953E-03	.3726E-03	.5339E-03	.6807E-03	.8146E-03
2	8	.1678E-03	.3220E-03	.4638E-03	.5942E-03	.7142E-03
2	9	.1319E-03	.2552E-03	.3702E-03	.4774E-03	.5772E-03
2	10	.1006E-03	.1960E-03	.2862E-03	.3713E-03	.4515E-03
3	4	.1585E-03	.3066E-03	.4447E-03	.5730E-03	.6920E-03
3	5	.2131E-03	.4073E-03	.5843E-03	.7457E-03	.8930E-03
3	6	.2463E-03	.4682E-03	.6682E-03	.8489E-03	.1012E-02
3	7	.2428E-03	.4617E-03	.6594E-03	.8382E-03	.1000E-02
3	8	.2101E-03	.4015E-03	.5761E-03	.7353E-03	.8807E-03
3	9	.1683E-03	.3239E-03	.4675E-03	.6000E-03	.7222E-03
3	10	.1319E-03	.2552E-03	.3702E-03	.4774E-03	.5772E-03
3	11	.1049E-03	.2035E-03	.2962E-03	.3832E-03	.4647E-03

### Appendix E. Series DV-C

S	R	Z= 5.0, 5.2	Z= 5.0, 5.4	Z= 5.0, 5.6	Z= 5.0, 5.8	Z= 5.0, 6.0
4	5	.2741E-03	.5205E-03	.7421E-03	.9419E-03	.1122E-02
4	6	.3067E-03	.5799E-03	.8239E-03	.1042E-02	.1238E-02
4	7	.2985E-03	.5649E-03	.8032E-03	.1016E-02	.1208E-02
4	8	.2588E-03	.4920E-03	.7025E-03	.8925E-03	.1064E-02
4	9	.2101E-03	.4015E-03	.5761E-03	.7353E-03	.8807E-03
4	10	.1678E-03	.3220E-03	.4638E-03	.5942E-03	.7142E-03
4	11	.1362E-03	.2621E-03	.3783E-03	.4857E-03	.5849E-03
4	12	.1139E-03	.2193E-03	.3168E-03	.4070E-03	.4906E-03
5	6	.3611E-03	.6796E-03	.9612E-03	.1211E-02	.1433E-02
5	7	.3461E-03	.6522E-03	.9237E-03	.1165E-02	.1380E-02
5	8	.2985E-03	.5649E-03	.8032E-03	.1016E-02	.1208E-02
5	9	.2428E-03	.4617E-03	.6594E-03	.8382E-03	.1000E-02
5	10	.1953E-03	.3726E-03	.5339E-03	.6807E-03	.8146E-03
5	11	.1601E-03	.3060E-03	.4390E-03	.5606E-03	.6720E-03
5	12	.1353E-03	.2585E-03	.3710E-03	.4739E-03	.5683E-03
5	13	.1176E-03	.2246E-03	.3222E-03	.4115E-03	.4932E-03
6	7	.3611E-03	.6796E-03	.9612E-03	.1211E-02	.1433E-02
6	8	.3067E-03	.5799E-03	.8239E-03	.1042E-02	.1238E-02
6	9	.2463E-03	.4682E-03	.6682E-03	.8489E-03	.1012E-02
6	10	.1964E-03	.3744E-03	.5361E-03	.6833E-03	.8174E-03
6	11	.1602E-03	.3059E-03	.4386E-03	.5597E-03	.6705E-03
6	12	.1352E-03	.2581E-03	.3701E-03	.4723E-03	.5659E-03
6	13	.1178E-03	.2247E-03	.3219E-03	.4105E-03	.4916E-03
6	14	.1051E-03	.2004E-03	.2868E-03	.3655E-03	.4375E-03

