ARIS SUMMARY SHEET

District Geologist, Smithers — Off Confidential: 89.02.11

ASSESSMENT REPORT 17061 — MINING DIVISION: Omineca

PROPERTY: Argus
LOCATION: LAT 57 20 00 LONG 126 58 00
UTM 09 6356108 622408
NTS 094E07W
CLAIM(S): Ian,Otto,Adrian,Paul,Argus 1-2
OPERATOR(S): Barytex Res.
AUTHOR(S): Seywerd, J.;Bekdache, M.
REPORT YEAR: 1987, 55 Pages
COMMODITIES SEARCHED FOR: Copper,Gold,Silver,Lead,Zinc
GEOLOGICAL SUMMARY:

The claims are underlain by Middle Jurassic Toodoggone Volcanics and the Lower Jurassic Hazelton Group in fault-contact in the center of the property. A monzonite intrusive is also present.

WORK DONE: Geological,Geochemical,Geophysical
GEOL 20.5 ha
IPOL 7.2 km
Map(s) - 4; Scale(s) - 1:2500
ROCK 94 sample(s) ;CU,PB,ZN,AG,AU
SOIL 67 sample(s) ;CU,PB,ZN,AG,AU

RELATED REPORTS: 09001,10294,16043
MINFILE: 094E 028,094E 029

BARYTEX RESOURCES CORP.
GEOLOGICAL REPORT ON
OTTO, PAUL, ADRIAN, IAN and
ARGUS 1 & 2 CLAIMS
OMINECA MINING DIVISION
LATITUDE: 57°20'N LONGITUDE: 126°58'W
NTS 94E/7W

AUTHORS: Mohamad Bekdache, B.Ing.,
Geological Engineer
Josef Seywerd
Geologist

DATE OF WORK: August 21,22,24,26, 1987
DATE OF REPORT: November, 1987

TABLE OF CONTENTS **PAGE**

ILLUSTRATIONS

SUMMARY

The **Argus Group** claims are mostly underlain by two sequences of volcanic rocks of Jurassic age. The Toodoggone volcanics and the Hazelton Group are in contact-fault on the central area of the property. The erosion of the volcanics along their contact displays a monzonite intrusive and bedrock of Lower to Middle Jurassic age.

The monzonite intrusive appears to have been structurally deformed by a network of intersecting faults displaying a block faulting system structure of the bedrock underlying the volcanics.

The mineralization is hosted primarily by the Toodoggone volcanic rocks lying on the west side of the property and, it's structurally located in a subhorizontal contact layer inserted between the monzonite bedrock and the base of the volcanics. The mineralization appears to be channeled by minor faults bordering steps of the block faulting system near felsic porphyry intrusions.

INTRODUCTION

A regional program consisting of geologic mapping, multipole induced polarization and geochemical sampling was conducted in the Toodoggone Gold Belt area in August, 1987. The intention of this survey was to geologically map and sample the area with particular attention to magnetometer lows. Geochemical surveys were then made over those magnetometer lows covered by overburden. White Geophysical has been commissioned by **Barytex Resources Corp.** to review and analyze the data gathered across **Ian, Adrian, Paul Otto and Argus 1&2.** In this report the claims will be referred to as the **Argus Group.**

One Grid of soil sampling was carried out on the **Argus Group** claims for a total of 67 geochemical samples; and 94 rock samples were taken from this property. Eight lines of Multipole induced polarization were also run on two former Grids of soil sampling showing gold anomalies.

PROPERTY

The six claims studied are comprised of 88 contiguous units as described below and illustrated in Figure 1. These claims are owned by **Rhyolite Resources Ltd.** of Vancouver and have been known as the **Argus** group.

CLAIM NAME	RECORD NO.	UNITS	RECORD DATE
IAN	6911	20	March 25,1985
ADRIAN	6911	20	March 25,1985
PAUL	6911	20	March 25,1985
OTTO	6911	12	March 25,1985
ARGUS 1	7313	4	Sept. 17,1985
ARGUS 2	7314	6	Sept. 17,1985

LOCATION AND ACCESS

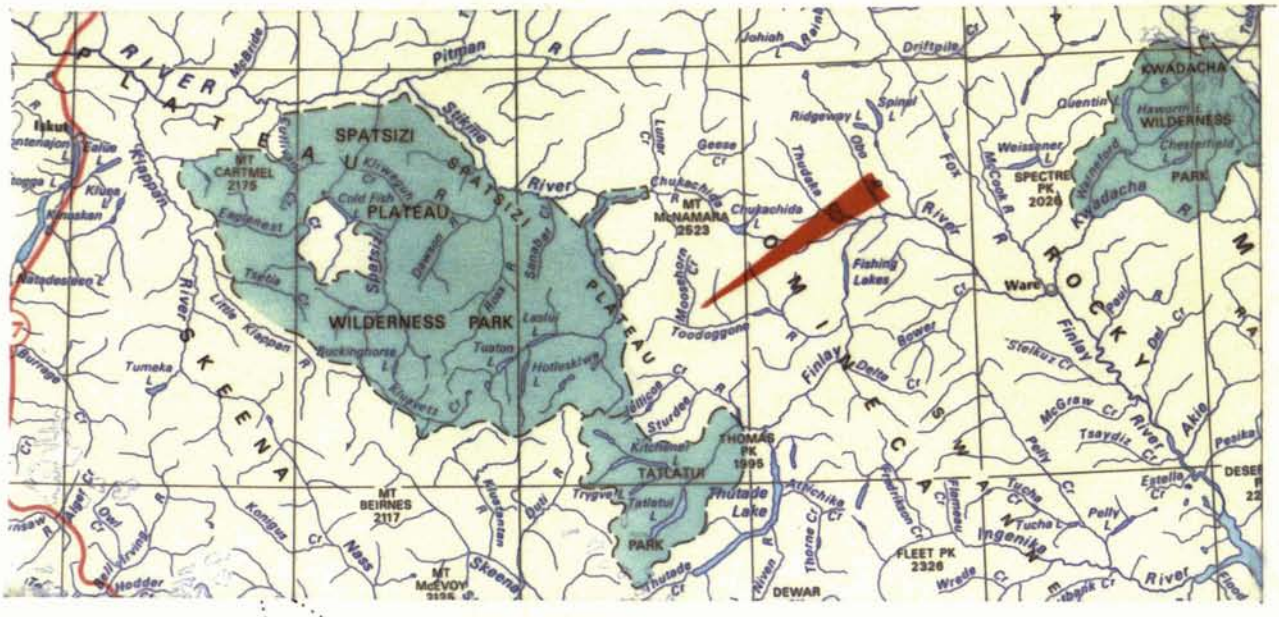
The Toodoggone River area is located approximately 280 kilometres north of Smithers, B.C. The subject claims are located some 9 kilometres south of Toodoggone Lake and 17 km northeast of the Sturdee River airstrip in NTS 94E/7W and the Omineca Mining Division. Approximate geographical coordinates of the centre of the claims are latitude 57°20'N and longitude 126°58'W.

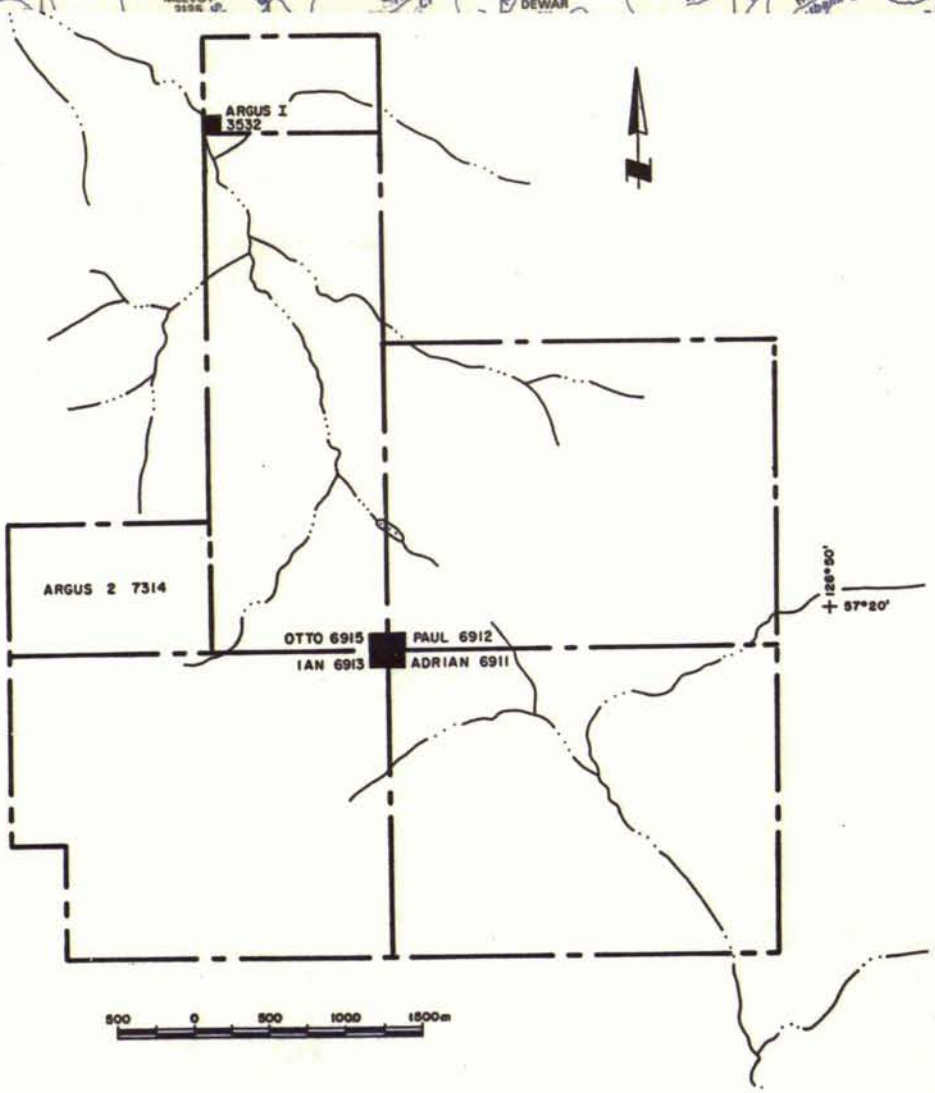
Access to the area is normally achieved via fixed wing aircraft from Smithers, B.C. to the Sturdee River airstrip. Historically, a number of helicopter companies have established summer bases at the Sturdee River airstrip and have been available for casual charter to nearby areas.

PHYSIOGRAPHY

The Toodoggone area lies between an elevation of 1200 to 2300 metres. The **Argus Group** lies between 1400 to 2000 metres. Glacial till is generally confined to the valley creeks up to 1600 metres of elevation. The rest of the properties area presents plenty of outcrops on ridges overlying terraces of valley head glaciers. Three small lakes lying at the common boundary of the **Otto and Paul** claims (near the L.C.P.) are starting points for two major creeks draining in opposite directions. These two major creeks intersect minor creeks draining from the west and the east side of the central valley. This valley crosses the property along the **Argus 1, Otto, Paul and Adrian** claims.

Most of the property is above tree line and is covered with patches of small scrubby trees and grasses.





BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP
LOCATION AND CLAIMS MAP

FIGURE 1

The Toodoggone area has a northern continental climate with warm summers and cold winters. Snow cover is generally moderately deep, reaching up to 8 feet packed snow by the end of winter.

HISTORY

The Toodoggone area was investigated for placer gold in the 1920's and 1930's. A public company, Two Brothers Valley Gold Mines Ltd., undertook considerable test work, including drilling in 1934. Most of this work was directed towards the extensive gravel deposits lying principally near the junction of McClair Creek and the Toodoggone River.

Gold-silver mineralization was discovered on the Chappelle (Baker Mine) property by Kennco Explorations (Western) Ltd. in 1969. DuPont of Canada Exploration Ltd. acquired the property in 1974 and began production at a milling rate of 90 tonnes per day in 1980.

Numerous other gold-silver discoveries were made in the 1970's and 1980's, including the Lawyers deposit which was discovered by Kennco in 1973 and optioned by SEREM Ltd. in 1979. Work on this property to date has included considerable trenching, drilling and underground development. Currently, a feasibility study is underway.

Although at this time only a small portion of the whole belt has been explored at depth, seven properties already show outlined gold-silver reserves. Of these, the three best known ones are: Baker Mines (Multinational) 52,000 tonnes 1.07 oz/tonne Au, 23.2 oz/tonne Ag, Lawyers (Serem Inc.) 561,000 tonnes 0.21 oz/tonne Au, 7.1 oz/tonne Ag; Al (Energex Minerals Ltd.) 160,000 tonnes 0.37 oz/tonne Au. Subsequently, the Lawyers reserves were increased to 1,400,000 tonnes of unknown grade.

The Toodoggone area has therefore been the scene of intense exploration activity during the past five years with numerous companies exploring more than 3,000 mineral claim units.

A regional program, constituting a survey of over 10,000 line kilometres of airborne magnetometer and VLF-electromagnetometer was conducted in the Toodoggone Gold Belt area in early 1986 by Western Geophysical Aero Data Ltd. The magnetic data is available in contour form, and the VLF-EM data in profile format. This data was used to assist both the reconnaissance work, and the final geological mapping presented in this report. The magnetic data is used for mapping both regional and local geological structures. Localized variations were attributed to lithological changes and two distinctive magnetic signatures were identified. Firstly, Jurassic intrusions appear as magnetic highs. Secondly, major fault and shear zones appear as linear magnetic lows. The magnetic responses were interpreted as reflecting only the general geological environment, and does not map any mineralization directly.

The VLF-EM data was used to locate lineations inferred to drainage channels, conductive overburden lenses, faults, shears, alteration zones, disseminated and massive sulphide bodies.

The first recorded geological work done in the claim area was in 1981 when SEREM Ltd. conducted a reconnaissance geological and silt geochemical survey over what was then their Argus 1-4 group. Although stream geochemical anomalies were found, the claims were allowed to lapse.

Geological and geochemical work on the ATLAS-HERCULES claim group to the south, done in 1981 and 1985, uncovered a

quartz-calcedony, breccia with assay of up to 2.6 oz/t silver (over 7m) and to .024 oz/t gold (over 5 meters).

The **Argus** property was acquired by **Rhyolite Resources Ltd.** after a large silt and soil geochemical anomaly was discovered. 1985 exploration work included geological mapping and geochemical surveys. Assays of mineralized rock returned up to 180 ppb Au, 3.8 ppm Ag and .91% Cu. Both silt and soil surveys returned highly anomalous precious and base metal values, and one quartz vein assayed 180 ppb Au, 4.6 ppm Ag, 910 ppm Pb and 5,600 ppm Zn.

Rhyolite Resources Ltd. commissioned Western Geophysical Aero Data Ltd. to process and interpret magnetometer and VLF-electromagnetometer data gather across the **Argus Group** claims. The data was gathered as part of the regional program completed in early spring of 1986. Two hundred kilometres of survey data has been examined to evaluate the subject claims. Five areas have been outlined as "Areas of Interest". Zones of interest on the magnetic map have been chosen over lows adjacent to intrusives, and over the major low including quartz zones.

1987 WORK PROGRAM

In late August 1987, field work was carried out by Josef Seywerd, Mohamad Bekdache and technicians. The following survey was carried out:

1) Geological mapping was carried out by J.Seywerd and M.Bekdache at a scale of 1:25000.

2) Rock chips were taken from unexplored ridges and hills near former Grid of soil sampling. A total of 94 samples were taken from this property.

3) One grid preparation 'B' horizon soil sampling was carried out by M.Niedswicki, G.Hagguist, P.Judson and L.Morgan. The grid was tied to the intersection of two creeks on the **Adrian** claim. A total of 67 samples were collected at 50 meter stations along lines spaced 200 metres apart, and oriented 50°NE with 26°E declination.

4) Multipole induced polarization was carried out over five 850m lines oriented 30°N on the **Paul** claim, and over two 950m lines and one 600m line oriented 90°E on the **Ian** claim.

REGIONAL GEOLOGY

The general geology of the area is shown on "Preliminary Map 61, "B.C. Ministry of Energy, Mines and Petroleum Resources by L.J. Diakow, A. Panteleyev and T.G. Schroeter, 1985 (on Open File), and Geologic Survey of Canada, by H. Gabrielse, C.J. Dodds, J.L. Mansy and G.H. Eisbacher, 1977 (Figure 2).

The Toodoggone River area is set within the Intermontaine Belt. The main geologic units are the Upper Cretaceous Sustut Group, Jurassic undivided volcanics of Hazelton group, the Upper Triassic Takla Group and Permian carbonate units thought to belong to the Asitka Group. Several intrusive bodies of quartz monzonitic to grano-dioritic composition, irregular in size and shape (belonging to the Omineca Intrusives) intruded the volcano-sedimentary complex in several localities. Swarms of dykes and small stocks are related to these intrusions.

A distinctive volcanogenic complex of early Jurassic age (called the Toodoggone volcanics) consisting of a subaerial pyroclastic assemblage with mostly andesitic composition is widely spread through the Toodoggone River area. This complex seems to be equivalent to the lower part of the

Hazelton group, and is probably associated with the Omineca Intrusions.

From the paleogeographic interpretation, it seems that the following sequence of events contributed to today's existence and distribution of stratigraphic units.

The Asitka group limestones were deposited in a marine environment. The Takla rocks are the product of a volcanic event that may have been accompanied by an uplift of the whole area (possibly changing the environment from submarine to sub-areal). The result is a complex of interlayered volcanic and sedimentary units. This was followed by a period of regression and related deformations. Next was a volcanic episode during which the Hazelton volcanics and related cyclic Toodoggone Volcanic rocks were formed. In the Toodoggone Belt, the event started with a quartzose acidic extrusion, followed by a mafic extrusion, and then by several intermediate extrusions. Much of the volcanics were porphyritic flows but within each cycle there are pyroclasitic units and conglomerates, lahars and sandstones (reworked pyroclastics).

Of the structural elements, the most prominent are three fault zones, trending northwest-southeast, which are intermittently exposed where outcrop is developed and are clearly outlined by the airborne geophysics. They had a major role not only in the distribution of geologic units, but also in the deposition of minerals. The same northwest-southeast trend is also the general strike of the majority of the lithostratigraphic members.

Local uplifts accompanying intrusions resulted in several domal structures, characterized by a circular distribution of volcano-sedimentary units surrounding an intrusive core.

