

Geological Survey Branch Assessment Report Indexing System



ARIS Summary Report

| Regional Geologist, Kamloops | | Date Approved: 2004.11.03 Off Confidential: 2005.09.14 | | | | | |
|------------------------------|--|--|--|--|--|--|--|
| ASSESSMENT REPORT: 27497 | | Mining Division(s): Clinton | | | | | |
| Property Name: | Newton Mountain | | | | | | |
| Location: | NAD 27 Latitude: 51 48 00 | Longitude: 123 37 00 UTM: 10 5738756 457476 | | | | | |
| | NAD 83 Latitude: 51 48 00 | Longitude: 123 37 05 UTM: 10 5738975 457382 | | | | | |
| | NTS: 092013E BCGS: 0920082 | | | | | | |
| Camp: 035 | Taseko - Blackdome Area | | | | | | |
| Claim(s): | Newton 1 | | | | | | |
| Operator(s): Author(s): | High Ridge Resources Inc. Walcott, Peter E. | | | | | | |
| Report Year: | 2004 | | | | | | |
| No. of Pages: | 18 Pages | | | | | | |
| Commodities Searched For: | | | | | | | |
| General Work Categories: | GEOP | | | | | | |
| Work Done: | Geophysical IPOL Induced Polarization | (24.0 km;) No. of maps : 22 ; Scale(s) : 1:5000 | | | | | |
| Keywords: | Cretaceous, Kingsvale Group, Volcanic rocks, Gossans, Pyrite, Chalcopyrite, Interpretations, Reinterpretations | | | | | | |
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| Related Reports: | 11001, 18081, 19170, 20585, 22198, 23114, 23660, 24197, 24724, 25264 | | | | | | |



A REPORT

ON

GEOPHYSICAL MODELING

NEWTON PROPERTY SCUM LAKE AREA CLINTON M.D., B.C.

51° 48' N, 112° 37' W NTS 920/13E

CLAIMS WORKED: NEWTON 1 WORK DATES: JULY 23RD – SEPTEMBER 10TH, 2004

FOR

OWNER: R. DURFELD & A. SCHMIDT

OPERATOR: HIGH RIDGE RESOURCES INC. VANCOUVER, BRITISH COLUMBIA

BY

PETER E. WALCOTT & ASSOCIATES LIMITED VANCOUVER, BRITISH COLUMBIA

OCTOBER 2004

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GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT



INTRODUCTION

In late July 2004 at the request of High Ridge Resources, Peter E. Walcott & Associates undertook a recompilation of the 1972 induced polarization data, collected on their frequency effect survey for Cyprus Exploration Corporation.

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The job notes were retrieved form the warehouse archive, and the data was transcribed into useable format suitable for computer manipulation.

2D resistivity and IP inversion was then carried out on the respective profiles, with topography obtained form the 1:20,000 Trim base maps.

The results were combined with the ground magnetics by Verdstone Gold Corporation and the GSC regional survey to create a composite 3D visualization in an effort to define further areas for exploration.

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The results are presented on modeled sections and plans maps that accompany this report.

PROPERTY, LOCATION & ACCESS

The Newton property is located in the Clinton Mining Division of British Columbia and consists of the following claims.

| Claim Name | Tenure Number | No. of Units | Anniversary |
|------------|---------------|--------------|--------------|
| NEWTON 1 | 04 2408 | 20 | September 14 |

The property is situated encompassing Newton Hill, a circular hill some 2 kilometers in diameter that protrudes about 150 meters above the surrounding Fraser Plateau, some 105 kilometers west southwest of the town of Williams Lake.

Access is readily obtainable by means of four-wheel drive vehicle from the community of Hanceville on Highway 20 along the Taseko Lake access road to kilometer 48, and thence by bush road – Scum Lake road – for 8 kilometers to the property.

<u>GEOLOGY</u>

The property is located within the Intermontane belt near the eastern margin of the Coast Plutonic complex.

The area was mapped by Tipper – GSC Open File 534 – is underlain by volcanic and clastic rocks of the Upper Cretaceous Kingsvale Group intruded by felsic stocks, sills and dykes of Eocene age. These are covered in places by overlying Miocene plateau basalts of the Chilcotin group.

The dominant structural trend is northwesterly, parallel to the Yalakom and Chilcotin transcurrent faults, which lie south and north of the property.

Hydrothermal alteration occurs as a one-kilometer radius area centered on Newton Hill. Sericite, kaolinite and quartz veining or silica flooding were the alteration products mapped.

Strong surface weathering is evident on the property – large gossans – with an indicated depth of some 30 meters as seen from drill hole results.

Pyrite mineralization is observed in a few locations on the property. Copper mineralization was only noted as trace turquoise. Below the oxidation level pyrite is ubiquitous in the drill holes with some chalcopyrite on quartz veins and disseminations. Chalcocite and malachite were noted in the oxidized section of one drill hole.

For further information, the reader is referred to reports by P.F. Lewis, J.C. Simpson and R.M. Durfeld.

PREVIOUS WORK

Previous work on the property dates back to 1916 and consisted of limited mining, prospecting, soil sampling, airborne and ground geophysics and diamond drilling. It is summarized as follows.

- 1916 One Mr. Newton, a landowner in the area, sunk a shaft and opened several cuts, which returned gold assays.
 1960 W. Livingstone undertook soil sampling
- 1972 Cyprus Exploration Corporation carried out geological mapping, magnetic and IP surveying, and diamond drilling
- 1982 Taseko Mines conducted a limited percussion and diamond drill programme
- 1989-92 Rea Gold Corporation / Verdstone Gold Corporation undertook geochemical sampling, trenching, ground magnetics and diamond drilling
- 1995 G.S.C flew wide spread airborne magnetics and radiomagnetics over the property

The results of these are documented in the previously mentioned reports, reports by P. Walcott on the induced polarization surveys and in the GSC open file report 2800.

PROCESSING AND MODELING

The geophysical data review was primarily from the 1972 frequency Induced Polarization (IP) and Total Field Magnetics conducted by Verdstone Gold Corporation in 1992. The GSC Regional survey was also processed to some extent in order to gain a regional overview of the property and surrounding area. This also provided some interesting insight over IP and Magnetics survey.

It should be noted here that the 1972 imperial grid has long since vanished. However the writer's recollection of it was that it was a well-cut line of sight picket grid, so the assumption that the lines were straight would not be unreasonable.

Induced Polarization

The IP data was recovered from the original survey notes by hand entry into a Geosoft compatible IP data format. These data files were subsequently imported into the Oasis Montaj database for processing. As the topography of the IP lines was required for the inversion, the location of the lines in the NAD 83 UTM grid system was required. This was established by using the monument on top of Newton Hill, along with a number of previous drill holes on the old grid system. The locations of the drill holes were obtained through the use of differential GPS. The grid was idealized using a four-point warp; to obtain a best fit solution. The topographic data was obtained using the TRIM II DEM, which was gridded using OASIS at a 25 meter cell size. The elevation for each electrode in the survey was then extracted into the database from this to provide a XYZ location. The data was then prepared and exported as individual lines to the inversion software.

The prepared files where then modeled using RES2DINV by Geotomo Software. The software uses the smoothness-constrained least-squares method inversion technique to produce a 2D model of the subsurface from the apparent resistivity and percent frequency effect data. The topography of the section is included in the model, in order to obtain the correct location in XZ space of the electrodes, which in areas of extreme relief is crucial. The general parameters used in the inversion used a vertical to horizontal ratio of 1, a cell width of one half the electrode spacing and a finite element method to create the forward model during the run time. The inversion files produced from the RES2DINV were then presented in a modeled section form using a custom Geosoft interface written in house as shown in accompanying map pocket. The gridded components of these sections were then imported into a 3D visualization software for interpretation.



PROCESSING AND MODELING con't

<u>Magnetics</u>

The total field intensity was obtained from a looped magnetic survey conducted by the Verdstone Gold Corporation. The data was extracted from a CAD file containing the posted values into a Geosoft compatible XYZ format, which was then imported into Oasis Montaj for processing and subsequently transformed into the NAD 83 UTM grid system. Standard 1D filtering was applied in order to remove short wavelength features prior to gridding using a bidirectional method with a cell size of 12.5 meters. The 2D data was then smoothed using a Hanning 3X3 filter and contoured as shown in Figure 3. Subsequent processing also consisted of Removal of Regional, Reduction to Pole, Upward Continuation, and 1st order derivatives were also carried out.

A residual TMI grid was upward continued to 12.5 meters was then extracted into a format compatible with the UBC MAG3DINV software for 3D inversion using a nominal mesh size of 25 meters including topographic relief.

