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June 14, 2004

Robert L. Martin P. G.
Martin & Slagle GeoEnvironmental Associates, LLC
PO Box 1023
Black Mountain, NC 28711

SUBJECT: Brent Street Property, Crystal Springs, MS
Final Report on Geophysical Survey

Dear Mr. Martin:

We are pleased to provide this final report on the geophysical survey conducted on the Brent Street Property. The report discusses the field methodology, data analysis, and results of the geophysical surveys we conducted at the Brent Street Property. Four figures are attached to show the plots of the geophysical data. A figure showing photographs of the equipment used is also attached. Preliminary results and recommendations were emailed to you on March 30, 2004.

1.0 INTRODUCTION

Schnabel Engineering conducted geophysical surveys at the Brent Street Property in Crystal Springs, Mississippi the week of March 22, 2004. The work was conducted under contract to Martin & Slagle GeoEnvironmental Associates, LLC (Martin & Slagle) in accordance with our proposal dated December 3, 2003. The work included EM-31 terrain conductivity and 2D resistivity surveys (Figure 1). The purpose of the work was to characterize the fill and help identify locations for subsequent drilling by Martin & Slagle.

2.0 METHODOLOGY

The EM-31 surveys were conducted on Tuesday, March 23 and the 2D resistivity surveys were conducted on Wednesday and Thursday, March 24 and 25. The geophysical data were collected by Mr. Ned Billington, P.G. and Mr. Danny Rawl of Schnabel Engineering. Richard Beale of Martin & Slagle observed the work and provided air monitoring and decontamination of equipment, in addition to helping with the work. Prior to the start of work each day, Mr. Billington, Mr. Rawl, and Mr. Beale attended the safety meeting held by Chuck Peel at the job site trailer.

2.1 Survey Grid

A 10-foot X-Y survey grid was marked on the site by Schnabel as location control for the geophysical surveys (Figure 2). All X-Y coordinates and distances listed in this report are in feet. A baseline was established in an approximate north-south direction along the western outside wall of the house and marked as X=110. A second baseline was established perpendicular to the X=110 baseline along the southern outside wall of the house and marked as Y=130. The remainder of the site was gridded and marked with orange paint using these two baselines as control. At the end of the work, selected points indicating the limits of the geophysical surveys were marked with blue paint and pink pin flags. These points were later located by Crowder Engineering & Surveying, Inc.

2.1 EM-31 Surveys

Conductivity and in-phase data were collected using Schnabel's Geonics EM-31 terrain conductivity meter operated in the vertical dipole mode. The EM-31 is an electromagnetic induction tool that can detect a single metal 55-gallon drum buried about 12 feet below ground surface. The EM-31 data were collected along parallel survey lines spaced 5 feet apart. The area of yellow and blue color contours in Figure 2 indicates the limits of the EM-31 surveys, which corresponded approximately to the extent of the white polyethelene temporary cap. EM-31 surveys were not conducted on the steeper slopes of the fill, as indicated by the white gaps in the color contours in Figures 2 and 3.

The EM-31 data were digitally recorded during the survey and later transferred to a laptop computer for analysis and plotting. The preliminary conductivity and in-phase results were reviewed with Martin & Slagle the morning of March 24 and used to help select line locations for the 2D resistivity surveys.

2.2 2D Resistivity Surveys

Resistivity data were collected using Schnabel's Sting/Swift Resistivity System along 4 lines as indicated in Figures 2 and 3. This system consists of the Sting resistivity meter, the Swift control unit, and a linear array of 28 electrodes. The electrodes were spaced at 7.5-foot intervals for a total array length of 202.5 feet and used to collect resistivity data using the dipole-dipole method. The line locations and array length was limited by the available survey area and the very steep slopes of the fill. The array length of 202.5 provided resistivity data to a depth of about 40 to 50 feet.

The resistivity data were recorded digitally and later transferred to a desktop computer for analysis. The data were processed using the software RES2DINV, an inversion modeling program that creates a model of the subsurface resistivity to match the observed data.