QUATERNARY

LEISTOCENE AND RECENT

UNCONSOLIDATED GLACIAL, FLUVIOGLACIAL, ALLUVIAL, AND COLLUVIAL DEPOSITS

CRETACEOUS

PPER CRETACEOUS

SUSTUT GROUP *(TANGO CREEK FORMATION)*

K — POLYMICTIC CONGLOMERATE, SANDSTONE, SHALE, CARBONACEOUS MUDSTONE

IASSIC

_OWER AND (?) MIDDLE JURASSIC

"TOODOGGONE VOLCANICS" - (?) HAZELTON GROUP

) — UNDIVIDED: PREDOMINANTLY GREY, GREEN, PURPLE AND ORANGE-BROWN HORNBLENDE PLAGIOCLASE AND PLAGIOCLASE PHYRIC ANDESITE PORPHYRY FLOWS, TUFFS, BRECCIA, SOME LAHAR, CONGLOMERATE, GREYWACKE, SILTSTONE, RARE RHYOLITE-PERLITE. INCLUDES SOME DYKES AND SILLS

LOWER TO MIDDLE JURASSIC

"TOODOGGONE VOLCANICS" (CARTER, 1972)

"GREY DACITE"

8 — DARK TO PALE GREY OR GREEN QUARTZOSE BIOTITE HORNBLENDE PLAGIOCLASE ASH FLOWS OF ANDESITIC AND RARELY DACITIC COMPOSITION. VARIABLY WELDED WITH LOCALLY WELL-DEVELOPED COMPACTION LAYERING. CONTAINS ABUNDANT GREY DACITE AND RARE GRANITIC CLASTS. OUTCROPS ARE COMMONLY BLOCKY AND STRONGLY JOINTED — 182 ± 8, 183 ± 8 Ma (GSC) HORNBLENDE

8A — POLYMICTIC CONGLOMERATE WITH ABUNDANT TAKLA AND GREY DACITE CLASTS IN A QUARTZOSE SANDSTONE MATRIX

8B — GREYWACKE, CONGLOMERATE DERIVED ENTIRELY FROM GREY DACITE

TOODOGGONE CRYSTAL ASH TUFFS AND FLOWS

7 — RECESSIVE, GREY, MAUVE, PURPLE QUARTZOSE PLAGIOCLASE CRYSTAL TUFF, LAPILLI TUFF, AND BRECCIA, WITH LESSER AGGLOMERATE, LAHAR, AND EPICLASTIC BEDS; INCLUDES SOME WELDED TUFFS AND PYROXENE HORNBLENDE FELDSPAR PORPHYRY FLOWS WHICH ARE LOCALLY DOMINANT. SOME MEMBERS CONTAIN NO QUARTZ. PINK WEATHERING WHERE LAUMONTITE IS ABUNDANT — 189 ± 6 Ma HORNBLENDE

7A — *EPICLASTIC RED BEDS* — ARKOSIC SANDSTONE, SILTSTONE, CONGLOMERATE, AND SLIDE DEBRIS. CONTAINS SOME CRYSTAL TUFF

TUFF PEAK FORMATION

6 — PALE PURPLE, GREY, AND GREEN BIOTITE AUGITE HORNBLENDE PLAGIOCLASE PORPHYRY FLOWS, SOME AUTOBRECCIATED FLOWS, MINOR SILLS AND PLUGS, SOME CRYSTAL AND LAPILLI TUFF — 197 ± 7 Ma BIOTITE, 200 ± 7 Ma HORNBLENDE

6A — CONGLOMERATE OR LAHAR DERIVED FROM UNITS 6 AND 6B, WITH GRADED AND CROSSLAMINATED MUDSTONE AND SANDSTONE INTERBEDS, DEBRIS FLOWS, LAPILLI AND CRYSTAL TUFFS

6B — FLOWS SIMILAR TO UNIT 6 BUT CONTAINING SPARSE ORTHOCLASE MEGACRYSTS

McCLAIR CREEK FORMATION

5 — PURPLE, LAVENDER, GREY RARELY GREY-GREEN, "CROWDED" FINE TO MEDIUM-GRAINED PLAGIOCLASE PORPHYRITIC FLOWS. INCLUDES SOME LAPILLI TUFF, BRECCIA, AND MINOR EPICLASTIC BEDS

5A — INTRUSIVE DOME WITH AUTOBRECCIATED CARAPACE AND FLANKING BRECCIA

MAFIC FLOW AND TUFF UNIT

4 — *BASALT FLOWS*— THIN BEDDED, PURPLE TO DARK GREEN, COMMONLY EPIDOTIZED, FINE-GRAINED PYROXENE BASALT FLOWS AND TUFFS. INCLUDES SOME SILLS AND DYKES

4A — PURPLE TO MAUVE, MEDIUM-GRAINED PORPHYRITIC BASALT, LOCALLY MAUVE TO PINK, ZEOLITIZED WITH LAUMONTITE. POSSIBLE INTRUSIVE (LACCOLITH)

4B — LAPILLI, CRYSTAL, AND ASH TUFF; WELL BEDDED. INCLUDES MINOR THINLY BEDDED SANDSTONE AND RARE CALCAREOUS SILTSTONE (MARL) TOTALLY OR IN PART EQUIVALENT TO UNIT 7

4C — PYROXENE BIOTITE HORNBLENDE PORPHYRY FLOWS WITH TRACES OF QUARTZ AND K-FELDSPAR, INTERBEDDED MINOR BRECCIA AND LAPILLI TUFF, TOTALLY OR IN PART EQUIVALENT TO UNIT 6

JURASSIC *(CONTINUED)*

LOWER TO MIDDLE JURASSIC *(CONTINUED)*

"TOODOGGONE VOLCANICS" (CARTER, 1972) *(CONTINUED)*

LAWYERS—METSANTAN QUARTZOSE ANDESITE

3 — GREEN TO GREY QUARTZOSE PYROXENE (?) BIOTITE HORNBLENDE PLAGIOCLASE PORPHYRY FLOWS AND TUFFS. QUARTZ CONTENT RANGES FROM NEGLIGIBLE TO ABOUT 3 PER CENT IN THE NORTH. FLOWS PREDOMINATE WITH LOCAL FLOW BRECCIA, LAPILLI TUFF, AND RARE WELDED TUFF UNITS. TOWARD THE SOUTH ASH FLOWS ARE COMMON, INCLUDING RARE SURGE DEPOSITS. THE UNIT CONTAINS EXTENSIVE ZONES OF EPIDOTIZED, PYRITIC ROCK WITH CHARACTERISTIC SALMON, PINK, AND ORANGE PLAGIOCLASE CRYSTALS — 168 ± 6 Ma HYDROTHERMAL ADULARIA

MOYEZ CREEK VOLCANICLASTICS

2 — CONGLOMERATE WITH SOME GRANITIC CLASTS, GRADED, CROSS-BEDDED GREYWACKE, WELL-BEDDED CRYSTAL TUFF, EPICLASTIC SEDIMENTS; LOCAL LAMINATED CALCAREOUS SILT (MARL). RARE THIN LIMESTONE AND CHERT. LOCAL COARSE LANDSLIDE DEBRIS AND LAHAR. IN PART OR TOTALLY EQUIVALENT TO UNIT 6A

2A — CRYSTAL TUFFS IN THIN, WELL-LAYERED UNITS, SOME EPICLASTIC SANDSTONE AND MUDSTONE. RARE PLANT FRAGMENTS IN SOME BEDS. MINOR LAPILLI TUFF

ADDOOGATCHO CREEK FORMATION

1 — PALE REDDISH GREY TO DARK RED-BROWN QUARTZOSE BIOTITE HORNBLENDE PHYRIC ASH FLOWS. THE ROCKS CONTAIN MINOR SANIDINE AND RARE AUGITE. WELDING IS WIDESPREAD AND RANGES FROM INCIPIENT TO EUTAXITIC; LOCALLY ORANGE TO BROWN VITROPHYRIC CLASTS ARE COMMON. INCLUDES LAPILLI TUFF AND BRECCIA UNITS AS WELL AS MINOR LAYERED GROUND SURGE DEPOSITS — 199 ± 7, 202 ± 7 Ma BIOTITE, 200 ± 7 Ma HORNBLENDE, 190 ± 7 Ma HYDROTHERMAL ALUNITE (WHOLE ROCK), 204 ± 7 Ma BIOTITE

1A — CRYSTAL ASH TUFF, LAPILLI TUFF, AND RARE AGGLOMERATE WITH INTERSPERSED EPICLASTIC BEDS. TUFFACEOUS SEDIMENTS AND MINOR CONGLOMERATE THAT LOCALLY CONTAINS GRANITIC CLASTS. MINOR HORNBLENDE PLAGIOCLASE PHYRIC FLOWS FORMING SINGLE OR THIN COMPOSITE FLOW UNITS

1B — *QUARTZOSE PLAGIOCLASE PORPHYRY*— JOINTED, DOMAL INTRUSION (?) OF HOMOGENOUS-APPEARING GREY TO GREEN, CHLORITIZED AND EPIDOTE-ALTERED ROCK CONTAINING ABUNDANT INCLUSIONS OF TAKLA VOLCANICS AND RARE METAMORPHIC ROCK CLASTS

TRIASSIC

UPPER TRIASSIC

TALKA GROUP

DARK GREEN AUGITE PORPHYRY BASALT FLOWS AND BRECCIAS WITH LESSER FINE-GRAINED ANDESITE TO BASALT FLOWS AND MINOR INTERBEDDED SILTSTONE, TUFFACEOUS SEDIMENTS, AND CHERT. CONTAINS LIMESTONE LENSES THAT MAY BE PART OF THE "ASITKA GROUP"

PALEOZOIC

PERMIAN

ASITKA GROUP?

PREDOMINANTLY LIMESTONE (INCLUDING MARBLE AND MINOR SKARN) WITH SOME ARGILLITE, BLACK SHALE, AND CHERT. UNITS COMPOSED OF LIMESTONE, CHERT, ARGILLITE, AND BASALT (Pv, c) MAY BE, IN PART, OR TOTALLY TAKLA GROUP

INTRUSIVE ROCKS

JURASSIC

LOWER JURASSIC (DYKES, SILLS, AND SMALL PLUGS)

A — BASALT

B — AUGITE HORNBLENDE PORPHYRY — BASALTIC STOCK, DOMAL INTRUSION (OR TAKLA INLIER) — 210 ± 6 Ma HORNBLENDE

C — BIOTITE HORNBLENDE DIORITE-GABBRO

D — PYROXENE PLAGIOCLASE PORPHYRY

LOWER TO MIDDLE JURASSIC (DYKES AND STOCKS)

QUARTZ MONZONITE, GRANODIORITE—MEGACRYSTIC IN PART, MINOR SYENITE OR QUARTZOSE SYENITE ALONG CONTACTS

E1 — GRANODIORITE, QUARTZ DIORITE — MEDIUM GRAINED, PORPHYRITIC, FOLIATED IN PART

F — FELDSPAR PORPHYRY, HORNBLENDE FELDSPAR PORPHYRY — DYKES AND PLUGS. RARE QUARTZ FELDSPAR PORPHYRY

SYMBOLS

NERAL OCCURRENCE (MINERAL INVENTORY FILE NUMBER) — × 43

MINERAL PROSPECT (MINERAL INVENTORY FILE NUMBER) — ⚒ 34

:PLORATION CAMP — ⊖

ACER WORKINGS — ⛏

PARK BOUNDARY — ——

ROAD

MAIN OUTCROP AREAS

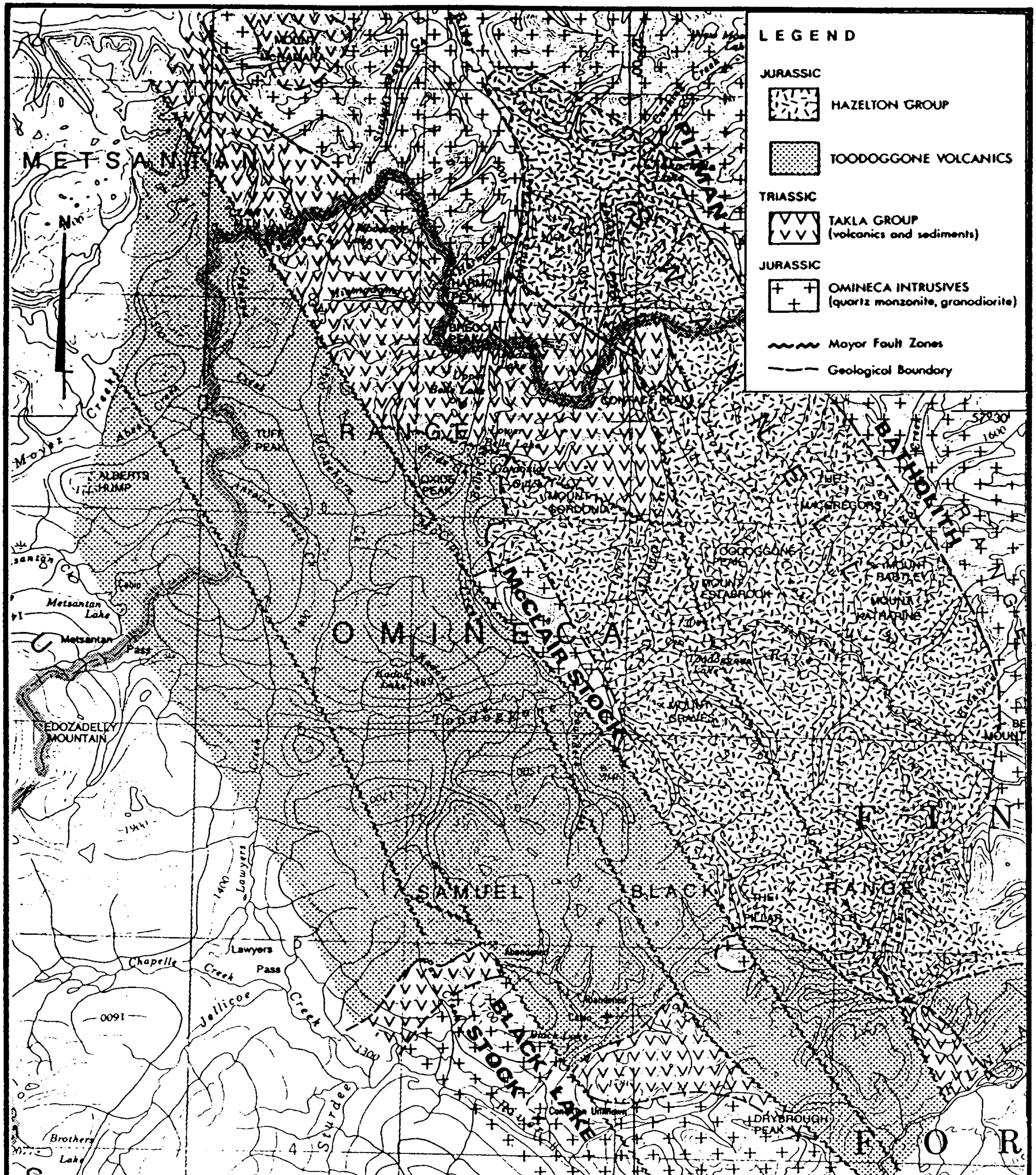
FAULT (OBSERVED, INFERRED)

THRUST OR REVERSE FAULT (OBSERVED, INFERRED)

GEOLOGIC CONTACT (DEFINED, ASSUMED)

BEDDING, LAYERING, FOLIATION (HORIZONTAL, INCLINED, VERTICAL) — + 10 /

FOLD AXES



BARYTEX RESOURCES CORP.

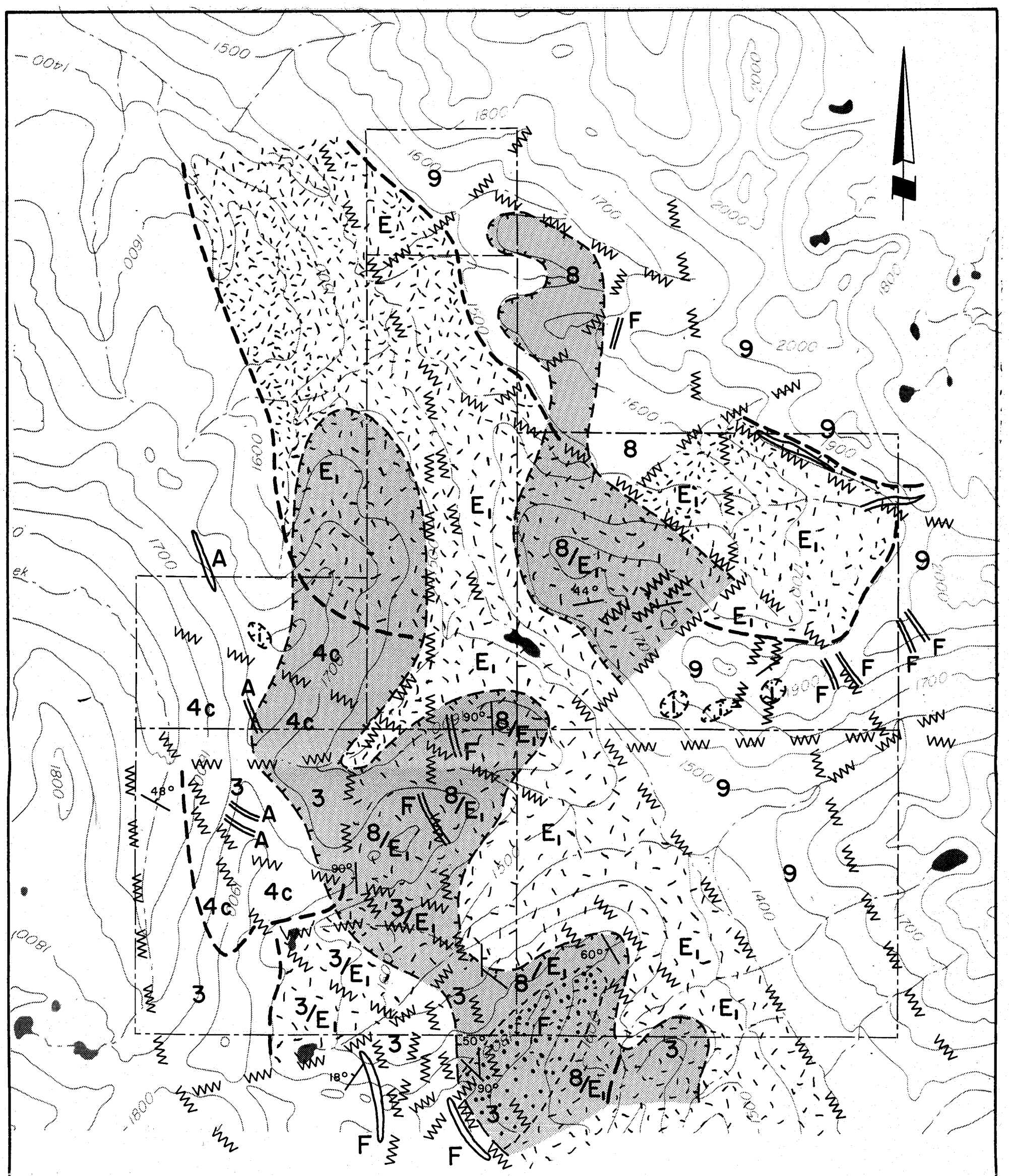
ARGUS CLAIM GROUP

REGIONAL GEOLOGY

N.T.S. 94E/7W

0 5 10 Km

FIG. 2



LEGEND

Gasson Porphyry intrusion

BARYTEX RESOURCES CORP.		
ARGUS CLAIM GROUP		
LOCAL GEOLOGY		
OMINECA M.D.		N.T.S. 94E/7W
WHITE GEOPHYSICAL INC., RICHMOND, B.C.		
DATE : NOV., 1987	SCALE : As shown	FIG. 3

The Toodoggone River area is an important host of numerous precious metal and base metal prospects. Four main mineral deposit types have been identified:

- porphyry - occurring mainly in Takla Group volcanics and Omineca intrusives.
- skarn - contact of limestones (Asitka, and some in Takla) with intrusives.
- stratabound - occurring in Takla limestones interbedded with cherts.
- epithermal - occurring mainly in Toodoggone Volcanics and in Takla rocks.

Of the four, the epithermal type is the most important, and has been divided into two subtypes: fissure vein deposits associated with fracture zones and possibly cauldera formations, and hydrothermally altered and mineralized deposits (associated with major fault zones).

The most common of the ore minerals in epithermal type deposits are argentite, electrum, native gold and silver. Of this type, the Baker Mine and the Lawyers Deposit are the two most prominent deposits in the area. For generalized geology refer to Figure 2.

LOCAL GEOLOGY

In this section the graben structure will be referred to as local Block-Faulting system.