Airborne Survey

To date minimum work has been done on the widely spaced – 500 meter fixed wing airborne geophysics of the GSC – Open File 2800. The Th/K ratio obtained with twelve 102x102x406 NAI detectors in the Skyvan aircraft flown at an average height of 125 meters has been contoured, and outline of the low is shown on Figure 5.

DISCUSSION OF RESULTS

As this the work to date is part of an ongoing compilation of the area, the discussion will only consist of the work completed to September 14th, the anniversary of the Newton I claim.

The various geochemical, geophysical and drill hole were combined in a 3D visualization in order to evaluate further exploration targets.

As previously determined the IP model shows an arcuate band of high frequency effects elongated northwesterly corresponding to a disseminated pyrite halo – Figure 5 to 7. Within this feature an area of lower frequency effect relief is readily discernable. This is fairly coincident with the airborne Th/K ratio suggestive of intensive alteration – Figure 5.

Figure 6 shows a 3D model susceptibility low – unconstrained as no susceptibility measurements have been done to date on rocks and/or core samples – coinciding with the above mentioned inner region of low frequency effect reflecting magnetite depletion due to alteration.

Figure 7 shows the copper geochemistry draped on the model IP sections. Higher values are associated with the inner skirts of the high frequency effect. The downhill portion of the large anomaly to the northwest is likely due to drainage as better seen on Figure 4.

SUMMARY AND RECOMMENDATIONS

Between July 15th and September 10th, 2004 Peter E. Walcott & Associates Limited undertook work on a recompilation program of the 1972 IP survey data as part of an overall program of compiling and reviewing data from the general area with an eye to further exploration.

To date the IP and magnetic data on the property have been modeled and incorporated into a 3D visualization program.

The location and corresponding elevations of the respective stations of the two grids could be somewhat in error due to the assumption of idealized lines and few corresponding reference points.

Before any commitment to drilling a few orientation lines of IP coupled with the re-run of the magnetic survey using a base station to account for diurnal magnetic drift would be beneficial.

Respectfully submitted

PETER E. WALCOTT & ASSOCIATES LIMITED

Peter E. Walcott, P. Eng Geophysicist

Vancouver, British Columbia October 2004

APPENDIX I

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COST OF SURVEY

Peter E. Walcott & Associates Limited undertook the project on a hourly basis. Printing and reporting costs were extra, so that the total costs of services as of September 14th,2004 were \$4,625.00.

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PERSONNEL EMPLOYED ON SURVEY

| Name | Occupation | Address | Dates |
|-------------------|--------------|---|---------------------------|
| Peter E. Walcott | Geophysicist | 506-1529 W 6 th Ave, Vancouver, B.C. V6J 1R1 | July 15-17 Sept 5,2004 |
| Alexander Walcott | " | u e | Aug 25-28, 2004 |
| Kevin Hayley | 56 | ц | July 27- Aug 10,2004 |

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- 1) I am a graduate of the University of Toronto in 1962 with a B.A. Sc. In Engineering Physics, Geophysics Option
- 2) I have been practicing my profession for the last forty two years
- 3) I am a member of the Association of Professional Engineers of British Columbia and Ontario
- 4) I have no interest, direct or indirect in the properties or securities of High Ridge Resources, nor do I expect to receive any.

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5) I personally visited the property on the 1972 IP survey.

Peter E. Walcott, P.Eng

Vancouver, B.C. October 2004

REFERENCES

The geology of the Scum Lake prospect, Clinton M.D., BC – P.F. Lewis, 1971 Exploration and Diamond Drill Program – J.G. Simpson, 1973 Geochemical report of the Newton mineral claims – R.M. Durfeld, 1997 Geophysical Report – Induced polarization – Peter E. Walcott, 1972 GSC Open File 534 – H.W. Tipper

