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PRELIMINARY EXPLORATION REPORT
ON THE
GENEVA LAKE POLYMETALLIC DEPOSIT
HESS TOWNSHIP
SUDBURY MINING DIVISION
ONTARIO
FOR
GENEVA LAKE MINERALS CORPORATION

October 25, 1989
Sudbury, Ontario

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SUMMARY

GENEVA LAKE MINERALS CORPORATION HAS AN OPTION TO EARN A 50 OR 100 PERCENT INTEREST IN A CONTIGUOUS BLOCK OF 22 PATENTED MINING CLAIMS SITUATED IN HESS TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO. THE CLAIM BLOCK IS LOCATED 38 AIR-MILES NORTHWEST OF SUDBURY AND IS EASILY ACCESSIBLE FROM HIGHWAY 144 VIA HAULAGE AND BUSH ROADS 4.9 MILES TO THE PROPERTY CENTRE.

THE GENEVA LAKE PROPERTY LIES IN THE BENNY GREENSTONE BELT, AN ASSEMBLAGE OF ARCHEAN MAFIC TO FELSIC METASEDIMENTS INTRUDED BY YOUNGER PRECAMBRIAN DIABASIC AND FELSIC DYKES. THE BELT TRENDS EAST-WEST AND HOSTS TWO MAJOR POLYMETALLIC DEPOSITS, THE BENNY DEPOSIT OF STRALAK RESOURCES INC. (VSE) AND, 85 MILES FURTHER EAST, THE HESS TOWNSHIP DEPOSIT OF GENEVA LAKE MINERALS CORPORATION. THE HESS TOWNSHIP PROPERTY IS STRATABOUND AND STRATAFORM. BOTH THE SULFIDE DEPOSIT AND THE HOST ROCKS STRIKE SOUTHEASTERLY AND DIP FROM 45^{0} TO 50^{0} TO THE SOUTH. THE POLYMETALLIC DEPOSIT CONSISTS OF MASSIVE SPHALERITE, GALENA, PYRITE, PYRRHOTITE AND CHALCOPYRITE. FIRST DISCOVERED IN 1924, A VERTICAL TWO-COMPARTMENT SHAFT WAS SUNK TO 315 FEET BY 1937. IN 1943 A 45^{0} WINZE FROM THE 315 LEVEL WAS COMPLETED TO A VERTICAL DEPTH OF 638 FEET. FROM 1941-1944 80,588 TONS OF ORE WERE HOISTED AND TREATED AT AN ON-SITE MILL. THE 80,588 TONS AVERAGED 3.34% LEAD, 9.21% ZINC WITH MINOR COPPER, SILVER AND GOLD VALUES. WITH MILL RECOVERIES OF 91% OF THE LEAD AND 81% OF THE ZINC 3006

TONS OF LEAD CONCENTRATE WAS PRODUCED GRADING 63.3% LEAD, 22 OUNCES OF SILVER PER TON AND 0.08 OUNCES OF GOLD PER TON. ALSO 11,796 TONS OF ZINC CONCENTRATE WAS PRODUCED GRADING 51.4% ZINC.

PRESENT UNDERGROUND RESERVES STAND AT 114,000 TONS AVERAGING 10% ZINC AND 3% LEAD ACROSS AN AVERAGE WIDTH OF 5.3 FEET PLUS 24,000 TONS WITH AN 8% COMBINED LEAD-ZINC CONTENT ACROSS 4.0 FEET PLUS 32,000 TONS WITH A 6% COMBINED LEAD-ZINC CONTENT AND A 3.0 FOOT AVERAGE WIDTH.

POTENTIAL FOR MORE MINERALIZATION ON GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY EXISTS:

(A) AT DEPTH BELOW THE 750-FOOT LEVEL

(B) ALONG STRIKE, PRINCIPALLY TO THE NORTHWEST OF THE SHAFT

(C) NEAR THE NORTHWEST VENT RAISE

(D) NEAR 1951 DIAMOND DRILL HOLE M-3 WHICH INTERSECTED A SEPARATE SULFIDE ZONE 100 FEET NORTHEAST OF THE MAIN SULFIDE ZONE

(E) WITH THE DISCOVERY OF NEW SULFIDE ZONES ELSEWHERE ON THE SUBJECT PROPERTY.

BASED ON HISTORIC PRODUCTION, PRESENT RESERVES, THE POTENTIAL TO EXPAND THESE RESERVES AND ONLY LIMITED GEOPHYSICAL COVERAGE ON GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY WE ARE RECOMMENDING A SINGLE EXPLORATION PHASE TOTALLING $375,000.

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INTRODUCTION

THIS REPORT WAS PREPARED AT THE REQUEST OF MR. BRUCE YOUNG, PRESIDENT OF GENEVA LAKE MINERALS CORPORATION, IN ORDER TO COMPILE, ASSESS AND, IF WARRANTED, TO RECOMMEND AN EXPLORATION PROGRAM FOR BASE METALS ON THE COMPANY'S GENEVA LAKE PROPERTY. THE SUBJECT PROPERTY CONSISTS OF 22 CONTIGUOUS PATENTED CLAIMS BEING PARTS OF LOTS 6, 7, 8 AND 9, CONCESSIONS V AND VI, HESS TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO. THE CLAIM BLOCK IS SITUATED 38 AIR MILES NORTHWEST OF SUDBURY AND IS ACCESSIBLE FROM THE HIGHWAY 144-BENNY VILLAGE TURNOFF, EASTWARD, ALONG ALL-WEATHER HAULAGE ROADS AND A BUSH ROAD TO THE PROPERTY'S MAIN SHAFT.

GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY LIES IN THE BENNY GREENSTONE BELT, AN ARCHEAN ASSEMBLAGE OF EAST-WEST STRIKING AND STEEPLY DIPPING VOLCANICS AND RELATED SEDIMENTS. THE ENTIRE BELT IS METAMORPHOSED TO UPPER GREENSCHIST FACIES, STRETCHED AND FAULTED. POLYMETALLIC DEPOSITS HAVE BEEN KNOWN IN THE BELT SINCE 1886. TWO MAIN DEPOSITS ARE DOCUMENTED:

(A) STRALAK DEPOSIT - PRESENTLY BEING EXPLORED BY STRALAK RESOURCES INC. AND LOCATED 8.5 MILES WEST OF THE GENEVA LAKE DEPOSIT

(B) GENEVA LAKE DEPOSIT - THE SUBJECT OF THIS REPORT AND FIRST DISCOVERED IN 1924

BOTH DEPOSITS ARE STRATIFORM AND STRATABOUND, ALTHOUGH IN DETAIL CROSSCUTTING VEINS OCCUR. THEY ARE HOSTED BY GNEISSIC METASEDIMENTS AND METAVOLCANICS. THERE EXISTS A DEFINITE SPATIAL ASSOCIATION BETWEEN THE MASSIVE SULFIDES AND SERICITE SCHIST. THE MAIN SULFIDE BODIES ARE LENTICULAR OR TABULAR, COARSE-GRAINED AND MASSIVE; WHILE PYRITE-AND/OR CHALCOPYRITE-RICH CROSSCUTTING VEIN STRUCTURES OCCUR WITHIN AND ABOVE THE MAIN SULFIDE ZONES.

DURING THIS REPORT'S PREPARATION WE HAVE UTILIZED ONTARIO GOVERNMENT FILES AND PUBLICATIONS PLUS A SERIES OF PRIVATE AND PUBLIC COMPANY REPORTS AND MAPS. ON SEPTEMBER 7, 1989 THE AUTHOR PERSONALLY VISITED THE SUBJECT PROPERTY. WE HAVE ALSO ACTIVELY AND SUCCESSFULLY EXPLORED THE NEARBY STRALAK POLYMETALLIC DEPOSIT SINCE 1983.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

Geneva Lake Minerals Corporation's Hess township property consists of a contiguous block of 22 patented mining claims (See Figure 1). The claims are presently held in the name of Geneva Metals Incorporated pending completion of the terms of an option agreement with Geneva Lake Minerals Corporation whereby the latter may earn a 50 or 100 percent interest in the property. The claims cover 809.25 acres and are presently in good standing with all taxes paid up to date. The claims are parcels 8044, 8045 and 8046 in the Land Titles Office, Sudbury, Ontario and may be further described as:

Claim Numbers	Lot	Concession
6303	SE¼ S½ Lot 7	Concession VI
6304	SW¼ S½ Lot 7	Concession VI
6502	NE¼ S½ Lot 8	Concession VI
6503	SE¼ S½ Lot 8	Concession VI
6504	NW¼ S½ Lot 7	Concession VI
6602	NE¼ N¼ Lot 8	Concession V
6603	NE¼ N½ Lot 7	Concession V
6604	NW¼ N½ Lot 7	Concession V
6605	NE¼ S½ Lot 7	Concession VI
6606	SW¼ S½ Lot 6	Concession VI
6615	NW¼ S½ Lot 8	Concession VI
6635	SW¼ N½ LOT 7	Concession VI

Claim Numbers	Lot	Concession
6641	NW¼ N½ Lot 6	Concession V
6654	SW¼ S½ Lot 8	Concession VI
6657	SW¼ N½ Lot 7	Concession V
6658	SE¼ N½ Lot 7	Concession V
6738	SE¼ N½ Lot 8	Concession V
6739	NW¼ N½ Lot 8	Concession V
6740	SW¼ N½ Lot 8	Concession V
6741	SE¼ N½ Lot 9	Concession VI
6742	NE¼ N½ Lot 9	Concession VI
6749	NE¼ S½ Lot 9	Concession VI

22 Claims Total

The claim block is situated at Latitude 46°47'25" North and Longitude 81°30'55" West, approximately 38 air-miles northwest of Sudbury (See Figure 1). Year round access is easy from paved Highway 144 north of Cartier village for 7 miles to the Benny village turnoff. Turning onto the new Dunbar all-weather haulage road one proceeds eastward for 3 miles where the original bush road departs from the new road and continues easterly for 1.9 miles to the main shaft and the centre of the Geneva Lake property. Smaller bush roads traverse the property north to south and west to east.

PROPERTY PHYSIOGRAPHY AND FACILITIES

Typical of the Canadian Precambrian Shield in general, the subject property has low relief consisting of wooded highland interrupted by large areas of muskeg. The highlands seldom have more than 50 feet of relief and are covered by little or no soil cover. Immature second growth trees are confined to the highlands and consist of poplar, birch, spruce and jackpine. The muskegs are covered by 10 to 30 feet of humus material and clay. Scrub brush, alders and various grasses cover the muskegs.

The last observed ice movement is from north to south as evidenced by glacial striae and eskers. Outcrop is abundant on the property comprising approximately 20 percent of the area.

Drainage is sluggish and the land drains generally southward and is part of the Great Lakes Basin. Locally, however the water drains easterly to the Onaping River and then southward.

Access roads to the property are in good shape and abundant road building aggregates are present near the subject property. Adequate water and timber occur on Geneva Lake Minerals Corporation's property for mine and mill operation. Hydro could be brought from Highway 144 for 5.25 road-miles to the site. The main transcontinental Canadian Pacific rail line lies in Benny village, 7.25 road miles west of the property.

HOUSING, EXPERIENCED PERSONNEL AND THE INFRASTRUCTURE NECESSARY FOR A MAJOR MINING DEVELOPMENT IS READILY AVAILABLE IN SUDBURY AND SURROUNDING TOWNS, SITUATED 45 ROAD MILES SOUTH. AN OLD TAILINGS AREA LIES BESIDE THE MAIN SHAFT ON THE GENEVA LAKE PROPERTY AND IT APPEARS TO POSSESS ADDITIONAL CAPACITY.

HISTORY OF PREVIOUS EXPLORATION

Base metals were first noted in the Benny Belt in 1886 near the Stralak whistle stop during construction of the main CP rail line, 8.5 miles west of the Geneva Lake property. In 1924 J.H. Collins discovered the Geneva Lake polymetallic deposit beneath iron-stained drift and oxidized sulfides (gossan zone). Collins staked the nucleus of the present claim block at that time. Exploration of the discovery commenced in 1927, firstly with Babson interests then under option to Towagamac Exploration Co. In 1928 the latter company formed Lake Geneva Mining Co. to develop the deposit. Initial exploration consisted of several blasted trenches and 8 surface diamond drill holes which probed to 400 vertical feet. Shortly thereafter the Towagamac Company completed an additional 2000 feet of diamond drilling which defined 77,350 tons of ore grading 4.5% lead, 13% zinc and containing minor additional gold and silver values all located above the 250-foot level.

By 1928 a vertical, two-compartment shaft was sunk to 250 feet and a level established at 235 (See Maps 4 and 5). Simultaneously, a 125-ton per day concentrating mill was constructed on the subject property, but it closed in the fall of 1928, prior to production status, due to the stock market and base metal price crashes.

As a result of metal demand during World War II the mine and plant were re-opened in 1941. Lake Geneva Mining Co. operated the mine and sold production to the Wartime Metals Corporation under contract. From 1941 to May, 1944 records show 80,588 tons of ore averaging 3.34% lead and 9.21% zinc were treated yielding 3006 tons of lead concentrate grading 63.3% lead, 0.08 ounces of gold per ton and 22 ounces of silver per ton. Also 11,796 tons of zinc concentrate was produced averaging 51.4% zinc (Source: Ontario Mines Branch Mineral Deposit Record). Mill recoveries were approximately 91% of the lead and 81% of the zinc. In 1941-42 the vertical shaft was deepened to 315 feet and a second level started. In 1943 an inclined winze was sunk from the 315 foot level to a vertical depth of 640 feet with levels started at the 525 and 615. No production was ever completed on these deep levels although some development work ensued. By May, 1944 base metal requirements fell as the war's end was in sight and Geneva Lake's contract lapsed. Unable to find new contracts the mine and mill closed and the plant was sold for salvage in late 1944.

Table 1 summarizes the property's history since the 1924 discovery. By 1949 Geneva Lake Mines held the property (later in 1956 it became Geneva Mines Limited). In 1949 Geneva Lake Mines de-watered the mine and re-examined the underground. In addition, they drilled 17 surface diamond drill holes for a

TOTAL OF 12,100 FEET. AFTER THE 1949-52 EXPLORATION PROGRAM RESERVES WERE LISTED AS 114,000 TONS AVERAGING 10% ZINC AND 3% LEAD ACROSS AN AVERAGE WIDTH OF 5.3 FEET PLUS 24,000 MORE TONS WITH AN 8% COMBINED METALS CONTENT ACROSS 4 FEET PLUS 32,000 TONS AVERAGING 6% COMBINED METALS CONTENT OVER A WIDTH OF 3 FEET [O.D.M. MINERAL RESOURCES CIRCULAR No. 12 (1969)]. IN 1951-52 A 100-TON PER DAY CONCENTRATING MILL WAS CONSTRUCTED BY GENEVA LAKE MINES BUT AGAIN, DUE TO DECLINING BASE METAL PRICES, THE MILL WAS NEVER COMPLETED.

HESS TOWNSHIP

LAKE GENEVA MINE (PAST PRODUCER)

MAIN METALS: Pb, Zn.

LOCATION: HESS TP.; LOT 7, CON. VI.
REFERENCE: ODM MAPS 2170 AND P.287.

GEOLOGY: THE DEPOSIT IS SHEET-LIKE IN FORM AND CONFORMS WITH THE BEDDING OF SEDIMENTARY HOST ROCKS. THE MINERALIZATION IS PARTLY REPLACEMENT AND PARTLY FRACTURE FILLING. THE ORE IS CHIEFLY SPHALERITE WITH LESSER GALENA, PYRITE, ETC. THE ORE IS CUT BY DIABASE DIKES. THE AVERAGE GRADE OF 80,588 TONS ORE MILLED FROM 1941-44 WAS 9.21% Zn AND 3.34% Pb WITH 22 OZ./TON Ag IN THE LEAD CONCENTRATE. THE ORE ZONE IS 700 FEET LONG, AVERAGES 5 FEET IN WIDTH AND HAS BEEN TESTED TO A DEPTH OF 1000 FEET.

ECONOMIC FEATURES: ORE RESERVES - 114,000 TONS AVERAGING 10% Zn AND 3% Pb, ACROSS AN AVERAGE WIDTH OF 5.3 FEET, PLUS 24,000 TONS CONTAINING 8% COMBINED METALS OVER AN AVERAGE WIDTH OF 4 FEET, PLUS 32,000 TONS AVERAGING 6% COMBINED METALS OVER A WIDTH OF 3 FEET (S.L.MACDONALD, MAY, 1951).

OWNERSHIP: IRVINGTON MINING CO. LTD. (IN BANKRUPTCY).

HISTORY: 1927-44 THE MINE WAS OPERATED BY LAKE GENEVA MINING COMPANY. A SHAFT AND WINZE WERE SUNK TO 640 FEET WITH LATERAL WORK ON 5 LEVELS. MINE CLOSED MAY,1944. PRODUCTION FROM 1941 TO 1944 WAS 10,389,646 LBS. ZN AND 3,598,411 LBS. PB. VALUED AT $528,003; THE VALUE OF AG PRODUCED WAS $28,416.

1949-52 THE MINE WAS DEVELOPED BY BIDGOOD KIRKLAND GOLD MINES LTD. SURFACE DRILLING WAS DONE IN

1950-51. A 100 TON MILL WAS INSTALLED IN 1952 BUT DID NOT GO INTO PRODUCTION.

1956 GENEX MINES LTD. SUCCEEDED GENEVA LAKE MINES LTD.

1966 IRVINGTON MINING CO. SUCCEEDED GENEX MINES LTD.

(SOURCE: SHLANKA, R. 1969 ODM MINERAL RESOURCE CIRCULAR NO. 12, PP. 248-49)

By 1966 Irvington Mining Company succeeded Geneva Mines Limited only to go into bankruptcy in 1967. By 1970 E. Blanchard and W. Haystead purchased the property for cash and after completing preliminary geophysics on the property a new company was formed called Geneva Metals Inc. In early 1973 three surface diamond drill holes were completed for a total of 1502 feet. Hole 73-1 was barren while Hole 73-2 cut a 29-foot low grade section (0.66% zinc), including 3 feet of 4% zinc. Hole 73-3 intersected 5 feet grading 0.488% lead, 1.64% zinc and 0.442 ounces of silver per ton. By 1978 Geneva Metals Ontario charter was cancelled and held privately until acquired by the subject company in mid-1989.

The property has lain dormant since the 1973 drilling except for its coverage by large scale airborne electromagnetic and magnetic surveys; namely a Questor survey in 1972 for Tex-Sol Explorations and an Aerodat airborne survey for Rio Tinto Canadian Exploration Ltd. in 1981. The former survey defined a one-channel conductor trending northwesterly in claims S.6742 and S.6664 (See Map 2).

TABLE 1

SUMMARY OF PROPERTY HISTORY

Discovery

1924	J. H. Collins

Ownership

1924-26	J. H. Collins
1927?	Babson
1927	Towagamac Exploration Co.
1928-49	Lake Geneva Mining Co. (controlled by Towagamac)
1949-56	Geneva Lake Mines - financed and operated by Bidgood Kirkland Gold Mines
1956	Genex Mines - name change
1966	Irvington Mining Co. - name change
1967	Irvington Mining Co. - bankrupt
1970	E. Blanchard & W. Haystead - purchase
1972	A. C. MacPherson & Co. - acquired rights
1972	Geneva Metals Inc.
1978	Geneva Metals - Ontario charter cancelled and held privately
1978-89	Inactive

History

1924-26	PITS AND TRENCHES
1926	DIAMOND DRILLING - COLLINS, BABSON
1927	TRENCHES AND DIAMOND DRILLING
1928-31	SHAFT, VERTICAL, 250' MILL ERECTED
1937	SHAFT DEEPENED TO 400'
	SMALL AMOUNT OF ORE PRODUCTION
	MILL BURNED DOWN
1941	PRODUCTION STARTED MID YEAR
1943	WINZE, INCLINED 45°, FROM 375' LEVEL,
	375' ON INCLINE TO VERTICAL DEPTH 638'
1944	MINE CLOSED IN MAY - EQUIPMENT SOLD FOR SALVAGE
1949	DEWATER AND SAMPLE
1950-51	DIAMOND DRILLING
PRE 1952	PREPARE FOR PRODUCTION -
	MILL CONSTRUCTION PARTIALLY COMPLETED
1972	GEOPHYSICAL SURVEY, DIAMOND DRILLING

Production

1937	1,287 TONS	UNKNOWN GRADE
1941-44	80,588 TONS	3.34% PB, 9.21% ZN
TOTAL	81,875 TONS	

Concentrates-Grades

PB 63.3% ZN 51.4% AG 22.0 OZ/T AU 0.08 OZ/T

REGIONAL AND PROPERTY GEOLOGY

Geneva Lake Minerals Corporation's Hess township property lies at the eastern end, northern margin of the Benny Greenstone Belt (See Maps 1,2,3). The Benny Belt is a differentiated assemblage of Archean volcanics, pyroclastics and sediments isolated within a sea of older migmatitic basement rocks. The Belt is elongated east-west for 28 miles with a maximum width of 2.5 miles. Over 10,000 feet of stratigraphic thickness is represented by the Belt and includes mafic flows, metatuffs and metasediments (See Maps 2,3) which strike east-west and dip steeply to moderately southward. The rock assemblage is intruded by younger Archean monzonites and granites and by two types of mafic dykes. The older mafic dyke is a gabbro and may also occur as a sill, the second and younger (Proterozoic) dyke set is an olivine diabase. The entire Belt has been intensely metamorphosed to upper greenschist and lower amphibolite facies resulting in development of a gneissic texture in most rocks and intense stretching, distortion and deformation of the primary features. Faulting generally trends northwest, northeast or east-northeast.

Within the Archean assemblage are distinct bands of mafic flows and tuffs; intermediate tuffs, breccias and lapilli tuffs and felsic flows, crystal tuffs and tuffs together with oxide-and sulfide-facies iron formations, graphitic sediments,

QUARTZITES AND GREYWACKES (SEE MAP 3). THE CHEMICAL SEDIMENTS, PROBABLE PERIODS OF VOLCANIC QUIESCENCE, ARE VARIOUSLY REPRESENTED BY GRAPHITE, OXIDE AND SULFIDE IRON FORMATION, CHERTS AND ALTERED CLAY MINERALS (SERICITE). THE LATTER SERICITIC UNITS OFTEN ENVELOP THE SULFIDE IRON FORMATIONS ALONG A STRATIGRAPHIC HORIZON AND IS THE SETTING FOR NUMEROUS LARGE BARREN MASSIVE SULFIDE BODIES IN THE BELT. THE SERICITIC ENVELOPE ALSO REPRESENTS THE GEOLOGIC SETTING FOR THE TWO MAIN POLYMETALLIC DEPOSITS IN THE AREA, NAMELY THE GENEVA LAKE AND STRALAK DEPOSITS.

GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY LIES ON THE NORTHERN MARGIN NEAR THE EASTERN END OF THE BENNY GREENSTONE BELT IN AN APPARENTLY COMPARABLE STRATIGRAPHIC POSITION TO THE STRALAK DEPOSIT (SEE MAP 1). IN DETAIL THE SUBJECT PROPERTY INCLUDES A CENTRAL DIFFERENTIATED SEQUENCE OF MAFIC (CHLORITIC) METAVOLCANICS SURROUNDED BY INTERMEDIATE METATUFFS AND BRECCIAS (SEE MAPS 2, 3). THE NORTHERN AND SOUTHERN PORTIONS OF THE PROPERTY ARE UNDERLAIN BY YOUNGER ARCHEAN MONZONITE-GRANITE PLUTONS. THE ROCK SEQUENCE STRIKES IN A VARIETY OF LOCAL TRENDS BUT NEAR THE MAIN SHAFT IN CLAIM S.6304 THE ROCKS STRIKE N45°W AND DIP SOUTH AT 45° TO 50°. THE ROCKS ARE WELL FOLIATED (GNEISSIC) WITH THE FOLIATION PARALLEL TO OBSERVED PRIMARY RELICT FEATURES AND THE GENEVA LAKE DEPOSIT IS CONFORMABLE TO THIS FOLIATION.

ALL THE ROCKS ARE METAMORPHOSED TO UPPER GREENSCHIST FACIES. TWO MAJOR FAULTS CROSS THE PROPERTY (SEE MAP 3): THE APPARENTLY YOUNGER NORTHEAST-TRENDING DOWES LAKE FAULT WHICH DISPLACES THE OLDER NORTHWEST-TRENDING FAULT SYSTEM. IMMEDIATELY TO THE SOUTH OF THE PROPERTY IS THE NORTHEASTERLY GENEVA LAKE FAULT (MAP 3).

YOUNGER ARCHEAN GABBROIC DYKES AND SILLS INTRUDE THE SEQUENCE JUST OUTSIDE THE SOUTHEASTERLY AND EASTERLY PROPERTY BOUNDARIES WHILE A LARGE PROTEROZOIC DIABASE DYKE TRENDS NORTHWESTERLY ACROSS THE NORTHEAST CORNER OF THE PROPERTY (SEE MAP 3).

ECONOMIC GEOLOGY

THE GENEVA LAKE MINERALIZATION HAS BEEN VARIOUSLY DESCRIBED AS A FRACTURE FILL, REPLACEMENT OR STRATABOUND MASSIVE SULFIDE DEPOSIT. BASICALLY, THE TWO FORMER DESCRIPTIONS ARE PRE-1980 IN ORIGIN WHILE THE LATTER DESCRIPTION IS A MORE MODERN THEORY. THE DEPOSIT STRIKES SOUTHEASTERLY, DIPS SOUTH AT 45^{0} TO 50^{0} AND RAKES TO THE SOUTHEAST AT 45^{0}. THE SULFIDE ZONE IS CONFORMABLE TO THE STRATIGRAPHY AND ON SURFACE HAS BEEN TRACED ALONG A 700 FOOT STRIKE LENGTH. SULFIDE WIDTHS VARY FROM 2 TO 20 FEET WITH AN AVERAGE WIDTH OF 5 FEET.

THE SULFIDE MINERALIZATION IS GENERALLY MASSIVE BUT WITH DISTINCT BANDING PARALLEL TO THE HOST ROCK'S BEDDING PLANES. THE MINERALIZATION CONTAINS RAFTS OF ALTERED HOST ROCK AND CONSISTS OF BLACK AND BROWN FINE-GRAINED SPHALERITE, COARSER-GRAINED GALENA, CHALCOPYRITE, PYRRHOTITE AND PYRITE. CROSS-CUTTING, STRINGER ZONES OCCUR WITHIN AND ABOVE THE MAIN SULFIDE HORIZON. THE MINERALOGY OF THE STRINGERS IS PYRITE, CHALCOPYRITE, SPHALERITE, PYRRHOTITE AND MINOR GALENA. GANGUE MINERALS WITHIN THE DEPOSIT INCLUDE QUARTZ, CALCITE, FELDSPAR AND CHLORITE. SELECTED GRAB SAMPLES OF EACH MINERALIZATION TYPE WERE TAKEN BY THE AUTHOR AND ASSAY REPORTS ARE INCLUDED IN APPENDIX III OF THIS REPORT.

SAMPLE-15827 - REPRESENTS A MASSIVE, HIGHGRADE, SULFIDE SAMPLE FROM THE MAIN ZONE AND CONTAINS 0.008% COPPER, 8.98% LEAD, 17.62% ZINC, 3.28 OUNCES PER TON SILVER AND 0.003 OUNCES PER TON GOLD.

SAMPLE-15829 - REPRESENTS MASSIVE, BUT LOWER GRADE, MAIN HORIZON MINERALIZATION AND ASSAYS 0.28% COPPER, 1.14% LEAD, 7.91% ZINC, 2.33 OUNCES PER TON SILVER AND 0.023 OUNCES PER TON GOLD.

SAMPLE-15828 - REPRESENTS STRINGER TYPE MINERALIZATION WITH INCREASING AMOUNTS OF PYRITE AND CHALCOPYRITE AND VERY LITTLE LEAD OR ZINC MINERALIZATION. GRADES 1.05% COPPER, 0.03% LEAD, 0.01% ZINC, 0.67 OUNCES OF SILVER PER TON AND 0.002 OUNCES PER TON OF GOLD.

