Geophysical Interpretation

on a

Fixed Source Genie Electromagnetic Survey

for

Agate Bay Resources Ltd.

Clearwater Property

September 21, 1993

A fixed source genie test survey was conducted on behalf of Agate Bay Resources Ltd. across a portion of a claim located southeast of Clearwater, B.C.. Prospecting in the area has uncovered massive sulphide mineralization in outcrop and a limited amount of hand trenching has been completed. A survey grid comprised of east west lines, spaced at 50 metre increments and flagged with 25 metre stations has been established across the area of interest. Hand specimens from the trench exhibit good electrical continuity across the sulphide mineralization. A one day geophysical test was planned to determine whether an electromagnetic (EM) signature could be attributed to the observed mineralization and if so, to assist in mapping the source.

A proposed geological model suggests that the sulphide mineralization observed on the surface is part of, or origintes from, a large volcanogenic massive sulphide deposit. A steeply dipping sheet or plate-like body buried at an unknown depth was presented as a possible geological model. The fixed loop genie survey was chosen primarily because of its' ability to detect deeply buried conductive bodies as well as surface features.

One transmitter loop, approximately 300 metres square and bounded by grid co-ordinates 9825E to 10125E and 9900N to 10200N was set up to the west of the area of interest. Six lines, 9900N to 10150N inclusive, were surveyed at this time. Amplitude ratios for four frequency pairs (112/37, 337/37, 1012/37 and 3037/37) were recorded at 12.5 metre station increments along the lines and these data are plotted in stacked profile format as figures 1 to 4.

The anomalies described below and flagged on the stacked profile maps are all low in amplitude however they are evident in all four frequency pairs, indicating a relatively high conductivity to the source bodies. The responses at the lowest frequencies (112 / 37) appear to be slightly offset from those at the higher frequencies although they delineate similiar trends.

A well defined positive bias was observed in the data, suggesting that the area surveyed is underlain by a flat or shallow dipping layer or sheet of high conductivity material. One genie response traces the western edge of this sheet and defines a strike of approximately 348°. This edge passes through the mineralized trench at line 10000N, station 10306E, suggesting that the massive sulphides observed may be the source.

The bulk of the conductivity features observed are located to the east of this lineation and appear to be generated by near surface bodies. Their character is indistinct however they appear to form northerly to northwesterly trending lineations. Two interpretations of these features are considered. First, the anomalies could be reflecting areas where the interpreted flat-lying sheet is closest to the ground surface. A second possibility is that the anomalies reflect zones of higher conductivity within the larger sheet.

No deep seated conductivity targets were observed in this data. However, the presence of a near surface conductive sheet will to some degree mask the response to deeper sources therefore these targets can not be dismissed at this time. Attempts to locate and identify a large, massive sulphide body buried beneath a conductive sheet will require surveying with a much larger transmitter loop than used during this test. Additionally, survey lines will need to be extended in order to provide more surface coverage.

The conductivity lineations highlighted on the attached maps represent areas which should be explored for near surface massive sulphide mineralization. A horizontal loop EM technique, such as a moving source genie or Max-Min, tuned to detect shallow targets will provide the best definition (strike, depth, dip) of these anomalies. The geophysical targets are all very near the ground surface and although shallow drilling may be required in some areas, trenching will likely provide the most cost effective method for identifying the sources.

Apparently some magnetic data has been gathered across this area. This data should be reviewed to determine whether it supports this interpretation of the EM data.

Respectfully
per GeoSci Data Analysis Ltd.