Lithology

The claims are underlain by feldspar porphyritic flows, crystal lapilli tuffs, pyroclastic breccia, lahars and volcanically derived conglomerate, mudstone and greywacke.

These rocks are similar to the Lower Jurassic Toodoggone and Hazelton Groups described by the Legend. They are intruded by monzonite, Syenite and quartz monzonite of Lower to Middle Jurassic age. Late mafic dykes cut the entire sequence.

The Toodoggone volcanic rocks are bordered on the west, and are in fault contact with the Hazelton Group underlying the eastern half of the property area.

In addition to the abundant intrusive of mafic and intermediate dykes reported within the volcanics, there are feldspar porphyry lenses (Eyes of Quartz) reported and mapped on the southwestern corner of the **Adrian** claim, and the northeastern corner of the **Paul** claim.

Contact

The contact area between the Toodoggone volcanics and Hazelton Group rocks follow a northwesterly trending set of structures crossing the central area of the property. However, erosion cleared the contact zone on the **Otto and Adrian** claim exhibiting the Jurassic monzonite intrusive bedrock representing the southern end of McClair stock.

The flat shape of the gossan area is interpreted as roof contact between the Omineca intrusive and the volcanics laying in the property. Also, several gossans are outlined on ridges of volcanic rocks along the southern boundary of the **Paul** claim and the western boundary of the **Ian and Argus #2** claims. This feature suggests that the gossan layer continues under the ridge forming the roof contact partially exhibited and delineated on the elongated centre of the property.

Structure

The geomorphology of the property area, shows a graben structure of Omineca intrusive underlying Toodoggone volcanics. The axis of the graben is trending north-south and crossing the property along the **Otto** and the common boundary of the **Ian and Adrian** claims.

The down throw block of the graben occupies the central area of the property and it is limited by two major faults crossing the property. The up throw blocks east and west of the down throw blocks, are buried under the ridges of volcanics located at the boundary of the property. In between the two major blocks, a complex steps faults system forms small blocks. The western side of the graben, in the **Ian** claim, is a good example of high faulting activity. The eastern side of the graben is less complex, and shows two major steps. The highest steps (terraces) are located under ridges of the **Paul and Ian** claims. Those "terraces" form cirques for valley heads glaciers.

The resistance of ridges to erosion is attributed to the presence of dense and thick dikes system of mafic volcanics and feldspar porphyry as shown on the **Paul** claim. However, the ridge forming the eastern side of the **Adrian** claim is a large scale block of Omineca intrusive underlying the Toodoggone volcanics. The volcanics and sedimentary sequence has been faulted into a number of blocks. Major faults trend northwest and northeast, with minor faults trending to the north. Mafic dikes and mineralized fractures correspond to these trends.

The property area is dominated by a northwesterly trending set of structures represented by younger steeply-dipping faults and syn-volcanics half-graben margins exhibited in

Hazelton Group volcanics. These major structural breaks may be directly related to a northwest trending line of volcanic centres reported at regional scale.

Younger post volcanic and intrusive faults recognizable as lineaments on the topography also traverse the property area in a northwesterly direction. Most of the prominent gossans in the area are also aligned along this same configuration of faults.

Alteration

There are numerous gossans on the claims marked in Figure 3, and an extensive zone of disseminated pyrite and intense porphylitic (chlorite and epidote) alteration. Yellowish-white clay alteration occurs along faults. Locally, rocks are completely altered to blue-white silica with disseminated pyrite. Minor amounts of galena and malachite stain also have been found.

Outside of the porphylitic zone, chlorite and epidote are confined to fractures and narrow haloes around syenite-monzonite stocks and dykes. Rocks are extensively hematized. Vuggy quartz and calcite veins occur in a few areas.

Geochemistry

Adrian Claim

Anomalous Soil Samples

G14L0N	2+50E	15ppb Au
G14L2N	0+00E	45ppb Au
G14L2N	0+50E	15ppb Au
G14L2N	1+50E	15ppb Au
G14L8N	4+50E	1.6ppm Ag

Argus 2 Claim

Anomalous Rock Samples

106030	30ppb Au
106031	70ppb Au
106032	225ppb Au
106033	25ppb Au
106037	55ppb Au

Ian Claim

Anomalous Rock Samples

106045	50ppb Au
106558	80ppb Au
106561	30ppb Au
106562	30ppb Au

The western side of the **Ian** claim presents a large gold anomaly.

Paul Claim

Amonalous Rock Samples

106002	30ppb Au
106012	30ppb Au
106024	6000ppm Cu (boulder)
106105	30ppb Au

Alteration zones are located at the head of the Talus slope.

CONCLUSION

The mineralization process on the **Argus Group** is related to intrusive activities in both Toodoggone and Hazelton volcanics. There is no evidence of syngenetic mineralization related to the deposition of volcanics.

The intrusive activity consists of dikes and lenses of feldspar porphyry (Eyes of Quartz). The porphyry dikes on

ridges are related to buried stocks under volcanics at the contact with Omineca intrusive. The porphyry intrusives control the mineralization deposition. However, these intrusives are not a heat source, they merely act as impermeable cap rocks and channel or pond hydrothermal fluids. Also, they evidence a high silica rhyolite flow dome complex.

The Omineca intrusive rocks of the property lie between an elevation of 1400 to 1600 metres and the volcanic rocks of the property lie between an elevation of 1700 to 2000 metres, including a subhorizontal and fractured contact zone lying between 1600 to 1700 metres of elevation.

The contact layer on the eastern claim is gently dipping to the west and to the east on the western claim. This behaviour shapes the property as an elongated open pit, with an axis of a north-south direction.

The eastern half of the **Adrian** claim presents evidence of pressure activity of the Omineca intrusive on the volcanic rock of the Hazelton Group. This lateral pressure could be responsible for silver mineralization controlled by folding activity.

RECOMMENDATION

We recommend the following works:

- Detailed geological mapping of the volcanic rocks with particular attention to the unit description in the legend.

- More rock and soil sampling of the volcanics with particular attention to the inferred contact layer.

- Further program of soil sampling with 50 metre separations and covering the majority of the eastern half of the **Adrian** claim. Also, detailed geological mapping of this area for quartz distribution and structure.

Respectfully submitted,

Mohamad Bekdache, B.Ing.,
Geophysicist

Josef Seywerd, B.Sc.,
Geologist

106105
106104
106102
106101
106103
106005
106002
106003
106004
106009
106010
106011
106006
106012
106013
106008
106014
106015
106016
106024
Boulder
106017
106018
106020
106019
106021
106075
106073
106023
106074
106072
106022
106042
106041
106563
106039
106040
106038
106037
106036
106559
106560
106558
106035
106557
106562
106561
106034
106556
106032
106033
106555
106031
106553
106554
106030
106553
106029
106028
106552
106027
106026
106025
106043
106044
106045
106046
106047
106048
106067
106070
106071
106068
106069
106571
106572
106573
106570
106569
106568
106580
106579
106578
106576
106581
106577
106574
106575
106566
106565
106564
106050
106049

0 1 2 Km

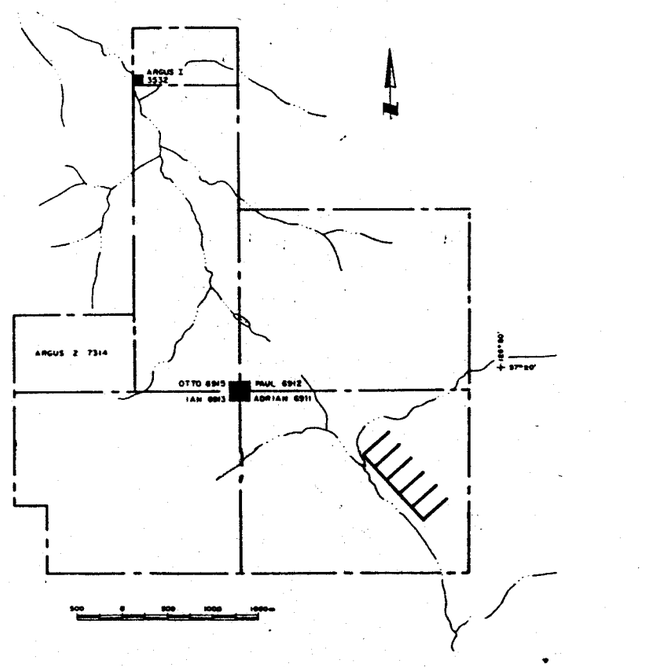
BARYTEX RESOURCES CORP.		
ARGUS CLAIM GROUP		
GEOCHEMICAL SAMPLES		
OMINECA M.D.		N.T.S. 94E/7W
WHITE GEOPHYSICAL INC., RICHMOND, B.C.		
DATE : NOV., 1987	SCALE : As shown	FIG. 4

10+00 N	8+00 N	6+00 N	4+00 N	2+00 N	0+00 N
104 / 0.1 / 5	76 / 0.1 / 5	90 / 0.1 / 5	54 / 0.1 / 5	57 / 0.1 / 5	83 / 0.1 / 5
88 / 0.1 / 5	75 / 1.6 / 5	94 / 0.1 / 5	80 / 0.1 / 5	95 / 0.1 / 5	87 / 0.1 / 5
112 / 0.1 / 5	47 / 0.1 / 5	60 / 0.1 / 5	88 / 0.1 / 5	108 / 0.1 / 5	76 / 0.1 / 5
110 / 0.1 / 5	88 / 0.1 / 5	77 / 0.1 / 5	103 / 0.1 / 5	77 / 0.1 / 5	82 / 0.1 / 5
117 / 0.1 / 5	104 / 0.1 / 5	68 / 0.1 / 5	102 / 0.1 / 5	84 / 0.1 / 5	47 / 0.1 / 5
79 / 0.1 / 5	78 / 0.1 / 5	99 / 0.1 / 5	60 / 0.1 / 5	51, 0.1, 5 61, 0.1, 5	80 / 0.1 / 5
98 / 0.1 / 5	100 / 0.1 / 5	45 / 0.2 / 5	53 / 0.1 / 5	116 / 0.1 / 5	55 / 0.1 / 5
78 / 0.1 / 5	74 / 0.1 / 5	55 / 0.1 / 5	72 / 0.1 / 15	65 / 0.1 / 5	47 / 0.1 / 5
204 / 0.2 / 5	63 / 0.1 / 5	81 / 0.7 / 5	45 / 0.5 / 5	51 / 0.1 / 5	47 / 0.1 / 5
105 / 0.4 / 5	57 / 0.1 / 5	59 / 0.1 / 5	74 / 0.1 / 5	76 / 0.1 / 15	42 / 0.1 / 5
91 / 0.2 / 5	56 / 0.1 / 5	72 / 0.1 / 5	28 / 0.1 / 5	48 / 0.3 / 45	52 / 0.5 / 5

BL 0+00

ZINC - ppm
120 / 0.1 — SILVER - ppm
10 — GOLD - ppb

N.T.S. 94E/7W



0 100 200 300 400 500 600

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

SOIL SAMPLES - Zn, Ag, Au

DATE : NOV., 1987

FIG. 5

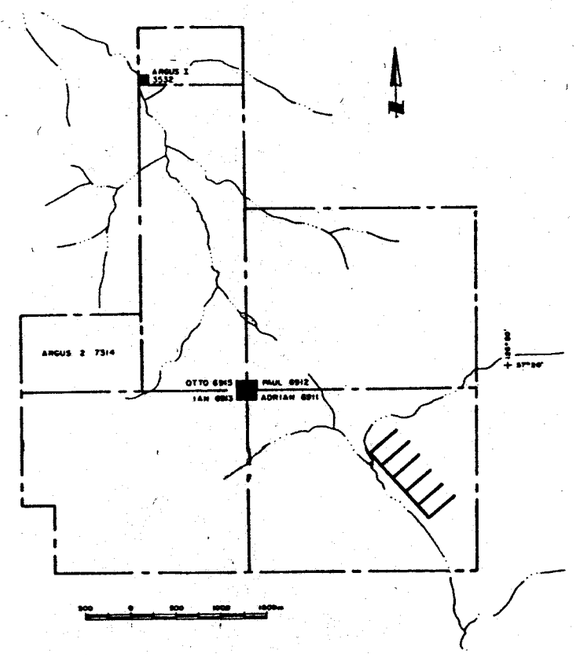
WHITE GEOPHYSICAL INC.

10+00 N	8+00 N	6+00 N	4+00 N	2+00 N	0+00 N
13 + 10	17 + 9	15 + 13	7 + 6	14 + 5	15 + 4
14 + 10	27 + 3	18 + 11	26 + 25	17 + 9	12 + 5
18 + 29	13 + 5	10 + 9	12 + 10	12 + 12	15 + 3
24 + 48	23 + 7	12 + 14	14 + 10	18 + 6	19 + 9
21 + 25	22 + 6	12 + 7	17 + 12	18 + 6	14 + 12
16 + 7	16 + 8	13 + 13	16 + 9	17 + 6 23 + 7	18 + 9
14 + 19	18 + 13	12 + 4	8 + 4	14 + 10	14 + 7
10 + 6	46 + 14	13 + 5	17 + 1	15 + 5	13 + 4
31 + 11	24 + 11	27 + 7	20 + 3	10 + 2	13 + 10
22 + 4	18 + 6	18 + 14	18 + 3	14 + 7	11 + 9
25 + 11	11 + 19	12 + 11	13 + 4	47 + 8	12 + 12

BL 0+00

COPPER - ppm
LEAD - ppm
43 + 62

N.T.S. 94E/7W



0 100 200 300 400 500 600

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

SOIL SAMPLES - Cu, Pb

DATE : NOV., 1987

FIG. 6

WHITE GEOPHYSICAL INC.

REFERENCES

Ashton, Arthur S. "Geochemical and physical report on the Argus Group, Adrian, Paul, Ian, Otto, Argus 1 and Argus 2 Mineral claims." For Rhyolite Resources Inc. and Clive Ashworth. Operator Rhyolite Resources Inc. 1986 Assessment Report.

Elliott, I.L.
Smee, B.W. Geoexpo/86, symposium, "Exploration in the North American Cordillera" May 12-14, 1986 Vancouver, B.C. Geological Association of Canada, Cordillera Section.

Parkinson, Graham
White, Glen E. "Geophysical report on a magnetometer survey, Otto, Paul, Adrian, Ian and Argus 1 & 2 claims, for Rhyolite Resources Ltd.", by Western Geophysical Aero Data Ltd., 1987 (Private file).

Hills, E. Sherbon Element of structural Geology, Methuen & Co. Ltd. & Sciences Paperbacks, Printed in Great Britain by Richard Clay (The Chaucer Press) Ltd., Bungay, Suffolk,1963.

STATEMENT OF QUALIFICATIONS

NAME:	Bekdache, Mohamad
PROFESSION:	Geological Engineer
EDUCATION:	Ecole polytechnique of Montreal Universite of Montreal B.Ing., Bachelor Degree (1978)
PROFESSIONAL ASSOCIATION:	Ordre des Ingenieurs du Quebec
LANGUAGES:	English, French, Arabic
EXPERIENCE:	Two years geological, geophysical and geotechnical exploration in British Columbia, Yukon, Quebec, Morocco, Lebanon.

STATEMENT OF QUALIFICATION

NAME: Seywerd, Josef

PROFESSION: Geologist

EDUCATION: University of British Columbia
B.Sc., Geology (1985)

EXPERIENCE: Three season geological assistant Noranda Explorations Ltd. NWT and British Columbia. Mapping, Rock sampling, Trenching, geochemical sampling, Track-etch surveys, Scintelometer surveys and Induced polarization surveys. 1981-1983.

One season geologist on geophysical crew White Geophysical Inc. Mapping, geochemical sampling, rock sampling and aiding in geological interpretation and geophysical data. 1986

COST BREAKDOWN

Personnel	Dates	Wages/ Diam.	Total
J.Seyward,B.Sc. Geologist	Aug.21-23/87	325.00	$ 975.00
M.Bekdache,B.Ing. Geo. Eng.	Aug.21-24/87	275.00	1,100.00
B.Acheson	Aug.21-24/87	250.00	1,000.00
G.Hagquist	Aug.21-24/87	225.00	900.00
M.Niedzwiecki	Aug.22/87	225.00	225.00
L.Morgan	Aug.22/87	225.00	225.00
Soil samples 60 @ $25/sample			1,500.00
Rock samples 86 @ $25/sample			2,150.00
Room and Board 17 mandays @ $100/manday			1,700.00
Helicopter 4.5 hrs at $600/hr			2,925.00
	Sub total		$12,700.00

I.P. Survey

Personnel	Dates	Wages/ Diam.	Total
B.Acheson Technician	Aug.25-29/87	350.00	$1,750.00
M.Niedzwiecki Technician	Aug.25-29/87	275.00	1,375.00
L.Morgan	Aug.25-29/87	275.00	1,375.00
P.Judson	Aug.25-29/87	225.00	1,125.00
Equipment Rental 5 days @ $400/day			2,000.00
Room and board 20 mandays @ $100/manday			2,000.00
Helicopter 6 hrs @ $650/hr			3,900.00
	Sub total		$13,525.00
Mob. and Demob.			5,000.00
Data Analysis, Report writing, Drafting			3,775.00
	Total		**$35,000.00**

APPENDIX I - GEOCHEMISTRY RESULTS

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: WHITE GEOPHYSICAL INC.

11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5

A8722874

Comments:

CERTIFICATE A8722874

WHITE GEOPHYSICAL INC.
PROJECT : GRID 14
P.O.# :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 12-OCT-87.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	60	Dry, sieve -80 mesh; soil, sed.
203	7	Dry, sieve -35 mesh and ring

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
2	67	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
4	67	Pb ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000
5	67	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	67	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.1	200
100	67	Au ppb: Fuse 10 g sample	FA-AAS	5	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: WHITE GEOPHYSICAL INC.

11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5

Project : GRID 14
Comments:

Date : 12-OCT-87
Invoice # : I-8722874
P.O. # :

CERTIFICATE OF ANALYSIS A8722874

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	Au ppb FA+AA
G14L0N 0+00E	201	--	12	12	62	0.5	< 5
G14L0N 0+50E	201	--	11	9	42	0.1	< 5
G14L0N 1+00E	201	--	13	10	47	0.1	< 5
G14L0N 1+50E	201	--	13	4	47	0.1	5
G14L0N 2+00E	201	--	14	7	55	0.1	< 5
G14L0N 2+50E	201	--	18	9	80	0.1	15
G14L0N 3+00E	201	--	14	12	47	0.1	< 5
G14L0N 3+50E	201	--	19	9	82	0.1	< 5
G14L0N 4+00E	201	--	15	3	76	0.1	< 5
G14L0N 4+50E	201	--	12	5	87	0.1	< 5
G14L0N 5+00E	201	--	15	4	83	0.1	< 5
G14L2N 0+00E	201	--	47	8	48	0.3	45
G14L2N 0+50E	203	--	14	7	76	0.1	15
G14L2N 1+00E	201	--	10	2	51	0.1	< 5
G14L2N 1+50E	201	--	15	5	65	0.1	5
G14L2N 2+00E	201	--	14	10	116	0.1	< 5
G14L2N 2+50E A	201	--	17	6	51	0.1	< 5
G14L2N 2+50E B	201	--	23	7	61	0.1	< 5
G14L2N 3+00E	201	--	18	6	84	0.1	< 5
G14L2N 3+50E	201	--	18	6	77	0.1	5
G14L2N 4+00E	201	--	12	12	108	0.1	< 5
G14L2N 4+50E	201	--	17	9	95	0.1	< 5
G14L2N 5+00E	201	--	14	5	57	0.1	< 5
G14L4N 0+00E	201	--	13	4	28	0.1	< 5
G14L4N 0+50E	201	--	18	3	74	0.1	< 5
G14L4N 1+00E	203	--	20	3	45	0.5	< 5
G14L4N 1+50E	201	--	17	1	72	0.1	15
G14L4N 2+00E	203	--	8	4	53	0.1	5
G14L4N 2+50E	201	--	16	9	60	0.1	< 5
G14L4N 3+00E	201	--	17	12	142	0.1	< 5
G14L4N 3+50E	201	--	14	10	103	0.1	< 5
G14L4N 4+00E	201	--	12	10	88	0.1	< 5
G14L4N 4+50E	201	--	26	25	80	0.1	5
G14L4N 5+00E	201	--	7	6	54	0.1	5
G14L6N 0+00E	203	--	12	11	72	0.1	< 5
G14L6N 0+50E	201	--	18	14	59	0.1	< 5
G14L6N 1+00E	203	--	27	7	81	0.7	< 5
G14L6N 1+50E	201	--	13	5	55	0.1	< 5
G14L6N 2+00E	201	--	12	4	45	0.2	< 5
G14L6N 2+50E	201	--	13	13	99	0.1	< 5

CERTIFICATION : Ivan Bulstra

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

TO: WHITE GEOPHYSICAL INC.