REPORTED MILL RECOVERIES (JEROME, 1972) FOR LEAD AND ZINC WERE 81 AND 91 PERCENT, RESPECTIVELY. LEAD CONCENTRATES AVERAGED 63.3% LEAD, 0.08 OUNCES OF GOLD PER TON AND 22 OUNCES OF SILVER PER TON. ZINC CONCENTRATES AVERAGED 51.4% ZINC.

GOLD VALUES ARE GENERALLY LOW BUT OSBORNE (1929) DESCRIBES A SPECTACULAR NATIVE GOLD SHOWING IN A SURFACE PIT.

THE HISTORIC GRADE OF THE PRODUCTION ORE IS 9.21% ZINC AND 3.34% LEAD FOR 80,558 TONS MILLED. THE AVERAGE GRADE OF THE PRE-PRODUCTION CHANNEL SAMPLES FROM THE 235-FOOT LEVEL IS 13.9% ZINC, 5.65% LEAD, 2.67 OUNCES OF SILVER PER TON AND 0.021 OUNCES PER TON OF GOLD ACROSS AN AVERAGE WIDTH OF 5.7 FEET.

HISTORICALLY, MORE MINERALIZATION LIES WEST OF THE SHAFT THAN EAST OF THE SHAFT. MAP 5 IN THIS REPORT SHOWS A SECTION THROUGH THE SHAFT. BELOW THE 375 LEVEL A DIABASE DYKE STRIKES S45°E AND DIPS NORTHEAST AT 75° TO VERTICAL AND DISRUPTS THE MINERALIZATION. THE SULFIDE CONTINUES, APPARENTLY WITHOUT ANY SIGNIFICANT DISPLACEMENT, BELOW 475 VERTICAL FEET AND CONTINUES BELOW THE DEEPEST DEVELOPMENT IN THE MINE AT 615 FEET. SMITH (1950, APPENDIX III IN THIS REPORT) OUTLINED RESERVES OF:

DEVELOPED	TONS
525 LEVEL	13,570
615 LEVEL	6,500
INDICATED	
525 LEVEL	4,500
615 LEVEL	18,500
PROBABLE	
525 LEVEL	12,400
615 LEVEL	5,75 ..... 61,150 TOTAL TONS

SMITH ALSO INDICATED THAT THESE RESERVES, WOULD HAVE "AN AVERAGE GRADE OF APPROXIMATELY 10% ZINC AND 3% LEAD OVER AN AVERAGE WIDTH OF ABOUT 5.0 FEET." SMITH CONTINUES, "I CONSIDER THAT THE CHANCES ARE GOOD OF FINDING ANOTHER ORESHOOT IN THE VEIN BELOW THE 615 FOOT LEVEL, BECAUSE IT HARDLY SEEMS REASONABLE TO EXPECT THE ORE TO BE ENTIRELY CUT OFF AT THAT HORIZON WHEN THE VEIN FRACTURE EXTENDS TO A DEPTH OF AT LEAST 1000 FEET."

BIDGOOD KIRKLAND GOLD MINES LTD. (1951) ESTIMATED RESERVES TO THE 750-FOOT LEVEL WERE:

(A) 114,000 TONS GRADING 10% ZINC AND 3% LEAD IN A TABULAR BODY AVERAGING 5 FEET IN THICKNESS

(B) 24,000 TONS CONTAINING 8% COMBINED LEAD AND ZINC WITH AN AVERAGE THICKNESS OF 4 FEET

(C) 32,000 TONS CONTAINING 6% COMBINED LEAD AND ZINC WITH AN AVERAGE THICKNESS OF 3 FEET

THEY ALSO INDICATED AN ADDITIONAL 5000 TONS LOCATED AT THE NORTHWEST END OF THE WORKINGS, WEST OF THE VENTILATION RAISE AND EXTENDING ALONG 200 TO 300 FEET OF STRIKE LENGTH AND FROM SURFACE TO 50 FEET OF DEPTH (TILSEY, 1989).

THE TAILINGS AT GENEVA LAKE CONTAIN APPROXIMATELY 65,737 TONS AVERAGING 2.07% ZINC AND 1.15% LEAD, IF ONE CALCULATED BACK FROM RECOVERED GRADES AND RATE OF RECOVERY FOR EACH METAL.

THE DEEPEST DRILLING TO DATE ON THE PROPERTY CONSISTS OF TWO HOLES AT THE 1000-FOOT DEPTH WHICH ENCOUNTERED SUB-ECONOMIC GRADES. THE 1951 DRILLING PROGRAM OF 12,100 FEET IN 17 HOLES BY BIDGOOD GOLD MINES LTD. (MACDONALD, 1951) EXTENDED THE DEPOSIT LATERALLY AND AT DEPTH (JEROME, 1972). HOLE M-3 PASSED SOME DISTANCE INTO THE FOOTWALL OF THE DEPOSIT AND CUT 4 FEET OF 4.5% ZINC LOCATED 100 FEET NORTHEAST OF THE MAIN ZONE (MACDONALD, 1951). THIS APPARENTLY REPRESENTS A NEW AND SEPARATE SULFIDE HORIZON (MAP 5). ANOTHER SULFIDE ZONE IS EXPOSED AT SURFACE FOR 200-300 FEET AND IS STILL OPEN NEAR THE NORTHWEST VENT RAISE. THIS SULFIDE ZONE IS KNOWN TO EXTEND TO A DEPTH OF 50 FEET. THE SULFIDE ZONE WEST OF THE 235-FOOT LEVEL IS STILL PRESENT, ALTHOUGH OF LOWER GRADE, AND POTENTIAL EXISTS FOR THIS MINERALIZATION TO INCREASE IN GRADE AND WIDTH.

STRALAK RESOURCES INC. IS PRESENTLY COMPLETING AN ORDER OF MAGNITUDE FEASIBILITY REPORT ON THEIR BENNY AREA POLYMETALLIC DEPOSIT, INCLUDING MILL COSTS VERSUS TRANSPORTATION AND CUSTOM MILLING. THE POSSIBILITY EXISTS FOR STRALAK TO CONSTRUCT A CENTRAL MILL AT BENNY VILLAGE 7.25 ROAD MILES FROM THE GENEVA PROPERTY. SHOULD THE PREVIOUS GENEVA LAKE DEPOSIT

TONNAGES AND GRADES BE CONFIRMED AND ADDITIONAL ZONES OF MINERALIZATION DELINEATED BY NEW EXPLORATION WORK THEN A CUSTOM MILLING FACILITY MAY BE AVAILABLE TO CONCENTRATE THE GENEVA MINERALIZATION. SINCE THE STRALAK AND GENEVA LAKE POLYMETALLIC DEPOSITS ARE THE TWO MAJOR DEPOSITS IN THIS AREA IT IS INEVITABLE THAT THEIR ECONOMIC FACTORS ARE INTERRELATED AND DEPENDENT.

THE GENEVA LAKE SULFIDE ZONES, IN ADDITION TO THE KNOWN MINERALIZATION IN PLACE ABOVE THE 750-FOOT LEVEL, HAS THE FOLLOWING POTENTIAL FOR EXPANSION:

(A) AT DEPTH BELOW THE 750-FOOT LEVEL

(B) ALONG STRIKE, PRINCIPALLY TO THE NORTHWEST OF THE SHAFT

(C) NEAR SURFACE IN THE AREA OF THE NORTHWEST VENT RAISE

(D) IN THE SECOND SULFIDE HORIZON DETECTED IN 1951 BY HOLE M-3

(E) IN SEPARATE UNDISCOVERED SULFIDE HORIZONS LOCATED ELSEWHERE ON THE PROPERTY

CONCLUSIONS

THESE SALIENT POINTS SUMMARIZE THE KNOWN FACTS REGARDING GENEVA LAKE MINERALS CORPORATION'S GENEVA LAKE POLYMETALLIC DEPOSIT, HESS TOWNSHIP, ONTARIO:

(A) THE SUBJECT PROPERTY CONSISTS OF A CONTIGUOUS BLOCK OF 22 PATENTED MINING CLAIMS SITUATED 38 AIR-MILES NORTHWEST OF SUDBURY AND ACCESSIBLE FROM MAIN HIGHWAY 144 VIA GOOD HAULAGE AND BUSH ROADS.

(B) THE CLAIM GROUP LIES IN THE BENNY GREENSTONE BELT, AN EAST-WEST STRIKING AND STEEPLY DIPPING ASSEMBLAGE OF ARCHEAN MAFIC TO FELSIC METASEDIMENTS.

(C) THE ENTIRE SEQUENCE HAS BEEN INTRUDED BY YOUNGER PRECAMBRIAN DIABASE AND FELSIC DYKES, METAMORPHOSED TO UPPER GREENSCHIST AND LOWER AMPHIBOLITE FACIES, STRETCHED, DEFORMED AND FAULTED.

(D) WITHIN THE ROCK SEQUENCE ARE ROCK TYPES REPRESENTING PERIODS OF QUIESCENCE OR CHEMICAL PRECIPITATION RATHER THAN RAPID CLASTIC SEDIMENTATION. EXAMPLES OF THE FORMER INCLUDE GRAPHITIC SEDIMENTS, OXIDE AND SULFIDE FACIES IRON FORMATION, CHERT AND SERICITE SCHIST.

(E) TWO MAJOR POLYMETALLIC DEPOSITS ARE PRESENT IN THE BENNY GREENSTONE BELT, THE STRALAK DEPOSIT AND GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP DEPOSIT.

(F) THE DEPOSITS CONSIST OF SPHALERITE, GALENA, PYRITE, PYRRHOTITE AND CHALCOPYRITE HOSTED BY SERICITE SCHIST.

(G) THE DEPOSITS ARE STRATABOUND AND STRATAFORM. THE GENEVA LAKE DEPOSIT CONFORMS TO THE HOST ROCK BEDDING, STRIKING SOUTHEASTERLY AND DIPPING FROM 45^{0} TO 50^{0} TO THE SOUTH.

(H) THE SULFIDE DEPOSITS ARE HOSTED AND ENVELOPED BY SERICITE SCHIST AND THEY CONSIST OF DISTINCT LENSES AND TABULAR BODIES WHICH PLUNGE STEEPLY EAST OR WEST.

(I) THE GENEVA LAKE POLYMETALLIC DEPOSIT HAS A VERTICAL TWO-COMPARTMENT SHAFT TO 315 FEET WITH LEVELS AT 235 AND 315. A WINZE GOES FROM THE 315 LEVEL TO 615 WITH LEVELS AT 525 AND 615 FEET.

(J) FROM 1941 TO 1944 80,588 TONS OF ORE GRADING 3.34% LEAD, 9.21% ZINC AND MINOR COPPER-SILVER-GOLD VALUES WERE MINED AND TREATED AT THE GENEVA LAKE PROPERTY PRODUCING 3006 TONS OF LEAD CONCENTRATE GRADING 63.30% LEAD, 22 OUNCES OF SILVER PER

TON AND 0.08 OUNCES OF GOLD PER TON PLUS 11,796 TONS OF ZINC CONCENTRATE AVERAGING 51.4% ZINC. MILL RECOVERIES WERE 91% OF THE LEAD AND 81% OF THE ZINC.

(K) PRESENT RESERVES IN PLACE UNDERGROUND AT THE GENEVA LAKE PROPERTY CONSIST OF 114,000 TONS AVERAGING 10% ZINC AND 3% LEAD ACROSS AN AVERAGE WIDTH OF 5.3 FEET PLUS 24,000 TONS WITH AN 8% COMBINED LEAD-ZINC CONTENT ACROSS 4.0 FEET PLUS 32,000 TONS AVERAGING 6% COMBINED LEAD-ZINC CONTENT ACROSS 3.0 FEET.

(L) POTENTIAL EXISTS FOR MORE MINERALIZATION ON GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY:

1. AT DEPTH BELOW THE 750 FOOT LEVEL
2. ALONG STRIKE, PRINCIPALLY TO THE NORTHWEST OF THE SHAFT
3. NEAR THE NORTHWEST VENT RAISE
4. NEAR 1951 DIAMOND DRILL HOLE M-3 WHICH INTERSECTED A SEPARATE SULFIDE ZONE
5. WITH THE DISCOVERY OF NEW SULFIDE ZONES ELSEWHERE ON THE SUBJECT PROPERTY.

(M) GENEVA LAKE MINERALS CORPORATION'S HESS TOWN-TOWNSHIP PROPERTY HAS SEEN ONLY LIMITED GEOPHYSICS AND NONE OF THE MODERN PULSE-TYPE GEOPHYSICAL COVERAGE.

RECOMMENDATIONS AND PROPOSED BUDGET

GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY PRODUCED 80,588 TONS OF ZINC-LEAD-COPPER-SILVER-GOLD ORE FROM 1941-1944. AN ADDITIONAL RESERVE ALSO REMAINS DEVELOPED OR ACCESSIBLE FROM THE PRESENT UNDERGROUND WORKINGS. EXPLORATION FROM THE 1950'S AND 1970'S HAS INTERSECTED OTHER MINERALIZED ZONES ON THE PROPERTY AND ALL THESE FACTS JUSTIFY A MODERN EXPLORATION PROGRAM ON GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY AND WE ARE RECOMMENDING A PHASE I PROGRAM TOTALLING $375,000.

PHASE I

(A) LINECUTTING
30 MILES @ $350 PER MILE
(INCLUDES ALL COSTS) ..... $ 10,500.

(B) GROUND GEOPHYSICS
30 MILES @ $1500 PER MILE
(INCLUDES ALL COSTS) ..... 45,000.

(C) GEOPHYSICAL REPORT ..... 4,500.

(D) DIAMOND DRILLING (BQ CORE)
10,000 FEET @ $25. PER FOOT
(INCLUDES MOB/DEMOB, DRILLING
COSTS, CORE BOXES, TRANSPORTATION) ... 250,000.

(E) ASSAYING
500 ASSAYS @ $20. PER ASSAY ..... 10,000.

(F) SUPERVISION, CONSULTING AND REPORT
PREPARATION COSTS ..... 25,000.

(G) CONTINGENCIES (≈ 10%) ..... -30,000.

TOTAL OF PHASE I $375,000.

PHASE I IS DESIGNED FOR COMPLETE GRID COVERAGE OF ALL 22 CLAIMS AT 400-FOOT LINE SPACINGS WITH AN ADDITIONAL ALLOWANCE FOR DETAILED CUTTING IN SPECIFIC AREAS. GROUND GEOPHYSICS OVER THE ENTIRE CLAIM BLOCK IS PLANNED USING THE MAXI-PROBE EM SYSTEM, A GEOPHYSICAL SYSTEM DESIGNED TO DETECT WEAKLY CONDUCTIVE ZONES EVEN AT GREAT DEPTH. ONCE GEOPHYSICAL TARGETS ARE DELINEATED AND RELATED TO THE KNOWN MINERALIZATION A SURFACE DIAMOND DRILLING PROGRAM WILL TEST THE TARGETS.

A PHASE II, WHICH WOULD BE DEPENDENT ON THE RESULTS OF PHASE I, WOULD CONSIST OF ADDITIONAL SURFACE DIAMOND DRILLING TO EXPAND AND DETAIL THE MINERALIZATION DETECTED IN PHASE I.

Dated at Sudbury, Ontario this 25th Day of October, 1989

GEOLOGICAL ASSOCIATION OF CANADA · DAVID W. CONSTABLE · FELLOW ·

CERTIFICATION

I, DAVID W. CONSTABLE, HEREBY CERTIFY THAT:

(A) I HAVE BEEN A CONSULTING GEOLOGIST SINCE 1983 AND AM PRESIDENT OF CONSTABLE CONSULTING INC. WITH AN OFFICE AT 10 KINGSTON COURT, SUDBURY, ONTARIO.

(B) I AM A 1970 HONOURS BACHELOR OF SCIENCE (GEOLOGY) GRADUATE OF MOUNT ALLISON UNIVERSITY, SACKVILLE, NEW BRUNSWICK AND IN 1970-71 COMPLETED ONE YEAR POST-GRADUATE STUDY AT OXFORD UNIVERSITY, ENGLAND.

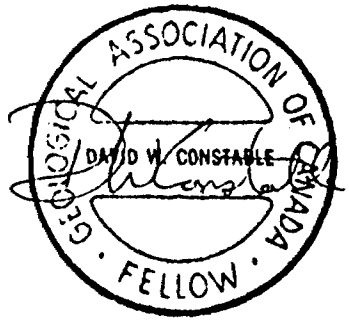
(C) I HAVE BEEN A FELLOW OF THE GEOLOGICAL ASSOCIATION OF CANADA SINCE 1975 AND AM A MEMBER OF THE CANADIAN INSTITUTE OF MINING AND METALLURGY AND THE PROSPECTORS AND DEVELOPERS ASSOCIATION.

(D) I HAVE BEEN CONTINUOUSLY EMPLOYED SINCE GRADUATION IN MINERAL AND OIL EXPLORATION AND DEVELOPMENT THROUGHOUT CANADA AND PARTS OF THE UNITED STATES AND MEXICO.

(E) I HAVE KNOWLEDGE OF GENEVA LAKE MINERALS CORPORATION'S GENEVA LAKE PROPERTY BASED ON A PERSONAL PROPERTY VISIT ON SEPTEMBER 7, 1989 AND PERSONAL EXPLORATION EXPERIENCE SINCE 1983 ON THE NEARBY STRALAK POLYMETALLIC DEPOSIT AND THE BENNY GREENSTONE BELT IN GENERAL. I HAVE ALSO USED ONTARIO GOVERNMENT, PRIVATE AND PUBLIC COMPANY REPORTS AND MAPS DURING THIS REPORT'S PREPARATION.

(F) I HAVE NO INTEREST, DIRECT OR INDIRECT, IN GENEVA LAKE MINERALS CORPORATION NOR DO I EXPECT TO RECEIVE ANY. I HAVE DISCLOSED, TO THE BEST OF MY ABILITY, ALL FACTS WHICH MIGHT HAVE A BEARING ON MY RECOMMENDATION REGARDING GENEVA LAKE MINERALS CORPORATION'S GENEVA LAKE PROPERTY.

DATED AT SUDBURY, ONTARIO THIS 25TH DAY OF OCTOBER, 1989



DAVID W. CONSTABLE, HBSc., F.G.A.C.
CONSULTING GEOLOGIST

Constable Consulting Inc.

TEL. (705) 566-5931

10 KINGSTON COURT SUDBURY, ONTARIO P3A 1C9

CONSENT LETTER

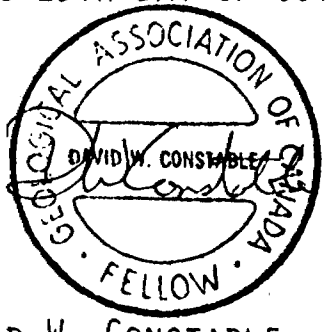
OCTOBER 25, 1989

GENEVA LAKE MINERALS CORPORATION
SUITE 101, 50 GERVAIS DRIVE
DON MILLS, ONTARIO
M3C 1Z3

GENTLEMEN:

THIS LETTER IS YOUR AUTHORITY TO UTILIZE MY REPORT DATED OCTOBER 25, 1989 AND ENTITLED "PRELIMINARY EXPLORATION REPORT ON THE GENEVA LAKE POLYMETALLIC DEPOSIT, HESS TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO FOR GENEVA LAKE MINERALS CORPORATION" FOR ANY CORPORATE PURPOSE YOU DEEM NECESSARY INCLUDING ITS USE, IN WHOLE OR IN PART, IN ANY COMPANY PROSPECTUS.

DATED AT SUDBURY, ONTARIO THIS 25TH DAY OF OCTOBER, 1989



DAVID W. CONSTABLE, HBSc., F.G.A.C.
CONSULTING GEOLOGIST

APPENDIX I: BIBLIOGRAPHY

ALCOCK, F.J. 1930: GENEVA ZINC-LEAD MINES IN ZINC AND LEAD DEPOSITS OF CANADA, GSC ECON. GEOL. SERIES NO. 8, PP. 169-175.

HARPER, H.G. 1972: GENEVA METALS INCORPORATED, HESS TOWNSHIP PROPERTY, MAGNETIC AND ELECTROMAGNETIC SURVEY (PRIVATE REPORT A COPY OF WHICH IS AVAILABLE AT THE REGIONAL GEOLOGIST'S OFFICE, SUDBURY, ONTARIO).

HAWLEY, J. E. 1948: LAKE GENEVA MINE IN STRUCTURE OF CANADIAN ORE DEPOSITS, CIMM JUBILEE VOLUME, VOL. 1, PP. 590-596.

JEROME, J.E. 1972: QUALIFYING REPORT ON THE GENEVA METALS INCORPORATED PROPERTY, HESS TOWNSHIP, SUDBURY MINING DISTRICT (COPY AVAILABLE AT REGIONAL GEOLOGIST'S OFFICE, SUDBURY, ONTARIO)

MACDONALD, S.L., 1951: LETTER TO THE PRESIDENT AND BOARD OF DIRECTORS, GENEVA LAKE MINES LTD. (PRIVATE REPORT: APPENDIX III OF THIS REPORT).

ODM ANNUAL REPORTS (1932, 1938, 1943-45), LAKE GENEVA MINING CO. LTD. IN VOLUME 41, PT. 1, P. 97;
VOL. 47, PT. 1, PPS. 232-233;
VOL. 52, PT. 1, PPS. 210-211;
VOL. 53, PT. 1, PPS. 175-176;
VOL. 54, PT. 2, P.103

OSBORNE, F.F. 1929: LAKE GENEVA MINING COMPANY LTD., IN CARTIER-STRALAK AREA, ODM ANNUAL REPORT VOL. 38, PT. 7 PP. 61-63

PROSPECTUS, 1972: FILED FOR GENEVA METALS INCORPORATED BY A.C. MACPHERSON AND CO. TO THE ONTARIO SECURITIES COMMISSION.

SAVAGE, W.S. 1952: A REPORT ON THE GENEVA LAKE MINES LTD., HESS TOWNSHIP (COPY AVAILABLE AT REGIONAL GEOLOGIST'S OFFICE, SUDBURY, ONTARIO).

SHLANKA, R. 1969: LAKE GENEVA MINES IN COPPER, NICKEL, LEAD AND ZINC DEPOSITS OF ONTARIO ODM MINERAL RESOURCE CIRCULAR NO. 12, PP. 248-249.

SMITH, F.L. 1972: A REPORT ON THE PROPERTY OF GENEVA LAKE MINES LIMITED (PRIVATE REPORT: APPENDIX III OF THIS REPORT).

THOMPSON, J. E. ET AL, 1957; GENEX MINES LTD. IN COPPER, NICKEL, LEAD AND ZINC DEPOSITS IN ONTARIO, ODM MINERAL RESOURCES CIRCULAR NO. 2, P. 92.

TILSEY, J.E. 1989: VALUATION OF GENEVA LAKE MINERALS INC. INTEREST IN HESS TOWNSHIP PROPERTY, DISTRICT OF SUDBURY, ONTARIO (PRIVATE REPORT FOR MR. G. ERICKSON).

TUCK, R. 1931: A LEAD-ZINC DEPOSIT AT GENEVA LAKE, ONTARIO IN ECONOMIC GEOLOGY, VOL. 26, NO. 3, PP. 295-313.

APPENDIX II: ASSAY RESULTS

ATOMIC ABSORPTION ASSAY REPORT

FOR: CONSTABLE CONSULTING
10 KINGSTON
SUDBURY, ONTARIO
P3A 1C9

DATE : 89/09/18

FILE NO.: 1061

COMMENT : GENEVA LAKE

SAMPLE NUMBER	DESCRIPTION	Au-OZ/TON	Ag-OZ/TON	Pt-OZ/TON	Cu %	Co %	Pb %	Zn %	Mo %	Fe %
19127		0.003	3.277		0.066		5.984	17.630		
19128		0.002	0.686		1.047		0.027	0.014		
19129		0.003	2.333		0.256		1.136	7.920		

ASS :

APPENDIX III: PRIVATE REPORT COPIES

J. E. Jerome, P. Eng.
Box 507
Haileybury, Ont.

Nov. 27,1972.

Mr. Grant Harper, P.Eng.,
314 Hendon Avenue,
Toronto, Ontario.

Dear Mr. Harper: Re: Lake Geneva Mines.

As promised, I am enclosing photostats of Reports by Frank Smith and Punch MacDonald on Lake Geneva Mines.

Yours very truly,

J.E. Jerome, P.Eng.

Enc.

JEJ:s.

Hem - 74017

A REPORT ON THE PROPERTY

of

GENEVA LAKE MINES, LIMITED
(No Personal Liability)

by

FRANK L. SMITH

PROPERTY AND LOCATION

The property consists of twenty-two (22) patented mining claims, comprising approximately eight hundred and eighty ~~(880)~~ 869 acres, situated in the Township of Hess, Sudbury Mining District, Ontario, covered by parcels Nos. 8044, 8045 and 8046, registered in the Register for the District of Sudbury, West section.

ACCESSIBILITY

The property lies about forty miles north-west of Sudbury and about six miles north-east of Benny, a station on the main line of the Canadian Pacific Railway. From Sudbury to Cartier, which is a divisional point on the C.P. Ry., there is a good Government Highway. From Cartier to Benny, a distance of about ten miles, the road is narrow and somewhat crooked but is quite passable with all types of motor vehicles. From Benny to the property there is a very fair motor road.

HISTORY

Towagmac Exploration Company Limited optioned the property in 1927 from the Collins-Babson Syndicate and started a diamond drilling campaign which indicated an ore body containing 77,310 tons with a grade of 3.3% Pb., 9.52% Zn., and 60¢ Au. and Ag.

Plans were then made to bring the property into production but, owing to the low price of metals at the time, this was not accomplished until 1941, when 10,313 tons were milled. In 1942 a contract was entered into with the Dominion Government and control was taken over by Wartime Metals Corporation. Under this agreement Wartime Metals were to furnish certain funds for further development of the mine, and pay certain subsidies on the metals produced.

Early in 1944 Wartime Metals Corporation surrendered its contract owing to the sudden change in war demand for base metals and, as metal prices were still pegged, no other favourable contract could be made and the mine was forced to close down in ~~April~~ 1944.

mA

.../2

MINE DEVELOPMENT

The mine is developed by a vertical shaft which was sunk to a depth of 400 feet, with levels established at 235, 315 and 375 feet. Later, a winze inclined at 45 degs. was sunk in the footwall of the vein from the 315 foot level to a vertical depth of 640 feet, and two additional levels were established at 525 and 615 feet respectively. Lateral work was done on all levels to the approximate limits of the deposit which would make ore at the time the mine was in production.

ORE DEPOSIT

The ore deposit strikes southeast and has a fairly uniform dip of between 42 and 45 degs. to the southwest. Above the 375 foot level it is almost right-triangular in outline due to the southeast rake of about 38 degs. and to a decrease in grade along a line about 100 feet east of the shaft. The ore body between the 375 and the 615 foot levels will probably have a similar outline, depending on the trend of the diabase dykes. Its longest horizontal dimension of 700 feet is along its surface projection. Widths vary from 2 to 20 feet with an average width of about 5 feet.

At the 375 foot level the vein is cut off by a steep dipping diabase dyke which has a thickness of from 40 to 60 feet. The vein was located again on the southwest side of the dyke and was developed for a length of 300 feet on the 525 foot level and for a length of 170 feet on the 615 foot level.

The drifts on both lower levels were stopped at these points in order to get stopes opened up to obtain mill feed. The vein is strong in both east faces but the grade is lower. However, there is a very good chance that the grade will pick up again if the drifts are continued. Due to the rake of the ore body, as established in the upper levels, the east drift on the 615 foot level should make ore again for a distance of another 100 feet, at least.

The west drifts on both levels should also make ore for some considerable distance, but these distances will depend on the trend of the diabase dyke which cuts the vein off at the 615 foot level.

ORE RESERVES

All known ore has been extracted above the 375 foot level. From the 615 foot level up to the diabase dyke, which cuts the vein off, the results of my examination indicate the following ore reserves.

DEVELOPED:

525 level	13,570 tons
615 "	6,500 "
	20,070 "

INDICATED:

525 level	4,500 tons
615 "	18,500 "
	23,000 "

PROBABLE - (Depends on trend of Diabase)

525 level	12,400 tons
615 "	5,750 "
	18,150

Total 61,150 Tons

The above ore should have an average grade of approximately 10% Zinc and 3.0% Lead over an average width of about 5.0 feet.