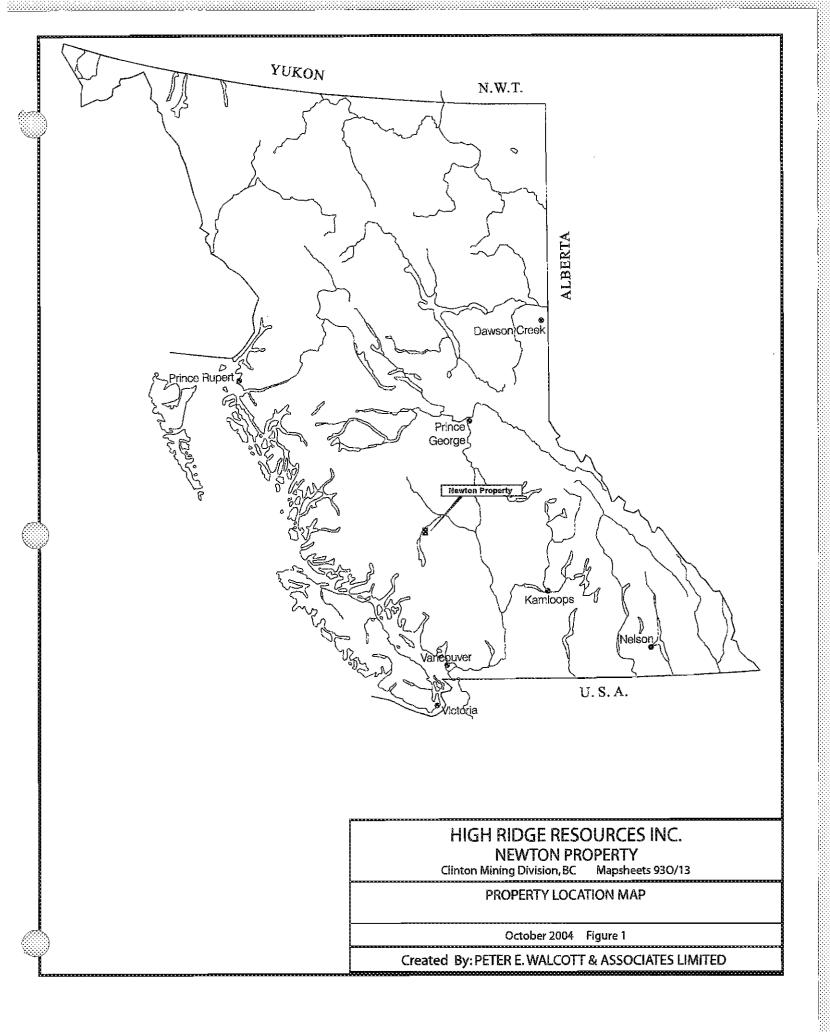
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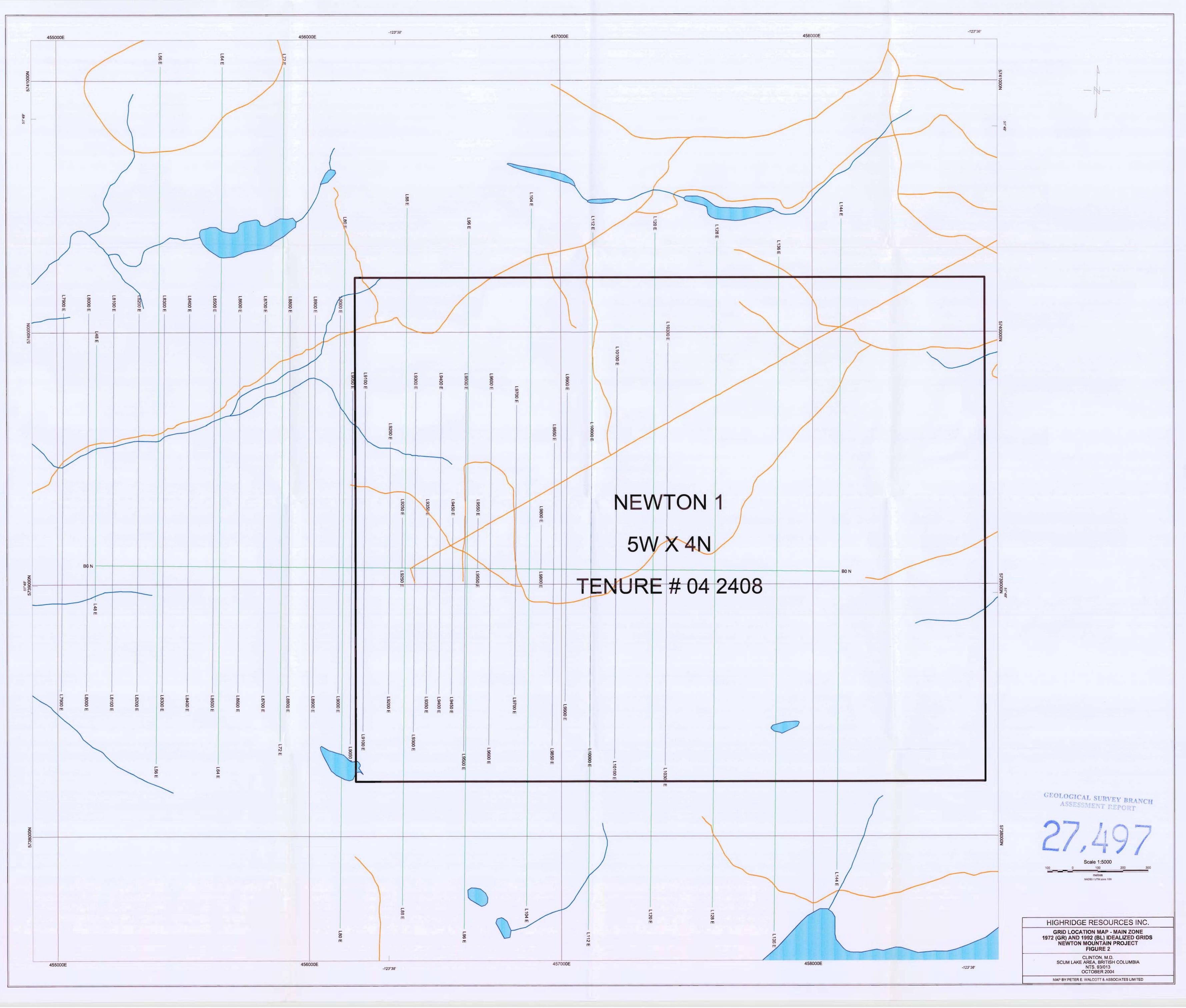
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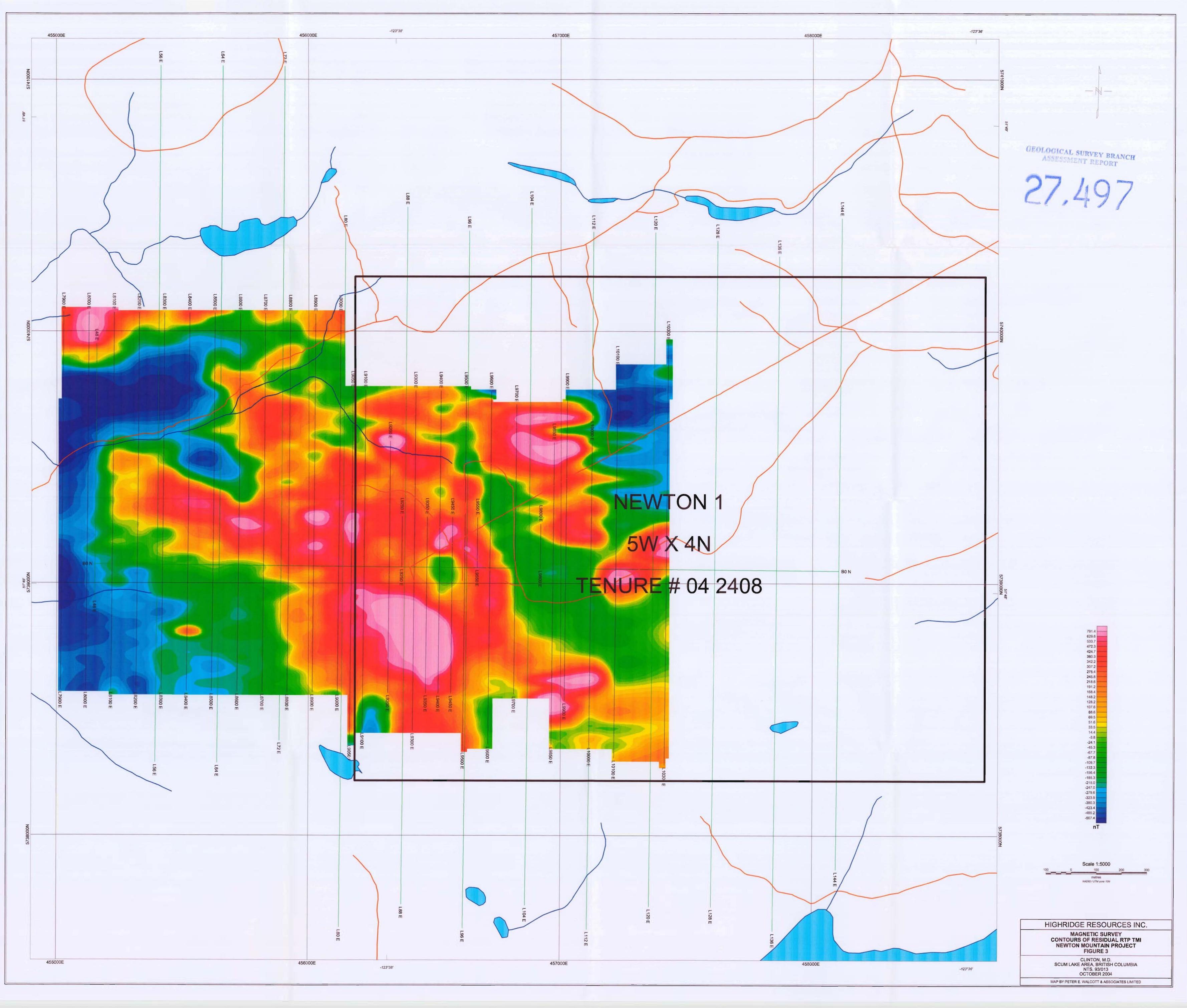
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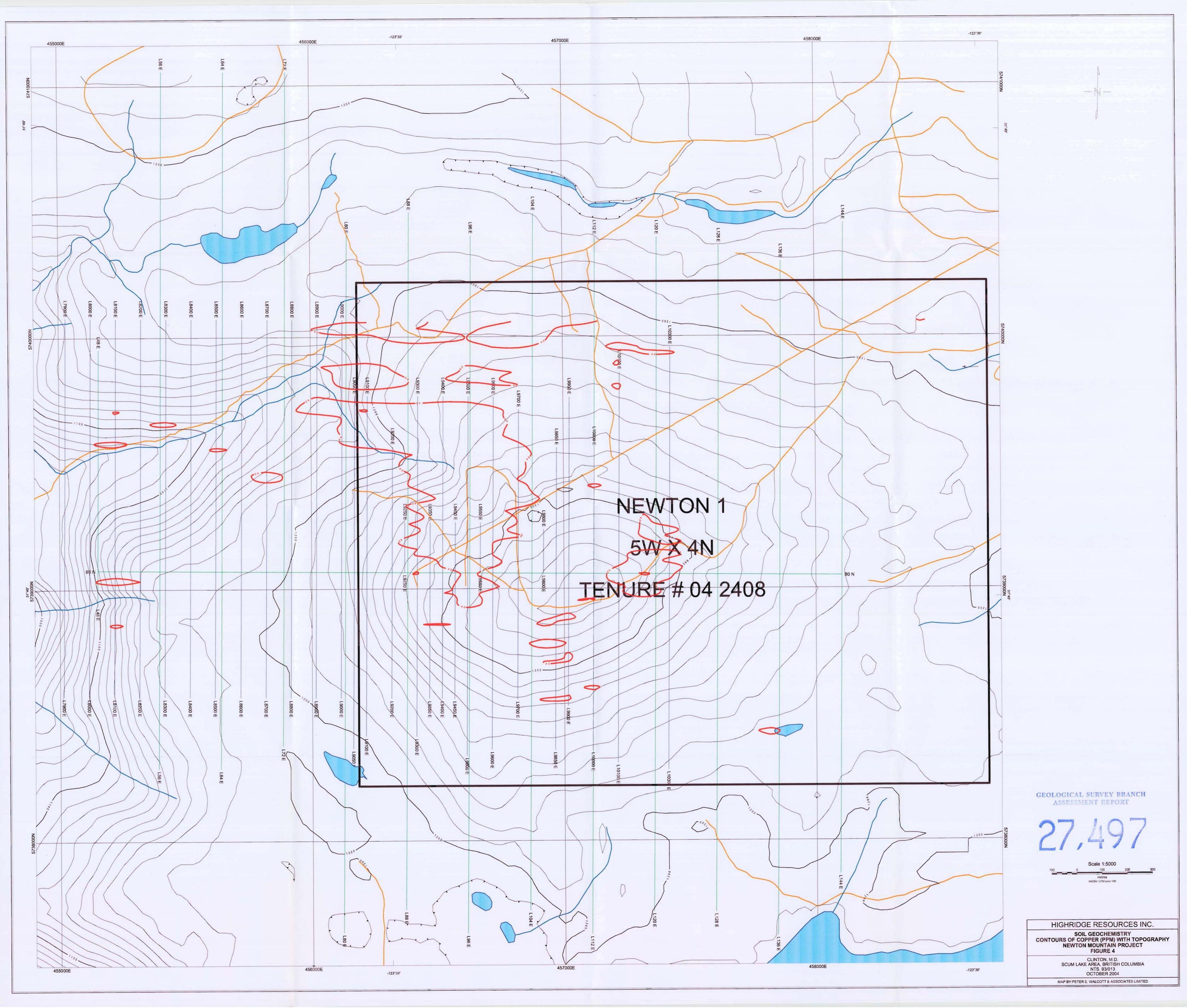