3.0 DISCUSSION OF RESULTS

The conductivity and in-phase results are shown on the plan view maps on Figures 2 and 3, respectively. The 2D resistivity models are shown on Figures 4 and 5. The 2D resistivity line locations are superimposed on the plan view maps in Figures 2 and 3.

The boundaries of the EM-31 survey and the 2D resistivity survey lines were marked on the AutoCAD file provided by Crowder Engineering and Surveying, using the points that they had located. This file was then sent back to Crowder and also sent to Mr. David Roat of your office on April 12, 2004.

3.1 EM-31 Data

The EM-31 conductivity data indicate that the fill has a higher conductivity (blue contours in Figure 2) than the surrounding in-situ soil and rock (yellow contours). Higher conductivity anomalies shown in darker blue possibly correspond to areas of higher metal concentration. The large anomaly in the center of the plot is caused by the metal-sided house.

The EM-31 in-phase data show anomalies caused by concentrations of buried metal (magneta and green contours in Figure 3). The in-phase results do not show the location of all buried metal objects, such as relatively small, very shallowly buried metal objects and objects buried deeper than the detection limit of the EM-31 (about 18 feet). In-phase anomalies were also caused by the house and the power line on the north side of the house.

3.2 2D Resistivity Models

The resistivity results shown in Figures 4 and 5 are cross-sectional models of the subsurface resistivity. The horizontal scale is in feet and the vertical scale is relative elevation in feet. An arbitrary elevation of 100 feet was assigned to a temporary bench mark (100X, 150Y) and used as control for the level survey of the resistivity electrode stations.

The majority of the fill is indicated by less resistive/more conductive values (blue contours) than the surrounding areas, as also observed on the EM-31 conductivity results. The fill contains some more resistive anomalies (red and yellow contours) that are interpreted to represent less dense areas, such as on the edges of the fill where less compaction has occurred, and possibly areas of non-conductive debris, such as rock or concrete. The boundaries of the fill cannot be determined exactly from the resistivity data, since the fill is surrounded by less resistive soil (blue), areas of more resistive dry gravel (red and yellow), and underlain by more resistive bedrock.

4.0 CONCLUSIONS

The results of the geophysical survey suggest that the fill is more conductive that the surrounding in-situ materials. The fill contains some concentrations of buried metal, as indicated by the EM-31 in-phase data. The fill also contains some resistive anomalies, interpreted to represent areas of less dense fill and possibly buried non-conductive debris, such as rock and concrete.

5.0 RECOMMENDATIONS

We understand that the main use of the geophysical data was to help select areas for drilling on top of the fill. Previous attempts to drill met with limited success, due to shallow refusal from objects within the fill.

As was stated in our March 30, 2004 email, we recommend that the EM-31 in-phase data be used to avoid areas containing concentrations of buried metal. The more resistive areas shown on the 2D resistivity models should be avoided as these may contain debris that could cause refusal when drilling.

6.0 LIMITATIONS

We have performed and completed the services reported herein in a manner consistent with the performance standard and skill ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions as this project. No other representation, expressed or implied, is included or intended in this document. It is generally recognized that the results of geophysical surveys are non-unique and may not represent actual subsurface conditions.

We understand that the drilling on top of the waste has been concluded and that the drilling program was very successful in penetrating the waste. We appreciate the opportunity to have assisted you in this project and look forward to working with you again on future projects. Please contact us if you need additional information or have any questions.