PRODUCTION

Ore mined from 1941 to 1944 yielded the following:

	Tons	Lead	Zinc	Gold	Silver
Milled	80,588	3.34%	9.21%		
Lead Concentrate	3,055.7	63.3%		0.08 ozs.	22 ozs.
Zinc "	11,796.08		51.4%		

The Engineers in charge of the operation at the time the mine was closed down claimed to be getting an extraction of approximately 90% of the Lead and 80% of the Zinc contained in the ore.

GEOLOGY

The geology of the area has been described in Government reports by T. T. Quirke, F. F. Osborne, F. J. Alcock and Ralph Tuck. Mr. Tuck's report covering work completed in 1930 was made after considerable diamond drilling and exploration had been done on the property and gives a detailed account of the character of the ore and enclosing rock formation.

Briefly, the ore body occurs along the bedding of a series of interbedded quartzite and graywacke. Tuck has correlated these sediments with the Serpent formation of the Lower Huronian series.

The sediments have been intruded by a large granite mass which occurs about 1400 feet northeast of the shaft and by at least three diabase dykes which are visible in the mine workings. The dykes strike about NW-SE and dip to the NE from 75 degs. to vertical. They appear to definitely cut the vein off, but there is some evidence that they are pre-ore and that the vein fracture cut through them. In any case there is practically no displacement of either the vein fracture or the dykes where they pass through one another.

Above the 375 foot level one of these dykes accounts for the southeast rake of the ore along its northwestern limits. The dyke which cuts the vein off at the 615 foot level will probably have the same effect on the ore body, but its actual trend on the two lower levels has not been definitely established.

SURFACE EXPLORATION

This consisted chiefly of diamond drilling and a total of 60 holes were put down to outline the ore body, and in an attempt to locate it again below the diabase dyke which cuts it off below the 615 foot horizon, and to the east of the shaft. The core from this drilling was not in a condition to examine, and the drill logs were not complete. The location of these holes are shown on the surface map. One or two holes were drilled to a depth of 1000 and although these did not cut any sections that would make ore over a mineable width, they apparently established the fact that the zone extends to that depth.

SUMMARY AND CONCLUSION

There is definitely an ore body in place and almost fully developed, which should contain approximately 60,000 tons of ore that will average around 10% Zn. and 3% Pb. As I have already pointed out this is not all positive ore because the probable ore tonnage will be governed by the trend of the diabase dyke. I feel, however, that the above is a safe estimate. At present prices for lead and zinc this has a very atractive salvage value. The profit from such an operation would depend largely on the type of power used. Hydro-electric power would be much cheaper but at present it is not available at the mine. This power situation would have to be studied carefully.

I consider that the chances are good of finding another oreshoot in the vein below the 615 foot level, because it hardly seems reasonable to expect the ore to be entirely cut off at that horizon when the vein fracture extends to a depth of at least 1000 feet.

The chances also appear to be good of finding another oreshoot to the east of the present workings. The grade in this direction may be lower but at present metal prices a sizeable tonnage of ore might be developed from which a good profit could be won.

In view of all the above and the present prices of lead and zinc and the strong demand for these metals, I consider that the property cetainly warrants some further exploration.

(Signed) F. L. Smith

Kirkland Lake, Ontario
September 29, 1950.

F. L. Smith

CERTIFICATE

I, Frank L. Smith, of the Township of Teck, in the Province of Ontario, hereby certify:

1. That I am a Mining Engineer and reside at 67 Government Road East, Kirkland Lake, Ontario.

2. That I graduated at the University of Toronto in Mining Engineering in the year 1910.

3. That I have no interest either directly or indirectly nor do I expect to receive any interest either directly or indirectly in the property covered in the accompanying report or the securities of the Company.

4. That the accompanying report is based upon personal examination of the property during August and September 1949, and also upon the reports of the Engineers in charge of the mine during the development and production periods and upon the mine's previous production records.

DATED this 29th day of September, 1950.

(Signed) F. L. SMITH

F. L. Smith

Kirkland Lake,
Ontario.

MINING ENGINEER

May 1st, 1951.

The President and
Board of Directors,
Geneva Lake Mines Ltd.

Gentlemen:

The following is a summary of operations carried out on your property in Hess Township, Sudbury Mining Area, and covers the period from October 23rd to April 15th inclusive, the date when diamond drilling was completed.

In order to measure what has been accomplished during the period under review, I consider it necessary here to set out the status of the property as of October 22nd, 1950.

As of that date, the ore reserves of the property were calculated to be 61,000 tons, with an average grade of 10% Zn, 3% Pb and 60 cts. in Au and Ag, with a gross valuation of $2,900,000.00. This tonnage was insufficient to warrant the erection of a plant and concentrator to remove the ore.

At the time it was considered that further diamond drilling was warranted to establish extensions of the existing developed sections of the main ore lens. This was further emphasized by the increased value of metals and a realization that the limits of previous operations were dictated by the prevailing low price of metals under which a combined metal content of lead and zinc of 10% was necessary to establish a "break-even" point.

On taking over the property, it was necessary to establish a camp site as all buildings had been removed or otherwise destroyed. In this connection, an adequate cookery of log construction was established and, also, walled tent frames. This provided the necessary accommodation for the Company's immediate requirements.

Drilling commenced on November 20th with one drill in operation and a further drill was added in December. Since the commencement of drilling operations, some 12,000 feet of diamond drilling has been carried out with results which probably are best expressed in the memorandum attached hereto.

A study of this memorandum, I think, will bring out the fact that the Company is faced with plans for production in the immediate future and I further believe that the intent and purpose of a Directors' Meeting is to devote full attention to this subject.

The courses which should be open to the Company and listed in their order of choice, in my opinion, are as follows:

1. The extraction of the ore by an operating company through the medium of either a bond issue or mortgage, and the element of profit being secured out of production.

2. A similar process, but with the profit element being satisfied by an issue of capital shares from the Company. In this connection, it should be noted that the Company will lose a large part of the control of its own affairs.

3. Sale of Bonds or equivalent interest to the Company's shareholders.

4. The further marketing of the Company's capital stock through registered brokers.

It should be emphasized that, in each instance, the Company is faced with the problem of securing additional sources of ore in order that the plant, equipment, power line, etc., can be written off in a normal manner.

Towards this end, I suggest that options should be taken, after examination, of all properties which are within economic trucking distance of the proposed site of the Company's concentrator.

This sugestion is not offered with any idea that further ore lenses will not be encountered on the Company's main property. The contrary is actually the case, as in Drill Hole # M-3, a parallel vein was encountered and returned values of 4% combined metals across a width of 4 feet.

Further, it is believed that a detailed examination of the surface adjacent to the east of the present ore lens will reveal further lenses of ore. Structurally this is a reasonable assumption.

The work performed, I think, has had gratifying results as we now have, based on a conservative estimate and checked by some well-known engineers, an ore reserve of approximately $7,000,000.00. (See attached Memorandum).

A detailed report covering all operations is in course of preparation and will be fyled with the Secretary of the Company.

Respectfully submitted,

S. L. Macdonald

SLM/KFM

(S. L. MACDONALD).

S. [illegible]. Macdonald
[illegible]ning Engineer

May 1st, 1951

The President and
Board of Directors,
Geneva Lake Mines Ltd.

Gentlemen:

The following is a summary of operations carried out on your property in Hess Township, Sudbury Mining Area, and covers the period from October 23rd to April 15th inclusive, the date when diamond drilling was completed.

In order to measure what has been accomplished during the period under review, I consider it necessary here to set out the status of the property as of October 22nd, 1950.

As of that date, the ore reserves of the property were calculated to be 61,000 tons, with an average grade of 10% Zn, 3% Pb and 60 cts. in Au and Ag, with a gross valuation of $2,900,000.00. This tonnage was insufficient to warrant the erection of a plant and concentrator to remove the ore.

At the time it was considered that further diamond drilling was warranted to establish extensions of the existing developed sections of the main ore lens. This was further emphasized by the increased value of metals and a realization that the limits of previous operations were dictated by the prevailing low price of metals under which a combined metal content of lead and zinc of 10% was necessary to establish a "break-even" point.

On taking over the property, it was necessary to establish a camp site as all buildings had been removed or otherwise destroyed. In this connection, an adequate cookery of log construction was established and, also, walled tent frames. This provided the necessary accommodation for the Company's immediate requirements.

Drilling commenced on November 20th with one drill in operation and a further drill was added in December. Since the commencement of drilling operations, some 12,000 feet of diamond drilling has been carried out with results which probably are best expressed in the memorandum attached hereto.

A study of this memorandum, I think, will bring out the fact that the Company is faced with plans for production in the immediate future and I futher believe that the intent and purpose of a Directors' Meeting is to devote full attention to this subject.

The courses which should be open to the Company and listed in their order of choice, in my opinion, are as follows:

.../2

1. The extraction of the ore by an operating company through the medium of either a bond issue or mortgage, and the element of profit being secured out of production.

2. A similar process, but with the profit element being satisfied by an issue of capital shares from the Company. In this connection, it should be noted that the Company will lose a large part of the control of its own affairs.

3. Sale of Bonds or equivalent interest to the Company's shareholders.

4. The further marketing of the Company's capital stock through registered brokers.

It should be emphasized that, in each instance, the Company is faced with the problem of securing additional sources of ore in order that the plant, equipment, power line, etc., can be written off in a normal manner.

Towards this end, I suggest that options should be taken, after examination, of all properties which are within economic trucking distance of the proposed site of the Company's concentrator.

This suggestion is not offered with any idea that further ore lenses will not be encountered on the Company's main property. The contrary is actually the case, as in Drill Hole # M-3, a parallel vein was encountered and returned values of 4½% combined metals across a width of 4 feet.

Further, it is believed that a detailed examination of the surface adjacent to the east of the present ore lens will reveal further lenses of ore. Structurally this is a reasonable assumption.

The work performed, I think, has had gratifying results as we now have, based on a conservative estimate and checked by some well-known engineers, an ore reserve of approximately $7,000,000.00. (See attached Memorandum).

A detailed report covering all operations is in course of preparation and will be filed with the Secretary of the Company.

Respectfully submitted,

(S. L. MACDONALD).

SLM/MFM

Stralak

Ulster

Munster

Leinster

To Timmins

Hwy 144

Zn, Cu, Pb, Ag

Geneva Lake Mines

22- CLAIMS

STRALAK DEPOSIT
Zn, Cu, Pb, Ag

Stralak

Benny

Craig

Moncrieff

Spanish River

Geneva Lake

Hess

Harty

Cartier

To Sudbury

G

= Lorrain Formation (Quartzite)

= Gowganda Formation

= Serpent Formation

= Mississagi Formation

= Gneisses and Schists (Benny Greenstone Belt)

= (G) Granites (Pre-Huronian)

= Basic Intrusives (Keweenawan)

0 1/2 1 MILE

GEOLOGICAL ASSOCIATION OF CANADA
DAVID W. CONSTABLE
FELLOW

Geneva Lake Minerals Corporation

Benny, Ontario

Location Plan

Scale : 1"= 1 Mile	Date : Sept. 89	Map - 1
Dwg. : S. Bell		

ULSTER

MUNSTER

MONCRIEFF

HESS

TO TIMMINS HWY 144

TO SUDBURY HWY 144

UNMAPPED

UNMAPPED

UNMAPPED

BANNERMAN CREEK FAULT

BANNERMAN LAKE FAULT

DOWES LAKE FAULT

DOWES LAKE FAULT

GENEVA LAKE FAULT

GENEVA LAKE

GENEVA LAKE FAULT

DEPOT CREEK FAULT

LEGEND

PRECAMBRIAN ROCKS

18 — Diabase

HURONION SUPERGROUP

11 to 15 — Sediments and Minor Diabase

EARLY PRECAMBRIAN

8 — Mafic Intrusive Rocks

7 — Felsic Intrusive Rocks

4 — Sediments

3 — Felsic Metavolcanics

2 — Intermediate Metavolcanics

1 — Mafic Metavolcanics

= SHAFT

= FAULT

= ROAD

Geneva Lake Minerals Corporation

Benny, Ontario

Plan of Geneva Lake Area

Geological Survey

Date : Sept. 89	Scale :	MAP - 2
Dwg. : S. Bell	App. :	

UNMAPPED

UNMAPPED

UNMAPPED

1,2,3,4

1,2

1,2,3,4

1,2

1,2

1,2

13,14

0 1/4 1/2 Mile

LEGEND

PRECAMBRIAN ROCKS

18 — Diabase

HURONION SUPERGROUP

11 to 15 — Sediments and Minor Diabase

EARLY PRECAMBRIAN

8 — Mafic Intrusive Rocks

7 — Felsic Intrusive Rocks

4 — Sediments

3 — Felsic Metavolcanics

2 — Intermediate Metavolcanics

1 — Mafic Metavolcanics

Shaft — ■

Fault — ——— — — —

Road — ═══

○ — Airborne Conductor

GEOLOGICAL ASSOCIATION OF CANADA
DAVID W. CONSTABLE
FELLOW

Geneva Lake Minerals Corporation

Benny , Ontario

Property Geology Plan

Date : Sept. 89	Scale :	MAP - 3
Dwg. : S. Bell	App. :	

ADDENDUM
TO
OCTOBER 25, 1989 REPORT
ON THE
GENEVA LAKE POLYMETALLIC DEPOSIT
HESS TOWNSHIP
SUDBURY MINING DIVISION
ONTARIO
FOR
GENEVA LAKE MINERALS CORPORATION

FEBRUARY 9, 1990
SUDBURY, ONTARIO

DAVID W. CONSTABLE, HBSc., F.G.A.C.
CONSULTING GEOLOGIST

RESERVES - A DISCUSSION

THE RESERVES QUOTED IN MY ORIGINAL REPORT ARE ENTIRELY HISTORIC AND BASED ON A 1949 UNDERGROUND SAMPLING PROGRAM AND A 1950 DIAMOND DRILLING PROGRAM. DESPITE A TOTAL OF 60 DIAMOND DRILL HOLES COMPLETED ON THIS PROPERTY SINCE ITS DISCOVERY ONLY A HANDFUL OF EARLY HOLES AND A FEW 1972 HOLES ARE DOCUMENTED. THE REMAINDER OF THE DIAMOND DRILL HOLE RECORDS AND ALL UNDERGROUND SAMPLING PLANS AND SECTIONS ARE EXTINCT. USING THE SAME DATA BASE TWO AUTHORS REACHED DIVERSE RESERVE ESTIMATES:

SMITH, 1950			MACDONALD, 1951
DEVELOPED		TONS	
525 LEVEL		13,570	114,000 TONS AVERAGING 10% ZN,
615 LEVEL		6,500	3% LEAD ACROSS 5.0 FEET
INDICATED			
525 LEVEL		4,500	24,000 TONS AVERAGING 8% ZN+PB
615 LEVEL		18,500	ACROSS 4.0 FEET
PROBABLE			
525 LEVEL		12,400	32,000 TONS AVERAGING 6% ZN+ PB
615 LEVEL		5,750	5,000 TONS VENT SHAFT -
		.....	GRADE AND WIDTH UNKNOWN .....
	TOTAL	61,150	TOTAL .....175,000 TONS

SMITH (1950) INDICATED THESE RESERVES WOULD HAVE AN AVERAGE GRADE OF 10% ZN AND 3% PB ACROSS AN AVERAGE WIDTH OF ABOUT 5.0 FEET.

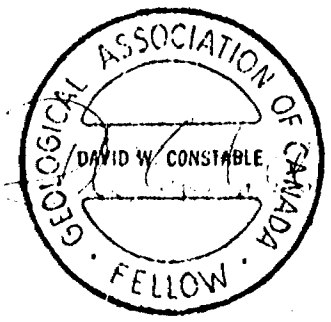
MACDONALD (1951) ESTABLISHED RESERVES OF 170,000 TONS AVERAGING 10.98% ZN+PB ACROSS AN AVERAGE OF 4.48 FEET PLUS 5000 ADDITIONAL TONS NEAR THE VENT RAISE OF UNKNOWN GRADE AND DIMENSIONS.

SPECIFIC LOCATION, DIMENSIONS, DILUTION FACTOR, MINIMUM WIDTH, SPECIFIC GRAVITY, TYPE OF SAMPLES AND RADIUS OF SAMPLE INFLUENCE USED TO ESTABLISH THESE RESERVES ARE UNKNOWN TO THIS AUTHOR AND THIS ABSENCE LOWERS THE CONFIDENCE LEVEL IN THE RESERVE FIGURES. NEW EXPLORATION WORK MUST INCREASE THE CONFIDENCE LEVEL OF THESE HISTORIC RESERVES AS WELL AS ATTEMPT TO EXPAND THESE RESERVES AND DELINEATE POTENTIAL NEW SULFIDE ZONES.

BUDGET

SINCE THE ORIGINAL REPORT WAS COMPLETED THE AUTHOR HAS UNDERTAKEN NUMEROUS DISCUSSIONS WITH GEOPHYSICISTS REGARDING THE BEST GEOPHYSICAL TOOL TO UTILIZE ON THE GENEVA LAKE PROPERTY. THE CHOICE SEEMS TO COME DOWN TO EITHER A PULSE ELECTROMAGNETIC SYSTEM, WHICH MEASURES ROCK CONDUCTIVITY, OR AN INDUCED POLARIZATION TIME DOMAIN SYSTEM, WHICH MEASURES METALLIC CONTENT OF A ROCK. THE CONCENSUS FAVOURS THE INDUCED POLARIZATION SYSTEM WHICH WE WILL USE IN A DIPOLE-DIPOLE ARRAY. INITIALLY TO CONFIRM THE CHOICE, TEST LINES WILL BE COMPLETED ACROSS KNOWN SULFIDE MINERALIZATION AND EVENTUALLY EXPANDED ACROSS THE ENTIRE PROPERTY. COSTS FOR THE INDUCED POLARIZATION SURVEY PLUS INTERPRETATION ARE SIMILAR TO THOSE USED IN MY INITIAL REPORT.

DATED AT SUDBURY, ONTARIO THIS 9TH DAY OF FEBRUARY 1990



DAVID W. CONSTABLE, HBSc., F.G.A.C.
CONSULTING GEOLOGIST

CERTIFICATION

I, DAVID W. CONSTABLE, HEREBY CERTIFY THAT:

(A) I HAVE BEEN A CONSULTING GEOLOGIST SINCE 1983 AND AM PRESIDENT OF CONSTABLE CONSULTING INC. WITH AN OFFICE AT 10 KINGSTON COURT, SUDBURY, ONTARIO.

(B) I AM A 1970 HONOURS BACHELOR OF SCIENCE (GEOLOGY) GRADUATE OF MOUNT ALLISON UNIVERSITY, SACKVILLE, NEW BRUNSWICK AND IN 1970-71 COMPLETED ONE YEAR POST-GRADUATE STUDY AT OXFORD UNIVERSITY, ENGLAND.

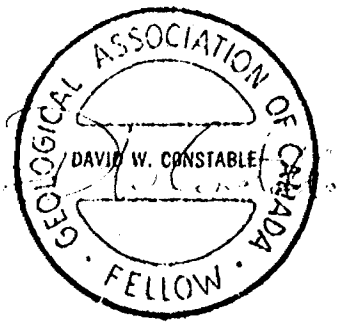
(C) I HAVE BEEN A FELLOW OF THE GEOLOGICAL ASSOCIATION OF CANADA SINCE 1975 AND AM A MEMBER OF THE CANADIAN INSTITUTE OF MINING AND METALLURGY AND THE PROSPECTORS AND DEVELOPERS ASSOCIATION.

(D) I HAVE BEEN CONTINUOUSLY EMPLOYED SINCE GRADUATION IN MINERAL AND OIL EXPLORATION AND DEVELOPMENT THROUGHOUT CANADA AND PARTS OF THE UNITED STATES AND MEXICO.

(E) I HAVE KNOWLEDGE OF GENEVA LAKE MINERALS CORPORATION'S GENEVA LAKE PROPERTY BASED ON A PERSONAL PROPERTY VISIT ON SEPTEMBER 7, 1989 AND PERSONAL EXPLORATION EXPERIENCE SINCE 1983 ON THE NEARBY STRALAK POLYMETALLIC DEPOSIT AND THE BENNY GREENSTONE BELT IN GENERAL. I HAVE ALSO USED ONTARIO GOVERNMENT, PRIVATE AND PUBLIC COMPANY REPORTS AND MAPS DURING THIS REPORT'S PREPARATION.

(F) I HAVE NO INTEREST, DIRECT OR INDIRECT, IN GENEVA LAKE MINERALS CORPORATION NOR DO I EXPECT TO RECEIVE ANY. I HAVE DISCLOSED, TO THE BEST OF MY ABILITY, ALL FACTS WHICH MIGHT HAVE A BEARING ON MY RECOMMENDATION REGARDING GENEVA LAKE MINERALS CORPORATION'S GENEVA LAKE PROPERTY.

DATED AT SUDBURY, ONTARIO THIS 9TH DAY OF FEBRUARY, 1990



DAVID W. CONSTABLE, HBSc., F.G.A.C.
CONSULTING GEOLOGIST

Constable Consulting Inc.

TEL. (705) 566-5931

10 KINGSTON COURT SUDBURY, ONTARIO P3A 1C9

CONSENT-LETTER

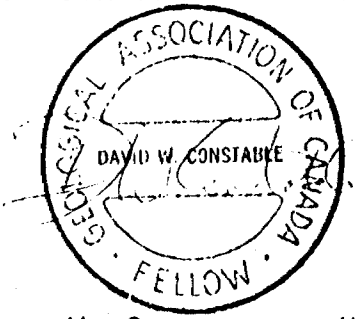
FEBRUARY 9, 1990

GENEVA LAKE MINERALS CORPORATION
SUITE 101, 50 GERVAIS DRIVE
DON MILLS, ONTARIO
M3C 1Z3

GENTLEMEN:

THIS LETTER IS YOUR AUTHORITY TO UTILIZE MY ADDENDUM DATED FEBRUARY 9, 1990 AND ENTITLED "ADDENDUM TO OCTOBER 25, 1989 REPORT ON THE GENEVA LAKE POLYMETALLIC DEPOSIT, HESS TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO FOR GENEVA LAKE MINERALS CORPORATION" FOR ANY CORPORATE PURPOSE YOU DEEM NECESSARY INCLUDING ITS USE, IN WHOLE OR IN PART, IN ANY COMPANY PROSPECTUS.

DATED AT SUDBURY, ONTARIO THIS 9TH DAY OF FEBRUARY, 1990



DAVID W. CONSTABLE, HBSc., F.G.A.C.
CONSULTING GEOLOGIST

Map 1 : Repererence 1929

Osborne , F.F., Map 38h : Cartier - Stralak Area From Ontario Department of Mines Annual Report Vol. 38, Part 7

Side 1" = 1 Mile

Stralak

Ulster

Munster

Leinster

To Timmins

Hwy 144

Zn , Cu , Pb , Ag

Geneva Lake Mines

22 - CLAIMS

STRALAK DEPOSIT
Zn , Cu , Pb , Ag

Stralak

Benny

Craig

Moncrieff

Spanish River

Geneva Lake

Hess

Harty

Cartier

To Sudbury

G

0 1/2 1 MILE

= Lorrain Formation (Quartzite)

= Gowganda Formation

= Serpent Formation

= Mississagi Formation

= Gneisses and Schists (Benny Greenstone Belt)

= (G) Granites (Pre-Huronian)

= Basic Intrusives (Keweenawan)

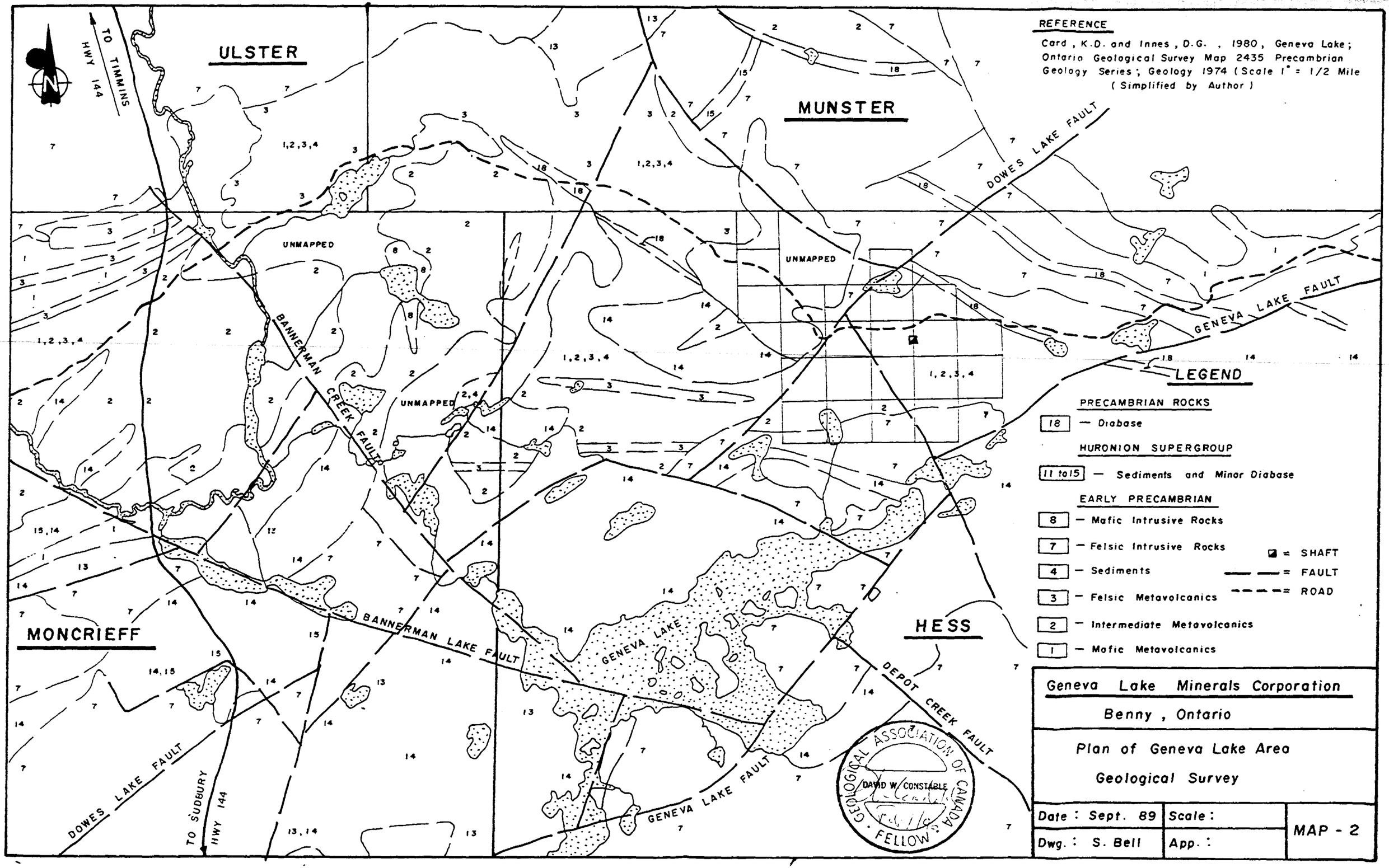
GEOLOGICAL ASSOCIATION OF CANADA
DAVID W. CONSTABLE
FELLOW

Geneva Lake Minerals Corporation

Benny , Ontario

Location Plan

Scale : 1" = 1 Mile	Date : Sept. 89	Map - 1
Dwg. : S. Bell		



REFERENCE

Card, K.D. and Innes, D.G., 1980, Geneva Lake; Ontario Geological Survey Map 2435 Precambrian Geology Series; Geology 1974 (Scale 1" = 1/2 Mile (Simplified by Author)

LEGEND

PRECAMBRIAN ROCKS

18 — Diabase

HURONION SUPERGROUP

11 to 15 — Sediments and Minor Diabase

EARLY PRECAMBRIAN

8 — Mafic Intrusive Rocks

7 — Felsic Intrusive Rocks

4 — Sediments

3 — Felsic Metavolcanics

2 — Intermediate Metavolcanics

1 — Mafic Metavolcanics

■ = SHAFT

—— —— = FAULT

– – – – = ROAD

Geneva Lake Minerals Corporation

Benny, Ontario

Plan of Geneva Lake Area

Geological Survey

Date: Sept. 89	Scale:	MAP - 2
Dwg.: S. Bell	App.:	

REFERENCES

Card, K.D. and Innes, D.G. 1980 Geneva Lake; Ontario Geological Survey Map 2435, Precambrian Geological Series; Geology 1974 (Scale 1" = 1/2 Mile) (Simplified by Author)

Hess Township Claim Map G-4062 (Scale 1:20,000)

Ontario Geological Survey, 1985, Hess Township District of Sudbury; Ontario Geological Survey, Geological Data Inventory Folio 244, Compiled by the Staff of the Resident Geologists Office, Sudbury, 26 pages and 2 Maps.