11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5

Project : GRID 14
Comments:

Date : 12-OCT-87
Invoice # : I-8722874
P.O. # :

CERTIFICATE OF ANALYSIS A8722874

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	Au ppb FA+AA
G14L6N 3+00E	201	--	12	7	68	0.1	< 5
G14L6N 3+50E	201	--	12	14	77	0.1	< 5
G14L6N 4+00E	201	--	10	9	60	0.1	< 5
G14L6N 4+50E	201	--	18	11	94	0.1	< 5
G14L6N 5+00E	201	--	15	13	90	0.1	< 5
G14L8N 0+00E	201	--	11	19	56	0.1	< 5
G14L8N 0+50E	201	--	18	6	57	0.1	< 5
G14L8N 1+00E	201	--	24	11	63	0.1	< 5
G14L8N 1+50E	203	--	46	14	74	0.1	< 5
G14L8N 2+00E	201	--	18	13	100	0.1	< 5
G14L8N 2+50E	201	--	16	8	78	0.1	< 5
G14L8N 3+00E	203	--	22	6	104	0.1	< 5
G14L8N 3+50E	201	--	23	7	88	0.1	< 5
G14L8N 4+00E	201	--	13	5	47	0.1	< 5
G14L8N 4+50E	201	--	27	3	75	1.6	< 5
G14L8N 5+00E	201	--	17	9	76	0.1	< 5
G14L10N 0+00E	201	--	25	11	91	0.2	< 5
G14L10N 0+50E	201	--	22	4	105	0.4	< 5
G14L10N 1+00E	201	--	31	11	204	0.2	< 5
G14L10N 1+50E	201	--	10	6	78	0.1	< 5
G14L10N 2+00E	201	--	14	19	98	0.1	< 5
G14L10N 2+50E	201	--	16	7	79	0.1	< 5
G14L10N 3+00E	201	--	21	25	117	0.1	< 5
G14L10N 3+50E	201	--	24	48	110	0.1	< 5
G14L10N 4+00E	201	--	18	29	112	0.1	< 5
G14L10N 4+50E	201	--	14	10	88	0.1	< 5
G14L10N 5+00E	201	--	13	10	104	0.1	< 5

CERTIFICATION : Stewart Buchan

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: WHITE GEOPHYSICAL INC.

11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5

A8722962

Comments:

CERTIFICATE A8722962

WHITE GEOPHYSICAL INC.
PROJECT : RYO
P.O.# :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 8-OCT-87.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	94	Rock & core: Ring

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
2	94	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
4	94	Pb ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000
5	94	Zn ppm: HNO3-aqua regia digest	AAS	1	10000
6	94	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.1	200
100	94	Au ppb: Fuse 10 g sample	FA-AAS	5	10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER, BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: WHITE GEOPHYSICAL INC.

11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5

Project : RYO
Comments:

Date : 8-OCT-87
Invoice # : I-8722962
P.O. # :

CERTIFICATE OF ANALYSIS A8722962

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	Au ppb FA+AA
RYO 106002	205	--	57	1	110	0.1	< 5
RYO 106003	205	--	19	28	91	0.1	< 5
RYO 106004	205	--	64	4	92	0.1	< 5
RYO 106005	205	--	9	1	19	0.1	10
RYO 106006	205	--	10	3	22	0.1	< 5
RYO 106007	205	--	75	1	115	0.1	< 5
RYO 106008	205	--	20	7	83	0.1	< 5
RYO 106009	205	--	23	4	76	0.1	30
RYO 106010	205	--	23	2	240	0.1	10
RYO 106011	205	--	20	1	150	0.1	< 5
RYO 106012	205	--	31	2	242	0.1	30
RYO 106013	205	--	42	2	243	0.1	< 5
RYO 106014	205	--	31	4	36	0.1	< 5
RYO 106015	205	--	228	1	165	0.1	< 5
RYO 106016	205	--	52	6	108	1.2	10
RYO 106017	205	--	9	4	139	0.1	< 5
RYO 106018	205	--	4	1	36	0.1	15
RYO 106019	205	--	3	3	56	0.1	10
RYO 106020	205	--	1	1	101	0.1	< 5
RYO 106021	205	--	1	1	140	0.1	10
RYO 106022	205	--	263	1	106	0.1	< 5
RYO 106023	205	--	16	4	12	0.1	< 5
RYO 106024	205	--	6000	4	81	0.1	< 5
RYO 106025	205	--	44	1	75	0.1	< 5
RYO 106026	205	--	84	1	73	0.6	< 5
RYO 106027	205	--	18	2	81	0.1	5
RYO 106028	205	--	10	4	89	0.1	5
RYO 106029	205	--	16	8	68	2.0	15
RYO 106030	205	--	16	20	97	6.1	30
RYO 106031	205	--	10	16	159	7.1	70
RYO 106032	205	--	29	300	247	66.0	255
RYO 106033	205	--	7	6	55	1.5	25
RYO 106034	205	--	7	6	101	0.6	15
RYO 106035	205	--	5	3	109	0.6	10
RYO 106036	205	--	21	2	66	0.1	15
RYO 106037	205	--	16	6	81	0.1	55
RYO 106038	205	--	16	4	88	0.1	10
RYO 106039	205	--	14	2	30	0.1	5
RYO 106040	205	--	37	530	415	0.4	10
RYO 106041	205	--	5	12	180	0.1	5

CERTIFICATION : Ian Bichler

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: WHITE GEOPHYSICAL INC.
11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5
Project : RYO
Comments:

Date : 8-OCT-87
Invoice # : I-8722962
P.O. # :

CERTIFICATE OF ANALYSIS A8722962

SAMPLE DESCRIPTION	PREP CODE	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	Au ppb FA+AA
RYO 106042	205 --	11	12	131	0.1	15
RYO 106043	205 --	36	2	53	0.1	10
RYO 106044	205 --	5	1	85	0.1	15
RYO 106045	205 --	15	2	82	0.3	50
RYO 106046	205 --	10	3	81	0.1	10
RYO 106047	205 --	4	2	66	0.1	15
RYO 106048	205 --	4	1	111	0.1	< 5
RYO 106049	205 --	7	2	100	0.1	< 5
RYO 106050	205 --	8	18	125	0.1	< 5
RYO 106067	205 --	34	18	196	0.1	< 5
RYO 106068	205 --	42	14	110	0.1	< 5
RYO 106069	205 --	42	2	89	0.1	< 5
RYO 106070	205 --	9	9	131	0.1	< 5
RYO 106071	205 --	3	2	103	0.1	< 5
RYO 106072	205 --	6	1	72	0.1	< 5
RYO 106073	205 --	8	1	59	0.1	< 5
RYO 106074	205 --	11	6	43	0.1	< 5
RYO 106075	205 --	10	12	23	0.1	< 5
RYO 106101	205 --	40	18	93	0.1	< 5
RYO 106102	205 --	29	2	107	0.1	< 5
RYO 106103	205 --	58	60	229	2.3	< 5
RYO 106104	205 --	70	2	178	0.1	10
RYO 106105	205 --	32	2	106	0.1	30
RYO 106551	205 --	5	1	80	0.1	< 5
RYO 106552	205 --	6	2	90	0.1	< 5
RYO 106553	205 --	12	1	74	0.1	< 5
RYO 106554	205 --	4	1	98	0.1	< 5
RYO 106555	205 --	4	1	91	0.1	< 5
RYO 106556	205 --	10	10	66	0.1	< 5
RYO 106557	205 --	6	3	48	0.1	< 5
RYO 106558	205 --	302	2	34	1.0	80
RYO 106559	205 --	73	1	142	0.1	< 5
RYO 106560	205 --	22	6	120	0.1	< 5
RYO 106561	205 --	85	4	87	0.1	30
RYO 106562	205 --	87	1	46	0.1	30
RYO 106563	205 --	14	7	91	0.1	< 5
RYO 106564	205 --	17	4	90	0.1	< 5
RYO 106565	205 --	11	7	120	0.1	< 5
RYO 106566	205 --	7	12	92	0.1	< 5
RYO 106567	205 --	22	260	50	0.1	< 5

CERTIFICATION : Ian Bichler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: WHITE GEOPHYSICAL INC.

11751 BRIDGEPORT RD.
RICHMOND, BC
V6X 1T5

Project : RYO
Comments:

Date : 8-OCT-87
Invoice # : I-8722962
P.O. # :

CERTIFICATE OF ANALYSIS A8722962

SAMPLE DESCRIPTION	PREP CODE		Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	Au ppb FA+AA
RYO 106568	205	--	86	11	900	0.1	< 5
RYO 106569	205	--	342	14	99	1.9	45
RYO 106570	205	--	185	14	130	0.1	5
RYO 106571	205	--	53	50	115	0.1	< 5
RYO 106572	205	--	390	6	134	0.8	20
RYO 106573	205	--	20	22	15	0.1	10
RYO 106574	205	--	105	16	94	0.1	15
RYO 106575	205	--	191	42	130	0.8	30
RYO 106576	205	--	78	20	170	0.1	< 5
RYO 106577	205	--	456	1	960	0.1	< 5
RYO 106578	205	--	216	14	95	2.1	80
RYO 106579	205	--	116	10	378	2.4	140
RYO 106580	205	--	201	14	155	0.4	25
RYO 106581	205	--	151	200	720	0.1	< 5

CERTIFICATION : Ian Bucher

APPENDIX II - INDUCED POLARIZATION SURVEY

TABLE OF CONTENTS **PAGE**

FIGURES

INTRODUCTION

During the months of August and September 1987 White Geophysical Inc. was contracted by **Barytex Resources Corp.** to conduct an Exploration program on their **Rhyolite** project in the Toodoggone area of British Columbia. As part of this exploration program an Induced Polarization survey was conducted over previously obtained geochemical anomalies to determine if the anomalies wereesourced in high resistivity silicious zones common to the Toodoggone Area. Eight lines were surveyed on the two established Grids, three on the south grid and the remaining five on the North Grid. A total of 7.2 kilometres of line were surveyed at 25 metre stations.

MULTIPOLE INDUCED POLARIZATION SURVEY

The multipole induced polarization method is a technique which exploits the rapid signal acquisition and processing capabilities available with current micro computer technology. With this technique the potential field information is obtained through a multiconductor cable having 36 takeouts at 25 metre intervals. The cable is presently configured as up to six end and position interchangeable cables of 150 metre length. The takeouts are addressed by the 40 channel multiplexer assembly in a specially configured HP-3497A data acquisition system as 25 metre to 275 metre dipoles. The data acquisition system is driven by a HP-85 computer, allowing the data to be stacked in the computer for a number of cycles at full precision until a criteria is reached. Ten windows on the secondary voltage are compiled, as well as the primary voltage information. Time zero is sensed by direct reference to the transmitter timing circuitry. The cable is scanned simultaneously in groups of five dipoles and the decay curves presented graphically for acceptance and logging or rejection and rescan by the operator. The data is logged on digital tape cartridges and is readily accessed in the field in order to produce pseudo-sections. These tapes are read by a HP-9845 computer for further processing and production of final report ready sections.

The primary field power is provided by a Huntec MK IV 2.5 kw transmitter operated in time domain mode which is driven by a 400 Hz, 120 volt three phase motor generator. The transmitted signal is an alternate cycle reversing current pulse of two second on and two second off time. The current is introduced into the ground through two current electrodes for each scan of the potential cable. By scanning the cable for each of several current stake

positions both along the cable and off the ends of the cable a strong measure of redundancy of coverage of a given depth point is assured. The stacking of this multiple scan information in the computer results in an improved determination of the geoelectric section.

The apparent resistivity is obtained from the ratio of the primary voltage measured on the potential dipole during the current on part of the cycle to the current flowing through the current electrodes. A geometric factor is computed from the electrode locations to arrive at the apparent resistivity, measured in ohm-metres.

The apparent chargeability is calculated from the ten secondary voltage windows as the area under the secondary decay curve and is measured in milliseconds.

DISCUSSION OF RESULTS

The three northernly most lines were surveyed on the south grid. The resistivity data appears quite useful in delineating silicious zones which in the Toodoggone have often been found to be gold bearing. The most pronounced zone, (zone 'A') is centered at approximately 300E on line 0S and strikes at approximately 145°. Toward the south on line 100S it is less pronounced and to the north on line 100N it is very pronounced. This may be due to the pod like nature of the silicious zones we have investigated in the Toodoggone Area with swelling and thinning taking place over hundreds of metres of strike length. The strike length of zone 'A; is 300 metres and it is open both toward the north and toward the south.

Zone B is a less distinct zone than zone A it has a mapped strike at 200 metres and is open toward the south. Zone B was intercepted on line 0S at approximately 660E and 550E and on line 100S at approximately 600E. It has an interpreted strike of approximately 100 metres.

Zone C is a moderately strong zone intercepted on line 0S at approximately 0E. Unfortunately the coverage on line 0N did not extend far enough to intercepted the expected extrusion of this zone on line 100N.

Zone D is a single line intercept (line 100N) of the strongest response on this grid. This zone is open to the north and warrants further investgation. The Chargeability data indicates the southernmost line is probably overlain by the Toodoggone volcanics while the northern line appears to have a more barren country rock as a background.

On the North Grid lines 100W-500W were read. The response in general is very similar to the northern line on the south grid, with low background chargeability values and continuous zones at high resistivity. The largest zone delineated is zone E with a mapped strike length of 400 metres. This zone seems to pinch and swell and is very strong on line 500W.

Zone F has a strong response on line 400W and appears to bifurcate on line 500W.

Zone G has a moderate response. This zone has a strike length of approximately 100m and a strike of 35°.

Zones H and I are single line intercepts of moderate strength. Zone H is open in both directions and Zone I is open toward the south.

The data is represented in plan map form in Figures 1A, 1B, 2A, 2B and in profile form in Figures 3-10.

CONCLUSIONS AND RECOMMENDATIONS

The Multipole Induced polarization survey was very successful in delineating several zones of high resistivity. All of these zones warrant further investigation. These zones should all be trenched and sampled along their complete strike. Experience in the Toodoggone has shown that the silicious zones very greatly in gold content along strike. If this trenching and sampling proves successful a follow-up IP survey can be run to delineate further trenching/drilling targets.

Respectfully Submitted,

Markus Seywerd, B.Sc.,
Geophysicist

STATEMENT OF QUALIFICATIONS

NAME: SEYWERD, Markus B., B.Sc.

PROFESSION: Geophysicist

EDUCATION: University of British Columbia -
B.Sc., Mathematics

EXPERIENCE: Three years of summer field work with Noranda Exploration Company Ltd. in British Columbia, Northwest Territories and Yukon Territories.

Two year Geophysicist with White Geophysical Inc. with work in British Columbia, Saskatchewan and Yukon Territories.

HP-85A Specifications

OPERATING SYSTEM

ROM ..... 32K bytes

USER READ/WRITE MEMORY

Standard ..... 16K bytes
Expansion memory module ..... 16K bytes

DYNAMIC RANGE

Real precision: -9.99999999999E499 to -1E-499, 0 and 1E-499 to 9.99999999999E499
Short precision: -9.9999E99 to -1E-99, 0, 1E-99 to 9.9999E99
Integer precision: -99999 to 99999

BUILT-IN FUNCTIONS

Mathematical and trigonometric functions are included in the following table with average execution times in msec.

Absolute (ABS)	0.83
Fractional part (FP)	1.01
Integer part (IP)	2.56
Maximum (MAX)	6.42
Minimum (MIN)	6.19
Modules (MOD)	2.21
ln (LOG)	32.11
log (LGT)	26.63
e^x (EXP)	24.54
Raise to power (Y↑X)	43.92
Random number (RND)	3.54
Sign (SGN)	0.90
Square root (SQR)	8.74
Sine (SIN)	45.62
Cosine (COS)	45.69
Tangent (TAN)	27.27
Arcsine (ASN)	43.23
Arccosine (ACS)	43.98
Arctangent (ATN)	22.76
Cosecant (CSC)	51.68
Secant (SEC)	51.72
Cotangent (COT)	27.29
+	1.08
−	1.12
÷	5.92
*	2.85
Ceiling (CEIL)	2.91
Floor (FLOOR)	3.33

Built-in Operators
Logic: AND, OR, NOT, EXOR
Relational: =, >, <, <=, >=, <> (or #)

CRT DISPLAY

Size ..... 127 mm (5 in.) diagonal
Capacity:
Alphanumeric ..... 16 lines × 32 characters
Graphics ..... 192 × 256 dots
Scrolling capacity ..... 64 lines
Character set ..... 256 characters; set of 128 + same set underscored
Character font ..... 5- × 7-dot matrix
Intensity ..... adjustable to 32 ft-lamberts
Cursor ..... underline

CLOCK AND TIMERS

Time is maintained as seconds since midnight, along with year and day in year. Three timers can be programmed to generate individual interrupts periodically, at intervals from 0.5 msec to 99,999,999 msec (1.16 days).

BEEPER

The beeper is programmable with parameters for duration and tone. The frequency range is approximately 0 to 4,575 Hz.