Sincerely,

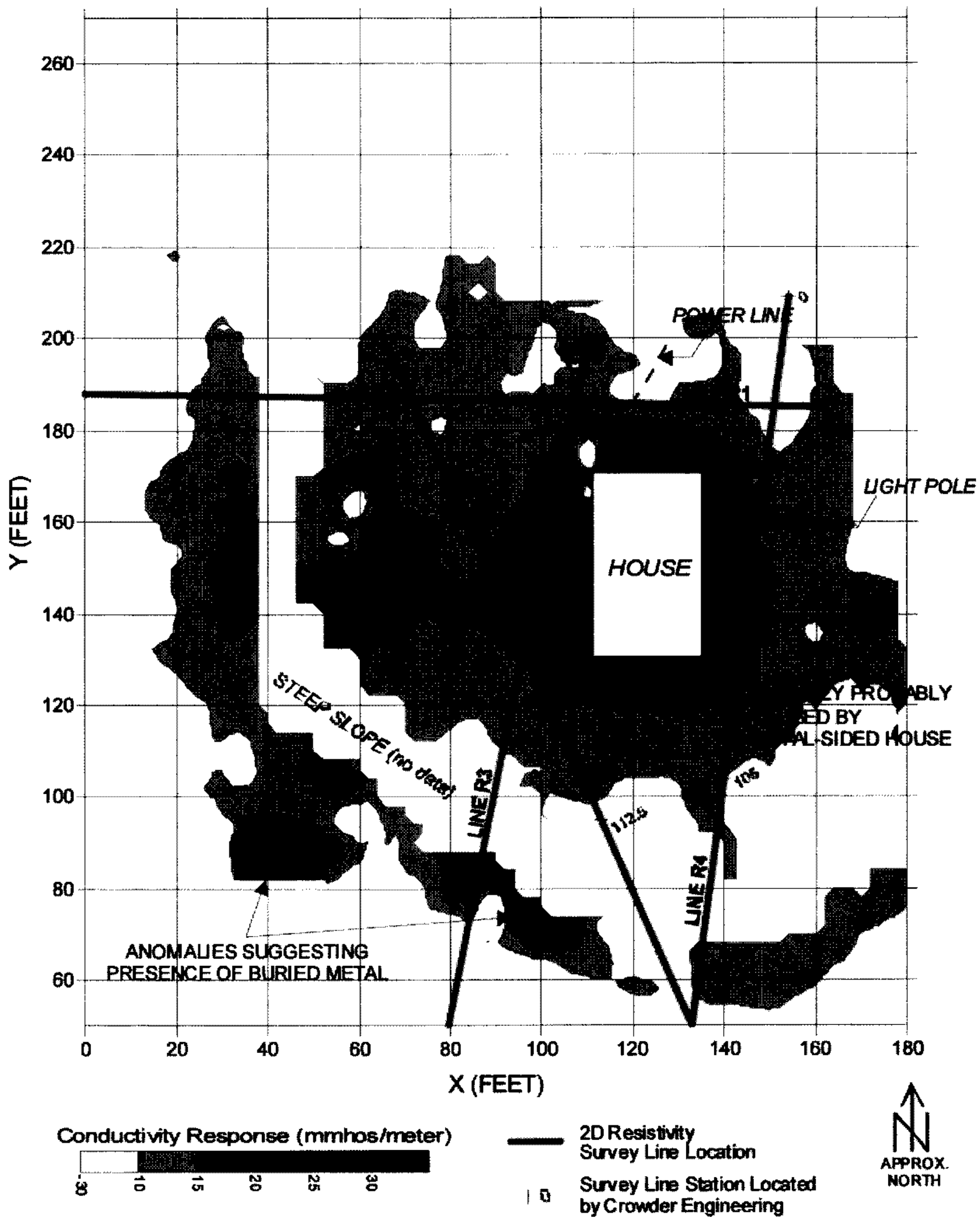
Edward (Ned) D. Billington, PG
Associate

NB/MD
Attachments: Figures 1-5
FILE: G:\PROJECTS\04211008 (CRYSTAL SPRINGS GEOPHYSICS)\CORRESPONDENCE\MARTIN LTR 02 - FINAL REPORT.DOC