## Appendix E. Series DV-C

DV- 6/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0, 5.2	Z= 5.0, 5.4	Z= 5.0, 5.6	Z= 5.0, 5.8	Z= 5.0, 6.0
7	8	.2741E-03	.5205E-03	.7421E-03	.9419E-03	.1122E-02
7	9	.2131E-03	.4073E-03	.5843E-03	.7457E-03	.8930E-03
7	10	.1646E-03	.3160E-03	.4553E-03	.5835E-03	.7015E-03
7	11	.1309E-03	.2518E-03	.3635E-03	.4668E-03	.5624E-03
7	12	.1087E-03	.2091E-03	.3018E-03	.3877E-03	.4671E-03
7	13	.9406E-04	.1806E-03	.2604E-03	.3341E-03	.4023E-03
7	14	.8389E-04	.1608E-03	.2316E-03	.2968E-03	.3570E-03
7	15	.7644E-04	.1464E-03	.2106E-03	.2695E-03	.3239E-03
8	9	.1585E-03	.3066E-03	.4447E-03	.5730E-03	.6920E-03
8	10	.1144E-03	.2232E-03	.3262E-03	.4234E-03	.5149E-03
8	11	.8549E-04	.1676E-03	.2461E-03	.3208E-03	.3918E-03
8	12	.6781E-04	.1330E-03	.1956E-03	.2554E-03	.3124E-03
8	13	.5715E-04	.1119E-03	.1644E-03	.2144E-03	.2621E-03
8	14	.5052E-04	.9874E-04	.1446E-03	.1883E-03	.2297E-03
8	15	.4614E-04	.8995E-04	.1314E-03	.1708E-03	.2080E-03
8	16	.4301E-04	.8367E-04	.1220E-03	.1582E-03	.1924E-03
9	10	.6697E-04	.1342E-03	.2010E-03	.2664E-03	.3301E-03
9	11	.4307E-04	.8791E-04	.1336E-03	.1796E-03	.2252E-03
9	12	.2977E-04	.6151E-04	.9451E-04	.1281E-03	.1621E-03
9	13	.2286E-04	.4739E-04	.7306E-04	.9940E-04	.1260E-03
9	14	.1942E-04	.4012E-04	.6167E-04	.8373E-04	.1060E-03
9	15	.1777E-04	.3644E-04	.5568E-04	.7522E-04	.9484E-04
9	16	.1699E-04	.3456E-04	.5246E-04	.7047E-04	.8843E-04
9	17	.1659E-04	.3353E-04	.5061E-04	.6764E-04	.8450E-04

## Appendix E. Series DV.C

DV- 6/PAGE 40F5

ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
10	11	.1353E-04	.3136E-04	.5247E-04	.7605E-04	.1014E-03
10	12	.3553E-05	.1122E-04	.2220E-04	.3581E-04	.5146E-04
10	13	-.7037E-06	.2162E-05	.7968E-05	.1616E-04	.2629E-04
10	14	-.1965E-05	-.9545E-06	.2531E-05	.8059E-05	.1525E-04
10	15	-.1804E-05	-.1159E-05	.1528E-05	.5909E-05	.1168E-04
10	16	-.1053E-05	-.8976E-07	.2553E-05	.6586E-05	.1175E-04
10	17	-.1247E-06	.1422E-05	.4355E-05	.8427E-05	.1342E-04
10	18	.7891E-06	.2977E-05	.6317E-05	.1059E-04	.1563E-04
11	12	-.1098E-04	-.1738E-04	-.1988E-04	-.1910E-04	-.1557E-04
11	13	-.1366E-04	-.2334E-04	-.2959E-04	-.3287E-04	-.3362E-04
11	14	-.1372E-04	-.2409E-04	-.3154E-04	-.3643E-04	-.3912E-04
11	15	-.1260E-04	-.2241E-04	-.2974E-04	-.3492E-04	-.3822E-04
11	16	-.1106E-04	-.1977E-04	-.2641E-04	-.3121E-04	-.3442E-04
11	17	-.9468E-05	-.1693E-04	-.2264E-04	-.2679E-04	-.2959E-04
11	18	-.7973E-05	-.1423E-04	-.1897E-04	-.2239E-04	-.2464E-04
11	19	-.6642E-05	-.1179E-04	-.1563E-04	-.1833E-04	-.2002E-04
12	13	-.1929E-04	-.3490E-04	-.4725E-04	-.5670E-04	-.6360E-04
12	14	-.1880E-04	-.3452E-04	-.4746E-04	-.5790E-04	-.6612E-04
12	15	-.1731E-04	-.3204E-04	-.4442E-04	-.5468E-04	-.6304E-04
12	16	-.1548E-04	-.2879E-04	-.4012E-04	-.4964E-04	-.5754E-04
12	17	-.1365E-04	-.2545E-04	-.3556E-04	-.4414E-04	-.5132E-04
12	18	-.1196E-04	-.2232E-04	-.3122E-04	-.3880E-04	-.4518E-04
12	19	-.1045E-04	-.1950E-04	-.2729E-04	-.3393E-04	-.3951E-04
12	20	-.9133E-05	-.1703E-04	-.2382E-04	-.2959E-04	-.3444E-04