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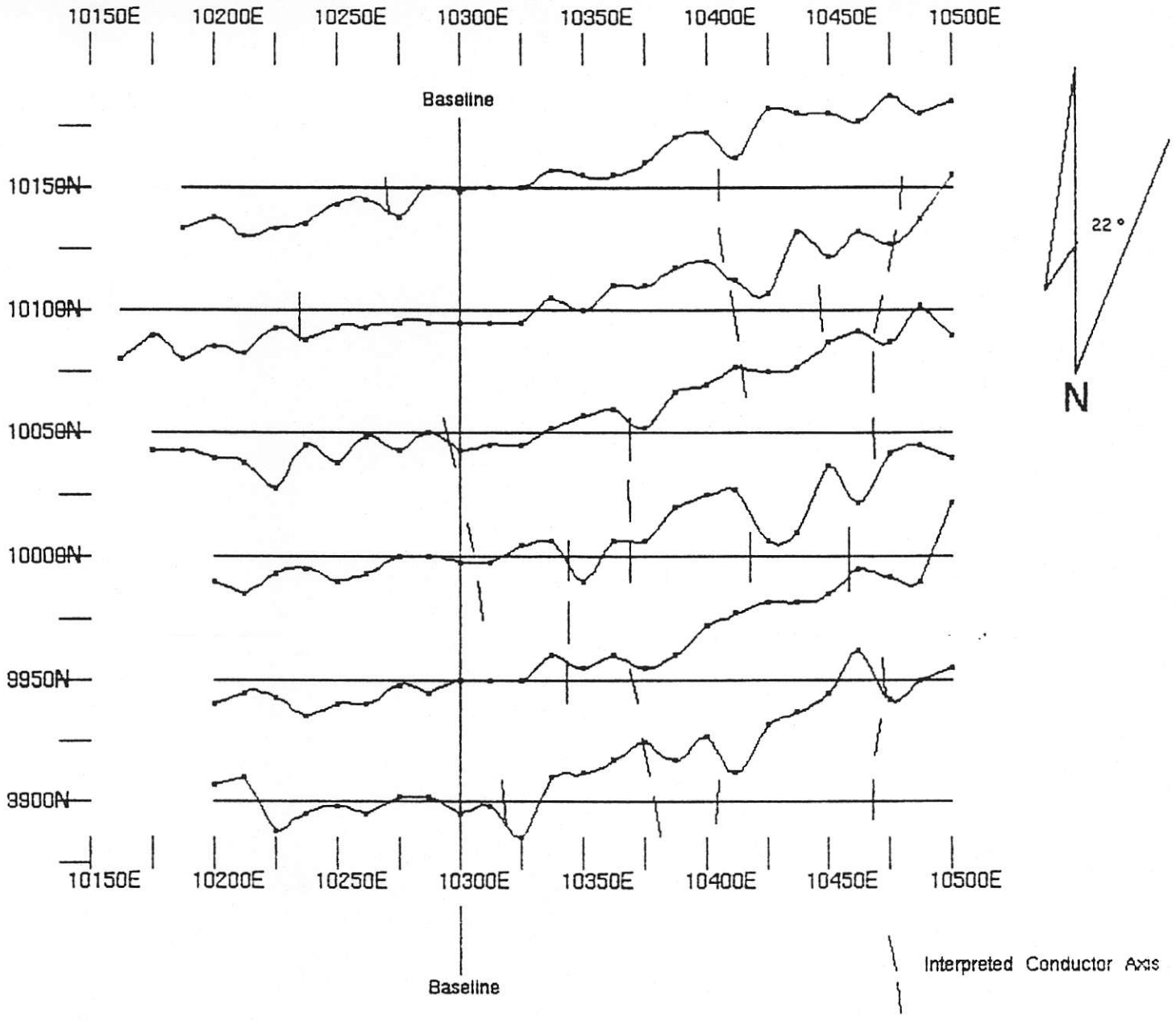
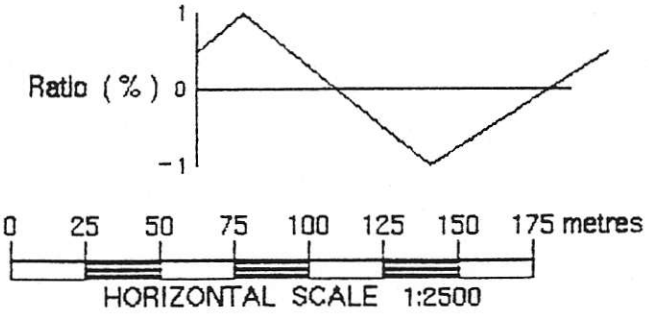