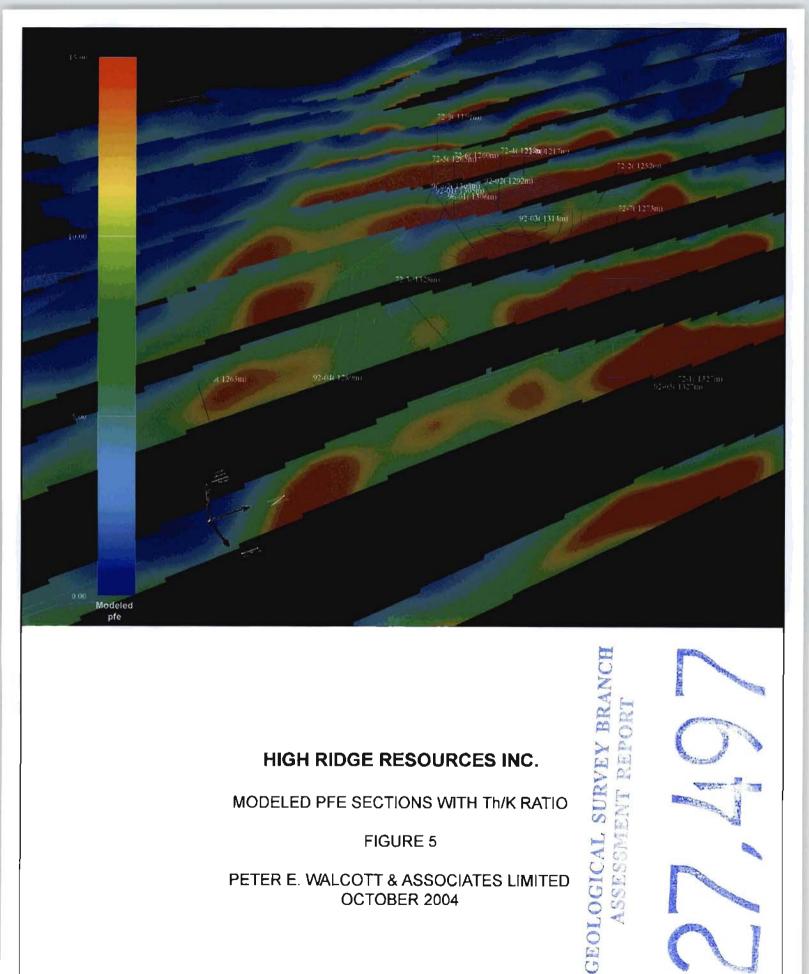












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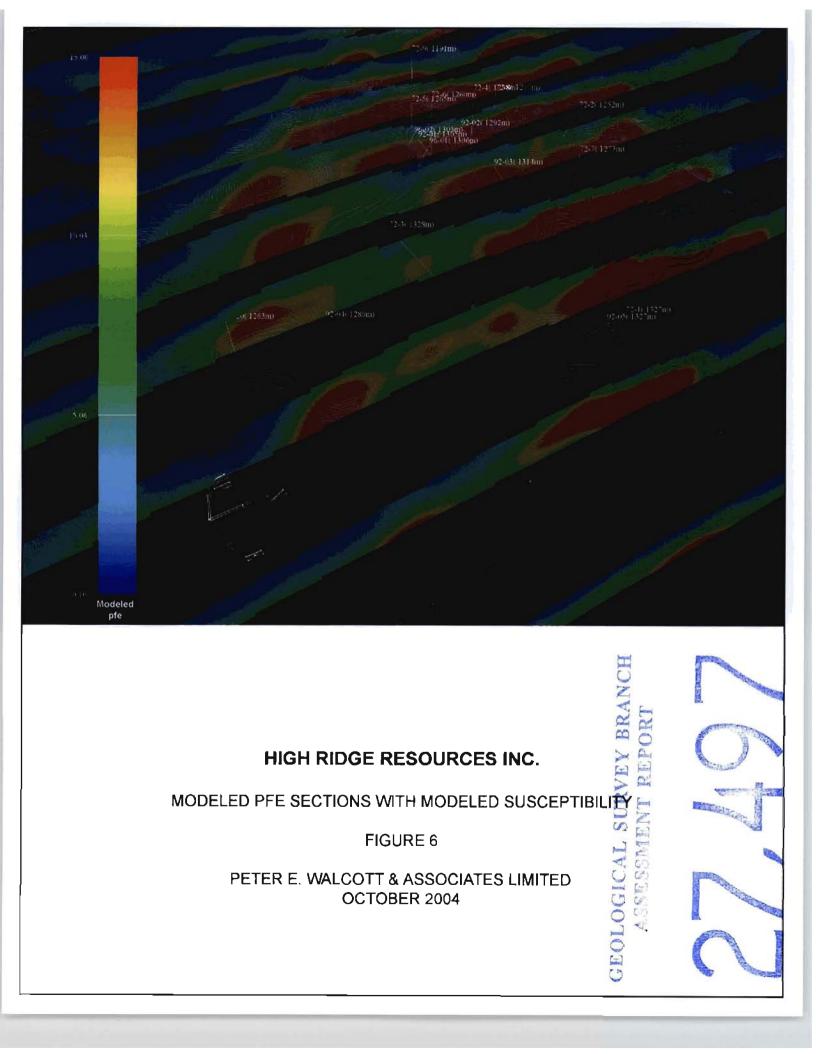
MODELED PFE SECTIONS WITH Th/K RATIO

FIGURE 5

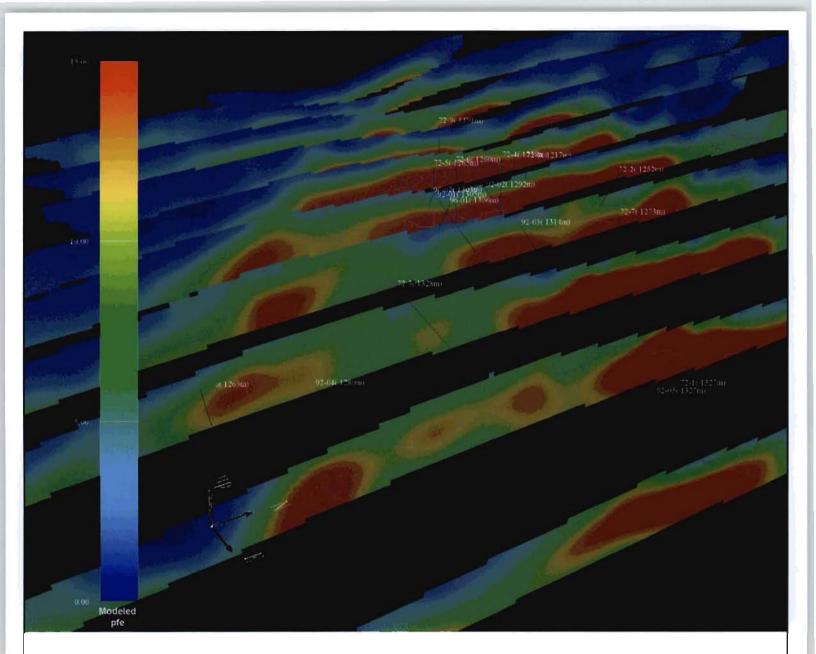
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ASSESSMENT REPORT