## Appendix E. Series DV-C

DV- 6/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0,Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 5.0,5.2	Z= 5.0,5.4	Z= 5.0,5.6	Z= 5.0,5.8	Z= 5.0,6.0
13	14	- .2007E-04	- .3751E-04	- .5253E-04	- .6533E-04	- .7612E-04
13	15	- .1852E-04	- .3484E-04	- .4913E-04	- .6155E-04	- .7224E-04
13	16	- .1668E-04	- .3152E-04	- .4465E-04	- .5619E-04	- .6626E-04
13	17	- .1486E-04	- .2815E-04	- .3999E-04	- .5047E-04	- .5970E-04
13	18	- .1317E-04	- .2500E-04	- .3558E-04	- .4499E-04	- .5331E-04
13	19	- .1167E-04	- .2217E-04	- .3158E-04	- .3998E-04	- .4743E-04
13	20	- .1035E-04	- .1968E-04	- .2804E-04	- .3552E-04	- .4216E-04
13	21	- .9211E-05	- .1750E-04	- .2495E-04	- .3160E-04	- .3751E-04
14	15	- .1797E-04	- .3414E-04	- .4860E-04	- .6147E-04	- .7286E-04
14	16	- .1625E-04	- .3100E-04	- .4432E-04	- .5630E-04	- .6703E-04
14	17	- .1455E-04	- .2782E-04	- .3990E-04	- .5083E-04	- .6070E-04
14	18	- .1297E-04	- .2485E-04	- .3571E-04	- .4559E-04	- .5455E-04
14	19	- .1156E-04	- .2218E-04	- .3191E-04	- .4079E-04	- .4888E-04
14	20	- .1032E-04	- .1982E-04	- .2854E-04	- .3651E-04	- .4379E-04
14	21	- .9244E-05	- .1776E-04	- .2558E-04	- .3275E-04	- .3929E-04
14	22	- .8309E-05	- .1596E-04	- .2300E-04	- .2945E-04	- .3535E-04
15	16	- .1511E-04	- .2900E-04	- .4172E-04	- .5332E-04	- .6387E-04
15	17	- .1356E-04	- .2611E-04	- .3766E-04	- .4829E-04	- .5801E-04
15	18	- .1213E-04	- .2339E-04	- .3382E-04	- .4345E-04	- .5232E-04
15	19	- .1084E-04	- .2094E-04	- .3033E-04	- .3902E-04	- .4705E-04
15	20	- .9715E-05	- .1878E-04	- .2722E-04	- .3506E-04	- .4233E-04
15	21	- .8729E-05	- .1688E-04	- .2449E-04	- .3157E-04	- .3814E-04
15	22	- .7871E-05	- .1523E-04	- .2210E-04	- .2851E-04	- .3445E-04
15	23	- .7126E-05	- .1379E-04	- .2002E-04	- .2583E-04	- .3122E-04