Photo showing EM-31 Data Collection on Top of Fill

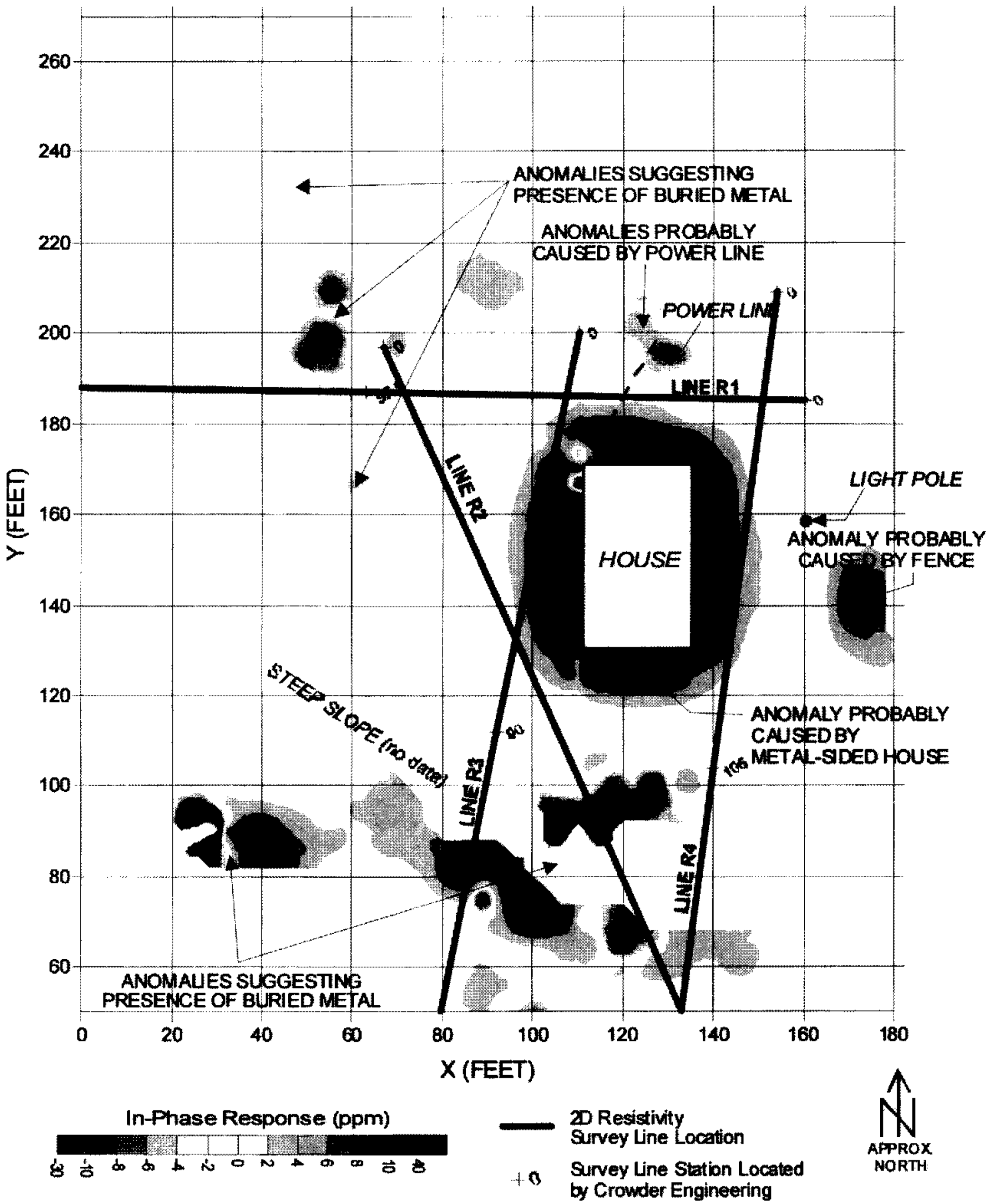
Photo showing 2D Resistivity Data Collection on Top of Fill

Schnabel Schnabel Engineering	Martin & Slagle Black Mountain, NC BRENT STREET PROPERTY CRYSTAL SPRINGS, MS	PHOTOGRAPHS OF GEOPHYSICAL SURVEY EQUIPMENT FIGURE 1



Note: Full extent of survey lines not shown above. Actual lines extend further west (R1) and south (R2, R3, and R4).