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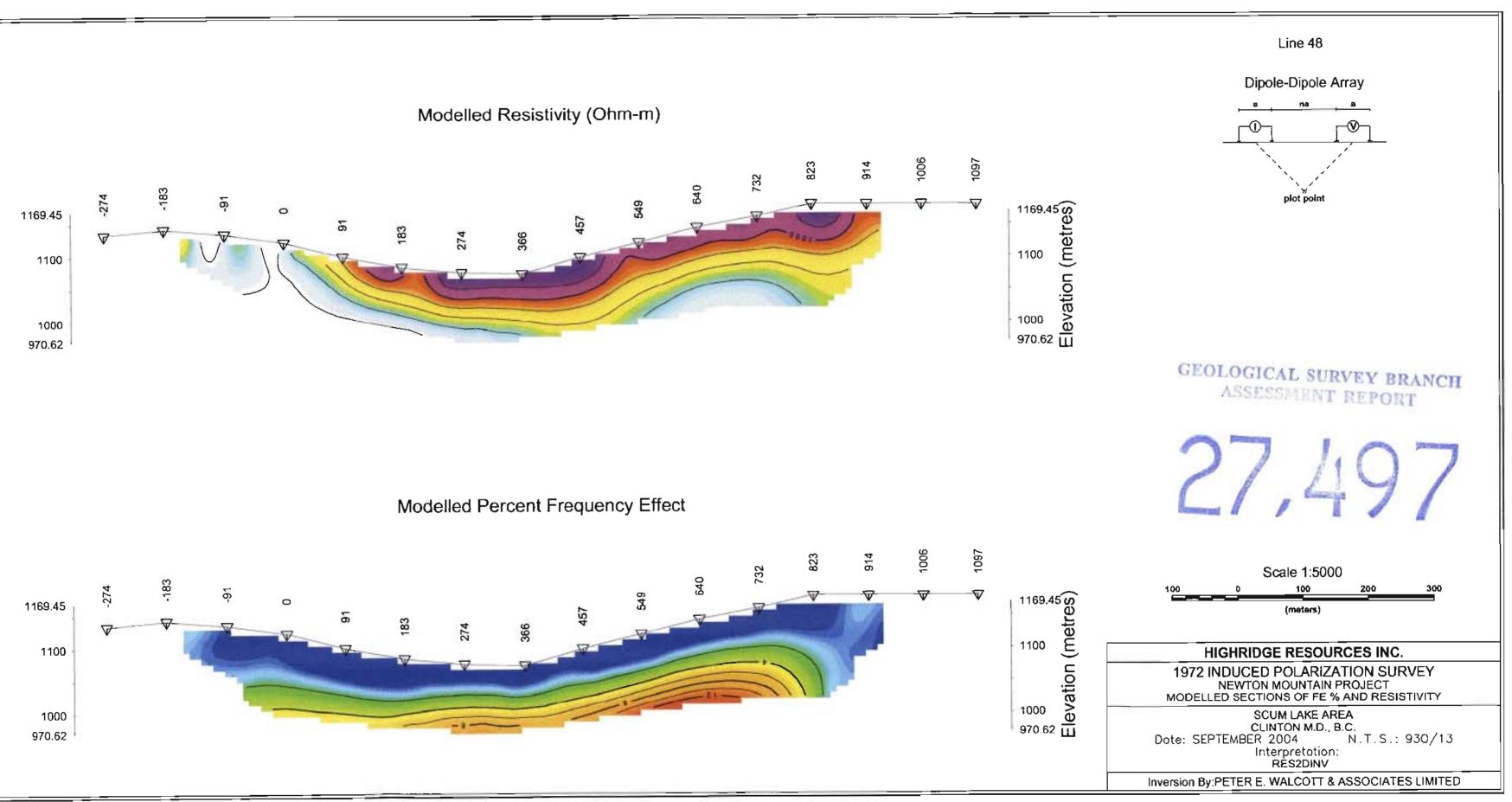
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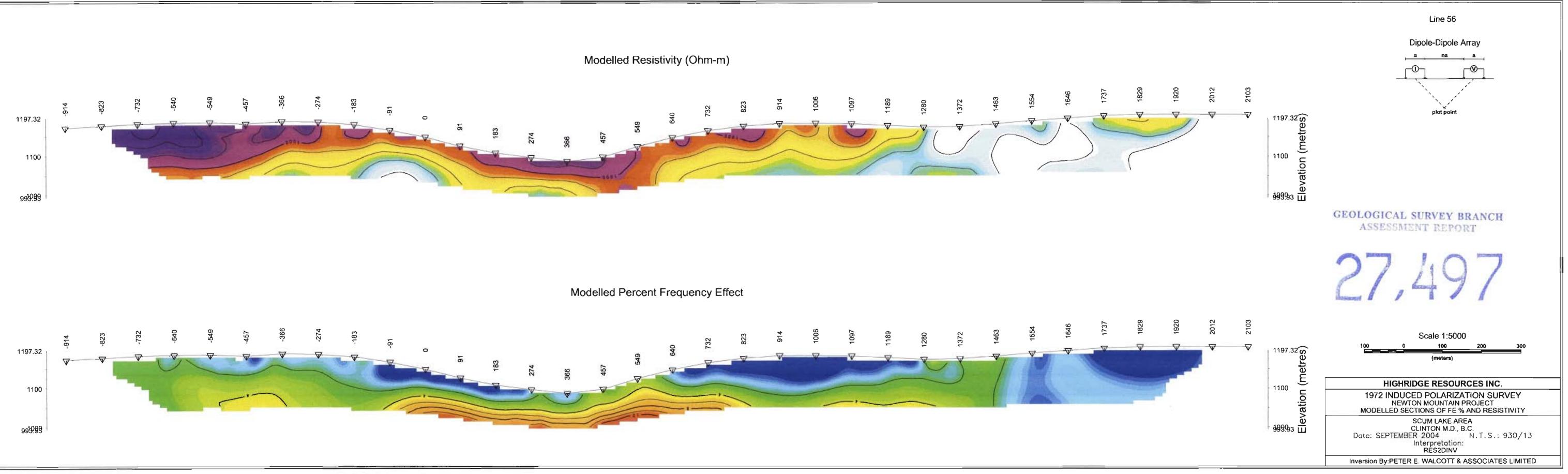
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GEOLOGICAL