INSTRUMENTS :

Receiver : IGS–2 / EM4 Genie / Horizontal Loop

Transmitter : Scintrex TF – 2 (2.5 kW)

Transmitter Loop : Square
from 9900N to 10200N
and 9825E to 10125E



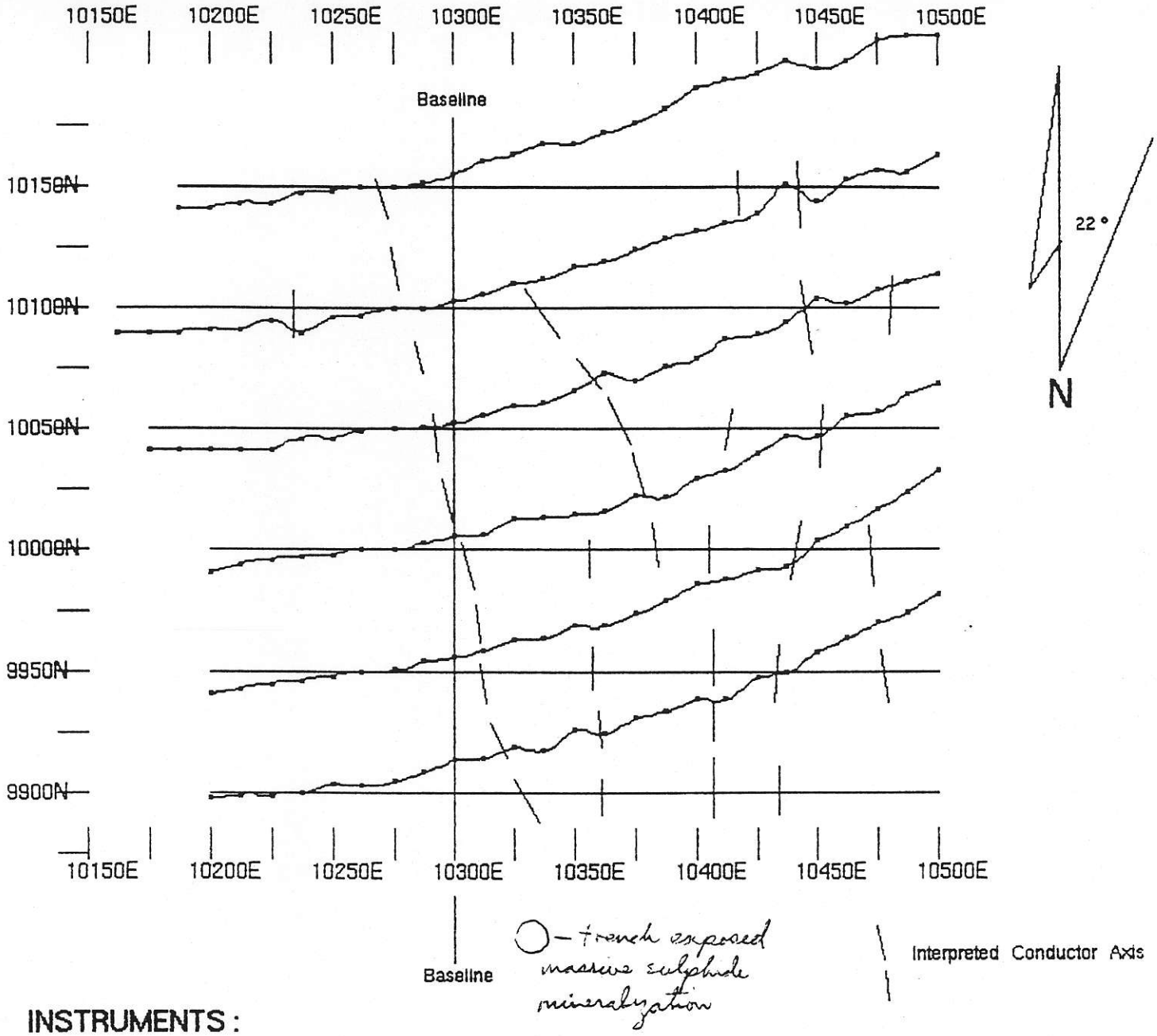
Clearwater Property
Stacked Profile Map

Genie Fixed Source
(112 Hz / 37 Hz)