UNMAPPED

UNMAPPED

UNMAPPED

1,2,3,4

1,2,3,4

1,2

1,2

1,2

13,14

LEGEND

PRECAMBRIAN ROCKS

18 — Diabase

HURONION SUPERGROUP

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EARLY PRECAMBRIAN

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3 — Felsic Metavolcanics

2 — Intermediate Metavolcanics

1 — Mafic Metavolcanics

Shaft — ■

Fault — ——— ——— ———

Road — ═══════

○ — Airborne Conductor

0 1/4 1/2 Mile

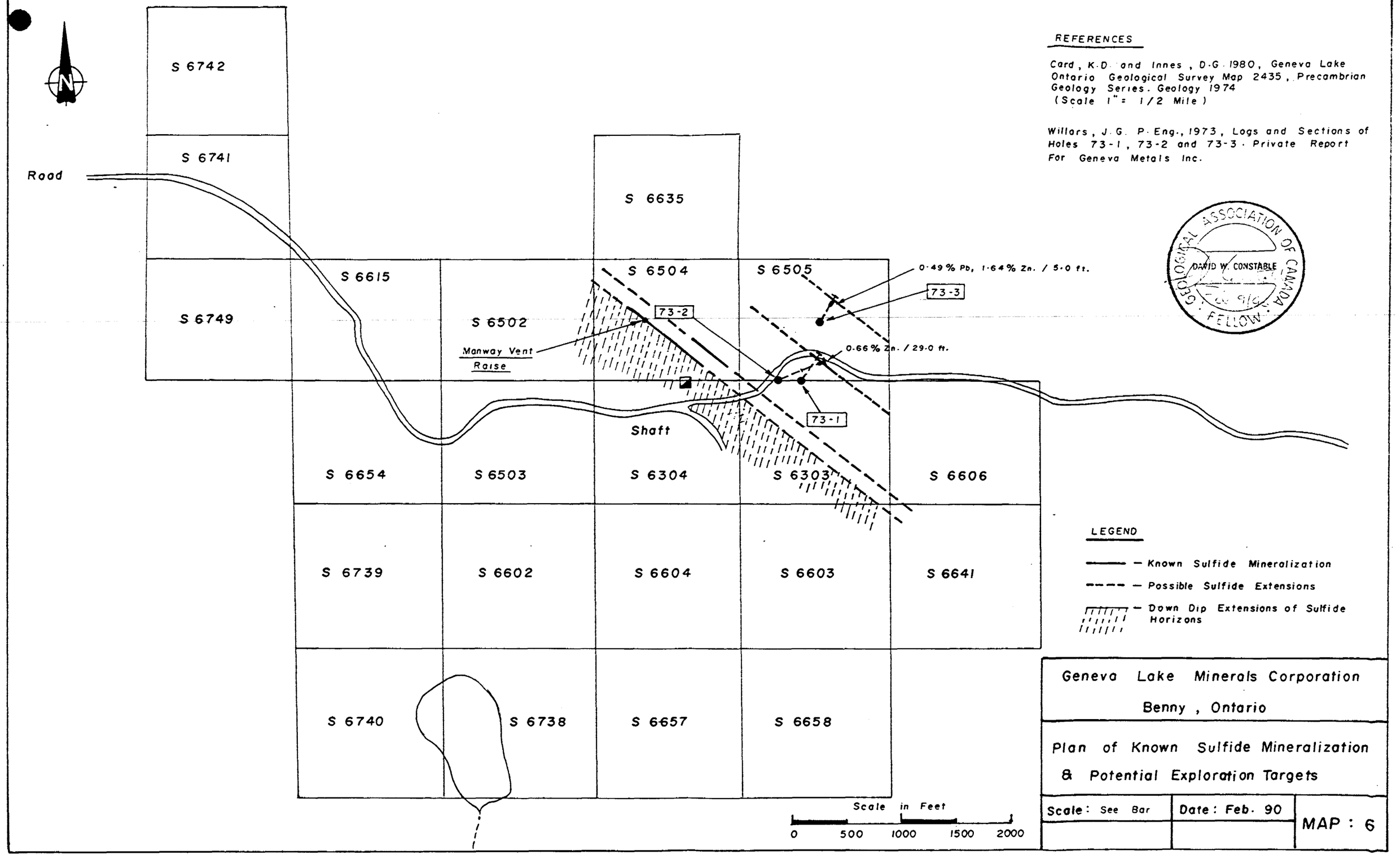
GEOLOGICAL ASSOCIATION OF CANADA
DAVID W. CONSTABLE
FELLOW

Geneva Lake Minerals Corporation

Benny, Ontario

Property Geology Plan

Date : Sept. 89	Scale :	MAP - 3
Dwg. : S. Bell	App. :	



REFERENCES

Card, K.D. and Innes, D.G. 1980, Geneva Lake Ontario Geological Survey Map 2435, Precambrian Geology Series. Geology 1974 (Scale 1" = 1/2 Mile)

Willars, J.G. P.Eng., 1973, Logs and Sections of Holes 73-1, 73-2 and 73-3. Private Report For Geneva Metals Inc.

LEGEND

— Known Sulfide Mineralization

– – – – Possible Sulfide Extensions

Down Dip Extensions of Sulfide Horizons

Geneva Lake Minerals Corporation

Benny, Ontario

Plan of Known Sulfide Mineralization & Potential Exploration Targets

Scale: See Bar	Date: Feb. 90	MAP : 6

Tie Line (3+00S)

Road

UNMAPPED 7+00S

15+50W

UNMAPPED

12+00W

Line 5+00W

Line 5+00E

Road

UNMAPPED

Base Line (6+00)

Tie Line (7+00S)

BASE 0 100 200 300 400 500 miles

Baseline 1500 m.
Tie Lines 2500 m
Picket Lines 31,350 m
Detailed Lines (Estimated) 12,000 m

General Lake Property
Hess Twp.
ONTARIO

THIS PROSPECTUS CONSTITUTES A PUBLIC OFFERIN
WHERE THEY MAY BE LAWFULLY OFFERED FOR SA
SUCH SECURITIES. NO SECURITIES COMMISSION OR
UPON THE MERITS OF THE SECURITIES OFFERED HE
IS AN OFFENCE.

020

New Issue

April 18, 1990

GENEVA LAKE MINERALS CORPORATION

$1,533,180

3,333,000 Common Shares

PRICE: $0.46 PER COMMON SHARE

	No. of Common Shares	Offering Price to Public	Underwriter's Discount(1)(2)	Net Proceeds to Company(3)
Per Common Share	1	$0.46	$0.18	$0.28
Total	3,333,000	$1,533,180	$599,940	$933,240

(1) Geneva Lake Minerals Corporation (the "Company") has also granted to Marchment & MacKay Limited (the "Underwriter") a non-assignable option (the "Compensation Option") to purchase 333,300 common shares ("Common Shares") of the Company exercisable on or before the third anniversary of the date upon which the Ontario Securities Commission issues its final receipt for this prospectus (the "Acceptance Date"), at a price of $0.46 per share. See "Description of the Offering".

(2) The underwriter's discount is 40% of the share price after deduction of the costs of issue estimated at $33,330 or $0.01 per Common Share.

(3) Before deducting costs of issue estimated at $33,330.

The offering price was established by negotiation between the Company and the Underwriter. There is currently no market for the Common Shares of the Company, however the Underwriter will act as market maker for at least 18 months on the Canadian Over-the-Counter Automated Trading System. **The offering price of each Common Share exceeds the net tangible book value thereof, as at December 31, 1989 after giving effect to this offering, by $0.356 per Common Share, representing dilution of 77.4% (see "Dilution"). An investment in shares should be regarded as speculative. The Company is an exploration and development issuer only. None of the mining claims in which the Company has an interest contains a known body known body of commercial ore and any exploration programs thereon are exploratory searches for ore. See "Risk Factors".**

We, as principal, conditionally offer the 3,333,000 underwritten Common Shares, subject to prior sale, if as and when issued by the Company and accepted by us, in accordance with the conditions contained in the Underwriting Agreement referred to under "Description of the Offering" and subject to approval of certain legal matters on our behalf by Armstrong, Schiralli & Dunne, Toronto, Ontario, and on behalf of the Company by Beach, Hepburn, Toronto, Ontario.

MARCHMENT & MACKAY LIMITED
Suite 308
181 University Avenue
Toronto, Ontario
M5H 3M7

PROSPECTUS SUMMARY

The information given below is intended to provide a summary only of the principal features of the offering. Reference is made to the more detailed information appearing elsewhere in this prospectus.

The Offering

Issuer: Geneva Lake Minerals Corporation (the "Company")

Amount: $1,533,180

Offering Price: $0.46 per Common Share

Issue: 3,333,000 Common Shares (the "Underwritten Shares")

Market Maker: The Underwriter will act as market maker on the Canadian Over-the-Counter Automated Trading System in respect of the Common Shares for at least 18 months from the Acceptance Date.

Use of Proceeds: The net proceeds of the Offering under this prospectus, after deducting the Underwriter's discount but before deducting the Company's estimated costs of issue, will be approximately $933,240. Such proceeds, together with the Company's current working capital, will be used to carry out the recommended exploration program on the Company's Geneva Lake mineral property, to pay accounts payable and for general working capital purposes. The use of working capital may be summarized as follows:

Net proceeds from the offering and cash on hand			$958,325
Less:	Option to acquire 50% in in Lake Geneva mineral property	$150,000	
	Exploration Program	375,000	
	Estimated costs of issue, accounts payable and administrative expenses	73,830	598,830
Working Capital			$359,495

Risk Factors:

Investment in the shares may be considered to be speculative due to such factors, amongst others, as the nature of the mineral exploration business in which the Company is engaged and the limited extent of the Company's assets.

None of the mining claims in which the Company has an interest contains a known body of commercial ore and any exploration programs thereon are exploratory searches for ore. Mining exploration involves a high degree of risk which even a combination of experience, knowledge and careful evaluation might not be able to overcome. The Company has limited sources of funds to engage in additional exploration and development, which may be necessary to exploit its properties, and the marketability of its properties will be influenced by factors beyond the control of the Company, such as the additional capital requirements of the Company in the period of time required before such mineral prospects may be brought into production.

The only source of funds presently available to the Company is through the sale of equity shares.

Subscribers are entitled to receive a Risk Disclosure Statement accompanying this prospectus. Such statement, if not already received, is available from the Underwriter or the Company.

See "Risk Factors", and the "Risk Disclosure Statement" attached to this prospectus.

GENEVA LAKE MINERALS CORPORATION

PROSPECTUS INDEX

THE COMPANY

Geneva Lake Minerals Corporation is a corporation incorporated under the laws of the Province of Ontario by Letters Patent dated October 12, 1927.

From its incorporation until 1960, the Company was engaged in mineral exploration under the name Rhyolite-Rouyn Mines, Limited. From 1960 to 1985 the Company was dormant. By Articles of Revival dated March 21, 1985, the Company was revived. By Articles of Amendment dated July 31, 1985, the Company's name was changed to Deerfoot Resources Inc. At that time the Company engaged in exploration work on the Blakelock Township gold property described below, as well as the exploration and development of oil and gas lands and deposits. The Company has retained an interest in the Blakelock Township gold property as described below, but no longer has any interests in oil and gas lands and deposits.

Other than work completed by an optionee on the Company's Blakelock Township gold property (see "Blakelock Township Property"), the Company has not engaged in any active mineral exploration in the past 3 years. As a result of its inactivity, the Company did not prepare or file its 1987 audited annual financial statements. It subsequently became subject to a cease trade order issued by the Ontario Securities Commission.

On September 18, 1989, the current management was appointed to the board of directors of the Company. As part of its efforts to have the Company actively resume resource exploration, audited financial statements for the years ended December 31, 1987 and December 31, 1988, and interim financial statements for the six months ended June 30, 1989, were filed with the Ontario Securities Commission and sent to shareholders. On September 27, 1989, the Ontario Securities Commission revoked the cease trade order outstanding against the Company.

By Articles of Amendment dated December 14, 1989, the Company's name was changed to Geneva Lake Minerals Corporation. The address of the head and principal office of the Company is Suite 101, 50 Gervais Drive, Don Mills, Ontario M3C 1Z3.

Although the Company's name has been changed to reflect new property acquisitions, it has not undergone a merger, amalgamation, share consolidation, arrangement or similar form of reorganization.

BUSINESS OF THE COMPANY

The business of the Company is to acquire interests in, and explore and develop mineral prospects in North America, or elsewhere if suitable mineral prospects are located. The Company carries out its objectives by exploring its own properties and by acquiring, either alone or jointly with others, interests in other mineral properties.

GENEVA LAKE PROPERTY

Description of Geneva Lake Property

The Geneva Lake Property consists of 22 contiguous patented claims numbered 6303, 6304, 6502-6504, 6602-6606, 6615, 6635, 6641, 6654, 6657, 6658, 6738-6742 and 6749, being Parts of Lots 6, 7, 8 and 9, Concessions V and VI, Hess Township, Sudbury Mining Division, Ontario. The claims cover 809.25 acres and are currently in good standing with all taxes paid up to date. The claims are parcels 8044, 8045 and 8046 in the Land Titles Office, Sudbury, Ontario. The Geneva Lake Property is subject to a 2 1/2% net smelter returns royalty jointly held by Mary K. Young, Secretary and director of the Company, Mildred Gerlock, Alfred Gerlock and Gogama Gold Inc.

The claim block is situated 38 air miles northwest of Sudbury in the Benny Greenstone Belt, an Archean assemblage of east-west striking and steeply dipping volcanics and related sediments. The entire belt is metamorphosed to upper greenschist facies, stretched and faulted. Polymetallic deposits have been known in the Benny Greenstone Belt since 1886. Two main deposits are documented:

(a) Stralak Deposit - presently being explored by Stralak Resources Inc. and located 8.5 miles west of the Geneva Lake deposit;

(b) Geneva Lake Deposit - the subject of the Company's exploration activities, first discovered in 1924, where a mine shaft exists with four levels of underground workings.

Both deposits are stratiform and stratabound, although in detail crosscutting veins occur. They are hosted by gneissic metasediments and metavolcanics. A definite spatial association exists between the massive sulfides and sericite schist. The main sulphide bodies are lenticular, coarse-grained and massive, while pyrite-and/or chalcopyrite-rich crosscutting vein structures occur within and above the main sulfide zone.

Location and Access

Year-round access is facilitated by paved Highway 144 north of Cartier Village for 7 miles to the Benny Village turnoff. Turning on to the new Dunbar all-weather haulage road, access is available eastward for 3 miles where an old fair-weather bush road departs from the new Dunbar road and continues easterly for 1.9 miles to the main shaft in the centre of the Geneva Lake Property. Smaller bush roads traverse the property north to south, and west to east. Abundant road building aggregates are present near the Geneva Lake Property should any further road construction be required.

Adequate water and timber occur on the Geneva Lake Property for mine and mill operation. Hydro could be brought from Highway 144 for 5.25 road miles to the site. The main transcontinental Canadian Pacific Rail line lies in Benny Village, 7.25 road miles west of the property.

Housing, experienced personnel and the infrastructure necessary for a major mining development is readily available in Sudbury, Ontario, and surrounding towns, situated 45 road miles to the south.

Geologist's Report - October, 1989

The following discussion of the Geneva Lake Property is a summary of the report (the "Geologist's Report") of David W. Constable, H.B.Sc., F.G.A.C., Consulting Geologist, 10 Kingston Court, Sudbury, Ontario, P3A 1C9, dated October 25, 1989 relating to the Geneva Lake Property, including an addendum to the Report dated February 9, 1990. None of the mining claims on the Geneva Lake Property presently contains a known body of commercial ore, and any exploration programs thereon are exploratory searches for ore.

Exploration History

Base metals were first noted in the Benny Greenstone Belt in 1886 near the Stralak whistle stop during construction of the main CP rail line, 8.5 miles west of the Geneva Lake Property. In 1924, J. H. Collins discovered the Geneva Lake polymetallic deposit beneath iron-stained drift and oxidized sulfides (Gossan Zone). Collins staked the nucleus of the present claim block at that time. Exploration of the discovery commenced in 1927, firstly with the Babson family interests, then under option to Towagamac Exploration Co. In 1928 the latter company formed Lake Geneva Mining Co. to develop the deposit. Initial exploration consisted of several blasted trenches and 8 surface diamond drill holes which probed to 400 vertical feet. Shortly thereafter the Towagamac Exploration Co. completed an additional 2,000 feet of diamond drilling which defined 77,350 tones of ore grading 4.5% lead, 13% zinc and containing minor additional gold and silver values all located above the 250-foot level.

By 1928 a vertical, two-compartment shaft was sunk to 250 feet and a level established at 235 feet. Simultaneously, a 125-ton per day concentrating mill was constructed on the Geneva Lake Property, but it closed in the fall of 1929, prior to reaching production status, due to the stock market and base metal price crashes.

The mine and plant were re-opened in 1941 by Lake Geneva Mining Co. Lake Geneva Mining Co. operated the mine and sold production to the Wartime Metals Corporation under contract. From 1941 to May, 1944, records show 80,588 tons of ore averaging 3.34% lead and 9.21% zinc were treated yielding 3,006 tons of lead concentrate grading 63.3% lead, 0.08 ounces of gold per ton and 22 ounces of silver per ton. Also, 11,796 tons of zinc concentrate was produced averaging 51.4% zinc. Mill recoveries were approximately 91% of the lead and 81% of the zinc. In 1941-42 the vertical shaft was deepened to 315 feet and a second level started. In 1943 an inclined winze was sunk from the 315-foot level to a vertical depth of 640 feet with levels started at depths of 525 feet and 615 feet. No production was ever completed on these deep levels although some development work ensued. By May, 1944 base metal demand declined and the contract of Lake Geneva Mining Co. lapsed. Unable to find new contracts, the mine and mill closed and the plant was sold for salvage in late 1944.

By 1949 Geneva Lake Mines Limited held the property (later in 1956 it became Geneva Mines Limited). In 1949 Geneva Lake Mines Limited de-watered the mine and re-examined the underground workings. In addition, they drilled 17 surface diamond drill holes for a total of 12,000 feet. After the 1949-52 exploration program, reserves were listed as 114,000 tons averaging 10% zinc and 3% lead across an average width of 5.3 feet, plus 24,000 more tons with an 8% combined metals content across 4 feet, plus 32,000 tons averaging 6% combined metals content over a width of 3 feet. In 1951-52 Geneva Lake Mines Limited commenced construction of a 100-ton per day concentrating mill, but again due to declining base metal prices, the mill was never completed.

By 1966, Irvington Mining Company succeeded Geneva Lake Mines Limited only to go into bankruptcy in 1967. In 1970, E. Blanchard and W. Haystead purchased the property for cash and after completing preliminary geophysics on the property, a new company was formed called Geneva Metals Inc. In early 1973, three surface diamond drill holes were completed for a total of 1,502 feet. Hole 73-1 was barren while hole 73-2 cut a 29 foot low grade section (0.66% zinc), including 3 feet of 4% zinc. Hole 73-3 intersected 5 feet grading 0.488% lead, 1.64% zinc and 0.442 ounces of silver per ton. By 1978, the Ontario charter of Geneva Lake Metals Inc. was cancelled.

The Geneva Lake Property has lain dormant since the 1973 drilling except for its coverage by large scale airborne electro-magnetic and magnetic surveys, namely a Questor survey in 1972 for Tex-Sol Explorations Inc. and an Aerodat airborne survey for Rio Tinto Canadian Exploration Ltd. in 1981. The former survey defined a weak conductor trending northwesterly in claim 6742.

On September 7, 1989 selected grab samples of each mineralization type were taken with the assay results described below. The grab samples are random only and should not be considered as representative of the mineralization.

Sample 15827 - represents a massive, highgrade, sulfide sample from the main zone and assays 0.008% copper, 8.98% lead, 17.62% zinc, 3.28 ounces per ton silver and 0.003 ounces per ton gold;

Sample 15829 - represents massive, but lower grade, main horizon mineralization and assays 0.28% copper, 1.14% lead, 7.91% zinc, 2.33 ounces per ton silver and 0.023 ounces per ton gold;

Sample 15828 - represents stringer type mineralization with increasing amounts of pyrite and chalcopyrite and very little lead or zinc mineralization and assays 1.05% copper, 0.03% lead, 0.01% zinc, 0.67 ounces of silver per ton and 0.002 ounces per ton gold.

Recommendations of Geologist's Report

The following is a summary of the recommendations of the Geologist's Report.

Some historical data exists regarding reserves on the Geneva Lake Property, based on a 1949 underground sampling program and a 1950 diamond drilling program. Two engineers examined this data and reached diverse reserve estimates in reports completed in 1950 and 1951:

Reserve Estimate 1:

170,000 tons averaging 10.98% combined lead zinc across an average width of 4.48 feet;

Reserve Estimate 2:

61,150 tons averaging 10% zinc and 3% lead across an average width of 5.0 feet.

Despite a total of 60 diamond drill holes completed on the Geneva Lake Property since its discovery, only a few early holes and 3 holes drilled in 1973 are documented. The remainder of the diamond drill hole records and all underground sampling plans and sections are extinct.

Specific location, dimensions, dilution factors, minimum width, specific gravity, type of samples and radius of sample influence used in estimating the above-noted reserves are unknown and this absence lowers the confidence level in the reserve figures. New exploration work must increase the confidence level of these historic estimates as well as attempt to expand these reserves and delineate potential new sulfide zones.

Potential exists for more mineralization on the Company's Geneva Lake Property:

(a) at a depth below the 750 foot level;

(b) along strike, principally to the northwest of the shaft;

(c) near the northwest vent raise;

(d) near the 1951 diamond drill hole M-3 which intersected a separate sulfide zone;

(e) with the discovery of new sulfide zones elsewhere on the subject property.

The Geneva Lake Property has seen only limited geophysics and none of the modern geophysical systems coverage.

The Geneva Lake Property produced 80,588 tons of zinc-lead-copper-silver-gold ore from 1941-1944. An additional reserve is reported to be developed or accessible from the present underground workings. Exploration from the 1950's and 1970's has intersected other mineralized zones on the property and all these facts justify a modern exploration program on the Geneva Lake Property. The Geologist's Report recommends a Phase I Program totalling $375,000:

PHASE I PROGRAM

(a)	Linecutting 30 miles at $350 per mile (includes all costs).....	$10,500
(b)	Ground Geophysics 30 miles at $1,500 per mile (includes all costs).....	45,000
(c)	Geophysical Report.....	4,500

(d)	Diamond Drilling (BQ Core) 10,000 feet at $25 per foot (includes rig transportation, installation and removal, drilling costs and core boxes)	250,000
(e)	Assaying 500 Assays at $20 per assay	10,000
(f)	Supervision, Consulting and Report Preparation Costs	25,000
(g)	Contingencies (estimated amount)	30,000
	TOTAL OF PHASE I	$375,000

The Phase I Program is designed for complete grid coverage of all 22 claims at 400-foot line spacings with an additional allowance for detailed cutting in specific areas. Ground geophysics over the entire claim block are planned using a time domain induced polarization system, a geophysical system designed to detect mineralized zones even at great depths. Once geophysical targets are delineated and related to the known mineralization a surface diamond drilling program will test the targets.

A Phase II Program, which would be dependent on the results of the Phase I Program, would consist of additional surface diamond drilling to expand and detail the mineralization detected in the Phase I Program.

Title

Title to the Geneva Lake Property is presently registered in the name of a predecessor in interest. The Conrad G. Erikson Trust holds a 100% interest in the Geneva Lake Property pursuant to an unregistered trust declaration, subject to the 2½% net smelter returns royalty discussed below. The Company has a deed in registrable form for the Geneva Lake Property which will be registered on title if the Company obtains a 50% interest in the Geneva Lake Property. Notice of the Geneva Agreement (see "Geneva Lake Property - Option and Joint Venture Agreement") has been registered on title to the Geneva Lake Property.

The Geneva Lake Property is subject to a 2½% net smelter returns royalty jointly held by Mary K. Young, Secretary and director of the Company, Mildred Gerlock, Alfred Gerlock and Gogama Gold Inc. The 2½% net smelter returns royalty was reserved

on April 12, 1985 at a time when the Company did not have an interest in the Geneva Lake Property.

There are no assessment work requirements necessary to maintain patented or leased mining claims in good standing. The annual municipal taxes and other charges payable in respect of the Lake Geneva Property are nominal.

Plant and Equipment

There is neither surface nor underground plant or equipment located on the Lake Geneva Property and, except as disclosed above, no underground exploration or development work has been carried out thereon. The mill and mining infrastructure which existed on the Lake Geneva Property in the 1940's and 1950's was demolished in the early 1950's.

Option and Joint Venture Agreement

The Company is a party to an option and joint venture agreement made as of October 25, 1989 (the "Geneva Agreement") with the Conrad G. Erikson Trust (the "Trust"), Suite 1300, 7 King Street East, Toronto, Ontario, M5C 1A2. The Geneva Agreement provides for exploration activities to be undertaken by the Company on the Geneva Lake Property.

The Geneva Agreement provides that the Company is required to make the following expenditures to earn the option described below:

(a) payment to the Trust of $100,000 upon signing of the Geneva Agreement on October 25, 1989;

(b) completion of $375,000 exploration and development expenditures by the Company on or before December 31, 1990;

(c) payment to the Trust of $50,000 on or before January 10, 1991; and

(d) payment of any taxes relating to the Geneva Lake Property.

The payment of $100,000 to the Trust was made by the Company from the proceeds of a $100,000 loan made to the Company by Bruce M. Young, President, director, and the promoter of the Company pursuant to a promissory note (the "Note") dated October 6, 1989. The Note bears interest at the rate of 14.25% per annum, is unsecured and is payable as to principal and accrued interest on demand at any time after April 6, 1990. The Company intends to repay the Note and accrued interest from

the proceeds of this Offering.

Upon completion of all of the above payments and expenditures under the prescribed terms, the Company will attain a 50% interest in the Geneva Lake Property. At that time the Company is required to enter into a joint venture (the "Joint Venture") with the Trust pursuant to the terms of the Geneva Agreement. The Joint Venture will terminate if the option to purchase the remaining 50% interest of the Trust in the Geneva Lake Property, as described below, is exercised.

Under the Joint Venture, the Company and the Trust will be required to make mutual contributions to exploration and development expenditures. The Joint Venture provides that a party's interest in the Geneva Lake Property shall be decreased by 1% for each $25,000 of its share of expenditures which it fails to contribute, and upon a party's joint venture interest being diluted to 15%, the interest shall be converted to a 10% net profits interest and the Joint Venture will terminate.

The Geneva Agreement also provides that upon formation of the Joint Venture, an option in favour of the Company arises whereby the remaining 50% interest of the Trust in the Geneva Lake Property can be purchased on or before January 10, 1991 for a purchase price of $150,000, payable to the Trust as follows: (i) $50,000 on January 10, 1991; (ii) $50,000 on July 10, 1991; and (iii) $50,000 on January 10, 1992. If the Company exercises the option, the Joint Venture terminates.