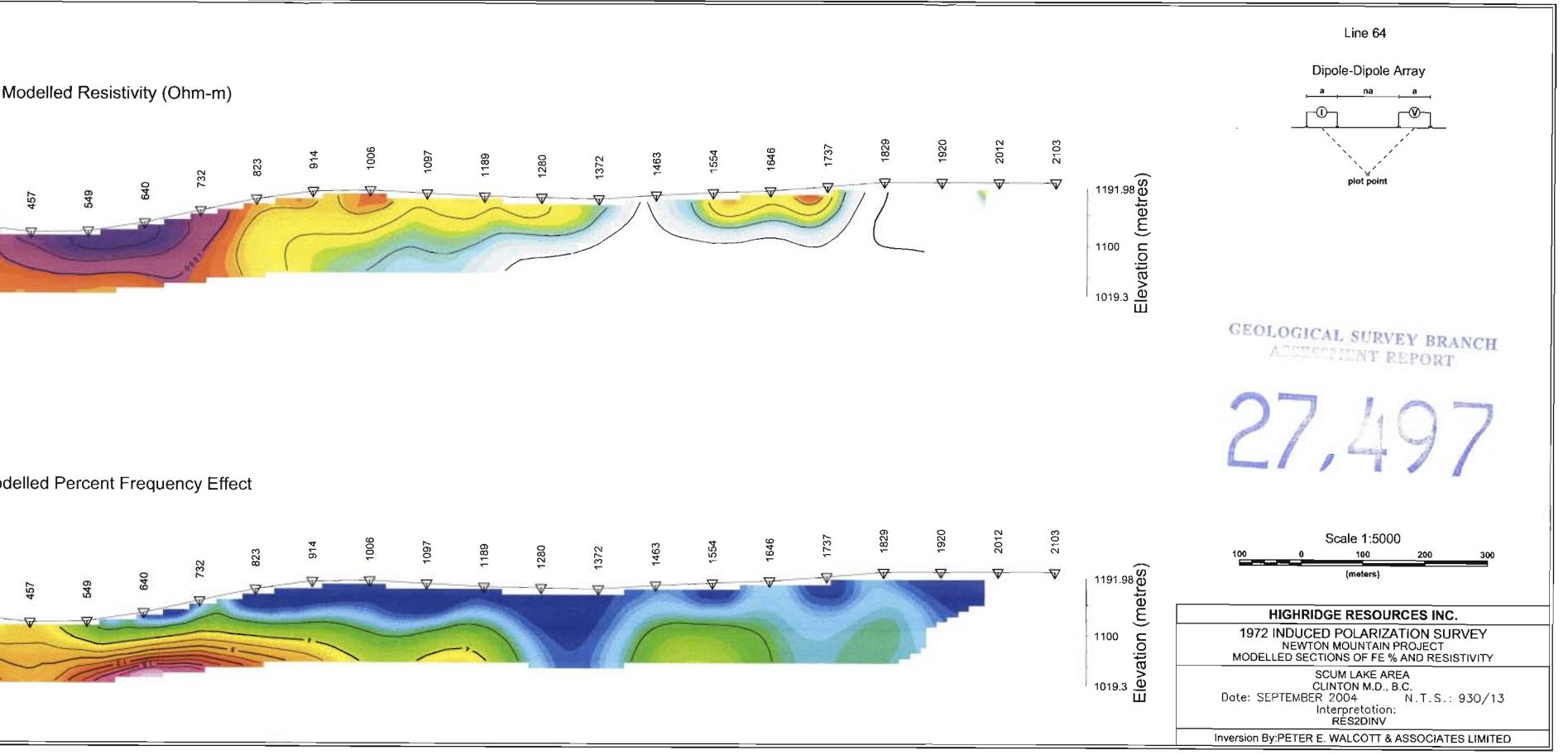
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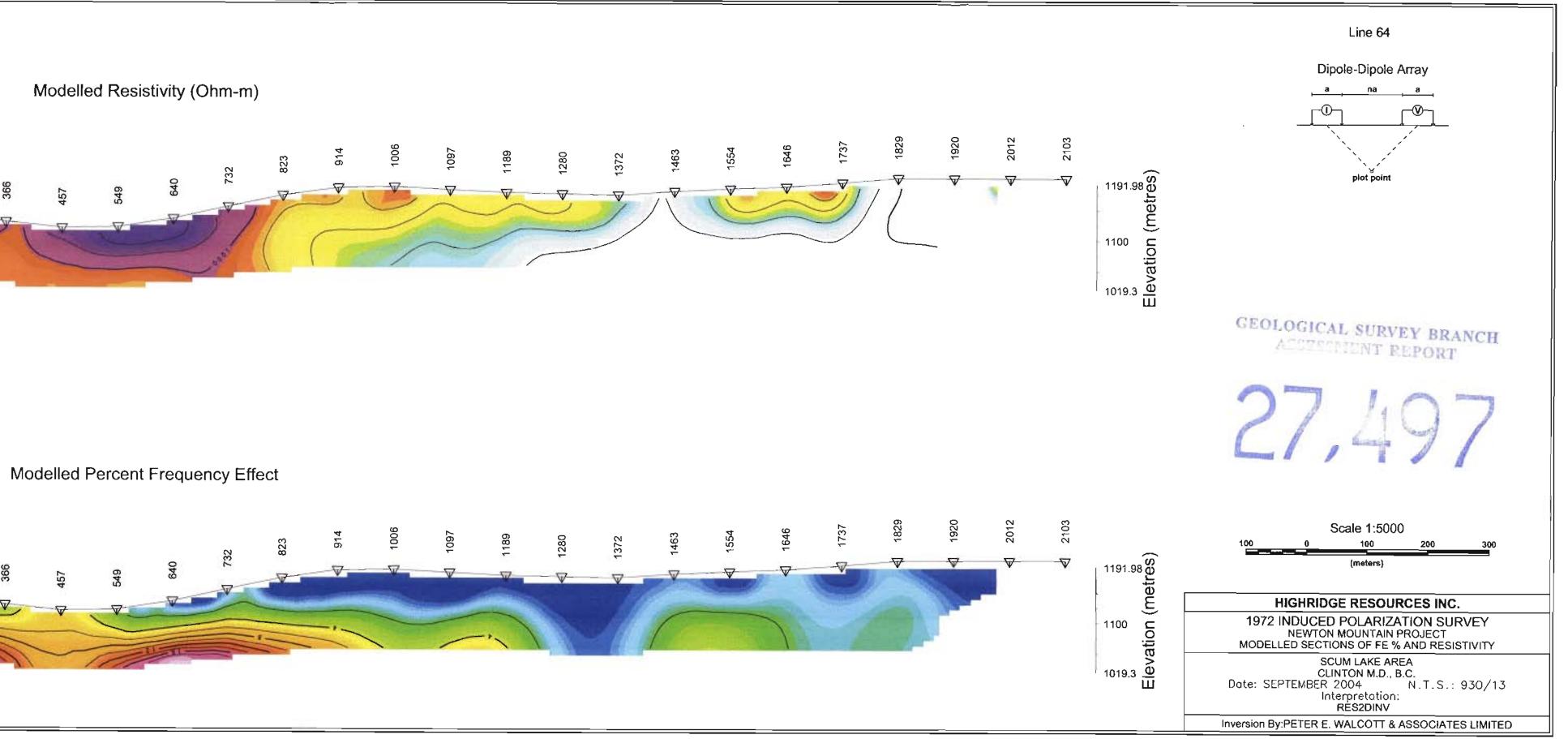
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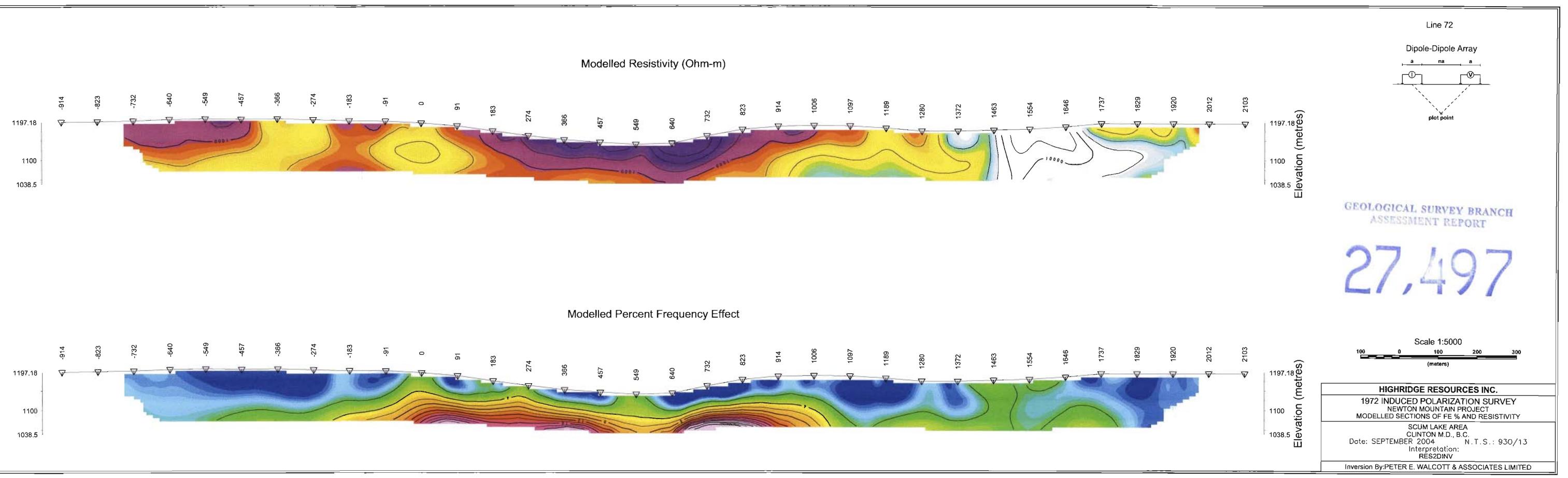