OPERATING REQUIREMENTS

Source ..... 115 Vac nominal (90-127 Vac)
230 Vac nominal (200-254 Vac)
Line frequency ..... 50-60 Hz

Consumption ..... 40 watts nominal

HP-85A operating temperature ..... 5° to 40°C (40° to 105°F)
HP-85A storage temperature ..... -40° to 65°C (-40° to 150°F)
HP-83A operating temperature ..... 0° to 55°C (32° to 131°F)
HP-83A storage temperature ..... -40° to 75°C (-40° to 167°F)
Ambient humidity ..... 5% to 80% at 40°C

SIZE AND WEIGHT

Height ..... 15.9 cm (6.3 in.)
Width ..... 41.9 cm (16.5 in.)
Depth ..... 45.2 cm (17.8 in.)
HP-85A Weight:
net ..... 9.1 kg (20 lbs)
shipping ..... 16.8 kg (37 lbs)
HP-83A Weight:
net ..... 7.3 kg (16 lbs)
shipping ..... 15.0 kg (33 lbs)

BASIC FUNCTIONS AND STATEMENTS

System Functions

ABS—Absolute value of the numeric expression.
ACS—Principal value (1st or 2nd quadrant) of the arccosine of the numeric expression in the current angular units.
ASN—Principal value (1st or 4th quadrant) of the arcsine of the numeric expression in the current angular units.
ATN—Principal value (1st or 4th quadrant) of the arctangent of the numeric expression in the current angular units.
ATN2—Arctangent of Y/X in proper quadrant.
CEIL—Smallest integer greater than or equal to the numeric expression.
COS—Cosine.
COT—Cotangent.
CSC—Cosecant.
DATE—Julian date in the format YYDDD, assuming system timer was set.
DTR—Converts the value of the numeric expression from degrees to radians.
EPS—A constant equal to the smallest positive real precision number, 1E-499.
ERRL—Line number of latest error.
ERRN—Error number of latest error.
EXP—Value of Napierian e raised to the power of the computed expression.
FLOOR—Largest integer less than or equal to the evaluated expression.
FP—Fractional part of the evaluated expression.
INF—A constant equal to the largest real number possible, 9.99999999999E499.
INT—Largest integer less than or equal to the evaluated expression (equivalent to FLOOR).
IP—Integer part of the numeric expression.
LGT—Common logarithm (base 10) of a positive numeric expression.
LOG—Natural logarithm (base e) of a positive numeric expression.
MAX—Larger of two values.
MIN—Smaller of two values.
PI—Numerical value of pi.
RMD—Remainder resulting from a division operation according to X-(Y*IP(X/Y)).
RND—Generates a number that is greater than or equal to zero and less than one, using a predetermined, pseudo-random sequence.
RTD—Converts the value of the numeric expression from radians to degrees.
SEC—Secant.
SGN—Returns a 1 if the expression is positive, -1 if negative, and 0 if exactly 0.
SIN—Sine.
SQR—Square root of a positive numeric expression.
TAN—Tangent.
TIME—Returns the time in seconds since midnight if the timer is set, or since machine turn-on otherwise, resetting automatically after 24 hours.

String Functions

CHR$—Converts a numeric value between 0 and 255 into a character corresponding to that value.
LEN—Returns the number of characters in a string.
NUM—Returns the decimal value corresponding to the first character of the string expression.
POS—Returns the position of the first character of a substring within another string or 0 if the substring is not found.
UPC$—Converts all lowercase letters in a string to uppercase letters.
VAL—Returns as a numeric value, including exponent, a string of digits so that the value may be used in calculations.
VAL$—Returns the value of a numeric expression as a string of digits.

General Statements and Programmable Commands

BEEP—Outputs a tone of specified frequency for a specified duration.
CLEAR—Clears the CRT.
COM—Dimensions and reserves memory so chained programs can access the same data.
CRT IS—Allows the definition of either a printer or the actual CRT as the current CRT.
DATA—Provides constants and text characters for use with READ statements.
DEFAULT ON—Makes numeric overflows, underflows, and the use of uninitialized variables non-fatal by substituting an appropriate approximate value.
DEFAULT OFF—Makes numeric overflows, underflows, and the use of uninitialized variables fatal.
DEF FN—Defines a single- or multiple-line function.
DEG—Sets degree mode for evaluation and output of the arguments and results of trigonometric functions.
DIM—Declares the size and dimensions of array and string variables.
DISP—Outputs the values or text on the current CRT.
DISP USING—Displays values and text according to format specified by IMAGE statement or literal IMAGE.
END—Terminates program execution (same as STOP).
FLIP—Changes the keyboard from BASIC mode to typewriter mode or vice versa.
FN END—Terminates a multiple-line function.
FOR/NEXT—Defines a program loop and the number of iterations.
GOSUB—Transfers program control to a subroutine and allows subsequent return of control.
GOTO—Transfers program execution to the specified line.
GRAD—Sets grad mode for evaluation and output of the arguments and results of trigonometric functions.
IF...THEN...ELSE—Allows statements to be either executed or bypassed depending on the outcome of a logical expression.
IMAGE—Specifies the format used with PRINT USING or DISP USING statements.
INPUT—Allows entry of values or text from the keyboard during program execution.
INTEGER—Declares variables as integers as well as the size and dimensions of integer arrays.
KEY LABEL—Displays in the lower portion of the CRT, an eight-character prompt for each Special Function Key defined by an ON KEY statement. Also returns cursor to upper left corner of the CRT.
LET—Assigns a value to a variable or array element.
LIST—Lists the program on the CRT IS device. Also outputs bytes remaining at the end of a program.
NORMAL—Cancels the effect of the PRINT ALL, AUTO, or TRACE statements.
ON ERROR—Sets up a branch to the specified line or subroutine anytime an error occurs.
OFF ERROR—Cancels any ON ERROR statement previously executed.
ON KEY #—Sets up a branch to the specified line or subroutine each time the Special Function Key is pressed.

SPECIFICATIONS TABLES

SYSTEM ACCURACY SPECIFICATIONS

These system specifications combine individual accuracy specifications to result in a total measurement accuracy specification. For example, the resistance specifications combine the DVM, current source and acquisition assembly error terms.

Voltage Measured Through Acquisition Assembly

3497A Configuration:
DVM: 5½ digit, auto zero on
Relays Switches: Tree Switched

Accuracy: ± (% of reading + number of counts)

90 Days 23°C ± 5°C

Voltmeter Range	Digits Displayed 5½ digits	4½ digits	3½ digits
0.1V	0.007 + 5	0.01 + 2	0.1 + 1
1.0V	0.006 + 1	0.01 + 1	0.1 + 1
10.0V	0.006 + 1	0.01 + 1	0.1 + 1
100.0V	0.006 + 1	0.01 + 1	0.1 + 1

Resistance Measured Through an Acquisition Assembly

3497A Configuration:
DVM: 5½ digit, auto zero on
Current Source: As indicated
Relay Switches: Configured for a 4-terminal resistance measurement

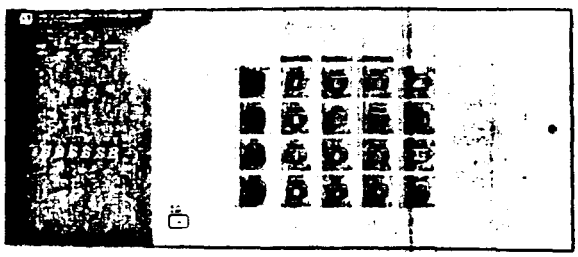
Characteristics

Effective Resistance Range	Effective Resistance Resolution	Current Source Range	Range
100 Ω	1 mΩ	1 mA	.100000
1 kΩ	10 mΩ	100 μA	1.00000
10 kΩ	100 mΩ	100 μA	10.0000
100 kΩ	1 Ω	10 μA	10.0000

Accuracy: ± (% of reading + number of counts)

90 Days 23°C ± 5°C

Range Relays (Opt. 010)	Digits Displayed 5½ digits	4½ digits	3½ digits
100 Ω	.032 + 5	.035 + 2	0.125 + 1
1 kΩ	.032 + 5	.035 + 2	0.125 + 1
10 kΩ	.032 + 5	.035 + 2	0.125 + 1
100 kΩ	.031 + 2	.035 + 2	0.125 + 1



System Noise Rejection

Normal Mode Rejection (NMR): (50 or 60 Hz ± .09%)

DVM Digits Displayed	Rejection
5½	60 dB
4½	0 dB
3½	0 dB

NMR is a function of the 3497A DVM configuration only and is not affected by the number of channels in the system.

Effective Common Mode Rejection (ECMR): The ECMR of a 3497A based system is a combination of the ECMR of the 3497A DVM and the effects of adding multiplexer assemblies and 3498A extenders.

ECMR: 1(kΩ imbalance in low lead, using tree switching, ac at 50 or 60 Hz, 25°C, <85% R.H.)

Voltmeter Configuration

Number of Acquisition Channels (Options 10,20)		5½ digits	4½ digits	3½ digits
0	AC	150 dB	90 dB	90 dB
	DC	120 dB	120 dB	120 dB
<100	AC	150 dB	90 dB	90 dB
	DC	104 dB	104 dB	104 dB
<400	AC	140 dB	80 dB	80 dB
	DC	92 dB	92 dB	92 dB
<1000	AC	130 dB	70 dB	70 dB
	DC	85 dB	85 dB	85 dB

Measurement Speeds

For the 3497A DVM and the relay multiplexer. Speeds are given for measurements on random channels (using software channel selection) and sequential channels (using external hardware increment). Speeds include I/O times to the indicated computers.

	Number of Digits Selected	85	Computer 9826*	1000L	1000E,F
Sequential Channels using external increment	5½ digits	39(33)**	39	39(25)	30(25)
	4½ digits	97(88)	103	108(79)	88(79)
	3½ digits	112(107)	123	127(99)	107(99)
Random Channels using software	5½ digits	13(15)	27	21(16)	22(16)
	4½ digits	14(21)	51	31(28)	35(30)
	3½ digits	14(23)	55	33(29)	35(32)

*9826 speeds for BASIC operating system
**50 Hz speeds in ( )

TIMER/REAL TIME CLOCK

Clock Format

Month:Day:Hours:Minutes:Seconds (Option 230)
Day:Month:Hours:Minutes:Seconds (Option 231)

	Maximum Time	Resolution	Accuracy	Output
Real Time Mode	1 year	1 second	±(.005% of time + .1s)	Display and HP-IB
Elapsed Time Mode	10^6 seconds	1 second	±(.005% of time + .1s)	Display and HP-IB
Time Alarm Mode	24 hours	1 second	±(.005% of time + .1s)	HP-IB SRQ
Time Interval Mode	24 hours	1 second	±(.005% of time + .1s)	50 μS TTL Pulse + HP-IB SRQ
Time Output Mode	1 second	100 μS	±(.02% of time)	16 μS TTL Pulse

Power Failure Protection: Battery back-up for >24 hours for time and elapsed time only

3497A MAINFRAME AUXILIARY INPUTS/OUTPUTS

Ext Trig. Input: TTL Compatible
Minimum pulse width: 50 n seconds

Ext Incr. Input: TTL Compatible
Minimum pulse width: 50 μ seconds

BBM Sync: TTL Compatible
This terminal serves as a break before make synchronizing signal to the 3497A and other equipment. The terminal is both an-input and output with a low level indicating a channel is closed. The 3497A will not close any additional channels until the line is sensed high and the line will float high when all channels are open.

VM Complete Output: TTL Compatible
Pulse width = 500 n seconds

Channel Closed Output: TTL Compatible
Pulse width = 500 n seconds

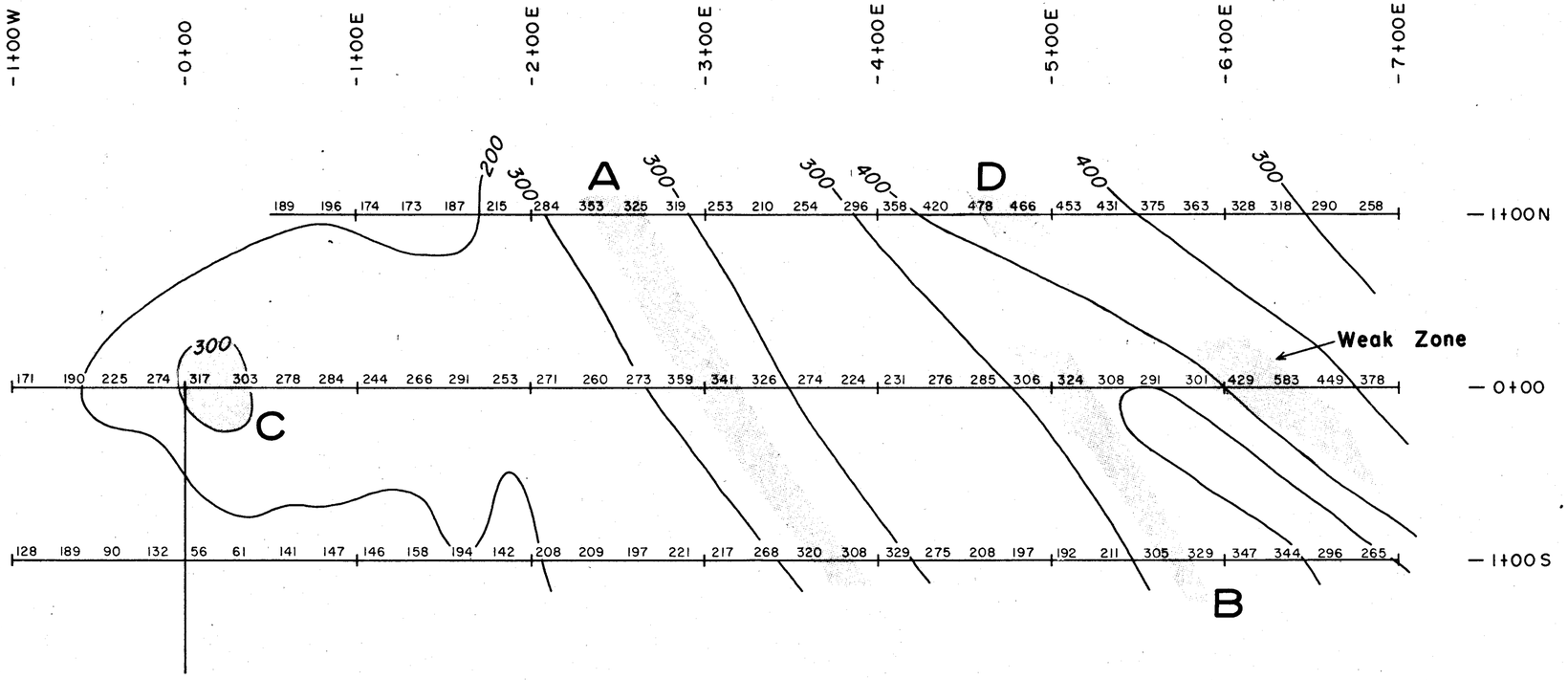
Timer Interval Output: TTL Compatible
Output port for the time interval and time output functions.

Physical Parameters

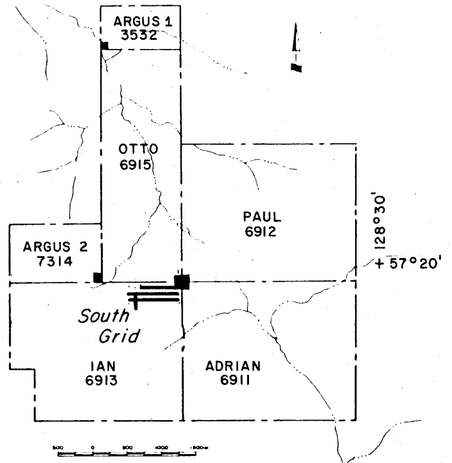
Size (3497A or 3498A): 190.5 mm (7½ in.) high
428.6 mm (16 7/8 in.) wide
520.7 mm (20½ in.) deep
An additional two inches in depth should be allowed for wiring.

Net Weight:

	3497A	3498A
Maximum (with assemblies in all slots)	20.4 kg (45 lbs.)	20.4 kg (45 lbs.)



N.T.S. 94E/7W



17,061

0 50 100 150 200 250 300 m

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

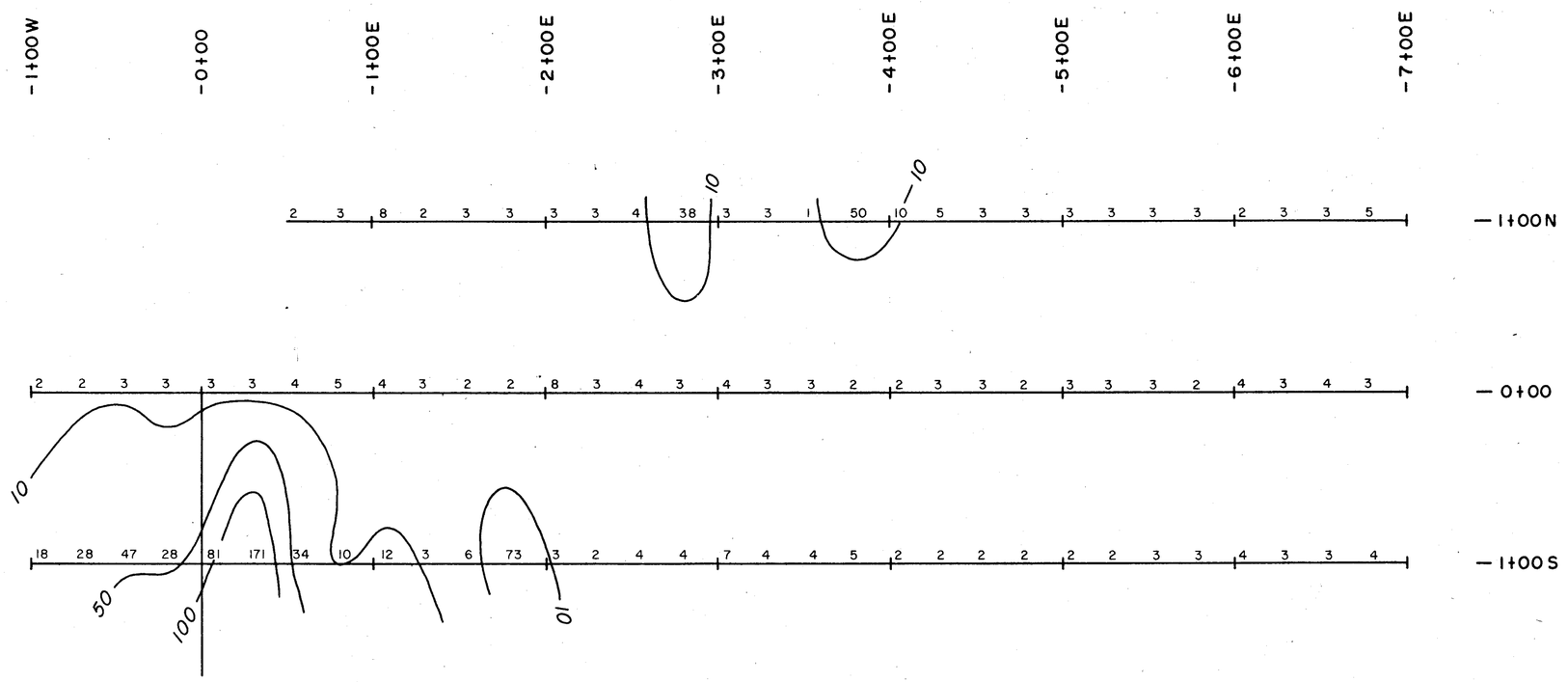
INDUCED POLARIZATION SURVEY

APPARENT RESISTIVITY MAP

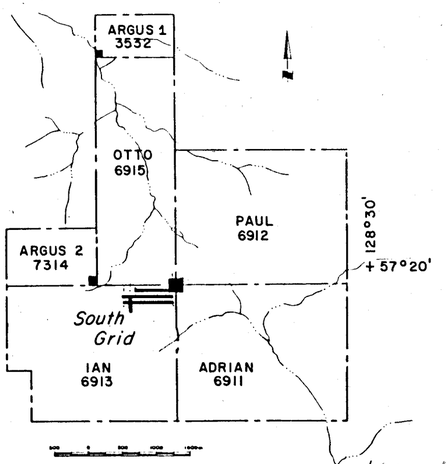
OMINECA M.D.