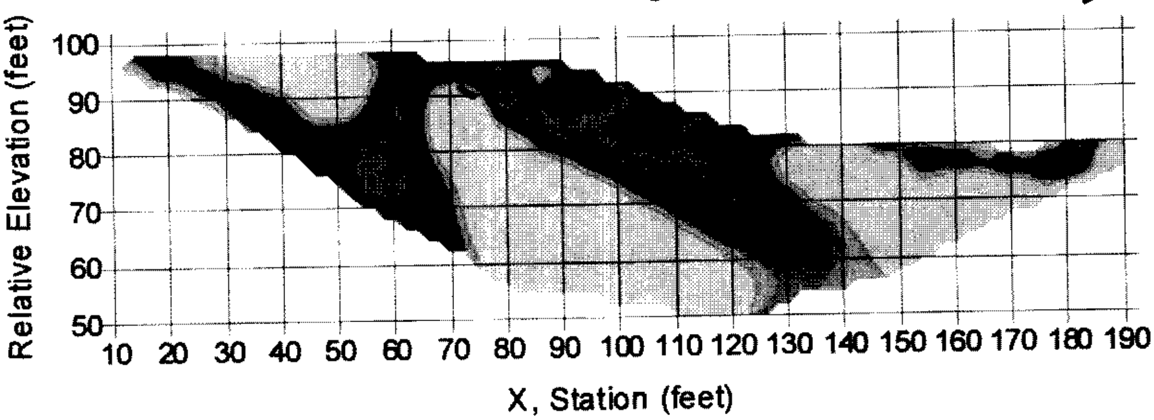
Schnabel Engineering	Martin & Slagle Black Mountain, NC BRENT STREET PROPERTY CRYSTAL SPRINGS, MS	EM-31 CONDUCTIVITY RESPONSE FIGURE 2



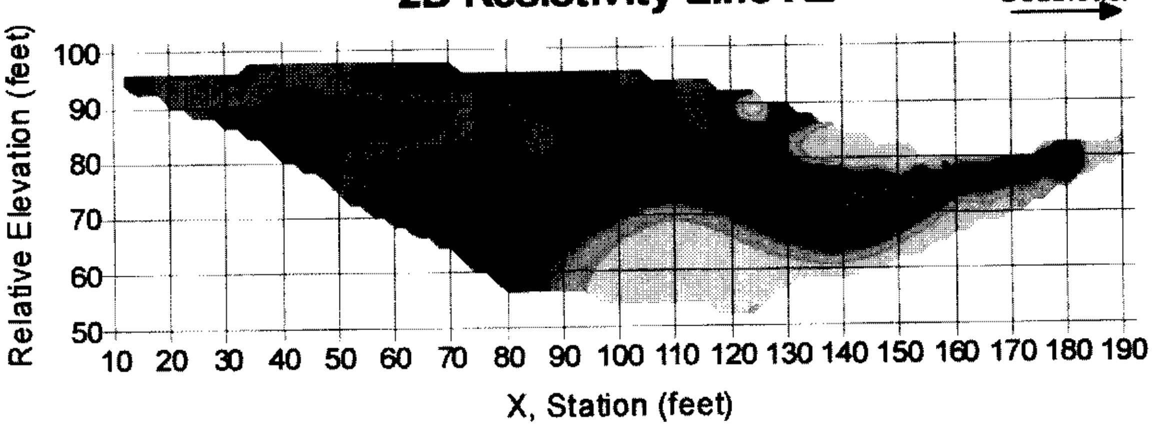
Note: Full extent of survey lines not shown above. Actual lines extend further west (R1) and south (R2, R3, and R4).

Schnabel Engineering	Martin & Slagle Black Mountain, NC BRENT STREET PROPERTY CRYSTAL SPRINGS, MS	EM-31 IN-PHASE RESPONSE FIGURE 3