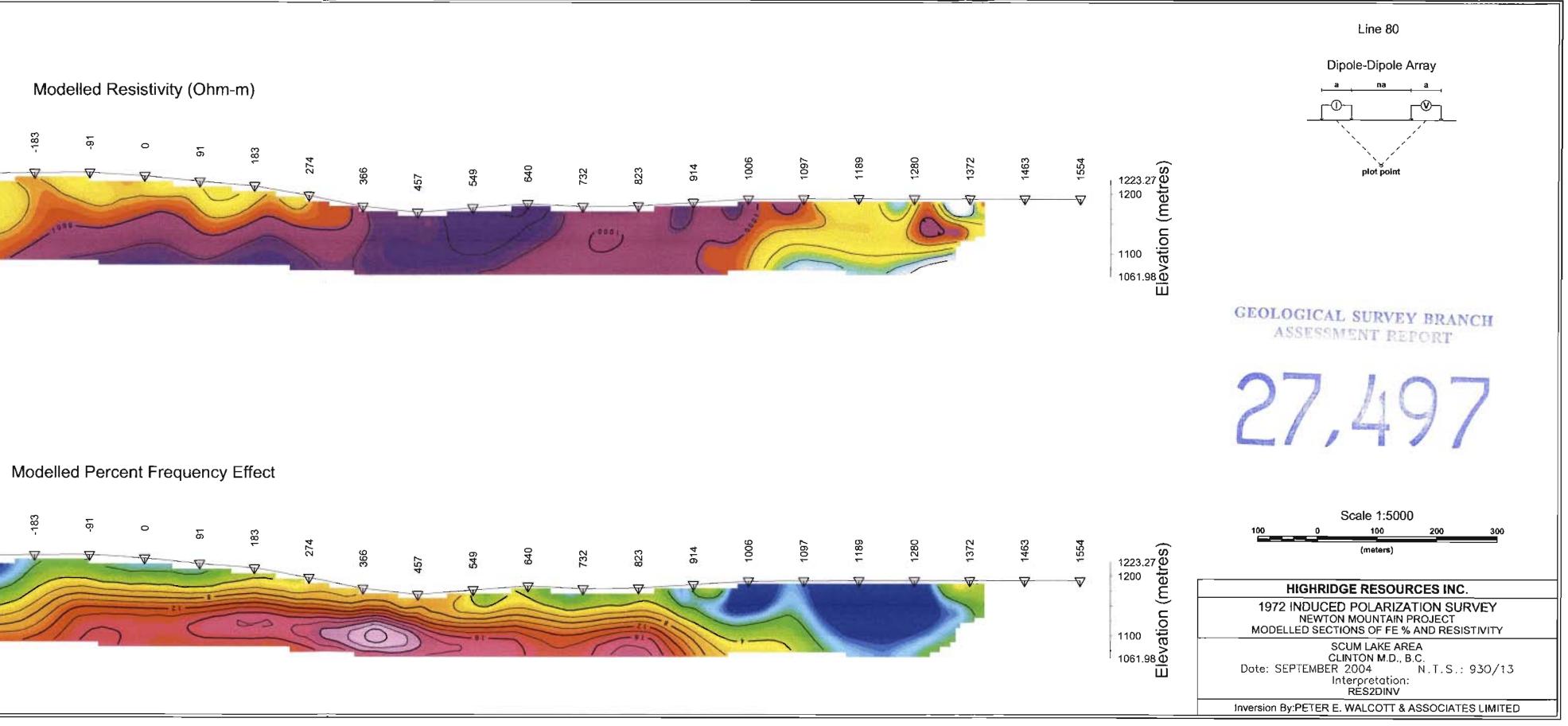
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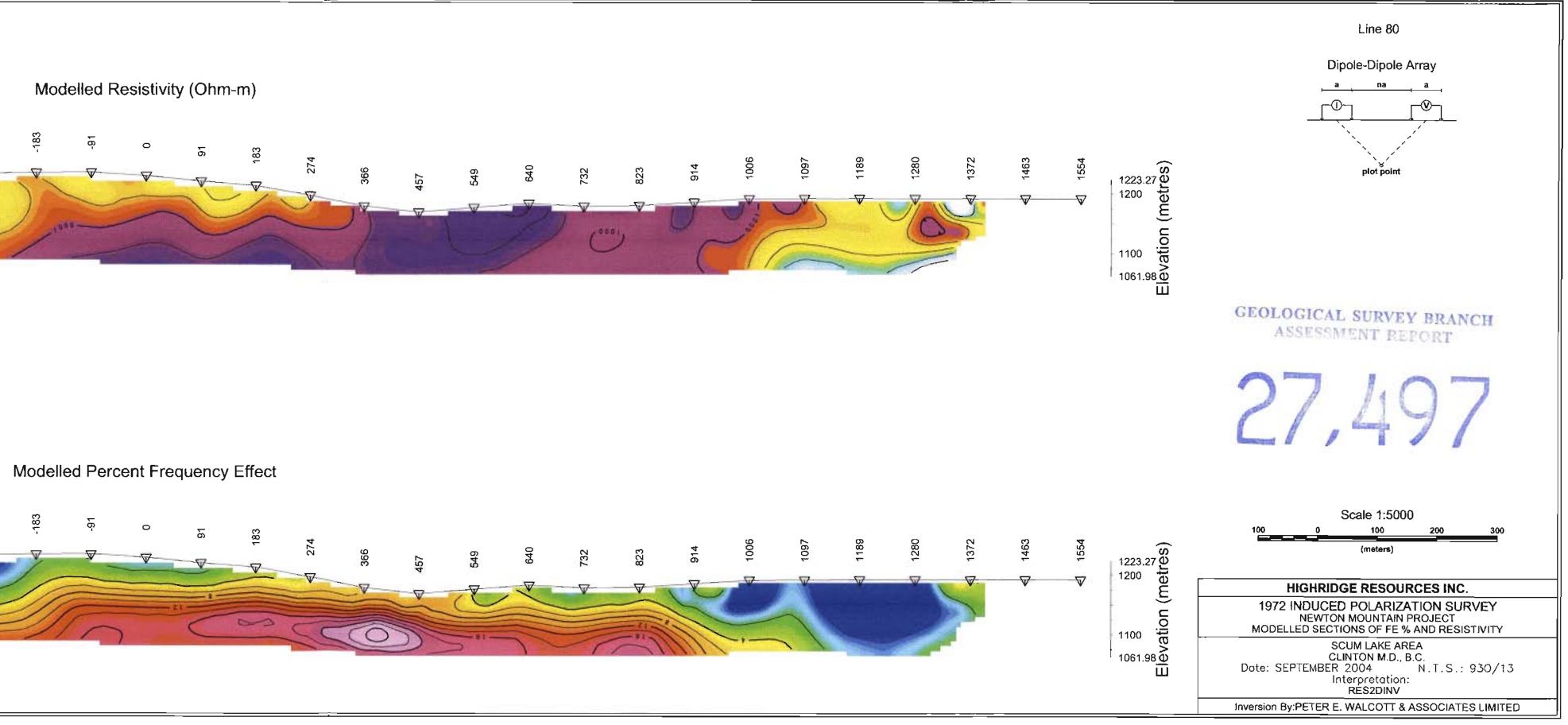