BLAKELOCK TOWNSHIP PROPERTY

Description of Blakelock Township Property

The Blakelock Township Property consists of 25 contiguous unpatented mining claims in Blakelock Township, Larder Lake Mining Division, Ontario and numbered L 848384 to L 848398 inclusive and L 755543 to L 755552 inclusive. It is 48 air miles northeast of Cochrane, Ontario. Part of the Abitibi Paper road system reaches a point 6 miles to the southeast of the property. Access can also be achieved by float plane or helicopter from Cochrane. A power transmission line which extends eastward from Island Falls on the Abitibi River to the Detour Mine road is approximately 10 miles northwest of the Blakelock Township Property. There is no surface or underground plant and equipment.

Gold exploration is being conducted on the Blakelock Township Property pursuant to an option and joint venture agreement with Placer Dome Inc., discussed in the following section ("Option and Joint Venture Agreement"). None of the mining claims on the Blakelock Township Property contains a known body of commercial ore and the exploration programs thereon are exploratory searches for ore.

The Company has no plans at this time to pursue exploration on the Blakelock Township Property other than that being completed pursuant to the option and joint venture agreement discussed in the following section. The proceeds raised for the Company pursuant to the offering under this prospectus will be used for exploration and development of the Geneva Lake Property as disclosed herein.

Option and Joint Venture Agreement

The Company is party to an option agreement dated June 18, 1987 (the "Blakelock Agreement") with Placer Dome Inc. ("Placer Dome"). The Blakelock Agreement provides for a diamond drilling program (the "Program") on the Blakelock Township Property.

The Blakelock Agreement provides that Placer Dome is required to make the following expenditures to earn the option described below:

(a) payments to the Company of $5,000 upon signing the Placer Agreement on June 23, 1987; $5,000 by October 31, 1987; $10,000 by October 31, 1988; $10,000 by October 31, 1989; and $10,000 by October 31, 1990;

(b) completion of $250,000 in exploration and development expenditures by the Company on or before October 31, 1990; and

(c) payment of any taxes relating to the property.

Upon completion of the above payments and expenditures under the prescribed terms, and having notified the Company that it wishes to proceed with further exploration and development of the Blakelock Township Property, Placer Dome will attain a 60% interest in the Blakelock Township Property and enter into a joint venture (the "Joint Venture") with the Company. Under the Joint Venture, the Company and Placer Dome will be required to make contributions to exploration and development expenditures in accordance with their proportionate ownership interest. The Joint Venture provides that the Company's interest in the Blakelock Township Property shall be decreased by 1% for each $25,000 of its proportionate share of expenditures which it fails to contribute, and upon the Company's joint venture interest being diluted to 10%, the interest shall be converted to a 1.5% net smelter return.

Placer Dome has made all required payments to date under the Blakelock Agreement. With regard to exploration expenses incurred by Placer Dome, Placer Dome has advised the Company that $299,895.65 has been expended on the following exploration activities up to October 31, 1989:

(a) 51 kilometres of line cutting has been completed in conjunction with ground geophysics conducted on adjacent ground;

(b) restaking of six claims; and

(c) an induced polarization survey (the "IP Survey") of 19.7 line kilometres.

With regard to the IP Survey, numerous anomalies were detected with six locations being subsequently tested by approximately an aggregate of 1,025 meters of diamond drilling. The anomalies have been shown to be caused by disseminated and stringer zones of pyrite and pyrhotite. Little alteration has been found to be associated with the mineralized zones. No significant assays were returned.

USE OF PROCEEDS

The net proceeds to be received by the Company will be $933,240 before payment of the Company's share of the costs of the issue which are estimated to be approximately $33,330. In addition, net proceeds of up to $153,318 may be raised through the exercise by the Underwriter of the Compensation Option described under "Description of the Offering". As at December 31, 1989 the Company had working capital of $25,085.

The sum of approximately $375,000 will be used to carry out the recommended Phase I Program on the Geneva Lake Property. The sum of $150,000 in cash payments are required to be made to the Conrad G. Erikson Trust pursuant to the Geneva Lake Option Agreement prior to January 10, 1991. An initial payment of $100,000 was paid by the Company from proceeds of a loan advanced to the Company by Bruce M. Young, President, director and promoter of the Company, unsecured at an interest rate of 14.25% per annum, and payable as to principal and accrued interest on demand any time after April 6, 1990 pursuant to the Note (see "Geneva Lake Property - Option and Joint Venture Agreement"). The Note and accrued interest will be paid from the proceeds of this offering. The balance of $50,000 is due to be paid to the Conrad G. Erikson Trust on January 10, 1991.

A further sum of $150,000 is required if the Company wishes to exercise its option to acquire the 50% interest of the Trust in the Geneva Lake Property. This amount is not included in the summary of working capital requirements made below. See "Geneva Lake Property - Option and Joint Venture Agreement".

To summarize, the proceeds of the issue will be utilized as follows:

Net proceeds from offering		$933,240
Cash on hand(1)		25,085
		$958,325
Less:		
Estimated Costs of Issue	$33,330	
Administrative Expenses	20,000	
Cost of payments with respect to Geneva Lake Property	150,000	
Exploration Program	375,000	
Accounts Payable	20,500	598,830
Working Capital		$359,495

(1) as at December 31, 1989

While the Company has no plans in this regard at the present time, monies in its treasury as available may also be used to defray the cost of acquiring, staking, exploring and developing other mineral properties either alone or in concert with others and generally to carry out exploration programs as opportunities and finances permit, but no such properties will be acquired and monies will not be expended thereon without an amendment to this prospectus being filed if the securities of the Company are then in the course of distribution to the public.

Monies not immediately required for the Company's purposes as set out in this prospectus will be deposited in interest bearing accounts with Canadian chartered banks and/or trust companies.

DESCRIPTION OF SHARE CAPITAL AND CAPITALIZATION

The Company has one authorized class of share capital, being the Common Shares. The attributes of the Common Shares and the amount of such Common Shares issued and outstanding are described below. The Company did have warrants outstanding to purchase 92,500 Common Shares. These warrants were cancelled with the consent of the holder without cost to the Company on December 15, 1989.

Common Shares

The holders of Common Shares are entitled to one vote for each share held at all meetings of shareholders of the Company and to receive dividends, if, as and

when declared by the board of directors. In the event of the liquidation, dissolution or winding up of the Company, the holders of the Common Shares are entitled to receive from the assets and property of the Company a sum equivalent to their pro rata share of any surplus. There are no indentures or agreements limiting the payment of dividends and no conversion, special liquidation, pre-emptive or subscription rights affecting the Common Shares. The currently outstanding Common Shares are not subject to any call or assessment and the Common Shares offered hereby when issued and sold as described by this prospectus will not be subject to any call or assessment.

Issued and Outstanding Share Capital

The following table sets out the outstanding share capital of the Company:

Designation of Security	Amount Authorized	Outstanding as at Dec. 31/89	Outstanding as at Mar. 1/90	Outstanding on Completion of Transaction(1)(2)(3)
Common Shares	$unlimited (unlimited shares	$903,527 (5,924,227 shares)	$911,027 (5,924,227 shares)	$1,810,937 (9,257,227 shares)

(1) These figures include the issuance of the 3,333,000 underwritten Common Shares as well as the issuance of 750,000 common shares to Bruce M. Young, President and director of the Company. See "Remuneration of Management" and "Promoter". The latter share issuance is subject to the approval of disinterested shareholders at the next meeting of shareholders. If such approval is not obtained, these shares will be cancelled at no cost to the Company.

(2) These figures do not take into consideration the possible issuance of up to 333,300 Common Shares upon the exercise of the Compensation Option or 592,000 Common Shares upon the exercise of options held by directors. See "Common Shares Subject to Issuance".

(3) Unaudited.

As at December 31, 1989 the Company had no long term or secured debt and a deficit of $766,014.

DESCRIPTION OF THE OFFERING

Under the terms of an underwriting agreement dated January 12, 1990 (the "Underwriting Agreement"), entered into between the Company and Marchment & MacKay Limited (the "Underwriter"), the Underwriter agreed to purchase 3,333,000 Common Shares (the "Underwritten Shares") at a price of $0.28 per share.

The Underwriter may terminate the Underwriting Agreement prior to the date on which a final receipt is issued by the Ontario Securities Commission for this prospectus (the "Acceptance Date") and for such additional period not exceeding 30 days thereafter until the Underwriter purchases any of the Underwritten Shares; provided that if any of the Underwritten Shares are purchased, the Underwriter is irrevocably bound to take up and pay for all of the Underwritten Shares. Termination may be based upon the Underwriter's assessment of the financial markets and in the case of certain stated

events. Subject to the foregoing, the Underwritten Shares must be purchased within the following times calculated from the Acceptance Date, namely:

Net Proceeds to be Received by the Company	Time From the Acceptance Date Within Which Payment Required
$311,080.00	30 days
311,080.00	60 days
311,080.00	90 days
$933,240.00	

The Underwriter, acting as principal, will offer the Underwritten Shares in the Province of Ontario at $0.46 per share. The offering price and underwriter's discount were established by negotiations between the Company and the Underwriter. Sales of the Underwritten Shares may also be made through other registered dealers acting as agents or principals at $0.46 per share.

The Underwriter will act as a market maker on the Canadian Over-the-Counter Automated Trading System ("COATS") in respect of the Common Shares for at least 18 months from the Acceptance Date.

In connection with this offering the Underwriter may effect short sales or other transactions which stabilize or maintain the market price of the Common Shares at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. If short selling does occur, such sales will not exceed 15% of the number of Underwritten Shares. If short selling occurs, the Underwriter will immediately, following completion of the distribution and the closing out of the Underwriter's short position, pay the Company 60% of the net profit received by the Underwriter from such short selling. If the Underwriter does not purchase in the market that number of Common Shares equal to its short position within 12 months from the Acceptance Date, the entire net profit from such short sales shall immediately be paid to the Company.

The Company has granted to the Underwriter a non-assignable option (the "Compensation Option") to purchase a total of 333,300 Common Shares (the "Compensation Shares") exercisable on or before the third anniversary of the Acceptance Date, at a price of $0.46 per share. 83,325 of the Compensation Shares may be acquired on or after the dates which are 6 months, 12 months, 18 months and 24 months from the Acceptance Date. The Underwriter may only sell Compensation Shares after the completion of the sale of the Underwritten Shares.

The only persons having an interest either directly or indirectly to the extent of not less than 5% of the capital of Marchment & MacKay Limited are 558851 Ontario Inc. and 571704 Ontario Inc. Mr. Charles Ornstein is the controlling shareholder of 571704 Ontario Inc. and Mr. Ian Rolin is the controlling shareholder of 558851 Ontario Inc. The remaining shares are owned by the wife and children of Mr. Ornstein and Mr. Rolin, respectively.

DIVIDEND RECORD

The Company has not paid any dividends or made similar distributions to its shareholders during the last five financial years.

DIRECTORS AND OFFICERS

The board of directors of the Company consists of five persons. The names and municipality of residence of the directors and officers of the Company and the positions presently held by them are as follows:

Name	Address	Position	Shares
Bruce M. Young	Perth, Ontario	President & Director	762,500(1)
J. Ross Austen, P.Eng.	Toronto, Ontario	Director & Vice-President	100,000
Mary K. Young B.A., B.Ed(2)	Perth, Ontario	Director & Secretary	13,450
W.R. Lincoln Torrance B.Sc.	Toronto, Ontario	Director	nil
Robert S. Nelson P.Eng.	Caledon East, Ontario	Director	nil

(1) Mr. Young holds 750,000 common shares directly, the issuance of which is subject to the approval of disinterested shareholders at the next meeting of shareholders, and 12,500 shares through a company which he controls, Superior Corporate Services Limited.

(2) Mary K. Young is the wife of Bruce M. Young who beneficially holds 762,500 common shares.

The principal occupations of the directors and officers for the past five years are as follows:

Mr. Bruce M. Young is a mining executive with over 30 years experience in the development and promotion of junior mining companies. Mr.Young is the President and a director of Young-Shannon Gold Mines, Limited, an Ontario public company which has spent over $1,000,000 on exploration and development, and is presently in the pre-production mining stage. Mr. Young is a retired principal of B.M. Young & Partners Securities Inc. B. M. Young & Partners Securities Inc. underwrote an offering of 370,000 Common Shares for total gross proceeds of $351,000 pursuant to a prospectus dated September 23, 1985. Mr. Young is a principal of and operates Superior Corporate Services Limited which provides mineral exploration management services. Mr. Young was appointed the President and a director of the Company on September 18, 1989.

Mr. J. Ross Austen, P.Eng., is the President and a director of Detrick Company of Canada Limited, a company engaged in the business of supplying and installing slide gate mechanisms for steel mills and high temperature refractory bricks for smelters. Mr. Austen has been a director of the Company since 1962, and has over 30 years experience in the development and promotion of junior mining companies.

Ms. Mary K. Young, B.A., B.Ed., is a retired educator having taught for over 20 years in North York schools. Ms. Young has experience in the maintenance of corporate records and prescribed filings, and will act as the Secretary of the Company. Ms. Young was appointed the Secretary and a director of the Company on September 18, 1989.

Mr. W.R. Lincoln Torrance, B.Sc., is a consulting geologist who has been a director of the Company since 1982. Mr. Torrance has specialized in exploration in the junior mining industry and has over 30 years experience.

Mr. Robert S. Nelson, P.Eng., is a retired engineer with over 20 years experience in the junior mining industry. Mr. Nelson has been a director of the Company since 1985. Mr. Nelson is presently the Volunteer President of the Association for Neurologically Disabled in Toronto, Ontario.

Reference is made to "History of Management and Promoters", for further particulars concerning the Company's directors and officers.

REMUNERATION OF MANAGEMENT

The Company has two executive officers, as such term is defined in the Regulations to the Securities Act (Ontario). Since completion of the last financial year of the Company ending December 31, 1989, and to the date of this preliminary prospectus, no cash or other remuneration has been paid or is payable to such officers in their capacity as such, although directors will be paid $100 for each meeting of the directors.

On November 28, 1989, shareholders of the Company approved a stock option plan (the "Plan") for directors, officers and employees of the Company and its affiliates. The Plan provides that the number of common shares under option at any time will not exceed 10% of the number of issued and outstanding common shares. The options are non-assignable and may be granted for a term not exceeding five years. The exercise price of the options issued under the Plan is the greater of $0.20 per share and the market price of the common shares at the time of grant. Options were granted under the Plan on November 28, 1989 to Bruce M. Young, J. Ross Austen, Mary K. Young, W. R. Lincoln Torrance and Robert S. Nelson as described under "Common Shares Subject to Issuance". At the time of grant of options to directors, there was no market price for Common Shares. Accordingly, pursuant to the Plan, the exercise price was set at $0.20 per share.

The Company has entered into a management agreement (the "Management Agreement") with Superior Corporate Services Limited, 50 Gervais Drive, Suite 101, Don Mills, Ontario M3C 1Z3, an affiliate of Bruce M. Young, President and a director of the Company. The Management Agreement is of indefinite duration and may be terminated by either party upon 60 days' notice. The Management Agreement provides for the provision of technical and advisory support services, such as locating, analyzing, structuring and negotiating potential mining interests for the Company, as well as providing financial advisory services and assistance when the Company is engaging in underwritings and other financings. Remuneration under the Management Agreement is to be determined by an independent committee of the board of directors of the Company on the basis of services provided. At no time will remuneration under the Management Agreement be payable to Superior Corporate Services Limited exceed $500.00 per month. The maximum remuneration that could be paid for management services under Ontario Securities Commission Policy 5.2 is $2,000 per month. Superior Corporate Services may be compensated for reasonable out-of-pocket expenses.

The Promoter of the Company is Bruce M. Young, the President and a director of the Company. See "Promoter". In recognition of the promotional efforts of Bruce M. Young, 750,000 Common Shares have been issued to Bruce M. Young for $0.01 per share for a total subscription price of $7,500. These shares are subject to the approval of disinterested shareholders at the next meeting of shareholders, and certain escrow provisions before they may be traded. If such approval is not obtained these shares will be cancelled at no cost to the Company. See "Escrowed Securities". Mr.

Young will also receive accrued interest on a loan he made to the Company pursuant to a promissory note dated October 6, 1989. See "Use of Proceeds".

SUBSIDIARIES

The Company has no subsidiaries.

AUDITORS AND REGISTRAR AND TRANSFER AGENT

T.H. Bernholtz & Co., Chartered Accountants, Suite 401, 103 Richmond Street East, Toronto, Ontario M5C 1N9, are the Company's auditors.

The registrar and transfer agent of the Common Shares is National Trust Company, 6th Floor, 21 King Street East, Toronto, Ontario M5C 1B3.

PRIOR SALES AND ISSUANCES OF SECURITIES

There has been no public market for the Common Shares within the 12 months prior to December 1, 1989. Accordingly, there are no public sale prices to report.

The only issuance of shares by the Company within the 12 months prior to December 1, 1989, has been the issue of 750,000 Common Shares at $0.01 per Share to the promoter of the Company, Bruce M. Young, for a total consideration of $7,500. The issuance of these shares is subject to the approval of the disinterested shareholders at the next meeting of shareholders and certain escrow provisions. If such approval is not obtained, these shares will be cancelled at no cost to the Company. See "Escrowed Securities" and "Promoter".

COMMON SHARES SUBJECT TO ISSUANCE

Set out below are Common Shares of the Company subject to issuance pursuant to rights, options, warrants, convertible securities and other agreements as at the date of this prospectus.

Holder	Date of of Grant	Date of Expiry	Exercise Price	No. of Common Shares
Bruce M. Young (1)	Nov. 28/89	Nov. 28/94	$0.20 per share	146,000
J.Ross Austen (1)	Nov. 28/89	Nov. 28/94	$0.20 per share	146,000
Mary K. Young (1)	Nov. 28/89	Nov. 28/94	$0.20 per share	100,000
W.R.Lincoln Torrance (1)	Nov. 28/89	Nov. 28/94	$0.20 per share	100,000
Robert S. Nelson (1)	Nov. 28/89	Nov. 28/94	$0.20 per share	100,000
Marchment & MacKay Limited(2)	Jan. 12/90	Third anniversary of Acceptance Date	0.45 per share	333,300

(1) These are directors' options.

(2) This is the Underwriter's Compensation Option. For further details concerning this option, see "Description of the Offering".

PRINCIPAL HOLDERS OF SECURITIES

As at the date of this prospectus, the only persons or corporations beneficially owning, directly or indirectly, more than 10% of the issued and outstanding voting securities of the Company are:

Name and Address	Designation of Class	Type of Ownership	Number of Securities Owned(1)	Percent of Class(2)
Bruce M. Young Mill on the Park 7B Lewis Street Perth, Ontario K7H 1M6	Common Shares	Direct	762,500 Common Shares	12.9%

(1) Of these shares, 750,000 Common Shares were issued to Bruce M. Young in recognition of his promotional efforts on behalf of the Company, and are subject to escrow requirements and the approval of disinterested shareholders at the next meeting of shareholders. If such approval is not obtained, these shares will be cancelled at no cost to the Company.

(2) Based upon 5,924,227 Common Shares outstanding at the date hereof.

The directors and senior officers of the Company, as a group, beneficially own, directly or indirectly, 875,950 of the issued and outstanding Common Shares which, before giving effect to this offering, will be 14.8% of the 5,924,227 issued and outstanding Common Shares, and after giving effect to this offering, will be 9.5% of the 9,257,227 issued and outstanding Common Shares.

ESCROWED SECURITIES

As at the date of this prospectus, certificates representing 750,000 Common Shares (representing 12.66% of the issued and outstanding Common Shares as at the date hereon) are held in escrow by National Trust Company, Toronto, Ontario (the "Trustee") pursuant to the provisions of an agreement dated January 2, 1990, made among the Company, the Trustee and Bruce M. Young:

Designation of Class	Number of Securities held in escrow	Percentage of Class
Common Shares	750,000	12.66%

All of the escrowed shares are subject to the approval of disinterested shareholders at the next meeting of shareholders of the Company. If such approval is not obtained, the shares will be cancelled at no cost to the Company. The following discussion of escrow release provisions assumes that the issuance of these shares has been approved.

The escrowed shares may not be sold, assigned, hypothecated, pledged, charged, alienated, released from escrow, transferred within escrow or otherwise in any manner dealt with without the express consent, order or direction in writing of the Ontario Securities Commission.

75,000 escrowed shares will be released automatically on the Acceptance Date and a further 135,000 escrowed shares will be released on each of the first, second, third, fourth and fifth anniversaries of the Acceptance Date. Shares will also be released from escrow on the basis of one share for each $3.60 actually spent by the Company on the exploration and/or development of its resource properties.

The number of shares released from escrow may not exceed 250,000 per year before each of the first, second and third anniversaries of the Acceptance Date. Any shares eligible for but not released from escrow at any time by virtue of these limits shall be released on the next anniversary date, subject again to the operation of these limits.

MATERIAL CONTRACTS

The only material contracts entered into by the Company which are in effect are:

1. The underwriting agreement referred to under "Description of the Offering";

2. The escrow agreement referred to under "Escrowed Securities";

3. The option and joint venture agreements referred to under "Blakelock Township Property" and "Geneva Lake Property";

4. The management agreement referred to under "Remuneration of Management";

5. The deed/transfer of land registering the Geneva Lake Property in the name of the Company; and

6. The promissory note referred to under "Geneva Lake Property - Option and Joint Venture Agreement" and "Use of Proceeds".

Copies of the foregoing agreements may be inspected at the office of the legal counsel to the Company, Beach, Hepburn, Barristers & Solicitors, Suite 1200, 595 Bay Street, Toronto, Ontario, M5G 2C2, during ordinary business hours at any time during the period of distribution of the securities offered hereby.

RISK FACTORS

Investment in the Common Shares may be considered to be speculative due to the nature of the mineral exploration business in which the Company is engaged, the limited extent of the Company's assets, the Company having no known proven reserves, the Company's state of development and the degree of its reliance upon the expertise of management. **None of the mining claims in which the Company has an interest contains a known body of commercial ore and any exploration programs thereon are exploratory searches for ore.**

In order to earn a 50% interest in the Geneva Lake Property pursuant to the Geneva Agreement, the Company must perform its obligations under such agreement including the payment of option amounts. Whether the Company will be able to exercise its option under the Geneva Agreement to purchase the remaining 50% of the Trust depends on the amount of working capital it has at that time.

There is no assurance that commercial quantities of minerals will be discovered. There is no guarantee that the Company's exploration programs will yield positive results. The Company has no source of funds to engage in additional exploration and development which may be necessary to exploit its properties other than interest earned on its short-term investments, the exercise of the stock options and further financing.

Mining exploration involves financial risk and capital investment. The Company's only present means of acquiring investment capital is by means of the sale of equity shares or rights to acquire equity shares. The Company will compete with other mining concerns, many of which may be more heavily capitalized than the Company, for the opportunity to participate in exploration programs.

The marketability of the Company's ownership interest in its mineral properties and other interests which the Company has or may acquire will be influenced by factors beyond the control of the Company, such as the additional capital requirements of the Company in the period of time required before mineral prospects may be brought into production.

DILUTION

The following table sets out the immediate dilution to subscribers for Common Shares purchased under this offering, assuming the Underwriter does not exercise the Compensation Option. The calculation of the dilution is based upon the net tangible assets of the Company per Common Share and as reflected on the Company's balance sheet as at December 31, 1989.

Dilution per share

Offering Price		$0.46
Net tangible book value per share as at December 31, 1989	$0.011	
Increase of net tangible book value attributable to this offering	$0.093	
Net tangible book value per share after this offering		$0.104
Dilution to subscribers per share		$0.356
Percentage of dilution in relation to the Offering Price		77.4%

ACQUISITIONS

The Company has not made any material dispositions of assets or shares within the past two years. The only acquisition made by the Company within the past two years is the Geneva Lake Agreement which gives the Company an option to earn a 50% interest in the Geneva Lake Property. See "Geneva Lake Property - Option and Joint Venture Agreement". The Geneva Lake Property is the Company's primary source of exploration activity. Placer Development Limited is completing exploration activity on the Blakelock Township Property. See "Blakelock Township Property -Option and Joint Venture Agreement".

PROMOTER

The promoter of the Company is Bruce M. Young, President and director of the Company, who resides at Mill on the Park, 7B Lewis Street, Perth, Ontario, K7H 1M6. In recognition of the promotional efforts of Bruce M. Young, 750,000 Common Shares (the "Founder Shares") have been issued to Bruce M. Young for a cash consideration of $7,500 or $0.01 per share. Pursuant to Ontario Securities Commission Policy 5.2 - "Junior Natural Resources Issuers", the Founder Shares require approval of disinterested shareholders at the next meeting of shareholders, and have been escrowed and are subject to release under the terms of that Policy. If such approval is not obtained these shares will be cancelled at no cost to the Company. See "Escrowed Securities".

A company related to Bruce M. Young, Superior Corporate Services Limited, will be compensated for management services provided to the Company. See "Remuneration of Management". Bruce M. Young will receive interest on a loan he made to the Company pursuant to the Note. See "Geneva Lake Property - Option and Joint Venture Agreement" and "Use of Proceeds". Bruce M. Young was formerly a principal of B. M. Young & Partners Securities Inc., an underwriter which underwrote a public distribution of the Company's securities pursuant to a prospectus dated September 23, 1985.

The only other promoter of the Company within the past five years was Syncline Resources Inc. ("Syncline"), 18 Cedarbank Crescent, Don Mills, Ontario, M3B 3A4, which was the promoter prior to September 18, 1989. Syncline is controlled by Mr. Verner M. Booth, P.Eng., a former President and director of the Company. The Company has paid Syncline $500 on September 30, 1989 for the redemption of 500,000 preferred shares of the Company held by it, and for the termination of warrants held by it to purchase 92,500 Common Shares expiring the earlier of July 31, 1990 and the time at which the Company no longer maintains an interest in the Blakelock Township Property. Pursuant to a public distribution of shares by a prospectus dated September

23, 1985, Syncline received 50,000 Common Shares as its portion of the share consideration for the sale of the Blakelock Township Property to the Company, and $9,466 in satisfaction of accounts receivable for office administration and services. Since January 1, 1987, Syncline has received $7,725 for office administration and services.

LEGAL PROCEEDINGS

Management is not aware of any actual or contemplated legal proceedings to which the Company is or could become a party.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Within the three years preceding the date of this prospectus, directors and senior officers have had a material interest in the following transactions disclosed in the indicated portions of this prospectus:

(a) Bruce M. Young, President and director of the Company, loaned $100,000 to the Company pursuant to a promissory note dated October 6, 1989, the proceeds of which were used by the Company to make a payment under the Geneva Agreement (see "Geneva Lake Property - Option and Joint Venture Agreement", "Use of Proceeds", and "Remuneration of Management");

(b) Bruce M. Young, President and director of the Company, was issued 750,000 Common Shares at $0.01 per share, subject to escrow and the approval of disinterested shareholders at the next meeting of shareholders, in recognition of his promotional efforts (see "Description of Share Capital and Capitalization - Issued and Outstanding Share Capital", "Remuneration of Management", "Promoter" and "Escrowed Securities");

(c) Mary K. Young, Secretary and director of the Company, holds a joint interest in a 2½% net smelter returns royalty reserved on the Geneva Lake Property (see "Geneva Lake Property - Title");

(d) The directors of the Company have received options entitling them to purchase a total of 592,000 Common Shares (see "Remuneration of Management" and "Common Shares Subject to Issuance");

(e) A company related to Bruce M. Young, Superior Corporate Services Limited, will be compensated for management services provided to the Company (see "Remuneration of Management").

HISTORY OF MANAGEMENT

Details of the associations of the directors and officers of the Company during the past five years with public companies are set out below. For the history of the promoters of the Company, see "Promoter".

The directors and officers of the Company have had the following associations with public companies during the past five years:

Bruce M. Young is a director and officer of Young-Shannon Gold Mines, Limited.

J. Ross Austen is a director and officer of Young-Shannon Gold Mines, Limited.

Robert S. Nelson is a director and/or officer of Young-Shannon Gold Mines, Limited and Chester Minerals Limited.

W. R. Lincoln Torrance is or has been a director and/or officer of Acadia Mineral Ventures Limited, Chester Minerals Limited, Belore Mines Ltd., Exroy Resources Inc., Team Energy and Minerals Inc., Glen Roy Resources Inc., Huronian Mines Ltd., Galore Gold Resources Inc., Edda Resources Inc., Comet Explorations Inc., Loki Resources Inc. and Richmond Gulf Resources Limited.