GEOSCI DATA ANALYSIS LTD.

Date: September 9, 1983

Figure: 1

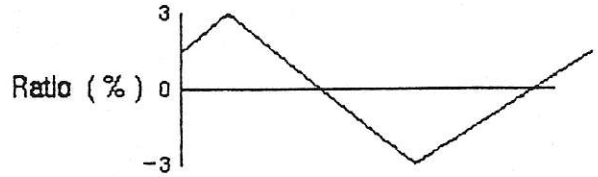


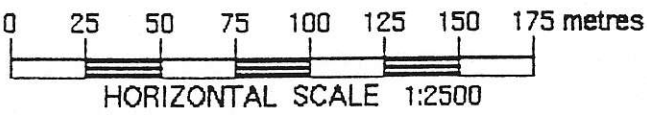
INSTRUMENTS :

Receiver : IGS–2 / EM4 Genie / Horizontal Loop

Transmitter : Scintrex TF – 2 (2.5 kW)

Transmitter Loop : Square
from 9900N to 10200N
and 9825E to 10125E





Clearwater Property
Stacked Profile Map

Genie Fixed Source
(337 Hz / 37 Hz)

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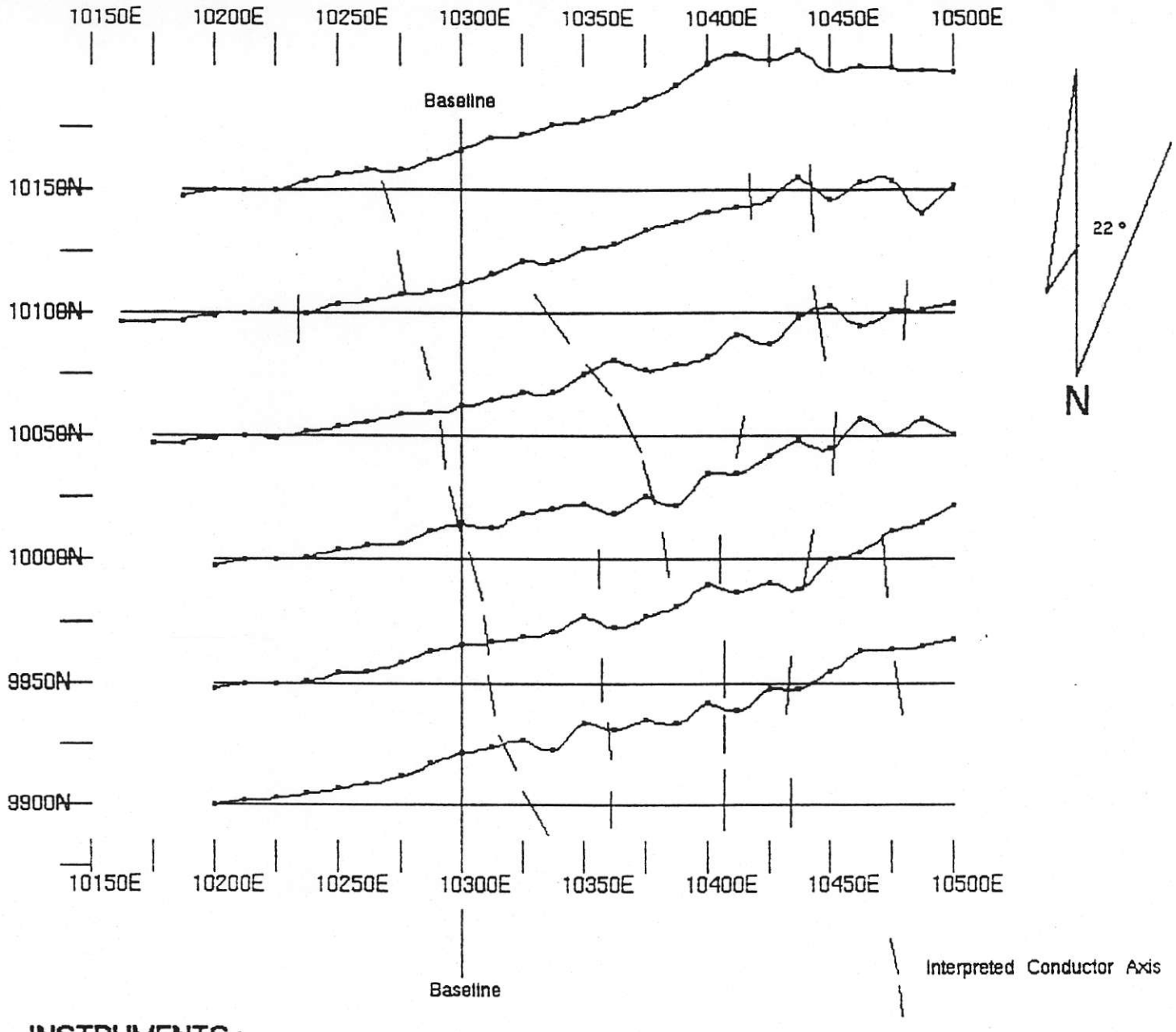
Figure: 2