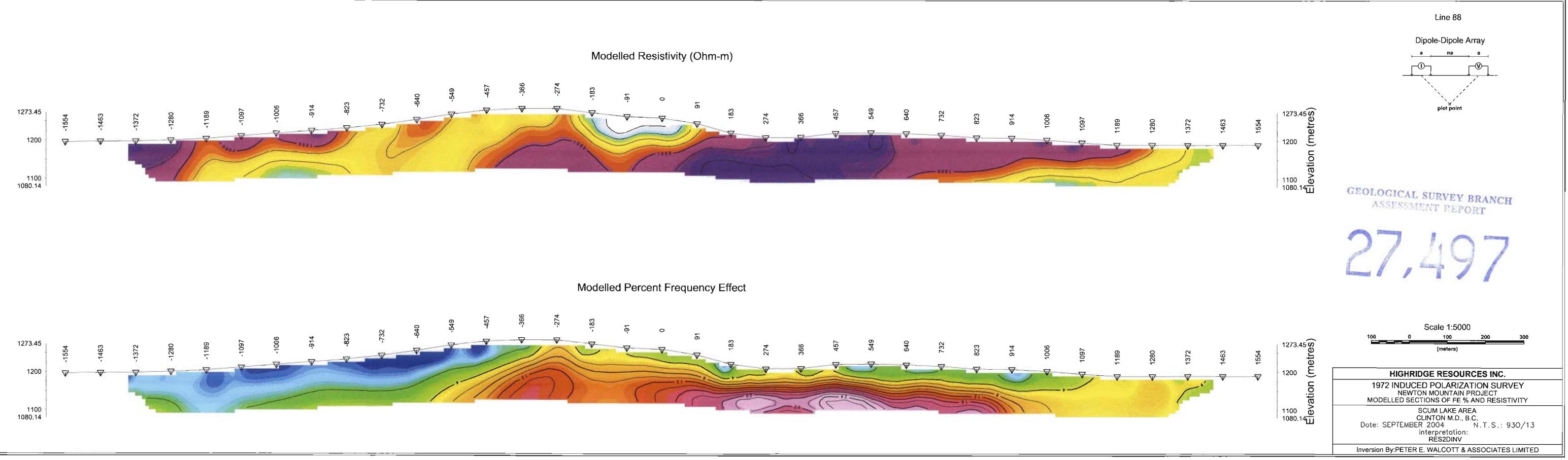


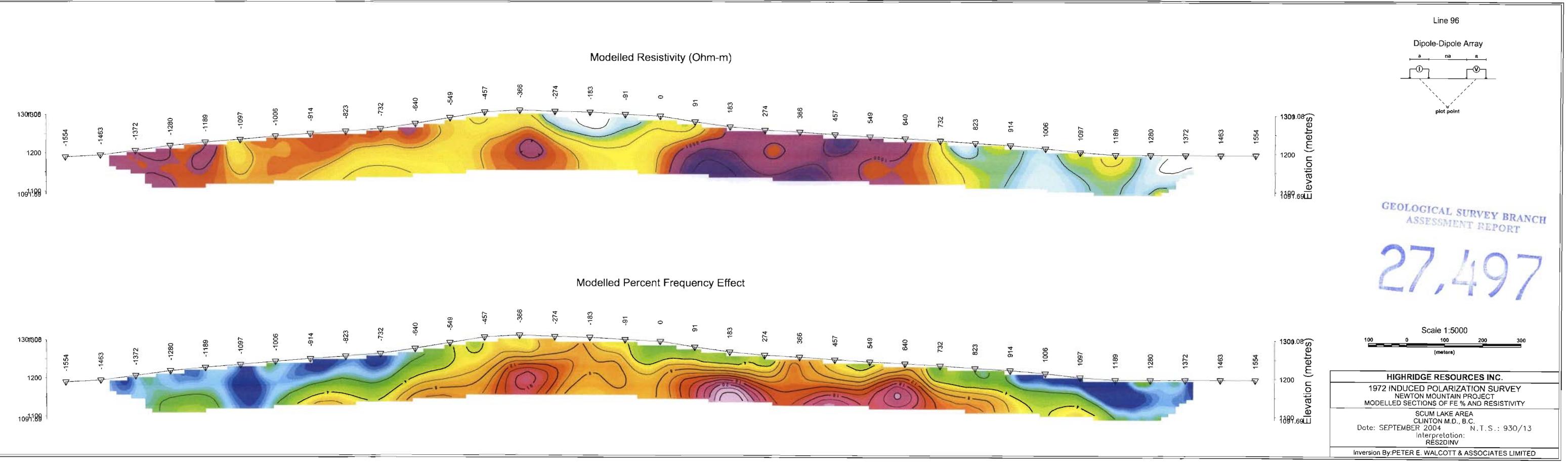


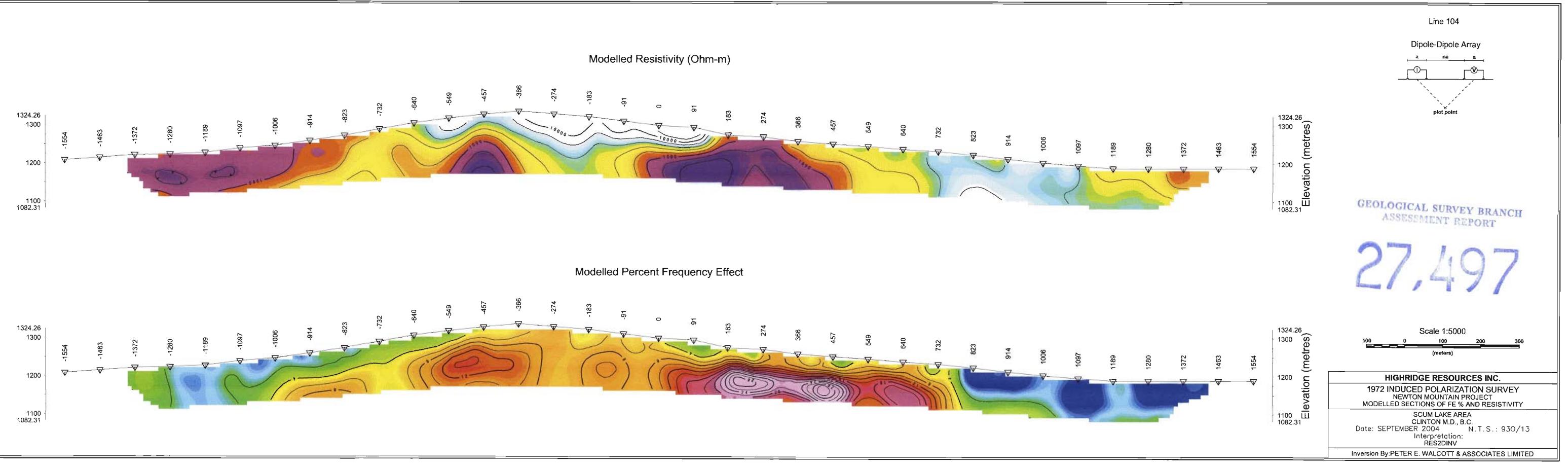
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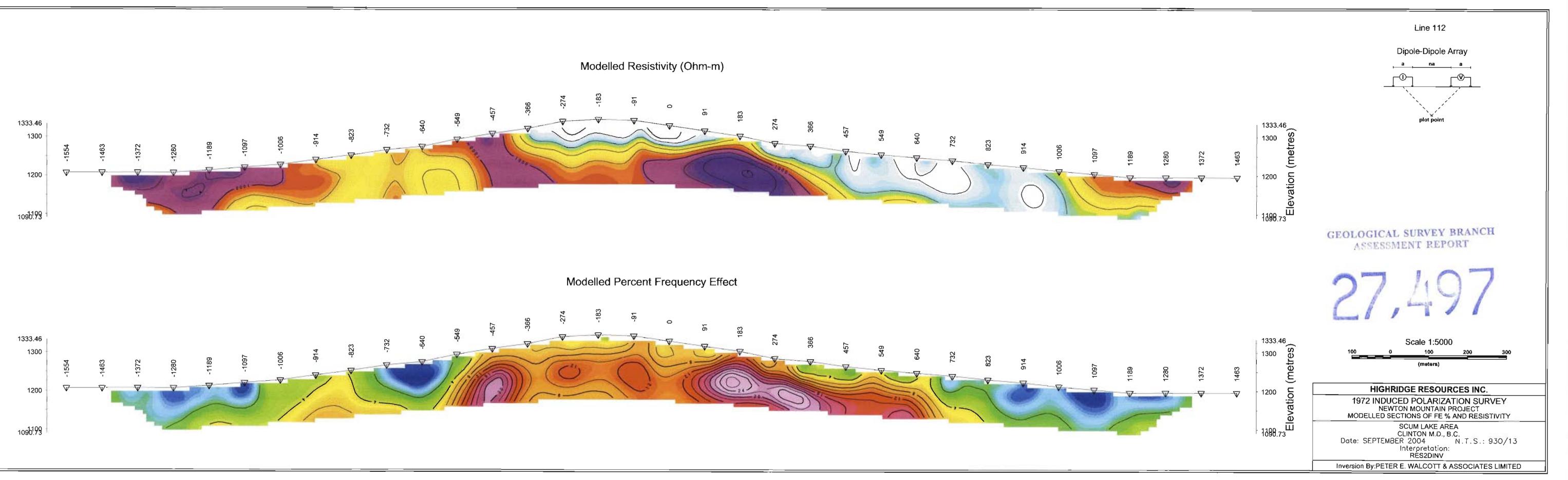


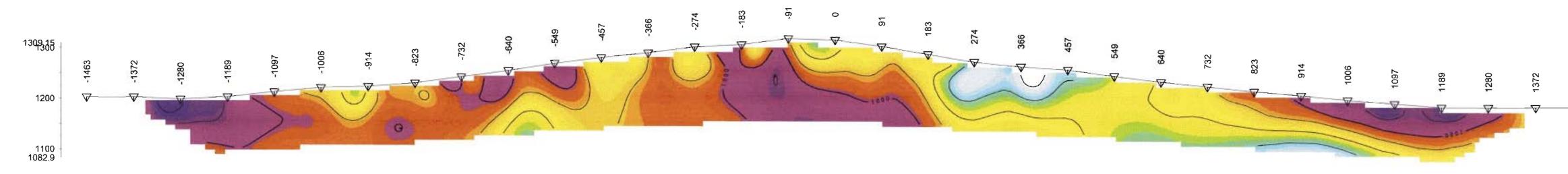


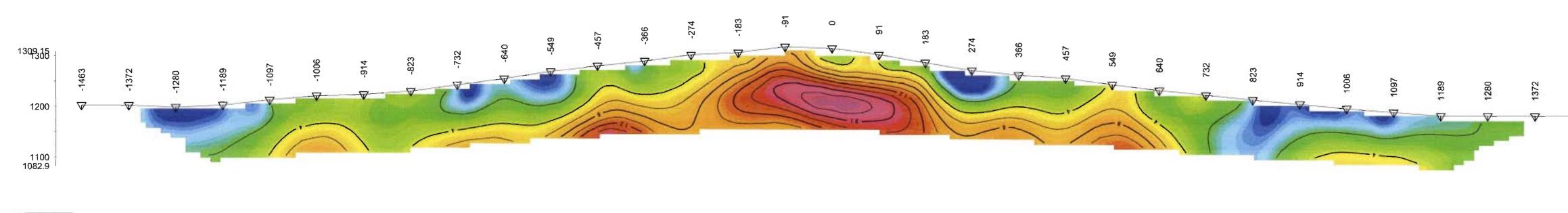












Modelled Resistivity (Ohm-m)

Modelled Percent Frequency Effect