Mary K. Young has not had any association with public companies during the past five years.

PURCHASERS' STATUTORY RIGHTS OF WITHDRAWAL AND RESCISSION

Sections 70, 126 and 135 of the Securities Act (Ontario) provide in effect that when a security is offered in the course of a distribution:

(a) a purchaser will not be bound by a contract for the purchase of such security if written or telegraphic notice of his intention not to be bound is received by the dealer from whom the purchaser purchased the security not later than midnight on the second business day after the latest prospectus and any amendment to the prospectus offering such security is received or deemed to be received by the purchaser or his agent;

(b) if a prospectus, together with any amendment to the prospectus, contains a misrepresentation, a purchaser who purchases a security offered thereby during the period of distribution shall be deemed to have relied on such misrepresentation, if it was a misrepresentation at the time of purchase, and, subject to the limitations set forth in the Act,

(1) has the right of action for damages against,

(i) the issuer or a selling security holder on whose behalf the distribution was made;

(ii) which underwriter required to sign the certificate required by of the Act;

(iii) every director of the issuer at the time the prospectus or amendment was filed;

(iv) every person or company whose consent has been filed pursuant to a requirement of the regulations under the Act, but only with respect to reports, opinions or statements made by them; and

(v) every other person or company who signed the prospectus or the amendment, or

(2) where the purchaser purchased the security from a person or company referred to in (i) or (ii) above or from another underwriter of the securities, he may elect to exercise a right of rescission against such person, company or underwriter, in which case he shall have no right of action for damages against such person, company or underwriter, and

(c) no action shall be commenced to enforce a right mentioned above more than:

(1) in the case of an action for rescission, 180 days after the date of the transaction that gave rise to the cause of action; or

(2) in the case of any action other than an action for rescission, the earlier of

(i) 180 days after the plaintiff first had knowledge of the facts giving rise to the cause of action; or

(ii) three years after the date of the transaction that gave rise to the cause of action.

Reference is made to the aforesaid Act for the complete text of the provisions under which the foregoing rights are conferred and the foregoing summary is subject to the express provisions thereof.

OTHER MATERIAL FACTS

Other than disclosed herein, there are no material facts relating to the securities proposed to be offered herein.

GENEVA LAKE MINERALS CORPORATION

REPORT AND FINANCIAL STATEMENTS

AUDITORS' REPORT

To the Directors of Geneva Lake Minerals Corporation
(formerly Deerfoot Resources Inc.)

We have examined the balance sheets of Geneva Lake Minerals Corporation as at December 31, 1989 and the statements of operations and deficit and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial positions of the Company as at December 31, 1989 and its activities and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a consistent basis, except for the change in the method of accounting for administrative expenditures and option payments as described in Note 2 to the financial statements.

Toronto, Ontario
January 19, 1990

T. H. Bernholtz & Co.
Chartered Accountants

AUDITORS' REPORT

To the Shareholders of Geneva Lake Minerals Corporation
(formerly Deerfoot Resources Inc.)

We have examined the balance sheets of Geneva Lake Minerals Corporation as at December 31, 1988 and 1987 and the statements of operations and deficit and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial positions of the Company as at December 31, 1988 and 1987 and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles applied on a consistent basis, except for the change in the method of accounting for administrative expenditures and option payments as described in Note 2 to the financial statements.

Toronto, Ontario
July 18, 1989 and
January 19, 1990
as to Note 2.

Zborovski Korn
Chartered Accountants

AUDITORS' REPORT

To the Shareholders of Geneva Lake Minerals Corporation
(formerly Deerfoot Resources Inc.)

We have examined the balance sheets of Geneva Lake Minerals Corporation as at December 31, 1986, 1985 and 1984 and the statements of operations and deficit and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial positions of the Company as at December 31, 1986, 1985 and 1984 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles applied on a consistent basis, except for the change in the method of accounting for administrative expenditures and option payments as described in Note 2 to the financial statements.

Toronto, Ontario
May 6, 1987 and
January 19, 1990
as to Note 2.

McGovern, Hurley, Cunningham
Chartered Accountants

GENEVA LAKE MINERALS CORPORATION
(formerly Deerfoot Resources Inc.)
STATEMENT OF OPERATIONS AND DEFICIT

	FOR THE YEAR ENDED DECEMBER 31					
	1989	1988	1987	1986	1985	1984
Costs and expenses:						
Write down of oil and gas properties	$ -	$ -	$ -	$ 77,500	$ -	$ -
General and administrative expenses:						
Office and general	6,100	5,315	11,706	13,972	17,138	5,000
Legal and audit	23,400	813	4,223	5,096	2,345	800
Directors' fees	500	-	-	-	-	-
Interest expense	2,375	-	-	-	-	-
Transfer agent's fees and expenses	1,050	-	5,095	11,474	4,359	400
	33,425	6,128	21,024	108,042	23,842	6,200
Less: Interest earned	1,083	942	661	8,035	1,005	-
Option payments	10,000	10,000	10,000	-	-	-
	22,342	(4,814)	10,363	100,007	22,837	6,200
Cost of issue	-	-	-	-	27,573	-
Brokers' commission	-	-	-	-	175,750	-
Deficit, beginning of period (Note 2)	743,672	748,486	738,123	638,116	411,956	405,756
Deficit, end of period	$ 766,014	$ 743,672	$ 748,486	$ 738,123	$ 638,116	$ 411,956

See Notes To Financial Statements

GENEVA LAKE MINERALS CORPORATION
(formerly Deerfoot Resources Inc.)
STATEMENT OF CHANGES IN FINANCIAL POSITION

	FOR THE YEAR ENDED DECEMBER 31					
	1989	1988	1987	1986	1985	1984
Cash provided by (used in) operations	$ (22,342)	$ 4,814	$ (10,363)	$ (100,007)	$ (22,837)	$ (6,200)
Add: Write down of oil and gas properties	-	-	-	77,500	-	-
	(22,342)	4,814	(10,363)	(22,507)	(22,837)	(6,200)
Net change in non cash components of working capital	117,175	18,525	(27,804)	8,126	(4,347)	6,200
	94,833	23,339	(38,167)	(14,381)	(27,184)	0
Cash provided by (used in) Financing activities						
Issue of special shares for cash	-	-	-	-	500	-
Issue of common shares for mineral property	-	-	-	-	47,500	-
Issue of common shares for interest in oil and gas wells	-	-	-	-	47,500	-
Issue of common shares for cash	7,500	-	-	46,271	351,500	-
Cost of issue	-	-	-	-	(27,573)	-
Brokers' commission	-	-	-	-	(175,750)	-
Redemption of preference shares	(500)	-	-	-	-	-
Issue of common shares for cancellation of a debt	-	-	-	-	5,000	-
	7,000	-	-	46,271	248,677	-
Cash provided by (used in) Investing activities						
Acquisition and development costs of gas wells	-	-	-	(30,000)	(47,500)	-
Mining properties and related expenditures	(103,679)	-	-	(84,222)	(57,500)	-
Government grants	-	-	7,598	-	-	-
	(103,679)	-	7,598	(114,222)	(105,000)	-
Increase (decrease) in cash	(1,846)	23,339	(30,569)	(82,332)	116,493	-
Cash (bank indebtedness) at the beginning of the period	26,931	3,592	34,161	116,493	-	-
Cash at the end of the period	$ 25,085	$ 26,931	$ 3,592	$ 34,161	$ 116,493	$ -

See Notes To Financial Statements

GENEVA LAKE MINERALS CORPORATION
(formerly Deerfoot Resources Inc.)
(Incorporated Under the Laws of the Province of Ontario)
BALANCE SHEET AS AT

	DECEMBER 31					
	1989	1988	1987	1986	1985	1984
ASSETS						
Current						
Cash and short-term deposits	$ 25,085	$ 26,931	$ 3,592	$ 34,161	$ 116,493	$ -
Accounts receivable	5,000	-	18,875	-	6,666	-
	30,085	26,931	22,467	34,161	123,159	-
Interest in oil and gas leases		-	-	-	47,500	-
Resource properties and related expenditures (Note 3)	237,803	134,124	134,124	141,722	57,500	-
	$ 267,888	$ 161,055	$ 156,591	$ 175,883	$ 228,159	$ -
LIABILITIES						
Current						
Accounts payable and accrued charges	$ 20,500	$ 700	$ 1,050	$ 9,979	$ 8,519	$ 6,200
Due to related party (Note 6)	102,375	-	-	-	-	-
	$ 122,875	$ 700	$ 1,050	$ 9,979	$ 8,519	$ 6,200
SHAREHOLDERS' EQUITY						
Capital Stock (Note 4)						
Authorized:						
Unlimited number of common shares						
Unlimited number of non-participating redeemable voting preference shares						
Unlimited number of convertible Class A special shares						
Issued:						
Nil preference share	-	500	500	500	500	-
5,924,227 common shares	911,027	903,527	903,527	903,527	857,256	405,756
	911,027	904,027	904,027	904,027	857,756	405,756
Deficit	(766,014)	(743,672)	(748,486)	(738,123)	(638,116)	(411,956)
	145,013	160,355	155,541	165,904	219,640	(6,200)
	$ 267,888	$ 161,055	$ 156,591	$ 175,883	$ 228,159	$ -

See Notes To Financial Statements

On Behalf Of The Board:

"J.ROSS AUSTEN" ----------Director

"W.R.LINCOLN TORRANCE" ----------Director

GENEVA LAKE MINERALS CORPORATION
(formerly Deerfoot Resources Inc.)
NOTES TO FINANCIAL STATEMENTS
AS AT DECEMBER 31, 1989

Note 1 Significant Accounting Policies

Nature of Operations

The Company is in the process of exploring its resource properties and has not yet determined whether the properties contain economically recoverable reserves. The recovery of the amounts shown for the resource properties and the related deferred expenditures is dependent upon the existence of economically recoverable reserves, confirmation of the Company's interest in the underlying mining claims, the ability of the Company to obtain necessary financing to complete the development, and upon future profitable production.

Mining Claims

Mining claims are carried at cost until they are brought into production at which time they are depleted on a unit-of-production basis.

Exploration expenses relating to mining claims are deferred until the properties are brought into production at which time they are amortized on a unit-of-production basis.

The cost of properties abandoned or sold and the deferred exploration costs relating to properties abandoned or sold are charged to operations in the current year.

Administrative Expenditures

Administrative expenditures are charged to operations in the year incurred.

Note 2 Change in Accounting Policies

The Company has retroactively changed its accounting policies to treat administrative expenditures and option payments received as current period charges and revenues. Prior to the change in accounting policy, administrative expenditures and option payments received were deferred.

As a result, the deficit has been restated as follows:

	1988	1987	1986
Deficit at the beginning of the year			
As previously reported	$600,822	$600,822	$411,956
Adjustment for cumulative effect of change in accounting policy administrative expenditures	157,664	137,301	226,160
option payments received	(10,000)	-	-
Deficit as restated	$748,486	$738,123	$638,116

Note 3 Resource Property

(a) Blakelock Township Property

Pursuant to an agreement dated July 29, 1985, the Company acquired a 100% interest in 25 unpatented mining claims located in Blakelock Township, Ontario for a consideration of 100,000 common shares valued at $47,500 and $10,000 cash. Pursuant to an agreement dated June 18, 1987, the Company optioned a 60% interest in these claims to Placer Dome Inc. ("Placer"). Under the terms of the agreement, Placer is required to make the following option payments:

$ 5,000 upon signing	(received)
$ 5,000 by October 31, 1987	(received)
$10,000 by October 31, 1988	(received)
$10,000 by October 31, 1989	(received)
$10,000 by October 31, 1990	

and complete a work program totalling $250,000 by December 31, 1990 (completed).

Upon completion of the above payments and expenditures under the prescribed terms, and having notified the Company that it wishes to proceed with further exploration and development of the property, Placer will attain a 60% interest in the property and enter into a joint venture with the Company whereby the Company and Placer will jointly fund for the exploration and development expenditures on the property in proportion to

their interests held. The agreement provides that the Company's interest in the property will be decreased by 1% for each $25,000 of its proportionate share of expenditures which it fails to contribute. Upon the Company's interest becoming diluted to 10%, the interest shall be converted into a 1.5% net smelter returns royalty.

(b) Geneva Lake Property Acquisition

Pursuant to an option and joint venture agreement dated October 25, 1989, the Company has the right to earn a 50% interest in the mineral rights in 22 patented mining claims located in Hess Township, Ontario. Under the terms of the agreement, the Company must make the following option payments:

$100,000 upon signing (paid); and a further

$ 50,000 by January 10, 1991

and complete exploration and development expenditures totalling $375,000 by December 31, 1990. The Company is also responsible for paying mining and other taxes assessed against the mineral rights.

Upon earning its 50% interest in the property, the Company will enter into a joint venture. Under the terms of the agreement, the parties must contribute in proportion to their interests held to the costs of further exploration and development of the property. The agreement provides that either party's interest in the property will be decreased by 1% for each $25,000 of its share of the expenditures which it fails to contribute. Upon a party's interest being diluted to 15%, the interest shall be converted into a 10% net profits interest, and the joint venture shall terminate.

Upon earning its 50% interest in the property, the Company will be entitled to purchase the remaining interest in the property on or before January 10, 1991 for $150,000 as follows:

$50,000 on January 10, 1991
$50,000 on July 10, 1991
$50,000 on January 10, 1992.

If the option is exercised, the joint venture will terminate.

The property is subject to a 2½% net smelter return royalty.

Note 4 Capital Stock

(a) Common Shares

	Shares	Value
December 31, 1986	5,174,227	$903,527
December 31, 1987	5,174,227	903,527
September 30, 1988	5,174,227	903,527
December 31, 1988	5,174,227	903,527
December 31, 1989	5,174,227	903,527
Issued for cash	750,000	7,500
	5,924,227	$911,027

(b) Preference Shares

December 31, 1986	500,000	$ 500
December 31, 1987	500,000	500
September 30, 1988	500,000	500
December 31, 1988	500,000	500
Redeemed and cancelled	(500,000)	(500)
December 31, 1989	-	-

(c) During the year, the President subscribed for 750,000 common shares of the Company for $7,500, all of which are subject to the approval of disinterested shareholders at the next meeting of shareholders and escrow pursuant to the Ontario Securities Commission Policy 5.2 - Junior Natural Resource Issuers.

(d) The issued and outstanding preference shares (500,000) and the accompanying warrants were redeemed and cancelled for a total consideration of $500.

(e) By articles of amendment dated December 14, 1989, the Company cancelled the preference shares from its capital structure and changed the Company's name to Geneva Lake Minerals Corporation.

(f) The Company granted officers and directors options to acquire 592,000 shares at $0.20 per share on or before November 28, 1994.

Note 5 Related Party Transactions

During the year ended December 31, 1989, the Company paid $5,725 ($2,000 - 1988) to Syncline Resources Inc., a company controlled by a former officer and director of the Company for management and administrative services and $654 ($564 - 1988) to a director of the Company for administrative and consulting services.

The Company has entered into an agreement with a company controlled by the President, who is also the Promoter of the Company to provide management services to the Company commencing September 18, 1989, for an indefinite duration terminable at the option of either party upon 60 days' notice. Remuneration is to be determined by a committee of the Board, however, at no time may it exceed $500 per month plus reasonable expenses.

Note 6 Loan Payable

The President, who is also the Promoter of the Company, loaned $100,000 to the Company in order to make the option payments as described in Note 3(b). The loan bears interest at 14.25% per annum, is unsecured and is due on demand with accrued interest at any time after April 6, 1990. To the year end, interest of $2,375 has accrued.

Note 7 Subsequent Events

Underwriting Agreement

By agreement dated January 12, 1990, the underwriter has agreed to purchase 3,333,000 common shares of the Company's capital stock at $0.28 per share for a net proceeds of $933,240 payable in three instalments of $311,080 due within 30, 60, and 90 days of the Acceptance Date (the date on which the Ontario Securities Commission issues a final receipt for this prospectus). The underwriter will offer these shares at $0.46 per share for gross proceeds of $1,533,180.

In addition, the Company has granted the underwriter a non-assignable option to purchase 333,300 common shares at a price of $0.46 per share for a period of 3 years from the Acceptance Date exercisable as follows:

83,325 on or after 6 months from the Acceptance Date;

a further 83,325 on or after 12 months from the Acceptance Date;

a further 83,325 on or after 18 months from the Acceptance Date; and

a further 83,325 on or after 24 months from the Acceptance Date.

Note 8 Comparative Financial Statements

Certain of the prior years' financial statements have been restated to conform with the current year's presentation.

CERTIFICATES OF COMPANY AND PROMOTER

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this prospectus as required by Part XIV of the Securities Act (Ontario) and the regulations thereunder.

DATED this 18th day of April, 1990.

(Sgd.) BRUCE M. YOUNG
Chief Executive Officer

(Sgd.) J. ROSS AUSTEN
Chief Financial Officer

ON BEHALF OF THE BOARD OF DIRECTORS

(Sgd.) W.R. LINCOLN TORRANCE
Director

(Sgd.) ROBERT S. NELSON
Director

PROMOTER

(Sgd.) BRUCE M. YOUNG

UNDERWRITER'S CERTIFICATE

To the best of our knowledge, information and belief, the foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this prospectus as required by Part XIV of the Securities Act (Ontario) and the regulations thereunder.

DATED the 18th day of April, 1990.

MARCHMENT & MacKAY LIMITED

Per: (Sgd.) CHARLES ORNSTEIN,
President

YOU SHOULD READ THIS NOTICE FROM THE
ONTARIO SECURITIES COMMISSION IMMEDIATELY

THIS RELATES TO THE SHARES
OFFERED BY THE ACCOMPANYING PROSPECTUS

RISK

THESE SHARES ARE SPECULATIVE. THE COMPANY DOES NOT NOW OWN OR HAVE ANY RIGHT TO A KNOWN BODY OF ORE. THE CHANCES OF FINDING A PROFITABLE ORE BODY ARE SMALL.

RESALE

THESE SHARES ARE NOT LISTED ON A STOCK EXCHANGE. ACCORDINGLY, YOU MAY NOT BE ABLE TO RESELL THEM. YOUR DEALER DOES NOT HAVE TO PURCHASE THESE SHARES BACK.

DILUTION

ONLY A PORTION OF THE PRICE PAID BY YOU FOR THE SHARES IS RECEIVED BY THE COMPANY AND IS AVAILABLE FOR EXPLORATION. THAT AMOUNT IS SHOWN ON THE FACE PAGE OF THE PROSPECTUS.

CANCELLATION

YOU ARE NOT REQUIRED TO PURCHASE THESE SHARES. IF YOU HAVE ALREADY PURCHASED OR AGREED TO PURCHASE SHARES, YOU MAY CANCEL THE PURCHASE BY SENDING OR DELIVERING NOTICE OF YOUR CANCELLATION TO THE DEALER FROM WHOM YOU PURCHASED THE SHARES. THIS NOTICE MUST BE RECEIVED BY THE DEALER NOT LATER THAN MIDNIGHT ON THE SECOND DAY AFTER YOUR RECEIPT OF THE ACCOMPANYING PROSPECTUS (NOT INCLUDING SUNDAYS AND HOLIDAYS).

VEUILLEZ LIRE IMMÉDIATEMENT CET AVIS DE LA COMMISSION DES VALEURS MOBILIÈRES DE L'ONTARIO

CONCERNANT LES ACTIONS OFFERTES DANS LE PROSPECTUS D'ACCOMPAGNEMENT

RISQUES

CES ACTIONS SONT SPÉCULATIVES. LA COMPAGNIE NE DÉTIENT ACTUELLEMENT AUCUN TITRE DE PROPRIÉTÉ NI AUCUN DROIT SUR UN GISEMENT DE MINERAI CONNU. LES POSSIBILITÉS DE DÉCOUVERTE D'UN GISEMENT RENTABLE SONT FAIBLES.

REVENTE

CES ACTIONS NE SONT PAS COTÉES EN BOURSE. VOUS POUVEZ, PAR CONSÉQUENT, VOUS TROUVER DANS L'IMPOSSIBILITÉ DE LES REVENDRE. VOTRE COURTIER N'EST PAS TENU DE VOUS LES RACHETER.

DILUTION

LE MONTANT VERSÉ À LA COMPAGNIE ET UTILISÉ POUR LA PROSPECTION NE CONSTITUE QU'UNE PARTIE DU PRIX QUE VOUS PAYEZ POUR CES ACTIONS. CE MONTANT EST INDIQUÉ SUR LA PREMIÈRE PAGE DU PROSPECTUS.

ANNULATION

VOUS N'ÊTES PAS TENU D'ACHETER CES ACTIONS. SI VOUS AVEZ DÉJÀ ACHETÉ OU CONVENU D'ACHETER DES ACTIONS, VOUS POUVEZ ANNULER CET ACHAT EN ENVOYANT OU EN REMETTANT UN AVIS D'ANNULATION AU COURTIER QUI VOUS A VENDU LESDITES ACTIONS. CET AVIS DOIT ÊTRE REÇU PAR LE COURTIER AU PLUS TARD À MINUIT, LE SURLENDEMAIN DU JOUR OÙ VOUS AVEZ REÇU LE PROSPECTUS D'ACCOMPAGNEMENT (EXCLUSION FAITE DES DIMANCHES ET JOUR FÉRIÉS).

OMIP SUMMARY REPORT
ON THE
DIAMOND DRILLING PROGRAM
FOR
GENEVA LAKE MINERALS CORPORATION
HESS TOWNSHIP PROPERTY
SUDBURY MINING DIVISION
ONTARIO

FEBRUARY 11, 1991
SUDBURY, ONTARIO

DAVID W. CONSTABLE
CONSULTING GEOLOGIST

OMIP FILE NO. OM90-071

SUMMARY

From August 2, 1990 to December 31, 1990 Geneva Lake Minerals Corporation completed an extensive exploration program on its Hess township polymetallic property. The claim block consists of 22 contiguous, patented, mining claims situated 38 air-miles northwest of Sudbury.

The claims lie in the Benny Greenstone Belt, an Archean sequence of mafic, intermediate and felsic metasediments, flows and tuffs which are intruded by younger mafic and felsic dykes. The belt hosts two main stratabound syngenetic massive sulfide deposits, the Stralak deposit and Geneva Lake Hess township deposit. Discovered in 1924 the Hess township deposit was mined from 1941-1944 when 80,588 tons of ore was removed grading 3.34% lead, 9.21% zinc with minor copper, silver and gold values.

In 1990 Geneva Lake Minerals Corporation cut a new grid over the entire property and completed blanket induced polarization and ground magnetometry coverage. This resulted in the delineation of several geophysical targets. From September 13 to December 31, 1990 a total of 15,962 feet was drilled in 23 holes. The holes tested a vent raise crown pillar with only narrow intersections and they also tested several induced polarization responses unrelated to the main deposit, also without success.

THE FINAL PHASE OF DRILLING ATTEMPTED TO DEEPEN AND EXPAND THE OLD DEPOSIT AT DEPTH. SUCCESS WAS LIMITED TO SEVERAL ANOMALOUS ZONES PLUS HOLE GL-90-17 WHICH CUT 9.7 FEET OF 0.08% COPPER, 0.38% LEAD, 5.20% ZINC AND 17 PPM SILVER.

THE AUTHOR HAS RECOMMENDED THAT HOLES GL-90-15 TO 22, INCLUSIVE, BE PROBED BY CRONE DOWNHOLE PEM TO CHECK FOR ANY OFF-SECTION RESPONSES.

INTRODUCTION

From August 2, 1990 to December 31, 1990 Geneva Lake Minerals Corporation completed an extensive exploration program on its contiguous block of 22 patented mining claims. The claims are situated in Hess township, Sudbury mining division, Ontario. They cover approximately 810 acres and lie 38 air-miles northwest of Sudbury. Access is very good from paved highway 144 east along the Dunbar road and, finally, along a bush road to the centre of the property.

The property lies along the northern edge of the Benny Greenstone Belt, which is an Archean assemblage of mafic, intermediate and felsic metasediments with minor flows and chemical sediments. Generally the metasediments strike from east-west to northwest-southeast and dip moderately southward. Swarms of younger Precambrian diabasic, gabbroic and felsic dykes and sills criss cross the sequence. Major faults are also present in the belt.

The Hess township property hosts a polymetallic, stratabound, massive sulfide zone which was discovered in 1924. The deposit strikes at 305^{0} and dips at 45^{0} to the south, conformable to the surrounding metasediments. The property was developed in 1941-42 by a two-compartment vertical shaft to the 315-foot level, and a -45^{0} winze to the 615-foot level was added in 1943. From 1941-1944 80,588 tons of ore was removed from the

DEPOSIT AND TREATED AT AN ON-SITE FLOTATION MILL. THE 80,588 TONS AVERAGED 3.34% LEAD, 9.21% ZINC, WITH MINOR COPPER, SILVER AND GOLD VALUES. MILL RECOVERIES WERE REPORTED AT 91% FOR LEAD AND 81% FOR ZINC.

HISTORICAL RESERVES STAND AT 114,000 TONS AVERAGING 10% ZINC AND 3% LEAD ACROSS AN AVERAGE WIDTH OF 5.3 FEET PLUS 24,000 TONS WITH AN 8% COMBINED LEAD-ZINC CONTENT ACROSS 4.0 FEET AND 32,000 TONS WITH A 6% COMBINED LEAD-ZINC CONTENT AND A 3-FOOT WIDTH. THIS EXPLORATION PROGRAM INCLUDED GEOPHYSICAL COVERAGE OVER THE ENTIRE PROPERTY, RELOCATION AND TIE-IN OF OLD SHAFTS AND RAISES AND CONFIRMATION AND EXTENSION OF THE MAIN DEPOSIT. DRILLING WAS ALSO TO TEST ANY OTHER POTENTIAL TARGETS DELINEATED ON THE PROPERTY.

THE 1990 EXPLORATION PROGRAM CONSISTED OF:

(1) LINECUTTING (100 AND 50 METER LINE-SPACINGS)

(2) GEOPHYSICS:

(A) INDUCED POLARIZATION (DOUBLE DIPOLE ARRAY, A = 25M AND N = 1-6)

(B) TOTAL FIELD MAGNETOMETRY (COMPUTER-CORRECTED FOR DIURNAL AND DAY TO DAY VARIATIONS)

(3) DIAMOND DRILLING (15,962 FEET IN 23 HOLES)

(4) CRONE DOWNHOLE PULSE EM: (TWO HOLES COMPLETED TO DATE)

THIS REPORT SUMMARIZES THE DIAMOND DRILLING RESULTS AND PROVIDES LOGS, SECTIONS AND A PLAN. SEPARATE REPORTS COVER THE INDUCED POLARIZATION AND CRONE DOWNHOLE PULSE EM DATA.

PROPERTY DESCRIPTION, LOCATION AND ACCESS

Geneva Lake Minerals Corporation's Hess township property consists of a contiguous block of 22 patented mining claims (See Figure 1). The claims are presently 100 percent owned by Geneva Lake Minerals Corporation. The claims cover 809.25 acres and are presently in good standing with all taxes paid up to date. The claims are parcels 8044, 8045 and 8046 in the Land Titles Office, Sudbury, Ontario and may be further described as:

Claim Numbers	Lot	Concession
6303	SE¼ S½ Lot 7	Concession VI
6304	SW¼ S½ Lot 7	Concession VI
6502	NE¼ S½ Lot 8	Concession VI
6503	SE¼ S½ Lot 8	Concession VI
6504	NW¼ S½ Lot 7	Concession VI
6602	NE¼ N¼ Lot 8	Concession V
6603	NE¼ N½ Lot 7	Concession V
6604	NW¼ N½ Lot 7	Concession V
6605	NE¼ S½ Lot 7	Concession VI
6606	SW¼ S½ Lot 6	Concession VI
6615	NW¼ S½ Lot 8	Concession VI
6635	SW¼ N½ Lot 7	Concession VI

To Hwy 144

MUNSTER TWP

HESS TWP

MONCRIEFF TWP

HESS TWP

6742				
6741			6635	
6749	6615	6502	6504	6605
	6654	6503	6304	6305	6606
	6739	6602	6604	6663	6641
	6740	6738	6657	6658	

Shaft

Geneva Lake

C.P.R.