DATE : NOV., 1987

FIG. 1A



N.T.S. 94E/7W



0 50 100 150 200 250 300 m

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

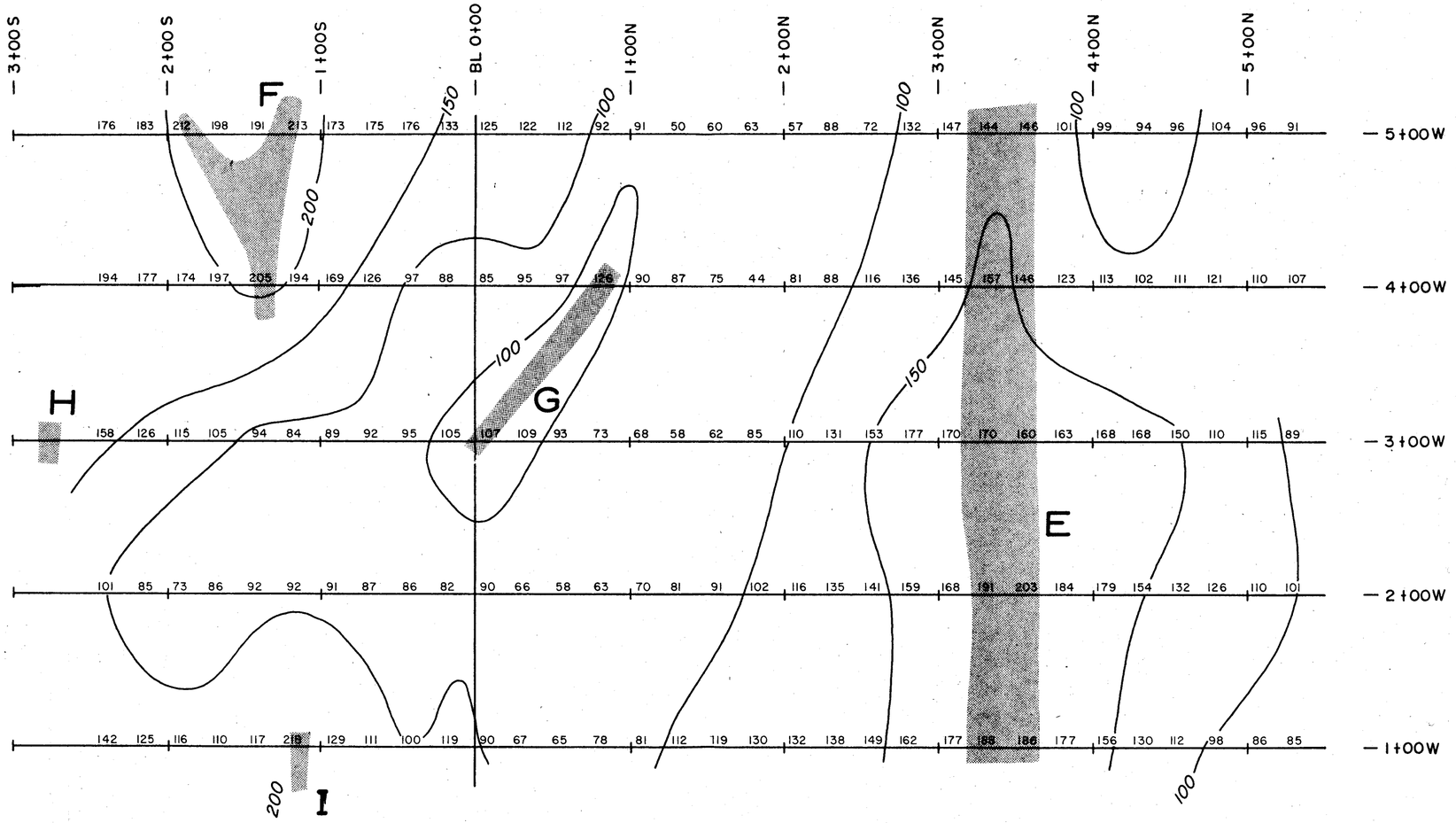
INDUCED POLARIZATION SURVEY

APPARENT CHARGEABILITY MAP

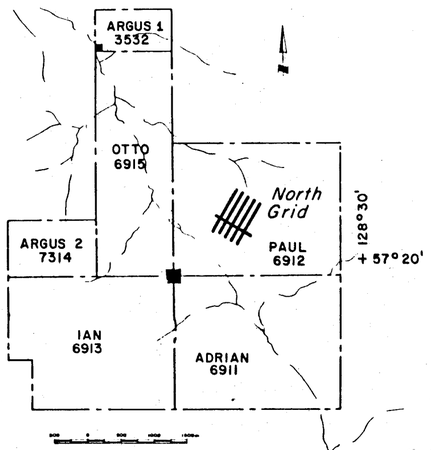
OMINECA M.D.

DATE : NOV., 1987

FIG. 1B



N.T.S. 94E/7W



17,061

0 50 100 200 300 m

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

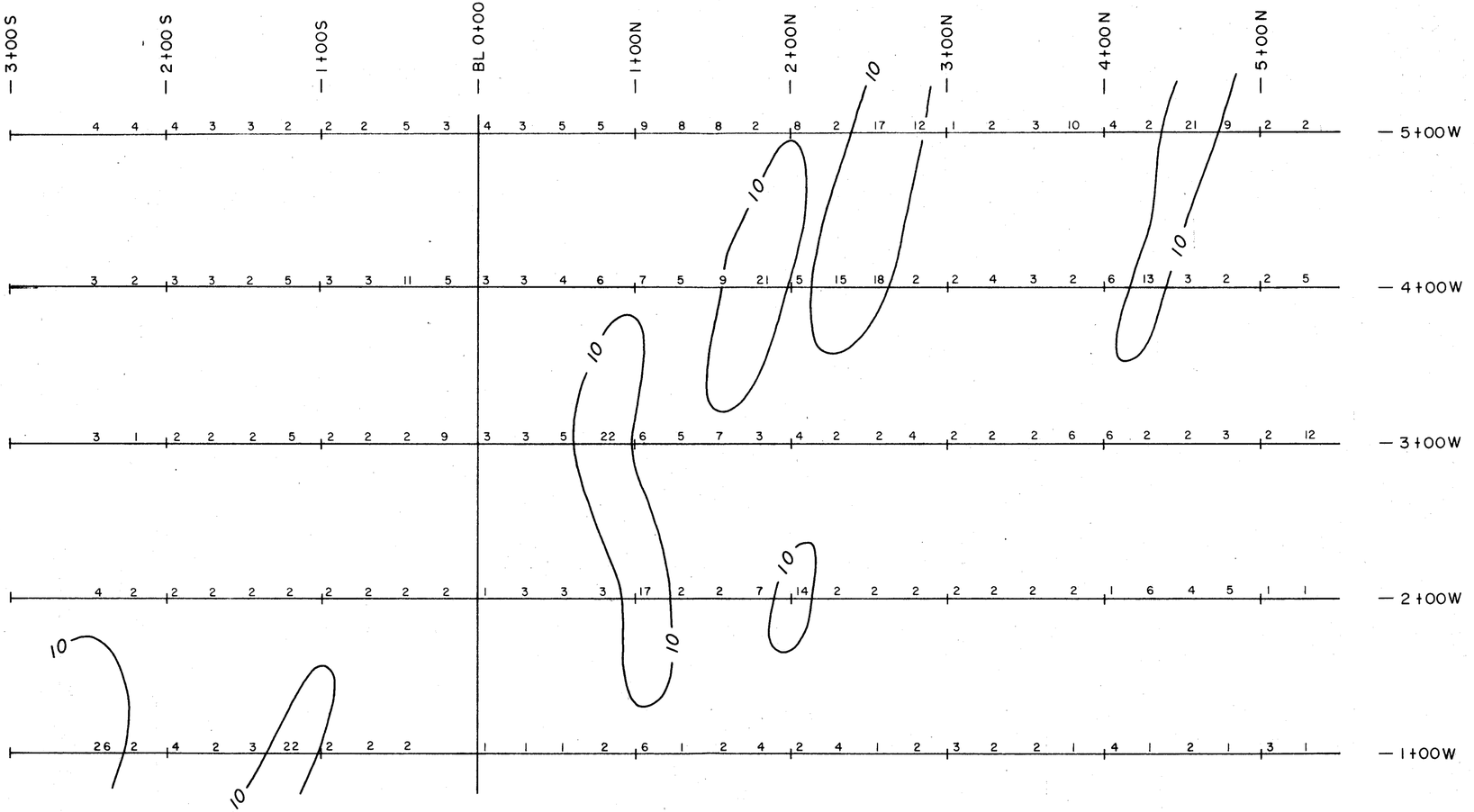
INDUCED POLARIZATION SURVEY

APPARENT RESISTIVITY MAP

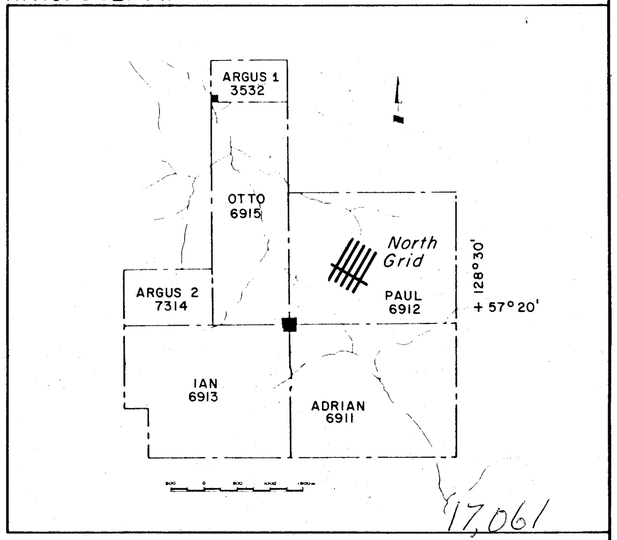
OMINECA M.D.

DATE : NOV., 1987

FIG. 2A



N.T.S. 94E/7W



BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

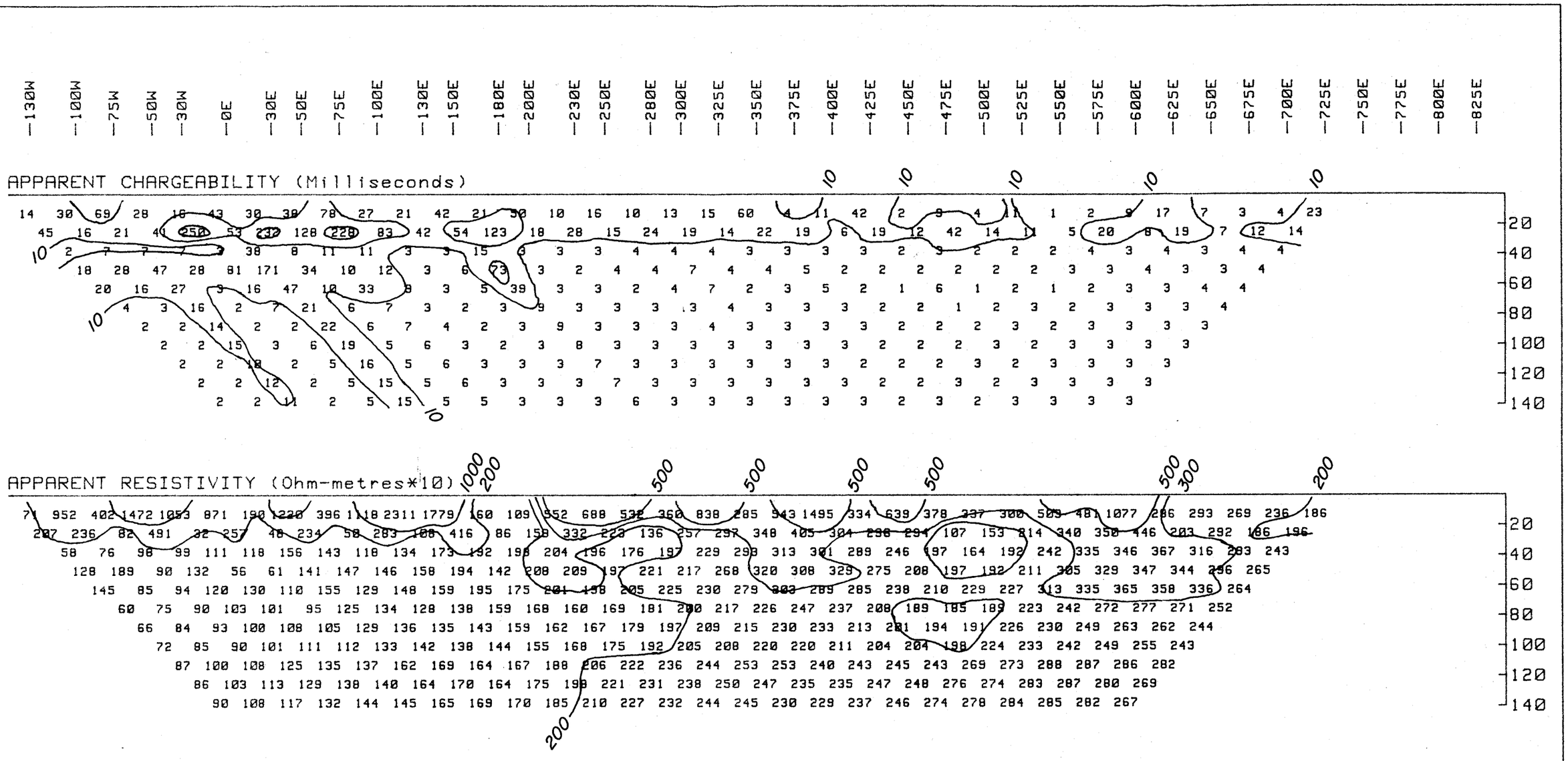
INDUCED POLARIZATION SURVEY

APPARENT CHARGEABILITY MAP

OMINECA M.D.

DATE : NOV., 1987

FIG. 2B



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

BARYTEX RESOURCES CORP.

TOODOGGONE PROJECT

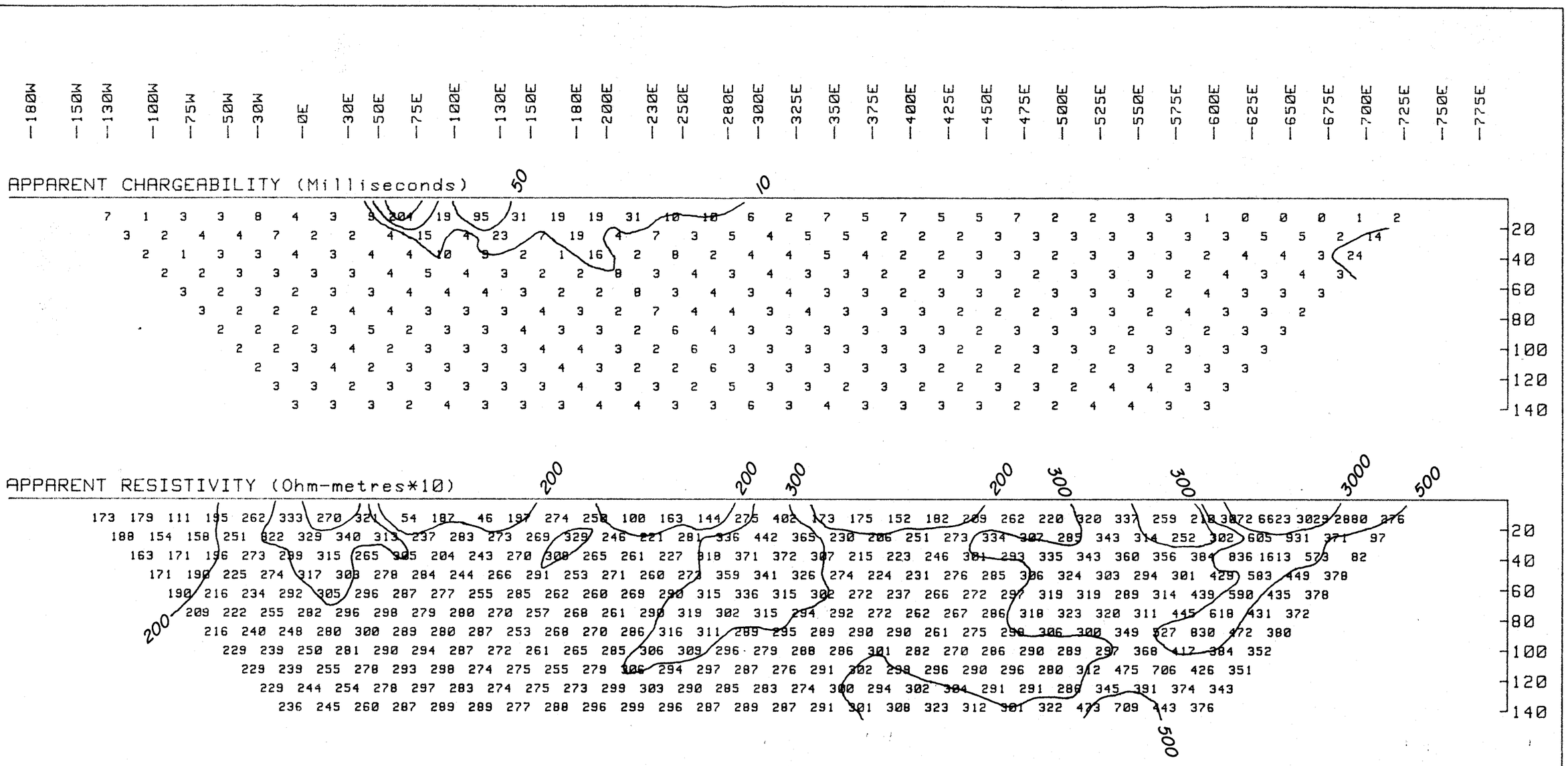
MULTIPOLE INDUCED POLARIZATION SURVEY

LINE 100S

WHITE GEOPHYSICAL INC.

DATE: AUG/87

FIG.: 3



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES

0 25 50 75 100

WHITE GEOPHYSICAL INC.

BARYTEX RESOURCES CORP.

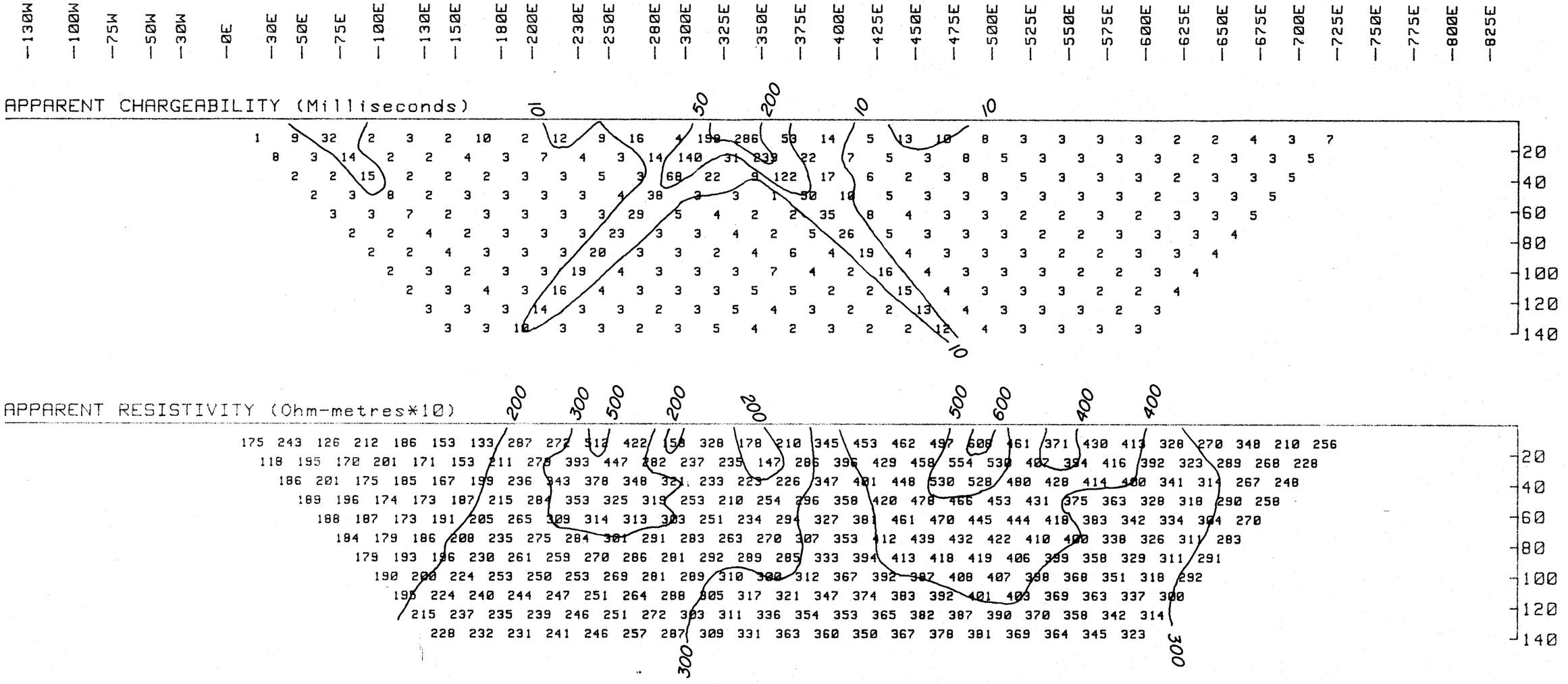
TOODOGGONE PROJECT

MULTIPOLE INDUCED POLARIZATION SURVEY

LINE 00S

DATE: AUG/87

FIG.: 4



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

BARYTEX RESOURCES CORP.