2D Resistivity Line R1



2D Resistivity Line R2

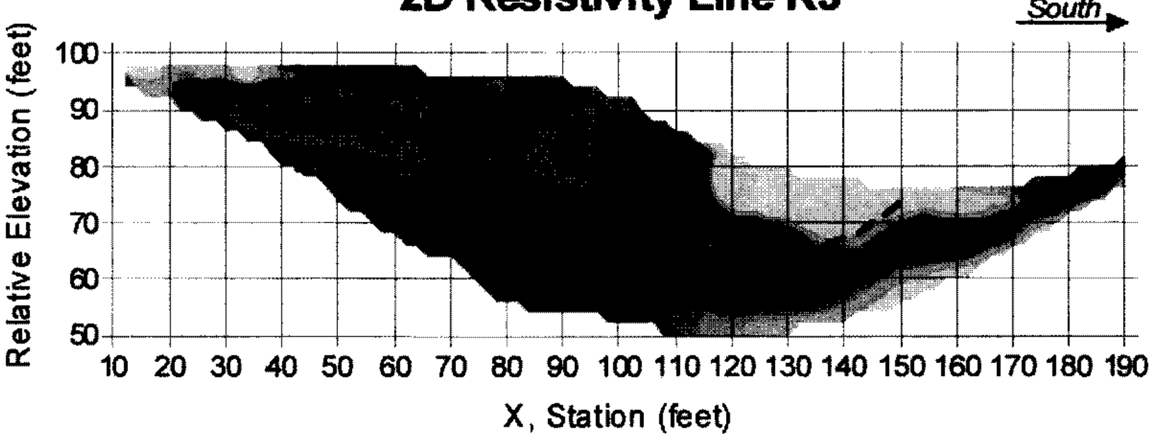


Resistivity (Ohm-Meters)

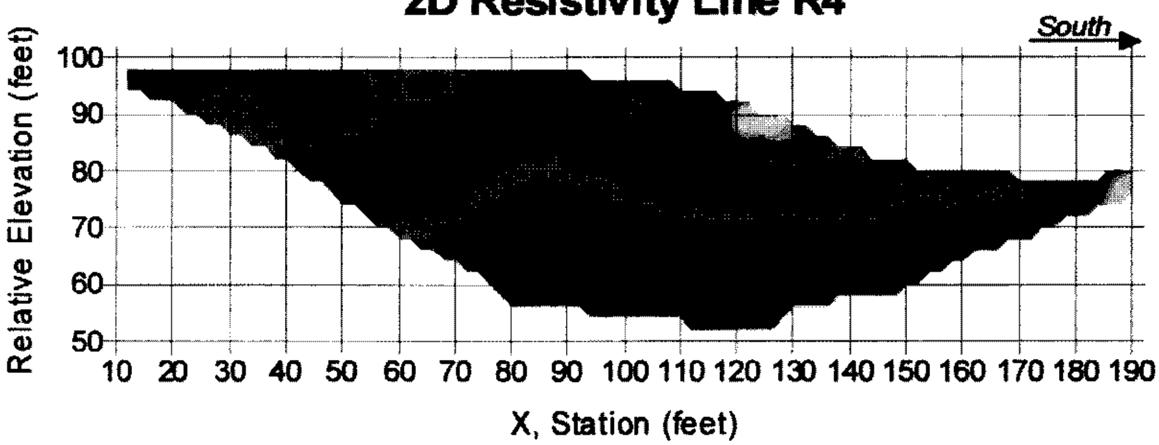
APPROXIMATE BASE OF FILL (ASSUMED FROM TOPOGRAPHY AND RESISTIVITY DATA)

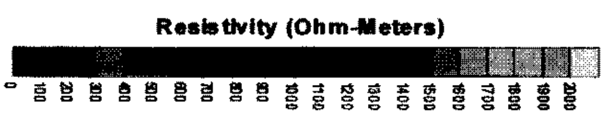
Schnabel Engineering	Martin & Slagle Black Mountain, NC BRENT STREET PROPERTY CRYSTAL SPRINGS, MS	2D RESISTIVITY MODELS FOR LINES R1 AND R2 FIGURE 4

2D Resistivity Line R3



2D Resistivity Line R4





APPROXIMATE BASE OF FILL
(ASSUMED FROM TOPOGRAPHY
AND RESISTIVITY DATA)

Schnabel Schnabel Engineering	Martin & Slagle Black Mountain, NC BRENT STREET PROPERTY CRYSTAL SPRINGS, MS	2D RESISTIVITY MODELS FOR LINES R3 AND R4 FIGURE 5