0 1000 METRES

SCALE

GEOLOGICAL ASSOCIATION OF CANADA
DAVID W. CONSTABLE
Feb 13/91
FELLOW

Geneva Lake Minerals Corporation

Benny , Ontario

Plan of 22 Claim Group

Scale : See Bar	Date : Sept. 89	FIG: 1
Dwg. : S. Bell	App. :	

Claim Numbers	Lot	Concession
6641	NW¼ N½ Lot 6	Concession V
6654	SW¼ S½ Lot 8	Concession VI
6657	SW¼ N½ Lot 7	Concession V
6658	SE¼ N½ Lot 7	Concession V
6738	SE¼ N½ Lot 8	Concession V
6739	NW¼ N½ Lot 8	Concession V
6740	SW¼ N½ Lot 8	Concession V
6741	SE¼ N½ Lot 9	Concession VI
6742	NE¼ N½ Lot 9	Concession VI
6749	NE¼ S½ Lot 9	Concession VI

22 Claims Total

The claim block is situated at Latitude 46°47'25" North and Longitude 81°30'55" West, approximately 38 air-miles northwest of Sudbury (See Figure 1). Year round access is easy from paved Highway 144 north of Cartier village for 7 miles to the Benny village turnoff. Turning onto the new Dunbar all-weather haulage road one proceeds eastward for 3 miles where the original bush road departs from the new road and continues easterly for 1.9 miles to the main shaft and the centre of the Geneva Lake property. Smaller bush roads traverse the property north to south and west to east.

PROPERTY-PHYSIOGRAPHY-AND-FACILITIES

Typical of the Canadian Precambrian Shield in general, the subject property has low relief consisting of wooded highland interrupted by large areas of muskeg. The highlands seldom have more than 50 feet of relief and are covered by little or no soil cover. Immature second growth trees are confined to the highlands and consist of poplar, birch, spruce and jackpine. The muskegs are covered by 10 to 30 feet of humus material and clay. Scrub brush, alders and various grasses cover the muskegs.

The last observed ice movement is from north to south as evidenced by glacial striae and eskers. Outcrop is abundant on the property comprising approximately 20 percent of the area.

Drainage is sluggish and, generally, southward. It is part of the Great Lakes Basin. Locally, however, the water drains easterly to the Onaping River and then southward.

Access roads to the property are in good shape and abundant road building aggregates are present near the subject property. Adequate water and timber occur on Geneva Lake Minerals Corporation's property for mine and mill operation. Hydro could be brought from Highway 144 for 5.25 road-miles to the site. The main transcontinental Canadian Pacific rail line lies in Benny village, 7.25 road miles west of the property.

HOUSING, EXPERIENCED PERSONNEL AND THE INFRASTRUCTURE NECESSARY FOR A MAJOR MINING DEVELOPMENT IS READILY AVAILABLE IN SUDBURY AND SURROUNDING TOWNS, SITUATED 45 ROAD MILES SOUTH. AN OLD TAILINGS AREA LIES BESIDE THE MAIN SHAFT ON THE GENEVA LAKE PROPERTY AND IT APPEARS TO POSSESS ADDITIONAL CAPACITY.

HISTORY OF PREVIOUS EXPLORATION

Base metals were first noted in the Benny Belt in 1886 near the Stralak whistle stop during construction of the main CP rail line, 8.5 miles west of the Geneva Lake property. In 1924 J.H. Collins discovered the Geneva Lake polymetallic deposit beneath iron-stained drift and oxidized sulfides (gossan zone). Collins staked the nucleus of the present claim block at that time. Exploration of the discovery commenced in 1927, firstly with Babson interests then under option to Towagamac Exploration Co. In 1928 the latter company formed Lake Geneva Mining Co. to develop the deposit. Initial exploration consisted of several blasted trenches and 8 surface diamond drill holes which probed to 400 vertical feet. Shortly thereafter the Towagamac Company completed an additional 2000 feet of diamond drilling which defined 77,350 tons of ore grading 4.5% lead, 13% zinc and containing minor additional gold and silver values, all located above the 250-foot level.

By 1928 a vertical, two-compartment shaft was sunk to 250 feet and a level established at 235. Simultaneously, a 125-ton per day concentrating mill was constructed on the subject property, but it closed in the fall of 1929, prior to production status, due to the stock market and base metal price crashes.

As a result of metal demand during World War II the mine and plant were re-opened in 1941. Lake Geneva Mining Co. operated the mine and sold production to the Wartime Metals Corporation under contract. From 1941 to May, 1944 records show 80,588 tons of ore averaging 3.34% lead and 9.21% zinc were treated yielding 3,006 tons of lead concentrate grading 63.3% lead, 0.08 ounces of gold per ton and 22 ounces of silver per ton. Also 11,796 tons of zinc concentrate was produced averaging 51.4% zinc (Source: Ontario Mines Branch Mineral Deposit Record). Mill recoveries were approximately 91% of the lead and 81% of the zinc. In 1941-42 the vertical shaft was deepened to 315 feet and a second level started. In 1943 an inclined winze was sunk from the 315-foot level to a vertical depth of 640 feet with levels started at the 525 and 615. Only small scale production was ever completed on these deep levels, although some development work ensued. By May, 1944 base metal requirements fell as the war's end was in sight and Geneva Lake's contract lapsed. Unable to find new contracts the mine and mill closed and the plant was sold for salvage in late 1944.

Table 1 summarizes the property's history since the 1924 discovery. By 1949 Geneva Lake Mines held the property (later in 1956 it became Geneva Mines Limited). In 1949 Geneva Lake Mines de-watered the mine and re-examined the underground. In addition, they drilled 17 surface diamond drill holes for a

TOTAL OF 12,100 FEET. AFTER THE 1949-52 EXPLORATION PROGRAM RESERVES WERE LISTED AS 114,000 TONS AVERAGING 10% ZINC AND 3% LEAD ACROSS AN AVERAGE WIDTH OF 5.3 FEET PLUS 24,000 MORE TONS WITH AN 8% COMBINED METALS CONTENT ACROSS 4 FEET PLUS 32,000 TONS AVERAGING 6% COMBINED METALS CONTENT OVER A WIDTH OF 3 FEET [O.D.M. MINERAL RESOURCES CIRCULAR No. 12 (1969)]. IN 1951-52 A 100-TON PER DAY CONCENTRATING MILL WAS CONSTRUCTED BY GENEVA LAKE MINES BUT AGAIN, DUE TO DECLINING BASE METAL PRICES, THE MILL WAS NEVER COMPLETED.

HESS TOWNSHIP

LAKE GENEVA MINE (PAST PRODUCER)

MAIN METALS: Pb, Zn.

LOCATION: Hess Tp.; lot 7, con. VI.
Reference: ODM maps 2170 and P.287.

GEOLOGY: The deposit is sheet-like in form and conforms with the bedding of sedimentary host rocks. The mineralization is partly replacement and partly fracture filling. The ore is chiefly sphalerite with lesser galena, pyrite, etc. The ore is cut by diabase dikes. The average grade of 80,588 tons ore milled from 1941-44 was 9.21% Zn and 3.34% Pb with 22 oz./ton Ag in the lead concentrate. The ore zone is 700 feet long, averages 5 feet in width and has been tested to a depth of 1000 feet.

ECONOMIC FEATURES: Ore reserves - 114,000 tons averaging 10% Zn and 3% Pb. across an average width of 5.3 feet, plus 24,000 tons containing 8% combined metals over an average width of 4 feet, plus 32,000 tons averaging 6% combined metals over a width of 3 feet (S.L.MacDonald, May, 1951).

OWNERSHIP: IRVINGTON MINING CO. LTD. (IN BANKRUPTCY).

HISTORY: 1927-44 THE MINE WAS OPERATED BY LAKE GENEVA MINING COMPANY. A SHAFT AND WINZE WERE SUNK TO 640 FEET WITH LATERAL WORK ON 5 LEVELS. MINE CLOSED MAY,1944. PRODUCTION FROM 1941 TO 1944 WAS 10,389,646 LBS. ZN AND 3,598,411 LBS. PB, VALUED AT $528,003; THE VALUE OF AG PRODUCED WAS $28,416.

1949-52 THE MINE WAS DEVELOPED BY BIDGOOD KIRKLAND GOLD MINES LTD. SURFACE DRILLING WAS DONE IN:

1950-51 A 100-TON MILL WAS INSTALLED IN 1952 BUT DID NOT GO INTO PRODUCTION.

1956 GENEX MINES LTD. SUCCEEDED GENEVA LAKE MINES LTD.

1966 IRVINGTON MINING CO. SUCCEEDED GENEX MINES LTD.

(SOURCE: SHLANKA, R. 1969 ODM MINERAL RESOURCE CIRCULAR NO. 12, PP. 248-49)

By 1966 Irvington Mining Company succeeded Geneva Mines Limited only to go into bankruptcy in 1967. By 1970 E. Blanchard and W. Haystead purchased the property for cash and after completing preliminary geophysics on the property a new company was formed called Geneva Metals Inc. In early 1973 three surface diamond drill holes were completed for a total of 1,502 feet. Hole 73-1 was barren while hole 73-2 cut a 29-foot low grade section (0.66% zinc), including 3 feet of 4% zinc. Hole 73-3 intersected 5 feet grading 0.488% lead, 1.64% zinc and 0.442 ounces of silver per ton. By 1978 Geneva Metals Ontario charter was cancelled and held privately until acquired by the subject company in mid-1989.

The property has lain dormant since the 1973 drilling except for its coverage by large scale airborne electromagnetic and magnetic surveys; namely a Questor survey in 1972 for Tex-Sol Explorations and an Aerodat airborne survey for Rio Tinto Canadian Exploration Ltd. in 1981. The former survey defined a one-channel conductor trending northwesterly in claims S.6742 and S.6664.

TABLE-1

SUMMARY-OF-PROPERTY-HISTORY

DISCOVERY

1924	J. H. COLLINS

OWNERSHIP

1924-26	J. H. COLLINS
1927?	BABSON
1927	TOWAGAMAC EXPLORATION CO.
1928-49	LAKE GENEVA MINING CO. (CONTROLLED BY TOWAGAMAC)
1949-56	GENEVA LAKE MINES - FINANCED AND OPERATED BY BIDGOOD KIRKLAND GOLD MINES
1956	GENEX MINES - NAME CHANGE
1966	IRVINGTON MINING CO. - NAME CHANGE
1967	IRVINGTON MINING CO. - BANKRUPT
1970	E. BLANCHARD & W. HAYSTEAD - PURCHASE
1972	A. C. MACPHERSON & CO. - ACQUIRED RIGHTS
1972	GENEVA METALS INC.
1978	GENEVA METALS - ONTARIO CHARTER CANCELLED AND HELD PRIVATELY
1978-89	INACTIVE

History

1924-26	PITS AND TRENCHES
1926	DIAMOND DRILLING - COLLINS, BABSON
1927	TRENCHES AND DIAMOND DRILLING
1928-31	SHAFT, VERTICAL, 250' MILL ERECTED
1937	SHAFT DEEPENED TO 400'
	SMALL AMOUNT OF ORE PRODUCTION
	MILL BURNED DOWN
1941	PRODUCTION STARTED MID YEAR
1943	WINZE, INCLINED 45°, FROM 375' LEVEL,
	375' ON INCLINE TO VERTICAL DEPTH 638'
1944	MINE CLOSED IN MAY - EQUIPMENT SOLD FOR SALVAGE
1949	DEWATER AND SAMPLE
1950-51	DIAMOND DRILLING
PRE 1952	PREPARE FOR PRODUCTION -
	MILL CONSTRUCTION PARTIALLY COMPLETED
1972	GEOPHYSICAL SURVEY, DIAMOND DRILLING

Production

1937	1,287 TONS	UNKNOWN GRADE
1941-44	80,588 TONS	3.34% Pb, 9.21% Zn
TOTAL	81,875 TONS	

Concentrates-Grades

Pb 63.3% Zn 51.4% Ag 22.0 oz/t Au 0.08 oz/t

REGIONAL-AND-PROPERTY-GEOLOGY

GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY LIES AT THE EASTERN END, NORTHERN MARGIN OF THE BENNY GREENSTONE BELT. THE BENNY BELT IS A DIFFERENTIATED ASSEMBLAGE OF ARCHEAN VOLCANICS, PYROCLASTICS AND SEDIMENTS ISOLATED WITHIN A SEA OF OLDER MIGMATITIC BASEMENT ROCKS. THE BELT IS ELONGATED EAST-WEST FOR 28 MILES WITH A MAXIMUM WIDTH OF 2.5 MILES. OVER 10,000 FEET OF STRATIGRAPHIC THICKNESS IS REPRESENTED BY THE BELT AND INCLUDES MAFIC FLOWS, METATUFFS AND METASEDIMENTS WHICH STRIKE EAST-WEST AND DIP STEEPLY TO MODERATELY SOUTHWARD. THE ROCK ASSEMBLAGE IS INTRUDED BY YOUNGER ARCHEAN MONZONITES AND GRANITES AND BY TWO TYPES OF MAFIC DYKES. THE OLDER MAFIC DYKE IS A GABBRO AND MAY ALSO OCCUR AS A SILL. THE SECOND AND YOUNGER (PROTEROZOIC) DYKE SET IS AN OLIVINE DIABASE. THE ENTIRE BELT HAS BEEN INTENSELY METAMORPHOSED TO UPPER GREENSCHIST AND LOWER AMPHIBOLITE FACIES RESULTING IN DEVELOPMENT OF A GNEISSIC TEXTURE IN MOST ROCKS AND INTENSE STRETCHING, DISTORTION AND DEFORMATION OF THE PRIMARY FEATURES. FAULTING GENERALLY TRENDS NORTHWEST, NORTHEAST OR EAST-NORTHEAST.

WITHIN THE ARCHEAN ASSEMBLAGE ARE DISTINCT BANDS OF MAFIC FLOWS AND TUFFS; INTERMEDIATE TUFFS, BRECCIAS AND LAPILLI TUFFS, FELSIC FLOWS, CRYSTAL TUFFS AND TUFFS TOGETHER WITH OXIDE- AND SULFIDE-FACIES IRON FORMATIONS, GRAPHITIC SEDIMENTS, QUARTZITES AND GREYWACKES. THE CHEMICAL SEDIMENTS, PROBABLY

REPRESENTING PERIODS OF VOLCANIC QUIESCENCE, ARE VARIOUSLY REPRESENTED BY GRAPHITE, OXIDE AND SULFIDE IRON FORMATION, CHERTS AND ALTERED CLAY MINERALS (SERICITE). THE LATTER SERICITIC UNITS OFTEN ENVELOP THE SULFIDE IRON FORMATIONS ALONG A STRATIGRAPHIC HORIZON AND ARE THE SETTING FOR NUMEROUS LARGE BARREN MASSIVE SULFIDE BODIES IN THE BELT. THE SERICITIC ENVELOPE ALSO REPRESENTS THE GEOLOGIC SETTING FOR THE TWO MAIN POLYMETALLIC DEPOSITS IN THE AREA, NAMELY THE GENEVA LAKE AND STRALAK DEPOSITS.

GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY LIES ON THE NORTHERN MARGIN NEAR THE EASTERN END OF THE BENNY GREENSTONE BELT IN AN APPARENTLY COMPARABLE STRATIGRAPHIC POSITION TO THE STRALAK DEPOSIT. IN DETAIL THE SUBJECT PROPERTY INCLUDES A CENTRAL DIFFERENTIATED SEQUENCE OF MAFIC (CHLORITIC) METAVOLCANICS SURROUNDED BY INTERMEDIATE METATUFFS AND BRECCIAS. THE NORTHERN AND SOUTHERN PORTIONS OF THE PROPERTY ARE UNDERLAIN BY YOUNGER ARCHEAN MONZONITE-GRANITE PLUTONS. THE ROCK SEQUENCE STRIKES IN A VARIETY OF LOCAL TRENDS BUT NEAR THE MAIN SHAFT IN CLAIMS S.6304 THE ROCKS STRIKE N45° TO 50°W. THE ROCKS ARE WELL FOLIATED (GNEISSIC) WITH THE FOLIATION PARALLEL TO OBSERVED PRIMARY RELICT FEATURES AND THE GENEVA LAKE DEPOSIT IS CONFORMABLE TO THIS FOLIATION.

ALL THE ROCKS ARE METAMORPHOSED TO UPPER GREENSCHIST FACIES. TWO MAJOR FAULTS CROSS THE PROPERTY; THE APPARENTLY

YOUNGER NORTHEAST-TRENDING DOWES LAKE FAULT WHICH DISPLACES THE OLDER NORTHWEST-TRENDING FAULT SYSTEM. IMMEDIATELY TO THE SOUTH OF THE PROPERTY IS THE NORTHEASTERLY GENEVA LAKE FAULT.

YOUNGER ARCHEAN GABBROIC DYKES AND SILLS INTRUDE THE SEQUENCE JUST OUTSIDE THE SOUTHEASTERN AND EASTERN PROPERTY BOUNDARIES, WHILE A LARGE PROTEROZOIC DIABASIC DYKE TRENDS NORTHWESTERLY ACROSS THE NORTHEAST CORNER OF THE PROPERTY.

ECONOMIC GEOLOGY

THE GENEVA LAKE MINERALIZATION HAS BEEN VARIOUSLY DESCRIBED AS A FRACTURE FILL, REPLACEMENT OR STRATABOUND MASSIVE SULFIDE DEPOSIT. BASICALLY, THE TWO FORMER DESCRIPTIONS ARE PRE-1980 IN ORIGIN WHILE THE LATTER DESCRIPTION IS A MORE MODERN THEORY. THE DEPOSIT STRIKES SOUTHEASTERLY, DIPS SOUTH AT 45^{0} TO 50^{0} AND RAKES TO THE SOUTHEAST AT 45^{0}. THE SULFIDE ZONE IS CONFORMABLE TO THE STRATIGRAPHY AND ON SURFACE HAS BEEN TRACED ALONG A 700-FOOT STRIKE LENGTH. SULFIDE WIDTHS VARY FROM 2 TO 20 FEET WITH AN AVERAGE WIDTH OF 5 FEET.

THE SULFIDE MINERALIZATION IS GENERALLY MASSIVE BUT WITH DISTINCT BANDING PARALLEL TO THE HOST ROCK'S BEDDING PLANES. THE MINERALIZATION CONTAINS RAFTS OF ALTERED HOST ROCK AND CONSISTS OF BLACK, RED AND BROWN FINE-GRAINED SPHALERITE PLUS COARSER-GRAINED GALENA, CHALCOPYRITE, PYRRHOTITE AND PYRITE. CROSS-CUTTING, STRINGER ZONES OCCUR WITHIN AND ABOVE THE MAIN SULFIDE HORIZON. THE MINERALOGY OF THE STRINGERS IS PYRITE, CHALCOPYRITE, SPHALERITE, PYRRHOTITE AND MINOR GALENA. GANGUE MINERALS WITHIN THE DEPOSIT INCLUDE QUARTZ, CALCITE, FELDSPAR AND CHLORITE.

REPORTED MILL RECOVERIES (JEROME, 1982) FOR LEAD AND ZINC WERE 91 AND 81 PERCENT, RESPECTIVELY. LEAD CONCENTRATES AVERAGED 63.3% LEAD, 0.08 OUNCES OF GOLD PER TON AND 22 OUNCES OF SILVER PER TON. ZINC CONCENTRATES AVERAGED 51.4% ZINC.

Gold values are generally low but Osborne (1929) describes a spectacular native gold showing in a surface pit.

The historic grade of the production ore is 9.21% zinc and 3.34% lead for the 80,588 tons milled. The average grade of the pre-production channel samples from the 235-foot level is 13.9% zinc, 5.65% lead, 2.67 ounces of silver per ton and 0.021 ounces per ton of gold across an average width of 5.7 feet.

Historically, more mineralization lies west of the shaft than east of the shaft. Below the 375 level a diabasic dyke strikes S45°E and dips northeast at 75° to vertical and disrupts the mineralization. The sulfide continues, apparently without any significant displacement, below 475 vertical feet and continues below the deepest mine development at 615 feet. Smith (1950) outlined reserves of:

Developed	Tons
525 Level	13,570
615 Level	6,500
Indicated	
525 Level	4,500
615 Level	18,500
Probable	
525 Level	12,400
615 Level	5,750
	61,220 Total Tons

SMITH ALSO INDICATED THAT THESE RESERVES, WOULD HAVE "AN AVERAGE GRADE OF APPROXIMATELY 10% ZINC AND 3% LEAD OVER AN AVERAGE WIDTH OF ABOUT 5.0 FEET." SMITH CONTINUES, "I CONSIDER THAT THE CHANCES ARE GOOD OF FINDING ANOTHER ORESHOOT IN THE VEIN BELOW THE 615 FOOT LEVEL, BECAUSE IT HARDLY SEEMS REASONABLE TO EXPECT THE ORE TO BE ENTIRELY CUT OFF AT THAT HORIZON WHEN THE VEIN FRACTURE EXTENDS TO A DEPTH OF AT LEAST 1000 FEET."

BIDGOOD KIRKLAND GOLD MINES LTD. (1951) ESTIMATED RESERVES TO THE 750-FOOT LEVEL WERE:

(A) 114,000 TONS GRADING 10% ZINC AND 3% LEAD IN A TABULAR BODY AVERAGING 5 FEET IN THICKNESS.

(B) 24,000 TONS CONTAINING 8% COMBINED LEAD AND ZINC WITH AN AVERAGE THICKNESS OF 4 FEET

(C) 32,000 TONS CONTAINING 6% COMBINED LEAD AND ZINC WITH AN AVERAGE THICKNESS OF 3 FEET.

THEY ALSO INDICATED AN ADDITIONAL 5,000 TONS LOCATED AT THE NORTHWEST END OF THE WORKINGS, WEST OF THE VENTILATION RAISE, EXTENDING ALONG 200 TO 300 FEET OF STRIKE LENGTH FROM SURFACE TO 50 FEET OF DEPTH (TILSEY, 1989).

THE TAILINGS AT GENEVA LAKE CONTAIN APPROXIMATELY 65,737 TONS AVERAGING 2.07% ZINC AND 1.15% LEAD, IF ONE CALCULATED BACK FROM RECOVERED GRADES AND RATE OF RECOVERY FOR EACH METAL.

THE DEEPEST DRILLING TO DATE ON THE PROPERTY CONSISTS OF TWO HOLES AT THE 1000-FOOT DEPTH WHICH ENCOUNTERED SUB-ECONOMIC GRADES. THE 1951 DRILLING PROGRAM OF 12,100 FEET IN 17 HOLES BY BIDGOOD GOLD MINES LTD. (MACDONALD, 1951) EXTENDED THE DEPOSIT LATERALLY AND AT DEPTH (JEROME, 1972). HOLE M-3 PASSED SOME DISTANCE INTO THE FOOTWALL OF THE DEPOSIT AND CUT 4 FEET OF 4.5% ZINC LOCATED 100 FEET NORTHEAST OF THE MAIN ZONE (MACDONALD, 1951). THIS APPARENTLY REPRESENTS A NEW AND SEPARATE SULFIDE HORIZON. THE MAIN SULFIDE ZONE IS EXPOSED AT SURFACE FOR 200-300 FEET AND IS STILL OPEN NEAR THE NORTHWEST VENT RAISE. THIS SULFIDE ZONE IS THOUGHT TO EXTEND TO A DEPTH OF 50 FEET. THE SULFIDE ZONE WEST OF THE 235-FOOT LEVEL IS STILL PRESENT, ALTHOUGH OF LOWER GRADE, AND POTENTIAL EXISTS FOR THIS MINERALIZATION TO INCREASE IN GRADE AND WIDTH.

RESULTS FROM THE 1990 EXPLORATION PROGRAM

From September 13 to December 31, 1990 Geneva Lake Minerals Corporation completed a total fo 15,962 feet of BQ core drilling in 23 holes. The logs, plan and sections are included at the end of this report and they describe the drill results, rock types and geologic features in detail. The drill program had three distinct phases:

(1) To confirm and expand the crown pillar zone near the old vent raise at line 1+00W, station 0+20N.

(2) To test the best induced polarization targets on the rest of the property.

(3) To confirm and expand the deposit west, east and downdip of the two lower levels (525- and 615-foot levels).

Phase (1) includes holes GL-90-1, 1A, 3, 4, 6, 7 and 8. Holes GL-90-1, 1A, 6 and 7 all hit stopes where a crown pillar was supposed to be in place. Hole GL-90-1A intersected 2.3 feet of 3.72% zinc and 0.90% lead in the hangingwall of the main zone. Hole GL-90-3 had a few flecks of chalcopyrite, galena and sphalerite in a diabase dyke. Best values were 360 ppm copper, 5400 ppm lead, 1082 ppm zinc and 108 ppm silver, randomly scattered across 9 feet of core.

HOLE GL-90-6 INTERSECTED 2.4 FEET OF 1.82% ZINC, 0.90% LEAD AND 124 PPM SILVER IN THE HANGINGWALL OF THE ZONE. HOLE GL-90-7 CUT 3.0 FEET OF 1160 PPM COPPER, 1100 PPM LEAD, 1664 ZINC AND 380 PPM SILVER; ALSO IN THE HANGINGWALL. HOLE GL-90-8 INTERSECTED MAFIC METASEDIMENTS WITH ONLY MINOR PYRITIC CONTENT. THIS DRILLING STAGE WAS A DISAPPOINTMENT AND MUCH OF WHAT WAS SHOWN AS CROWN PILLAR HAS BEEN MINED.

HOLES GL-90-5, 9 AND 10 WERE ALL TESTING THE BEST INDUCED POLARIZATION TARGETS ELSEWHERE ON THE PROPERTY. HOLE GL-90-5 INTERSECTED EPIDOTIZED, MAFIC METASEDIMENTS WITH ONLY TRACES OF PYRITE AND CHALCOPYRITE. HOLE GL-90-9 WAS ALSO WEAKLY MINERALIZED WITH THE BEST ASSAY ONLY 276 PPM ZINC AND 160 PPM LEAD. HOLE GL-90-10 CONTAINED ONLY WEAKLY ANOMALOUS VALUES OF 128 PPM ZINC AND 100 PPM LEAD. THE CAUSE OF THE INDUCED POLARIZATION ANOMALIES IS LIKELY TO BE THE WEAK MINERALIZATION ENCOUNTERED IN THE DRILL HOLES. THERE WAS NO OTHER STRONG, DISTINCT FEATURE PRESENT TO OFFER ANY OTHER EXPLANATION. AGAIN, THESE RESULTS WERE DISAPPOINTING.

HOLES GL-90-2 AND HOLES GL-90-11 TO 22, INCLUSIVE, WERE ALL SPOTTED TO INTERSECT THE MAIN DEPOSIT AT DEPTH. SPECIFICALLY, THEY WERE SPOTTED TO TEST THE WESTERN EXTENSION, DOWNDIP BELOW THE DEEPEST LEVELS, BETWEEN THE TWO DEEP LEVELS AND EAST OF THE DEEP LEVELS.

HOLE GL-90-2 CONTAINED A WEAK SERICITE ZONE FROM 846.5' TO 854.3' WITH SPLASHES OF CHALCOPYRITE AND SPHALERITE. BEST VALUES WERE IN A 3.5-FOOT INTERSECTION WHERE VALUES OF 1400 PPM COPPER, 1140 PPM LEAD, 8880 PPM ZINC AND 38 PPM SILVER WERE ENCOUNTERED.

HOLE GL-90-11 CONTAINED A DIABASE DYKE WHERE THE TARGET ZONE SHOULD HAVE PROJECTED. HOLE GL-90-12 CROSSED A SERICITE ZONE FROM 975.0' TO 1005.0'. ONLY TRACES OF CHALCOPYRITE, SPHALERITE AND GALENA WERE NOTED AND THE BEST ASSAY WAS 2020 PPM ZINC, 220 PPM LEAD, 120 PPM COPPER AND 6 PPM SILVER.

HOLE GL-90-13 HIT ONLY A ¼" WIDE GALENA VEIN AND A WEAK PYRITIC ZONE FROM 912.5 TO 959.0 FEET. HOLE GL-90-14 INTERSECTED A SERICITE ZONE FROM 1016.0-1045.0 FEET WITH BLEBS OF GALENA AND CHALCOPYRITE. BEST ASSAYS WERE 340 PPM FOR COPPER, 7000 PPM LEAD, 11,900 PPM ZINC AND 12 PPM SILVER.