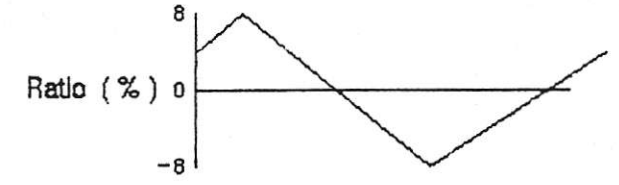


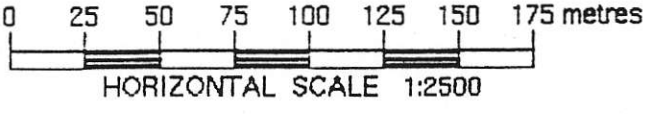
INSTRUMENTS :

Receiver : IGS-2 / EM4 Genie / Horizontal Loop

Transmitter : Scintrex TF - 2 (2.5 kW)

Transmitter Loop : Square
from 8900N to 10200N
and 9825E to 10125E





Clearwater Property
Stacked Profile Map

Genie Fixed Source
(1012 Hz / 37 Hz)

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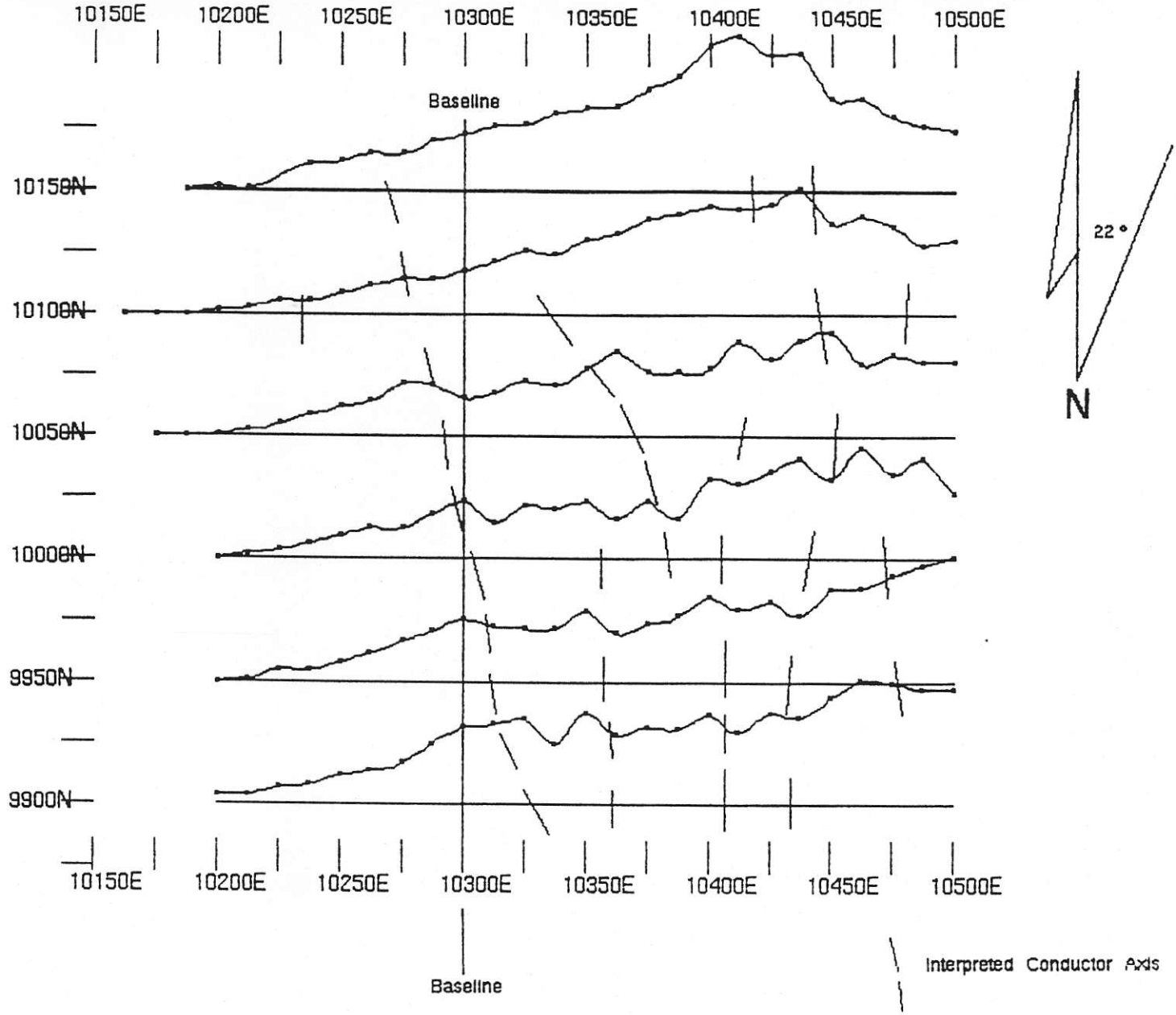
Date: September 9, 1993

Figure: 3

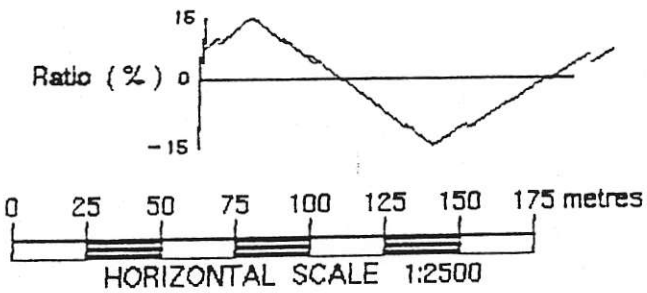


INSTRUMENTS :

Receiver : ~~IGS-2 / FM4 Genie / Horizontal Loop~~

Transmitter : Scintrex TF – 2 (2.5 kW)

Transmitter Loop : Square
from 9900N to 10200N
and 9825E to 10125E



Clearwater Property
Stacked Profile Map

Genie Fixed Source
(3037 Hz / 37 Hz)

GEOSCI DATA ANALYSIS LTD.

Date: September 8, 1993

Figure: 4