## Appendix E. Series DV-C

S	R	Z= 6.0, 6.2	Z= 6.0, 6.4	Z= 6.0, 6.6	Z= 6.0, 6.8	Z= 6.0, 7.0
1	2	.2654E-04	.5383E-04	.8147E-04	.1091E-03	.1366E-03
1	3	.4492E-04	.8883E-04	.1314E-03	.1727E-03	.2124E-03
1	4	.6725E-04	.1308E-03	.1908E-03	.2474E-03	.3008E-03
1	5	.8845E-04	.1703E-03	.2463E-03	.3168E-03	.3822E-03
1	6	.1015E-03	.1946E-03	.2802E-03	.3591E-03	.4318E-03
1	7	.1020E-03	.1957E-03	.2819E-03	.3613E-03	.4345E-03
1	8	.9180E-04	.1767E-03	.2554E-03	.3283E-03	.3959E-03
1	9	.7634E-04	.1478E-03	.2147E-03	.2773E-03	.3358E-03
2	3	.6151E-04	.1206E-03	.1772E-03	.2312E-03	.2826E-03
2	4	.8589E-04	.1664E-03	.2418E-03	.3123E-03	.3783E-03
2	5	.1087E-03	.2089E-03	.3013E-03	.3865E-03	.4653E-03
2	6	.1223E-03	.2342E-03	.3366E-03	.4305E-03	.5167E-03
2	7	.1223E-03	.2341E-03	.3365E-03	.4305E-03	.5168E-03
2	8	.1104E-03	.2120E-03	.3057E-03	.3922E-03	.4720E-03
2	9	.9288E-04	.1792E-03	.2596E-03	.3344E-03	.4040E-03
2	10	.7543E-04	.1463E-03	.2129E-03	.2754E-03	.3340E-03
3	4	.1104E-03	.2127E-03	.3074E-03	.3951E-03	.4764E-03
3	5	.1345E-03	.2574E-03	.3699E-03	.4730E-03	.5675E-03
3	6	.1482E-03	.2829E-03	.4053E-03	.5169E-03	.6187E-03
3	7	.1469E-03	.2804E-03	.4019E-03	.5127E-03	.6139E-03
3	8	.1328E-03	.2542E-03	.3654E-03	.4673E-03	.5607E-03
3	9	.1127E-03	.2167E-03	.3127E-03	.4013E-03	.4832E-03
3	10	.9288E-04	.1792E-03	.2596E-03	.3344E-03	.4040E-03
3	11	.7634E-04	.1478E-03	.2147E-03	.2773E-03	.3358E-03

## Appendix E. Series DV-C

DV- 7/PAGE 20F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0, 6.2	Z= 6.0, 6.4	Z= 6.0, 6.6	Z= 6.0, 6.8	Z= 6.0, 7.0
4	5	.1629E-03	.3105E-03	.4443E-03	.5659E-03	.6765E-03
4	6	.1760E-03	.3345E-03	.4777E-03	.6072E-03	.7246E-03
4	7	.1726E-03	.3284E-03	.4692E-03	.5967E-03	.7123E-03
4	8	.1557E-03	.2971E-03	.4255E-03	.5424E-03	.6490E-03
4	9	.1328E-03	.2542E-03	.3654E-03	.4673E-03	.5607E-03
4	10	.1104E-03	.2120E-03	.3057E-03	.3922E-03	.4720E-03
4	11	.9180E-04	.1767E-03	.2554E-03	.3283E-03	.3959E-03
4	12	.7750E-04	.1494E-03	.2161E-03	.2782E-03	.3359E-03
5	6	.1985E-03	.3762E-03	.5357E-03	.6792E-03	.8086E-03
5	7	.1925E-03	.3652E-03	.5204E-03	.6603E-03	.7866E-03
5	8	.1726E-03	.3284E-03	.4692E-03	.5967E-03	.7123E-03
5	9	.1469E-03	.2804E-03	.4019E-03	.5127E-03	.6139E-03
5	10	.1223E-03	.2341E-03	.3365E-03	.4305E-03	.5168E-03
5	11	.1020E-03	.1957E-03	.2819E-03	.3613E-03	.4345E-03
5	12	.8661E-04	.1662E-03	.2396E-03	.3074E-03	.3700E-03
5	13	.7509E-04	.1441E-03	.2078E-03	.2666E-03	.3210E-03
6	7	.1985E-03	.3762E-03	.5357E-03	.6792E-03	.8086E-03
6	8	.1760E-03	.3345E-03	.4777E-03	.6072E-03	.7246E-03
6	9	.1482E-03	.2829E-03	.4053E-03	.5169E-03	.6187E-03
6	10	.1223E-03	.2342E-03	.3366E-03	.4305E-03	.5167E-03
6	11	.1015E-03	.1946E-03	.2802E-03	.3591E-03	.4318E-03
6	12	.8582E-04	.1647E-03	.2373E-03	.3043E-03	.3662E-03
6	13	.7433E-04	.1426E-03	.2055E-03	.2635E-03	.3171E-03
6	14	.6583E-04	.1262E-03	.1818E-03	.2330E-03	.2804E-03