TOODOGGONE PROJECT

MULTIPOLE INDUCED POLARIZATION SURVEY

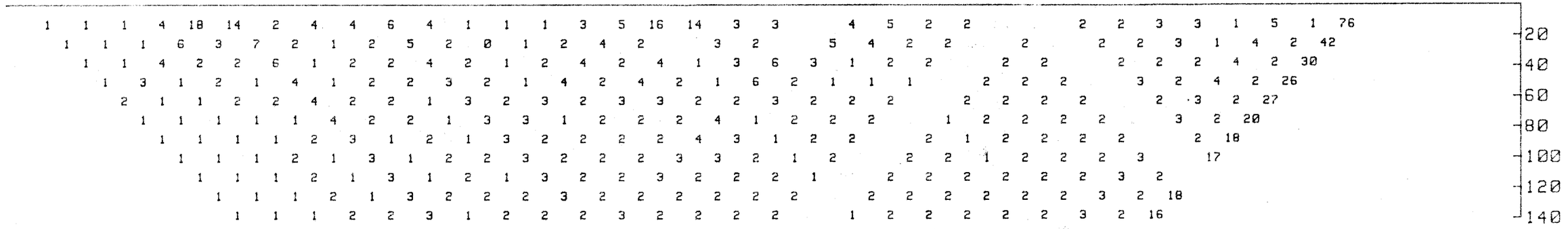
LINE 100N

DATE: AUG/87

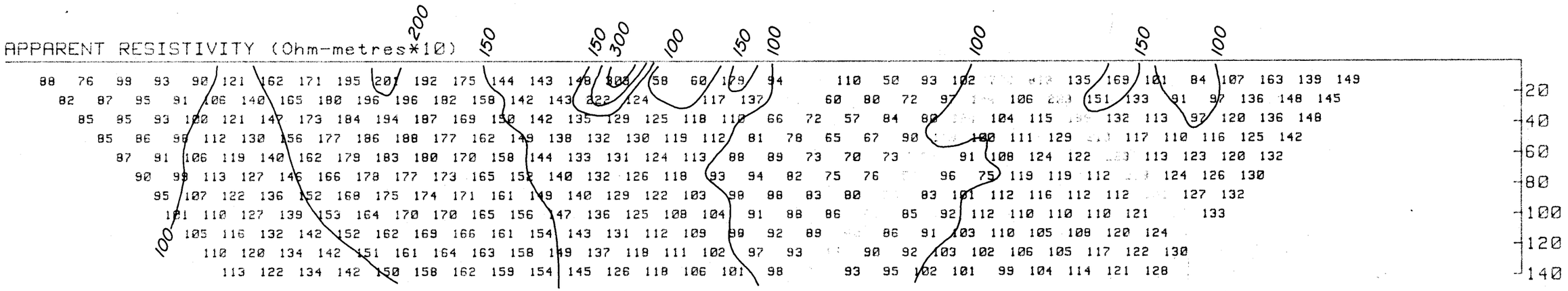
FIG.: 5

575N 550N 525N 500N 475N 450N 425N 400N 375N 350N 325N 300N 280N 250N 230N 200N 180N 150N 130N 100N 75N 50N 30N 0S 30S 50S 75S 100S 130S 150S 180S 200S 230S 250S 280S 300S 325S 350S 375S 400S

APPARENT CHARGEABILITY (Milliseconds)



APPARENT RESISTIVITY (Ohm-metres*10)



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

BARYTEX RESOURCES CORP.

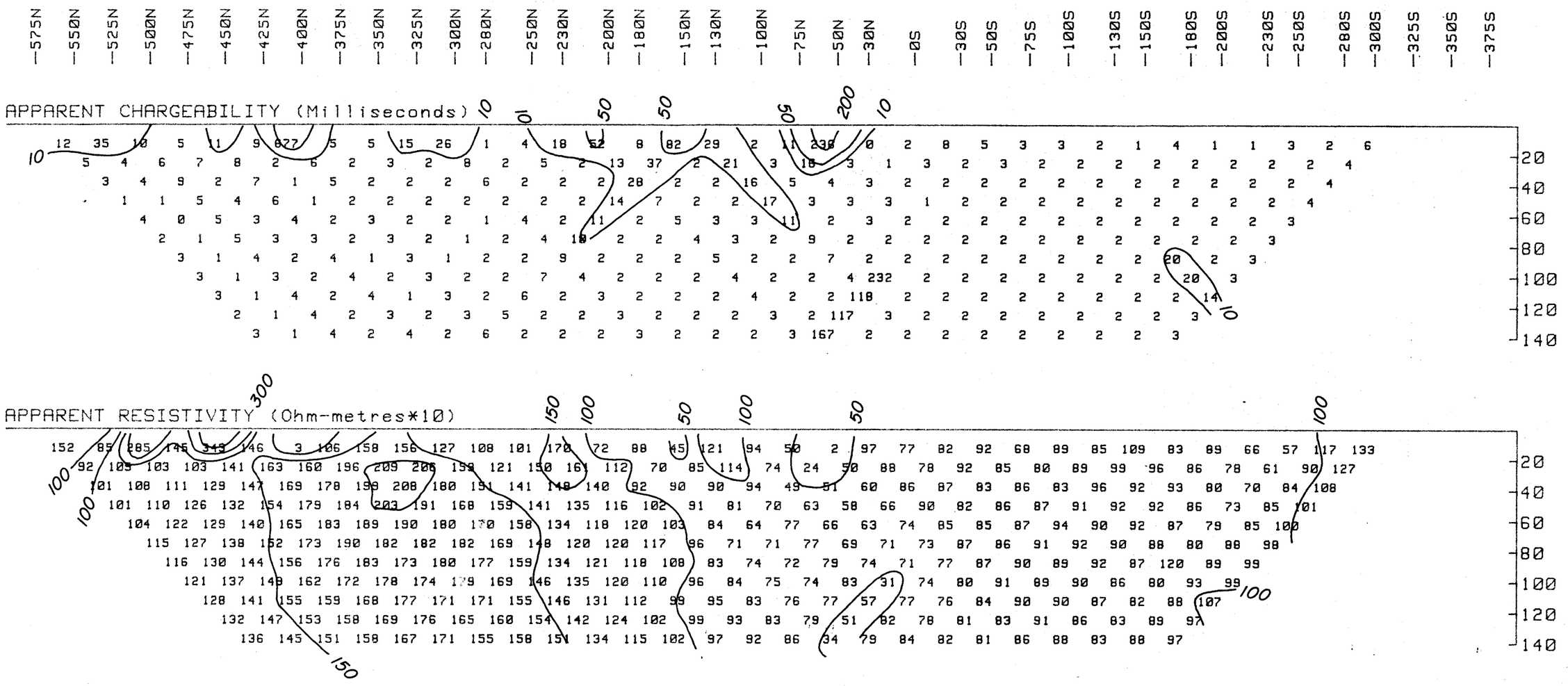
TOODOGGONE PROJECT

MULTIPOLE INDUCED POLARIZATION SURVEY

LINE 100W

DATE: AUG/87

FIG.: 6



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

BARYTEX RESOURCES CORP.

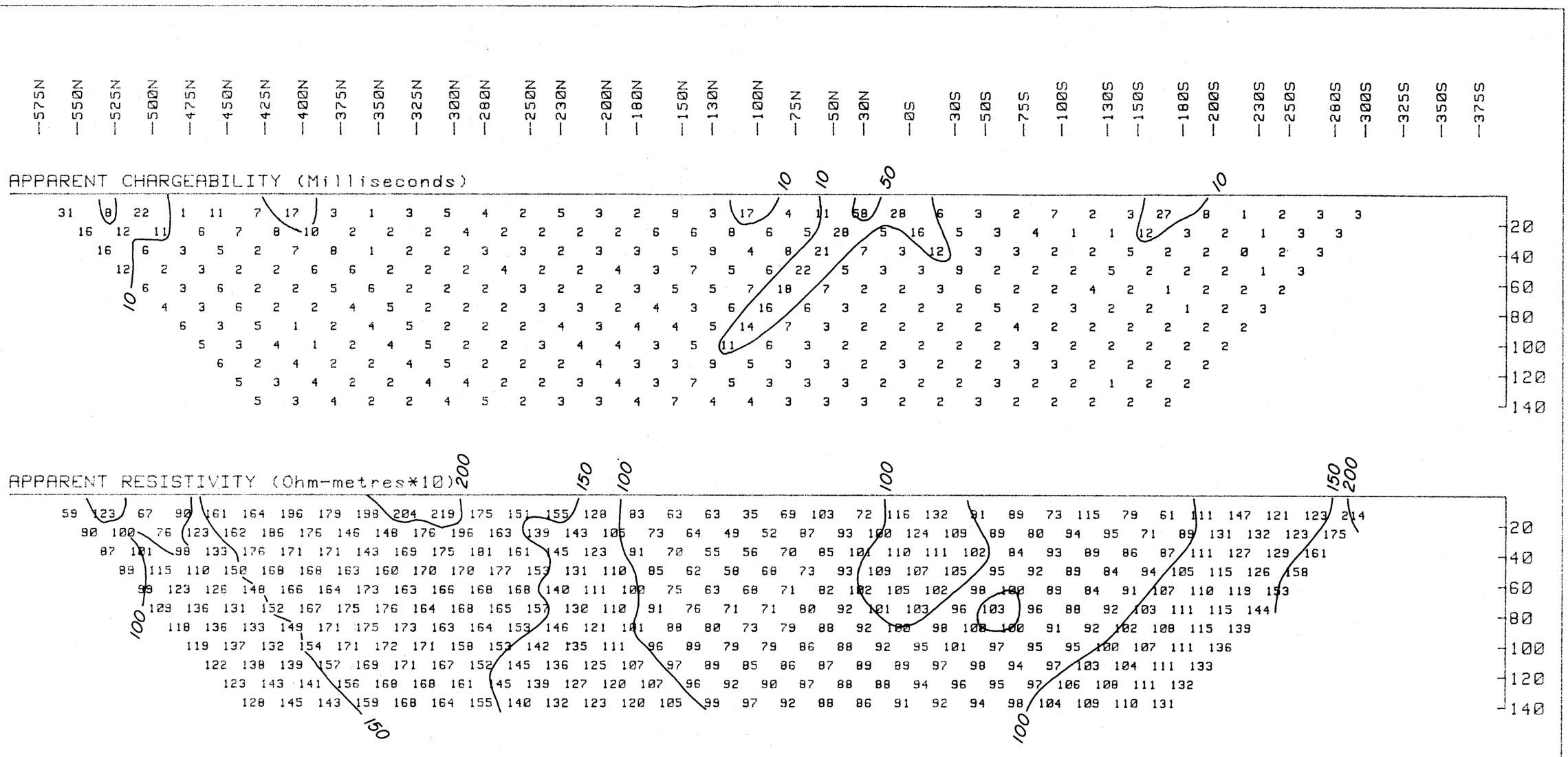
TOODOGGONE PROJECT

MULTIPOLE INDUCED POLARIZATION SURVEY

LINE 200W

DATE: AUG/87

FIG.: 7



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

BARYTEX RESOURCES CORP.

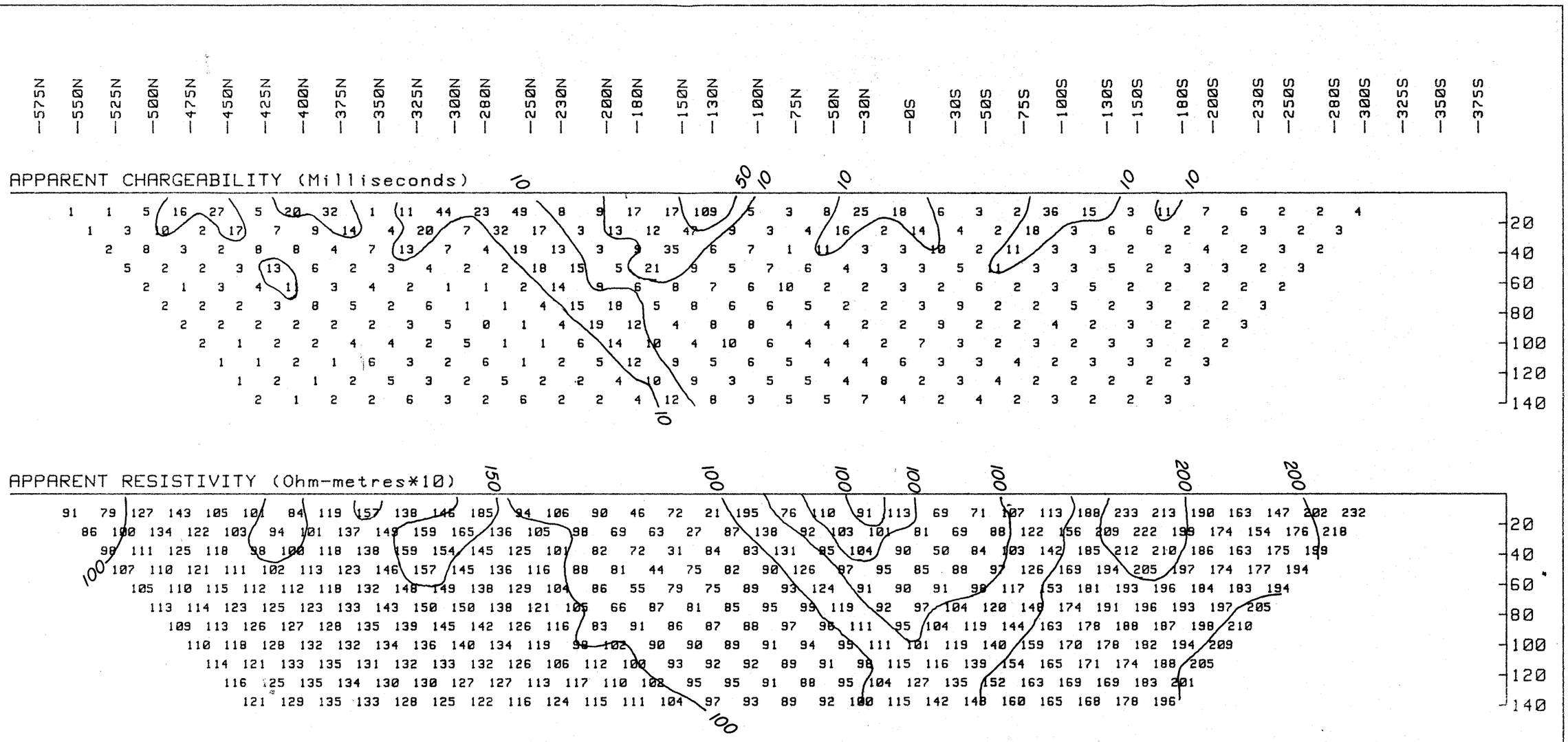
TOODOGGONE PROJECT

MULTIPOLE INDUCED POLARIZATION SURVEY

LINE 300W

DATE: AUG/87

FIG.: 8



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

BARYTEX RESOURCES CORP.

TOODOGGONE PROJECT

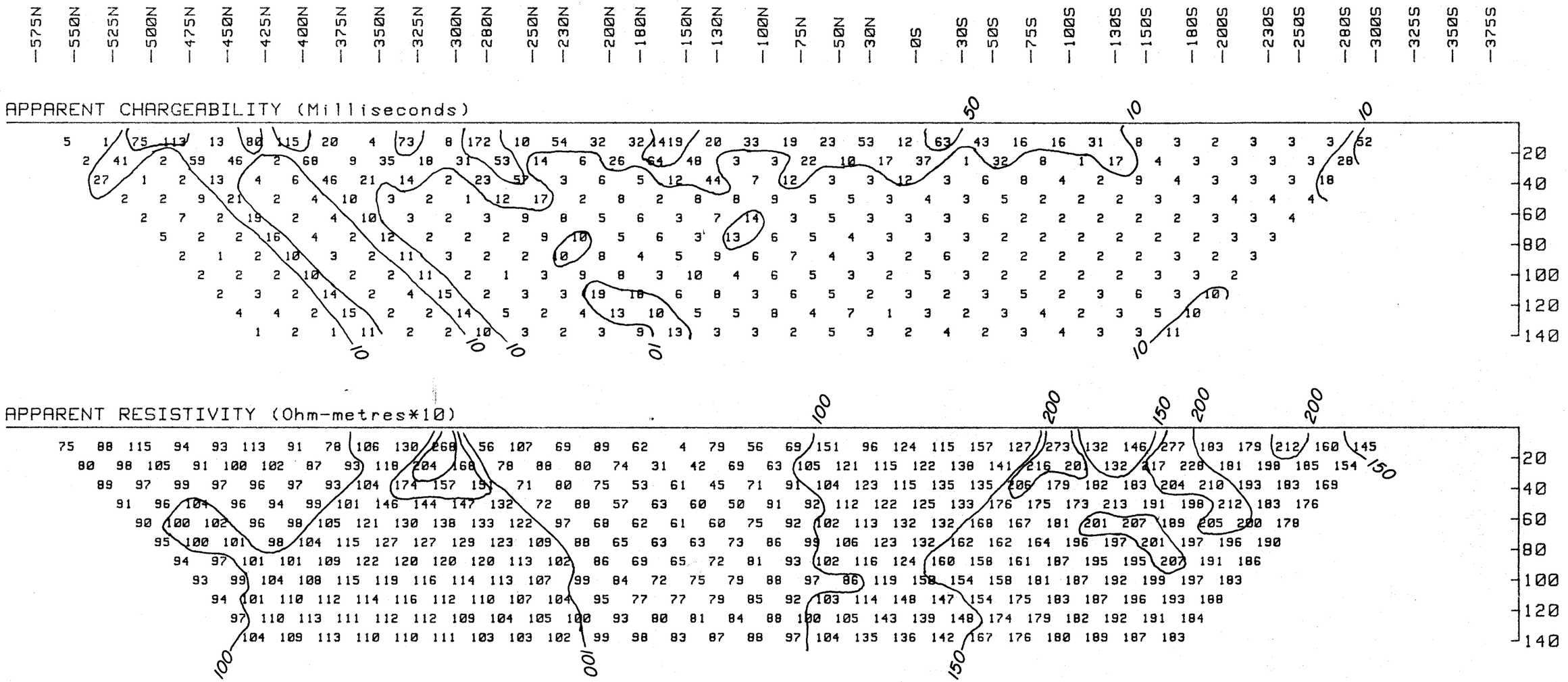
MULTIPOLE INDUCED POLARIZATION SURVEY

LINE 400W

WHITE GEOPHYSICAL INC.