**Appendix E. Series DV-C**

DV- 7/PAGE 30F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0, 6.2	Z= 6.0, 6.4	Z= 6.0, 6.6	Z= 6.0, 6.8	Z= 6.0, 7.0
7	8	.1629E-03	.3105E-03	.4443E-03	.5659E-03	.6765E-03
7	9	.1345E-03	.2574E-03	.3699E-03	.4730E-03	.5675E-03
7	10	.1087E-03	.2089E-03	.3013E-03	.3865E-03	.4653E-03
7	11	.8845E-04	.1703E-03	.2463E-03	.3168E-03	.3822E-03
7	12	.7367E-04	.1420E-03	.2055E-03	.2646E-03	.3196E-03
7	13	.6317E-04	.1217E-03	.1762E-03	.2268E-03	.2740E-03
7	14	.5566E-04	.1072E-03	.1550E-03	.1995E-03	.2408E-03
7	15	.5014E-04	.9649E-04	.1394E-03	.1792E-03	.2163E-03
8	9	.1104E-03	.2127E-03	.3074E-03	.3951E-03	.4764E-03
8	10	.8589E-04	.1664E-03	.2418E-03	.3123E-03	.3783E-03
8	11	.6725E-04	.1308E-03	.1908E-03	.2474E-03	.3008E-03
8	12	.5417E-04	.1056E-03	.1543E-03	.2005E-03	.2442E-03
8	13	.4532E-04	.8836E-04	.1292E-03	.1679E-03	.2046E-03
8	14	.3932E-04	.7660E-04	.1119E-03	.1454E-03	.1771E-03
8	15	.3517E-04	.6842E-04	.9986E-04	.1295E-03	.1576E-03
8	16	.3218E-04	.6252E-04	.9112E-04	.1180E-03	.1435E-03
9	10	.6151E-04	.1206E-03	.1772E-03	.2312E-03	.2826E-03
9	11	.4492E-04	.8883E-04	.1314E-03	.1727E-03	.2124E-03
9	12	.3381E-04	.6722E-04	.1000E-03	.1320E-03	.1632E-03
9	13	.2672E-04	.5328E-04	.7948E-04	.1051E-03	.1303E-03
9	14	.2231E-04	.4447E-04	.6634E-04	.8782E-04	.1088E-03
9	15	.1955E-04	.3889E-04	.5793E-04	.7659E-04	.9481E-04
9	16	.1777E-04	.3528E-04	.5243E-04	.6917E-04	.8547E-04
9	17	.1659E-04	.3283E-04	.4868E-04	.6409E-04	.7903E-04

### Appendix E. Series DV-C

DV- 7/PAGE 40F5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z = 6.0, 6.2	Z = 6.0, 6.4	Z = 6.0, 6.6	Z = 6.0, 6.8	Z = 6.0, 7.0
10	11	.2654E-04	.5383E-04	.8147E-04	.1091E-03	.1366E-03
10	12	.1720E-04	.3555E-04	.5470E-04	.7436E-04	.9429E-04
10	13	.1165E-04	.2449E-04	.3823E-04	.5262E-04	.6746E-04
10	14	.8543E-05	.1815E-04	.2861E-04	.3969E-04	.5125E-04
10	15	.6901E-05	.1470E-04	.2323E-04	.3230E-04	.4179E-04
10	16	.6096E-05	.1293E-04	.2035E-04	.2823E-04	.3644E-04
10	17	.5749E-05	.1209E-04	.1890E-04	.2606E-04	.3348E-04
10	18	.5638E-05	.1174E-04	.1821E-04	.2495E-04	.3188E-04
11	12	.5811E-05	.1349E-04	.2268E-04	.3307E-04	.4441E-04
11	13	.1401E-05	.4617E-05	.9353E-05	.1534E-04	.2237E-04
11	14	-.7808E-06	.7058E-07	.2312E-05	.5729E-05	.1013E-04
11	15	-.1656E-05	-.1897E-05	-.9206E-06	.1098E-05	.4002E-05
11	16	-.1816E-05	-.2422E-05	-.1982E-05	-.6424E-06	.1467E-05
11	17	-.1611E-05	-.2192E-05	-.1881E-05	-.8005E-06	.9398E-06
11	18	-.1242E-05	-.1606E-05	-.1208E-05	-.1551E-06	.1460E-05
11	19	-.8203E-06	-.8855E-06	-.2992E-06	.8467E-06	.2471E-05
12	13	-.4651E-05	-.7345E-05	-.8337E-05	-.7859E-05	-.6120E-05
12	14	-.6235E-05	-.1071E-04	-.1365E-04	-.1522E-04	-.1562E-04
12	15	-.6647E-05	-.1176E-04	-.1552E-04	-.1808E-04	-.1957E-04
12	16	-.6435E-05	-.1155E-04	-.1549E-04	-.1838E-04	-.2034E-04
12	17	-.5921E-05	-.1071E-04	-.1448E-04	-.1734E-04	-.1938E-04
12	18	-.5290E-05	-.9601E-05	-.1303E-04	-.1566E-04	-.1760E-04
12	19	-.4639E-05	-.8426E-05	-.1144E-04	-.1377E-04	-.1548E-04
12	20	-.4018E-05	-.7287E-05	-.9883E-05	-.1187E-04	-.1332E-04

### Appendix E. Series DV-C

DV- 7/PAGE 5OF5  
 ELECTRODE CONFIGURATION POLE-POLE  
 THESE RESULTS ARE THE GEOMETRICAL COEFFICIENTS  
 FOR THE COMBINED EFFECT OF THE FOUR VERTICAL  
 SURFACES GIVEN BY X=5.5, X=6.5, Y=-3.0, Y=3.0  
 AND THE Z LIMITS AS SHOWN  
 THE NUMERICAL VALUES ARE GSRI  
 SOURCE POSITION=S, RECEIVER POSITION=R

S	R	Z= 6.0, 6.2	Z= 6.0, 6.4	Z= 6.0, 6.6	Z= 6.0, 6.8	Z= 6.0, 7.0
13	14	- .8954E-05	- .1625E-04	- .2206E-04	- .2654E-04	- .2982E-04
13	15	- .9116E-05	- .1679E-04	- .2316E-04	- .2835E-04	- .3247E-04
13	16	- .8721E-05	- .1620E-04	- .2255E-04	- .2786E-04	- .3224E-04
13	17	- .8067E-05	- .1506E-04	- .2108E-04	- .2620E-04	- .3050E-04
13	18	- .7323E-05	- .1372E-04	- .1926E-04	- .2403E-04	- .2807E-04
13	19	- .6577E-05	- .1234E-04	- .1737E-04	- .2170E-04	- .2541E-04
13	20	- .5872E-05	- .1103E-04	- .1553E-04	- .1943E-04	- .2278E-04
13	21	- .5227E-05	- .9823E-05	- .1383E-04	- .1731E-04	- .2030E-04
14	15	- .1001E-04	- .1874E-04	- .2631E-04	- .3279E-04	- .3828E-04
14	16	- .9550E-05	- .1800E-04	- .2544E-04	- .3194E-04	- .3757E-04
14	17	- .8859E-05	- .1677E-04	- .2382E-04	- .3004E-04	- .3551E-04
14	18	- .8092E-05	- .1537E-04	- .2189E-04	- .2769E-04	- .3284E-04
14	19	- .7330E-05	- .1395E-04	- .1991E-04	- .2524E-04	- .3000E-04
14	20	- .6613E-05	- .1260E-04	- .1801E-04	- .2287E-04	- .2721E-04
14	21	- .5958E-05	- .1136E-04	- .1625E-04	- .2065E-04	- .2460E-04
14	22	- .5369E-05	- .1024E-04	- .1465E-04	- .1863E-04	- .2220E-04
15	16	- .9550E-05	- .1816E-04	- .2589E-04	- .3279E-04	- .3892E-04
15	17	- .8878E-05	- .1695E-04	- .2427E-04	- .3087E-04	- .3680E-04
15	18	- .8138E-05	- .1558E-04	- .2237E-04	- .2854E-04	- .3413E-04
15	19	- .7404E-05	- .1420E-04	- .2044E-04	- .2613E-04	- .3132E-04
15	20	- .6714E-05	- .1290E-04	- .1859E-04	- .2380E-04	- .2857E-04
15	21	- .6083E-05	- .1170E-04	- .1687E-04	- .2163E-04	- .2599E-04
15	22	- .5514E-05	- .1061E-04	- .1532E-04	- .1965E-04	- .2362E-04
15	23	- .5007E-05	- .9642E-05	- .1392E-04	- .1786E-04	- .2149E-04