DATE: AUG/87

FIG.: 9



INSTRUMENT: 36 CHANNEL MULTIPOLE I.P.

METRES
0 25 50 75 100

WHITE GEOPHYSICAL INC.

BARYTEX RESOURCES CORP.

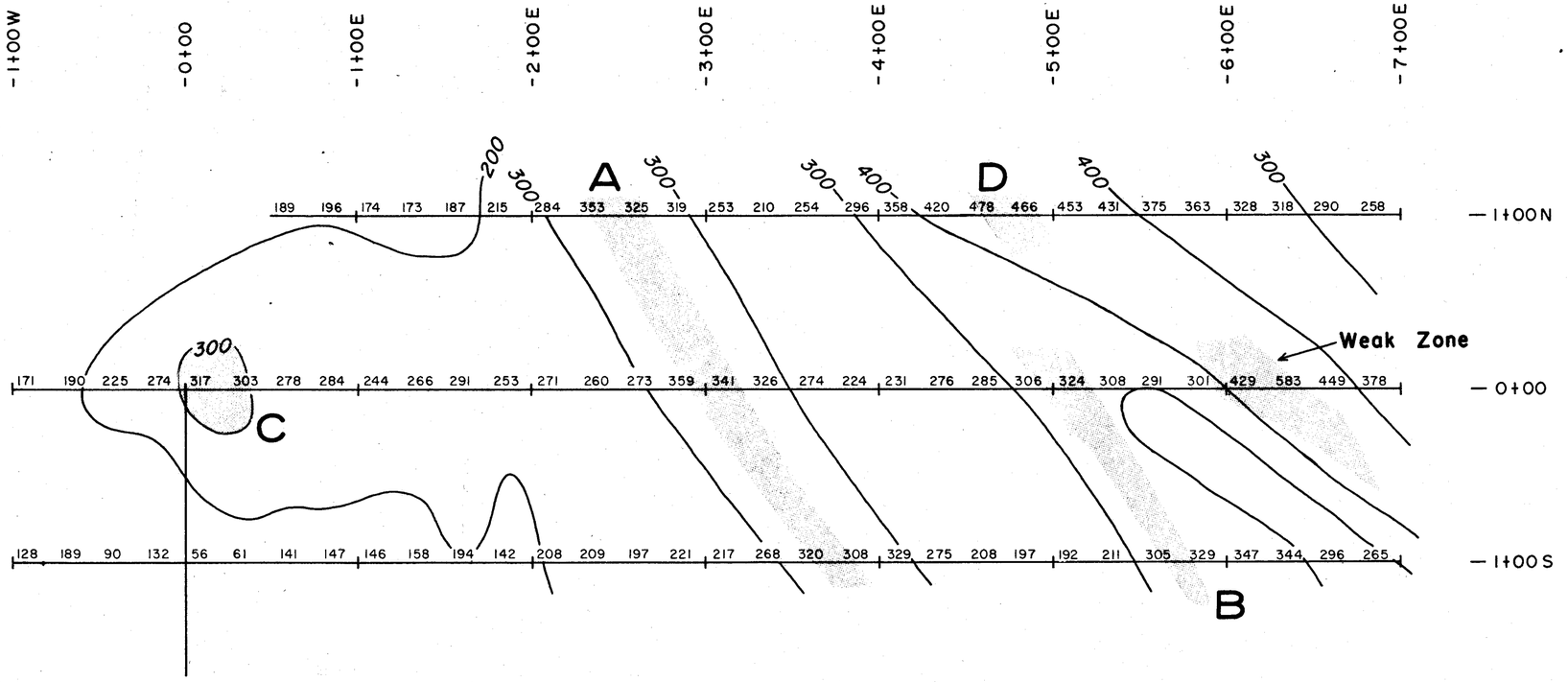
TOODOGGONE PROJECT

MULTIPOLE INDUCED POLARIZATION SURVEY

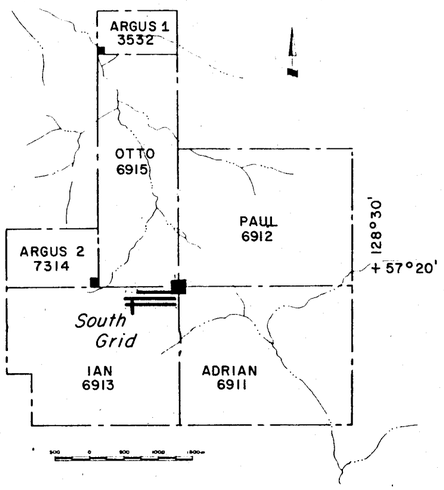
LINE 500W

DATE: AUG/87

FIG.: 10



N.T.S. 94E/7W



0 50 100 150 200 250 300 m

17061

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

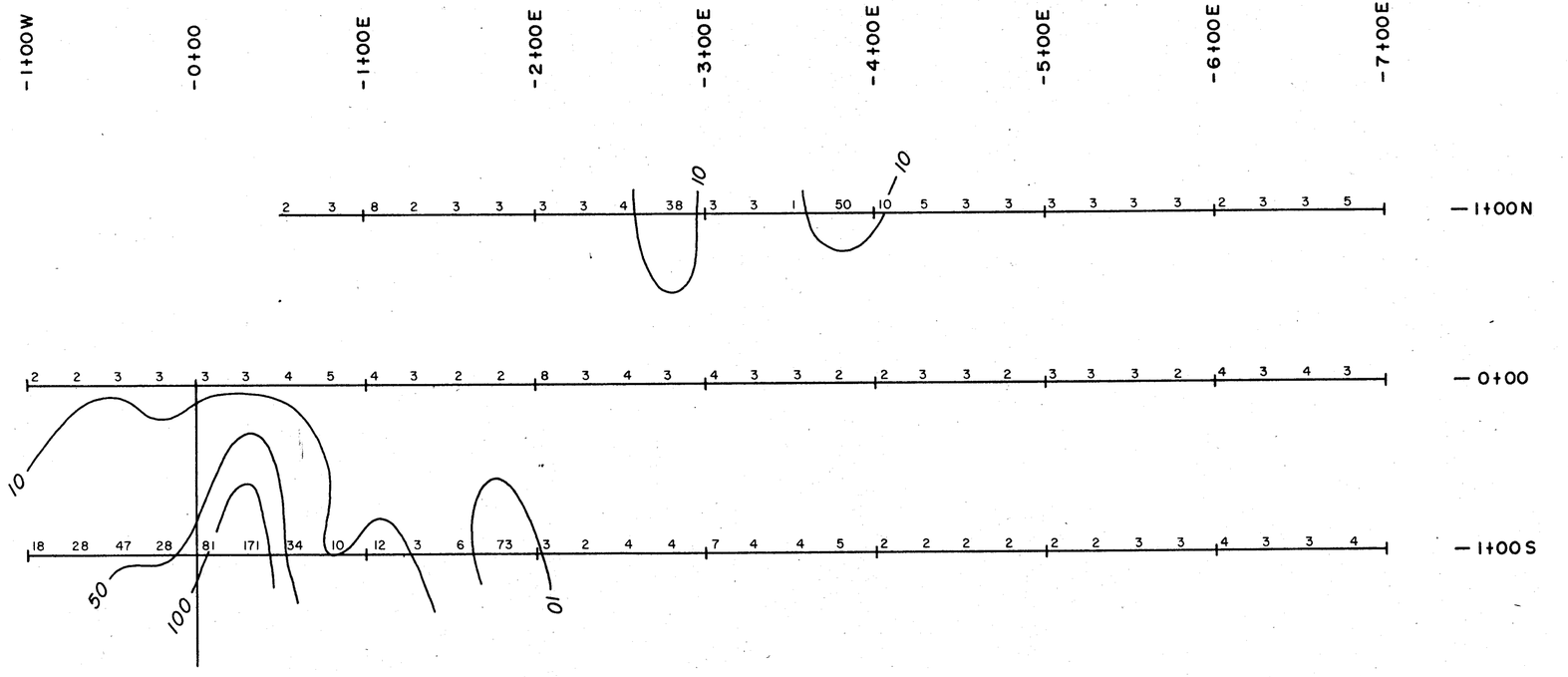
INDUCED POLARIZATION SURVEY

APPARENT RESISTIVITY MAP

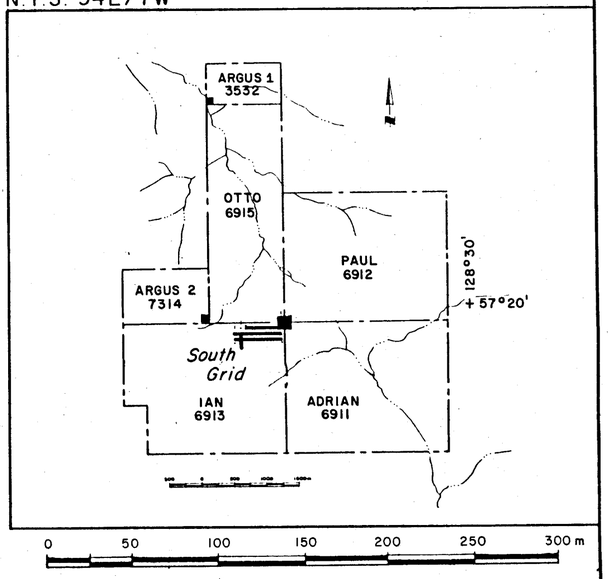
OMINECA M.D.

DATE : NOV., 1987

FIG. 1A



N.T.S. 94E/7W



BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

INDUCED POLARIZATION SURVEY

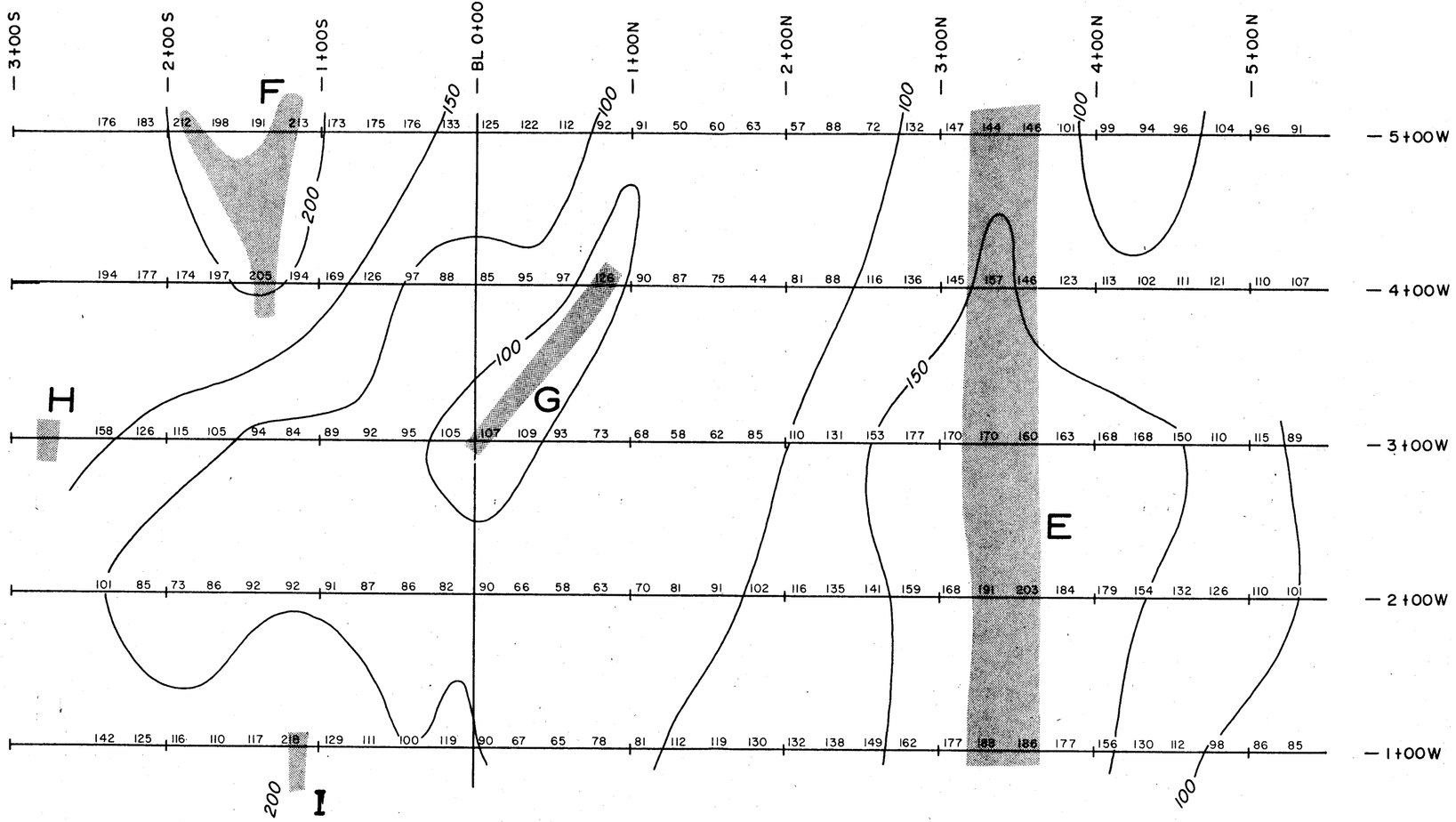
APPARENT CHARGEABILITY MAP

OMINECA M.D.

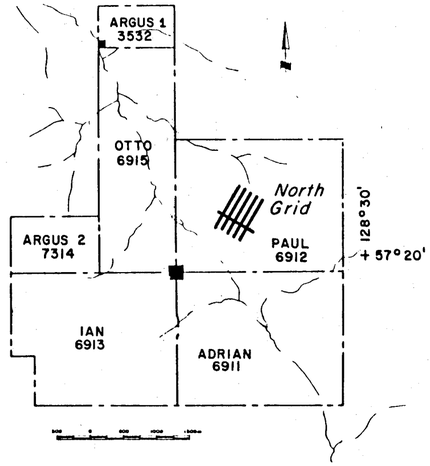
DATE : NOV., 1987

FIG. 1B

17061



N.T.S. 94E/7W



0 50 100 200 300 m

BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

INDUCED POLARIZATION SURVEY

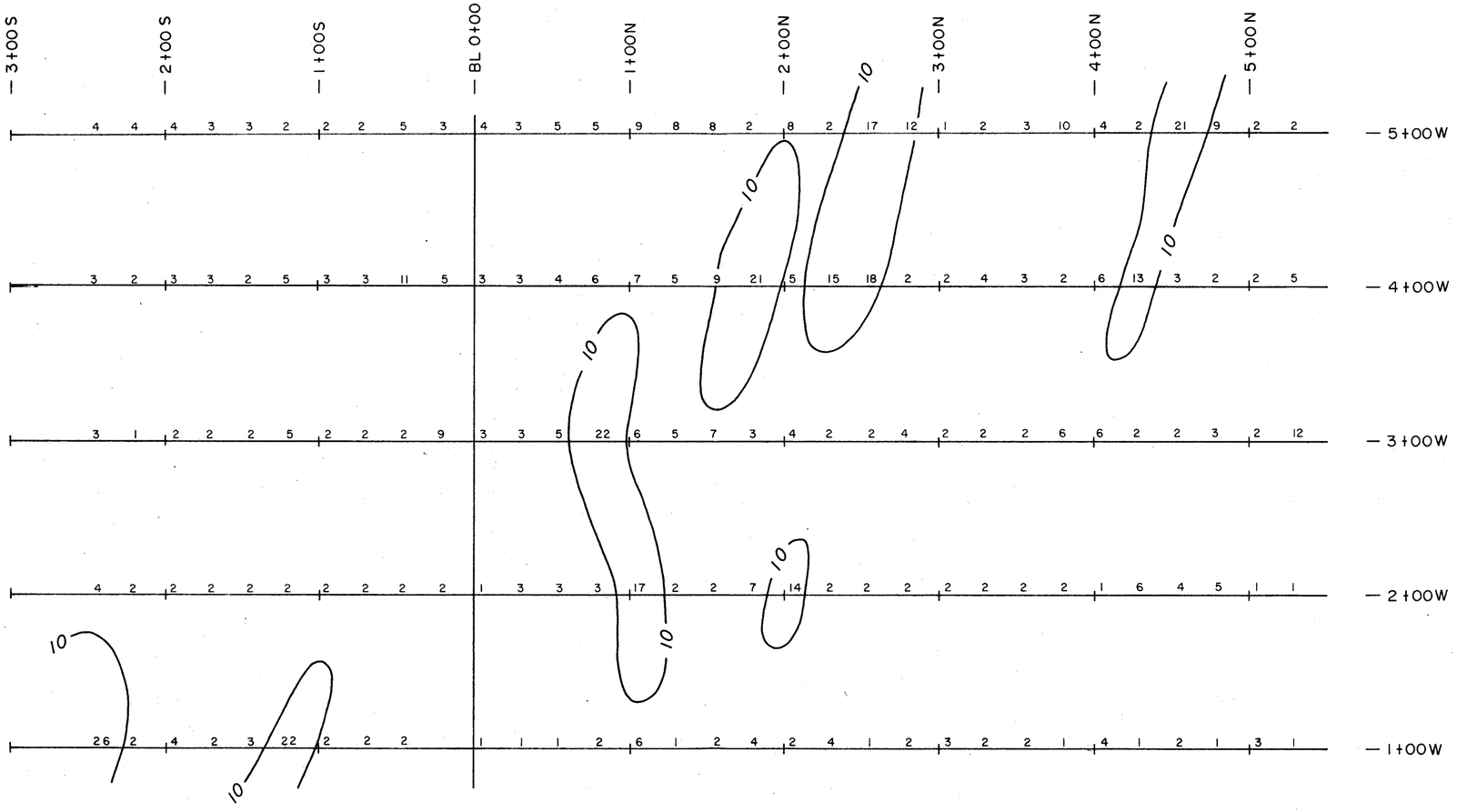
APPARENT RESISTIVITY MAP

OMINECA M.D.

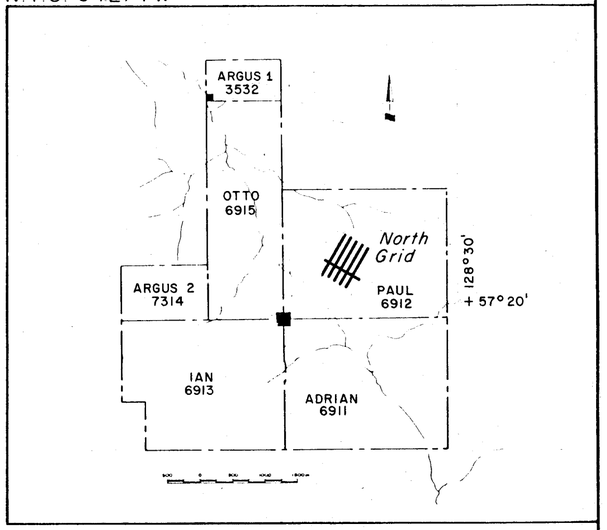
DATE : NOV., 1987

FIG. 2A

17061



N.T.S. 94E/7W



BARYTEX RESOURCES CORP.
ARGUS CLAIM GROUP

INDUCED POLARIZATION SURVEY

APPARENT CHARGEABILITY MAP

OMINECA M.D.

DATE : NOV., 1987

FIG. 2B

17061