HOLE GL-90-15 AGAIN CROSSED A SERICITE ZONE FROM 858.4-887.0 FEET. ONE MASSIVE BED OF SULFIDES WAS PRESENT FROM 873.4 TO 875.0 FEET. THIS 1.6-FOOT GRADES 2.60% LEAD, 6.40% ZINC AND 34 PPM SILVER. THE BEST ASSAYS IN THE REST OF THE SERICITE SCHIST ALONE ARE 220 PPM COPPER, 600 PPM LEAD, 2660 PPM ZINC AND 12 PPM SILVER.

IN HOLE GL-90-16 THE TARGET AREA WAS OCCUPIED BY A MAJOR DIABASE DYKE. HOLE GL-90-17 HIT THE MAIN ZONE FOR 9.7 FEET FROM 857.9 TO 867.6 FEET. THE 9.7-FOOT ZONE AVERAGED 0.08% COPPER, 0.38% LEAD, 5.20% ZINC AND 17 PPM SILVER.

HOLE GL-90-18 TRIED TO EXPAND THE MAIN ZONE ENCOUNTERED IN HOLE 17 EASTWARD, BUT CROSSED A FELSIC AND DIABASIC DYKE SWARM FROM 872.6 TO 1053.0 FEET. HOLE GL-90-19 ATTEMPTED TO DEEPEN THE SULFIDE ZONE IN HOLE 17. IT HIT A SERICITE SCHIST ZONE FROM 1128.0 TO 1286.0 FEET. THIS CONTAINED PYRITIC BEDS WITH RARE TRACES OF CHALCOPYRITE.

HOLE GL-90-20 WAS ALSO SPOTTED TO DEEPEN THE MAIN ZONE BUT HIT ONLY A SERICITE ZONE AT 1155.0 FEET WITH SPLASHES OF SPHALERITE FOR LESS THAN A FOOT. THE SERICITE ZONE ENDED AT 1182.1 FEET. HOLE GL-90-21 WAS AN EASTWARD STEP-OUT HOLE FROM HOLE 18 BUT IT FAILED TO ENCOUNTER THE SERICITE ZONE. INSTEAD ONLY MINOR PYRITE-PYRRHOTITE MINERALIZATION WAS PRESENT.

FINALLY, HOLE GL-90-22 WAS PLACED NEAR HOLE GL-90-17 AND DRILLED AT 10^{0} STEEPER DIP. IT CUT ONLY MINOR SPHALERITE-GALENA-CHALCOPYRITE BLEBS. THIS MINERALIZATION WAS INCLUDED IN A SERICITE ZONE FROM 934.5 TO 1005.0 FEET.

BOTH HOLE GL-90-12 AND GL-90-14 WERE READ BY A CRONE DOWNHOLE PULSE ELECTROMAGNETIC INSTRUMENT. BOTH HOLES GAVE NO RESPONSE (SEE SEPARATE REPORT). HOLES GL-90-15 TO 22, INCLUSIVE, HAVE THE CASING LEFT IN THE HOLES AND ARE CAPPED.

CONCLUSIONS AND RECOMMENDATIONS

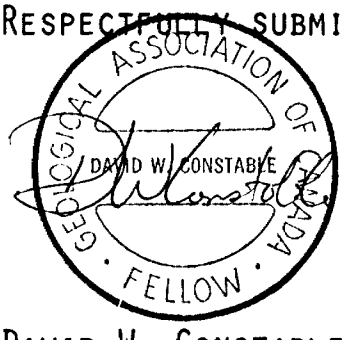
THE RESULTS OF THE 1990 EXPLORATION PROGRAM ON GENEVA LAKE MINERALS CORPORATION'S HESS TOWNSHIP PROPERTY WERE GENERALLY DISAPPOINTING, WITH THE EXCEPTION OF **HOLE GL-90-17.** THE VENT RAISE CROWN PILLAR WAS ABSENT, THE BEST INDUCED POLARIZATION TARGETS WERE VERY WEAKLY MINERALIZED AND THE ONLY INTERSECTION AT DEPTH WAS BETWEEN THE TWO DEEP LEVELS OF THE MINE. NO DEEP EXTENSION OF **HOLE GL-90-17** WAS FOUND, DURING THIS RECENT DRILLING PROGRAM.

TO COMPLETE THE ASSESSMENT OF THE HOLES CRONE SHOULD READ HOLES **GL-90-15 TO 22,** INCLUSIVE, TO DETECT ANY OFF-HOLE MINERALIZATION. CARE MUST BE TAKEN WHEN READING THE HOLES BECAUSE THERE ARE SEVERAL BLOCKY SECTIONS WHICH MAY JAM THE PROBE.

ANY OFF-HOLE ANOMALIES SHOULD BE DRILLED IN THE SPRING OF 1991.

DATED THIS 11TH DAY OF FEBRUARY, 1991 AT SUDBURY, ONTARIO

RESPECTFULLY SUBMITTED



DAVID W. CONSTABLE
CONSULTING GEOLOGIST

900 W 800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 00 100 E 200 E

6504 6303 6502 6304 6615 6503 6604 6654 6602

LAKE

SHAFT

90-6 90-1A 90-7 90-4 90-8 90-1 90-3

90-17 90-22 90-21 90-16 90-18 90-9 90-2 90-20 90-11 90-14 90-15 90-13 90-12 90-19

90-10

90-5

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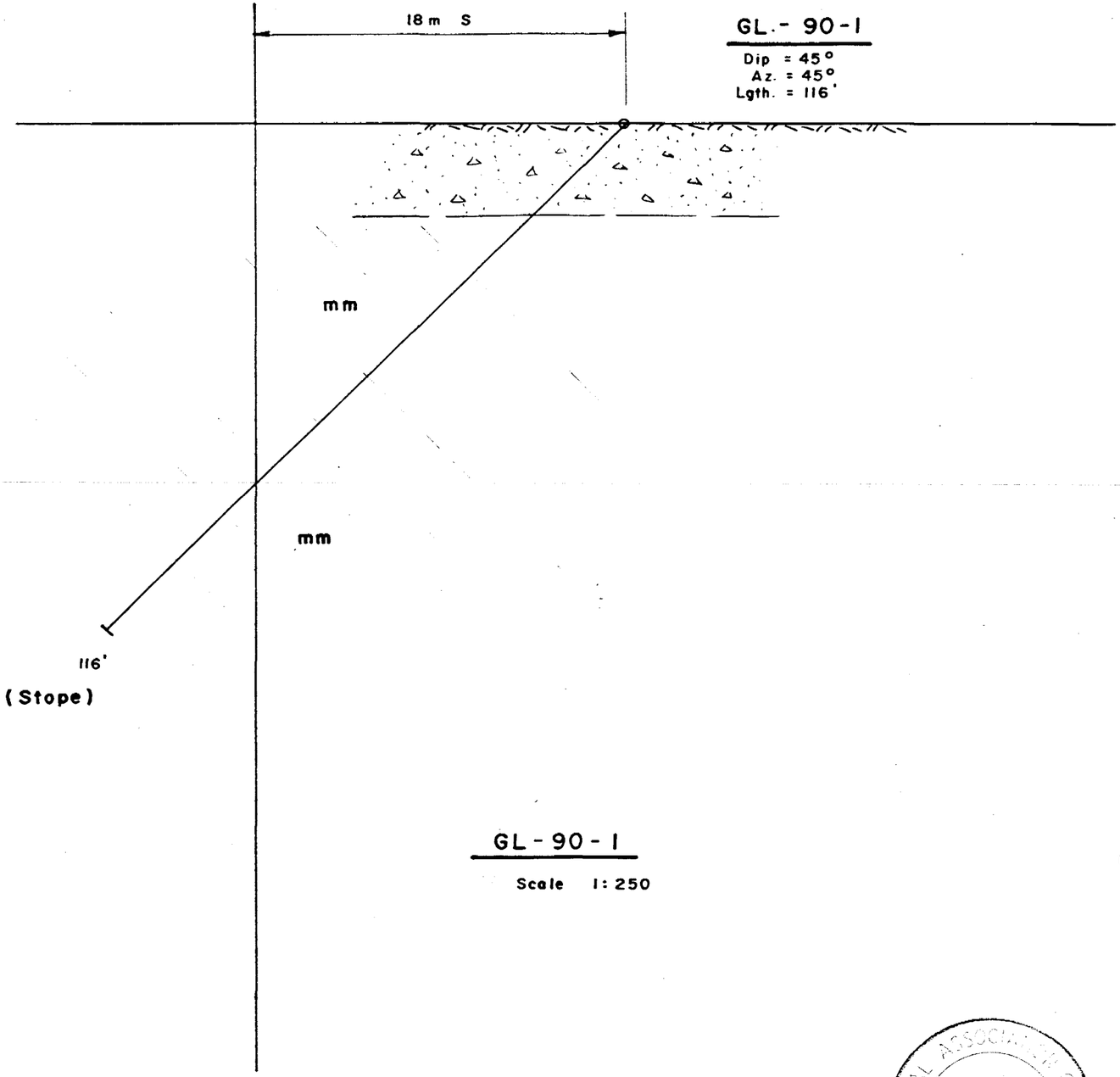
FELLOW

Geneva Lake Minerals Corporation
Benny , Ontario

Surface Plan of D. Drill Holes

Date : Jan. 91	Scale : See Bar	



GL-90-1

Scale 1:250

mm = Mafic Metasediment

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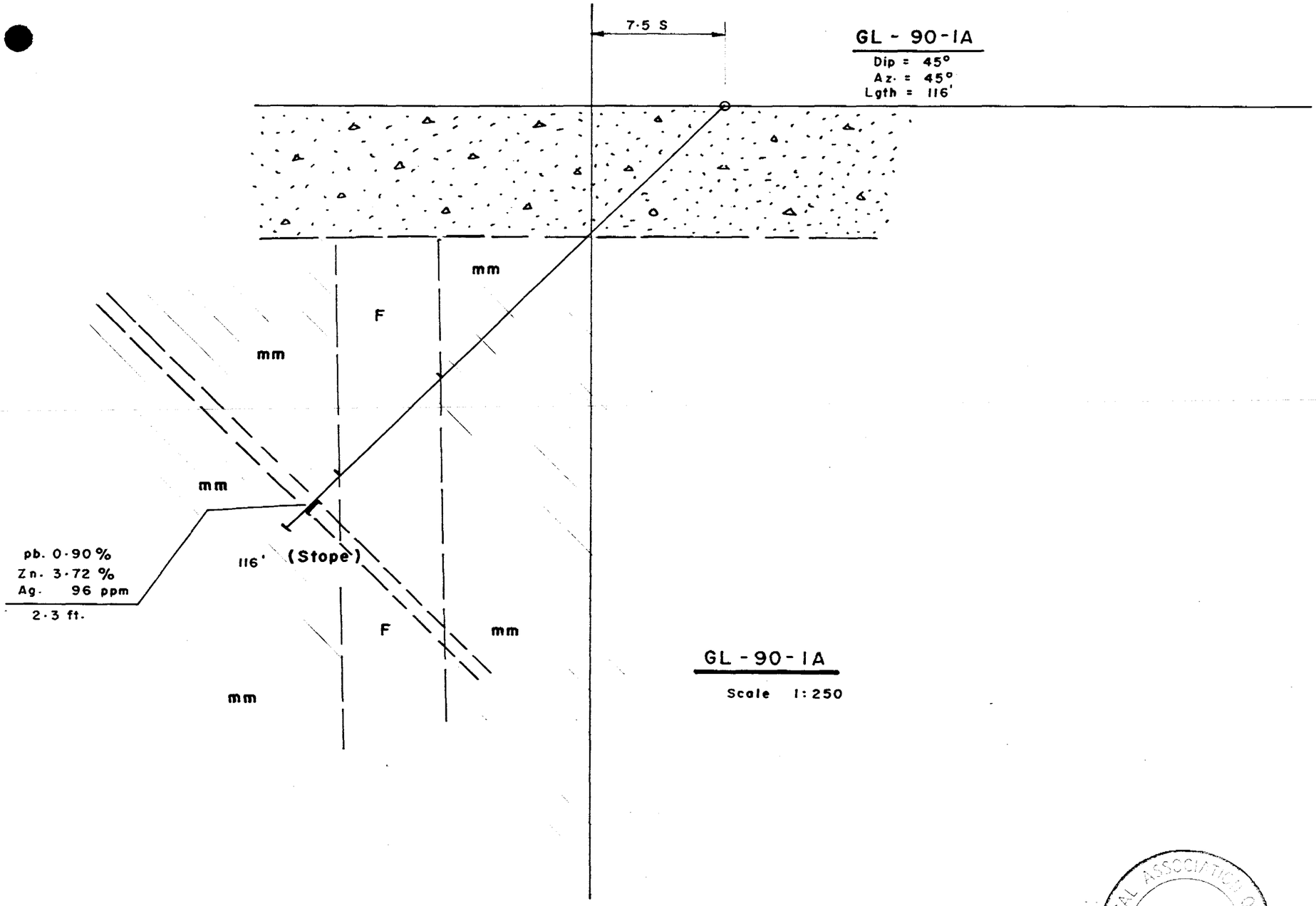
Geneva Lake Minerals Corporation Benny, Ontario		
Section D.D. Hole GL-90-1		
Date : Dec. 90	Scale : 1:250 m	
Dwg. : S. Bell	App. :	



GL - 90 - 1A

Scale 1:250

mm = Mafic Metasediments
F = Felsic Intrusions

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Geneva Lake Minerals Corporation Benny , Ontario	
Section D.D. Hole GL-90 - 1A	
Date : Dec. 90	Scale : 1:250 m
Dwg. : S. Bell	App. :

292' S

GL-90-2

Dip = 45°
Lgth = (1005') 306·3 m

mm

mm

mm

mm

Sericite Alteration

Cu· 0·14 %
Pb· 0·11 %
Zn· 0·89 %
Ag· 38 ppm
3·5 ft·

(1005') 306·3 m

0+00
Base Line

mm = Mafic Metasediment

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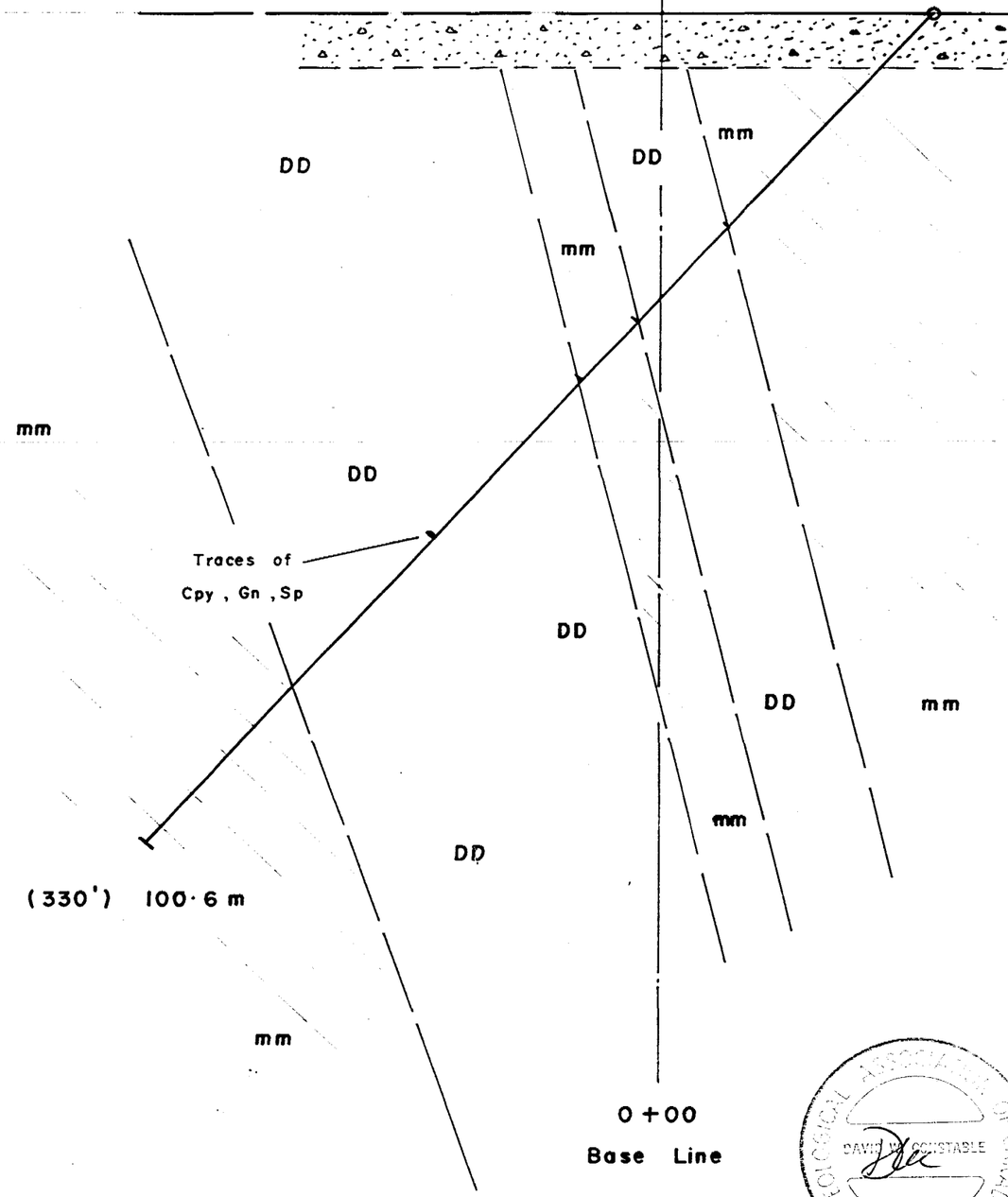
Benny, Ontario

Section D.D. Hole GL-90-2

Date: Jan. 91	Scale: 1:1000	

GL - 90 - 3



F = Felsic Intrusions
DD = Diabase Dyke
FM = Felsic Metasediments
mm = Mafic Metasediments

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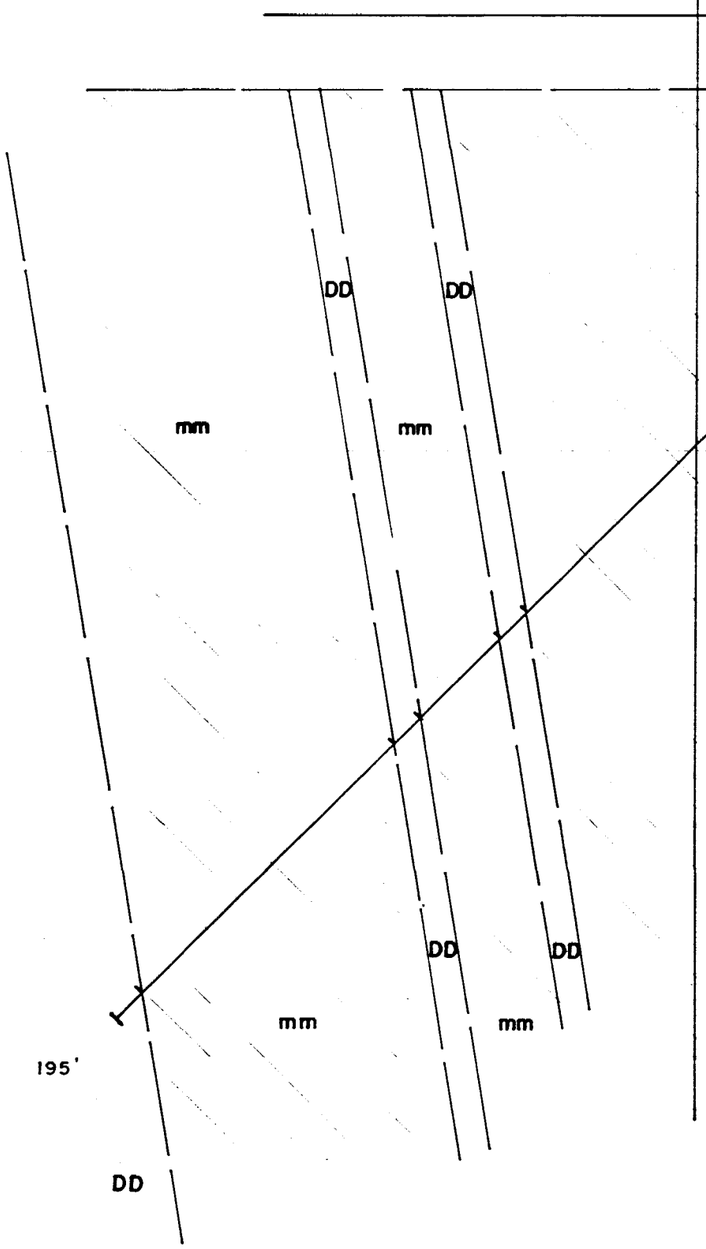
Benny , Ontario

Section D·D. Hole GL-90-3

Date : Dec. 90	Scale : 1 : 500 m
Dwg. : S. Bell	App. . :

GL - 90 - 4

Dip = 45°
Az = 45°
Lgth. = 195'



GL - 90 - 4

Scale 1: 250 m

DD = Diabase Dyke
mm = Felsic Metasediments

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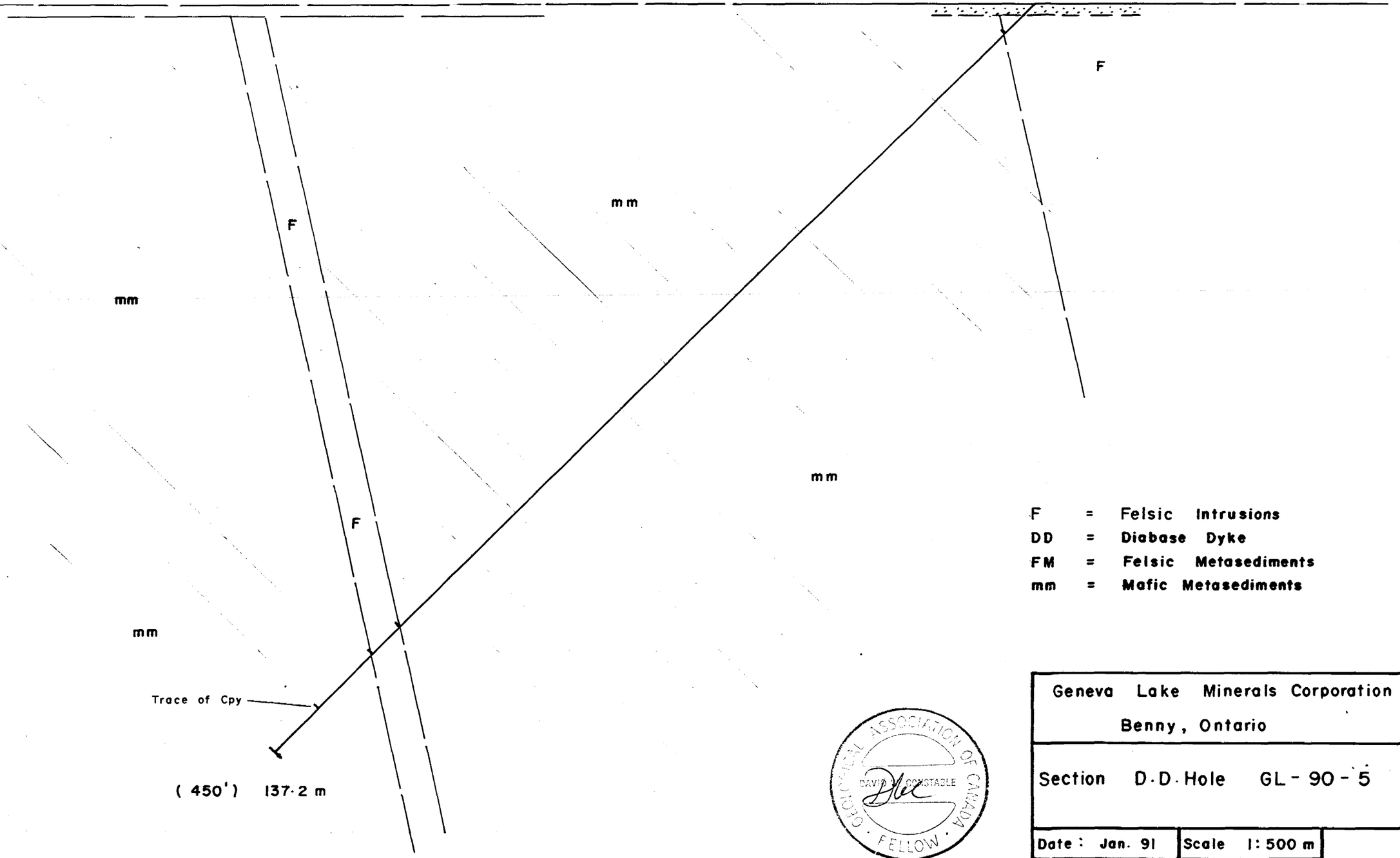
Section D. D. Hole GL-90 - 4		
Date : Dec. 90	Scale : 1 : 250 m	
Dwg. : S. Bell	App. :	

GL - 90 - 5

Dip = 45° Lgth. = 450'



F = Felsic Intrusions
DD = Diabase Dyke
FM = Felsic Metasediments
mm = Mafic Metasediments

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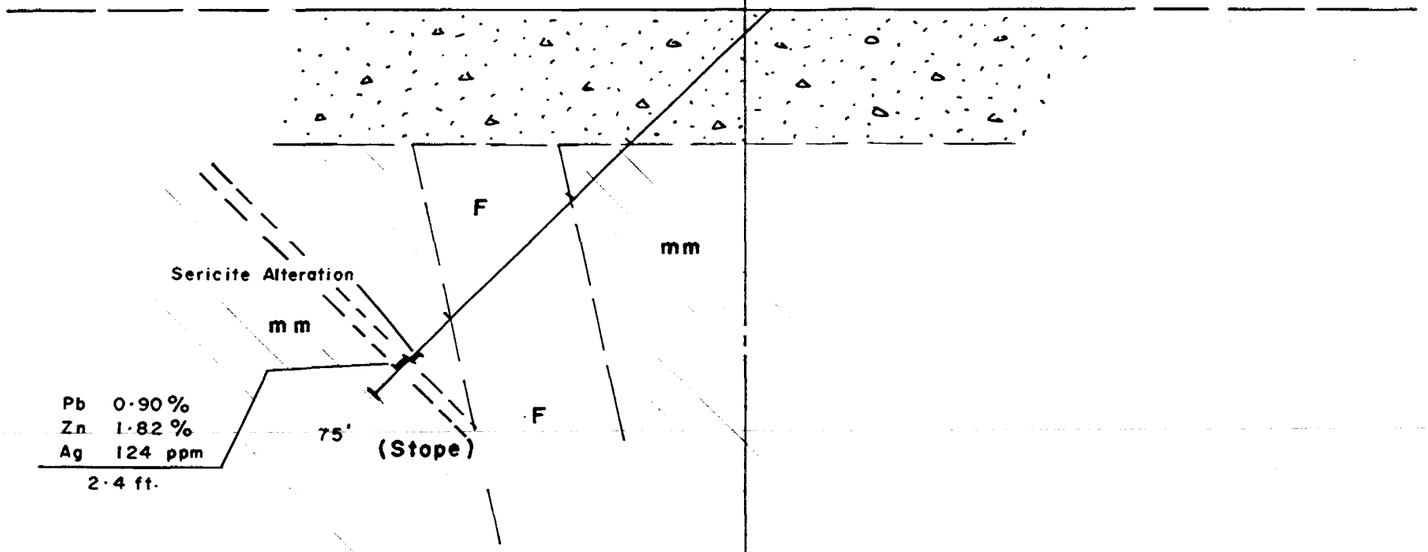
Section D·D·Hole GL - 90 - 5		
Date : Jan. 91	Scale 1: 500 m	

GL - 90 - 6

Dip = 45°
Az. = 45°
Lgth. = 75'



GL - 90 - 6

Scale 1 : 250

F = Felsic Intrusions
mm = Mafic Metasediments

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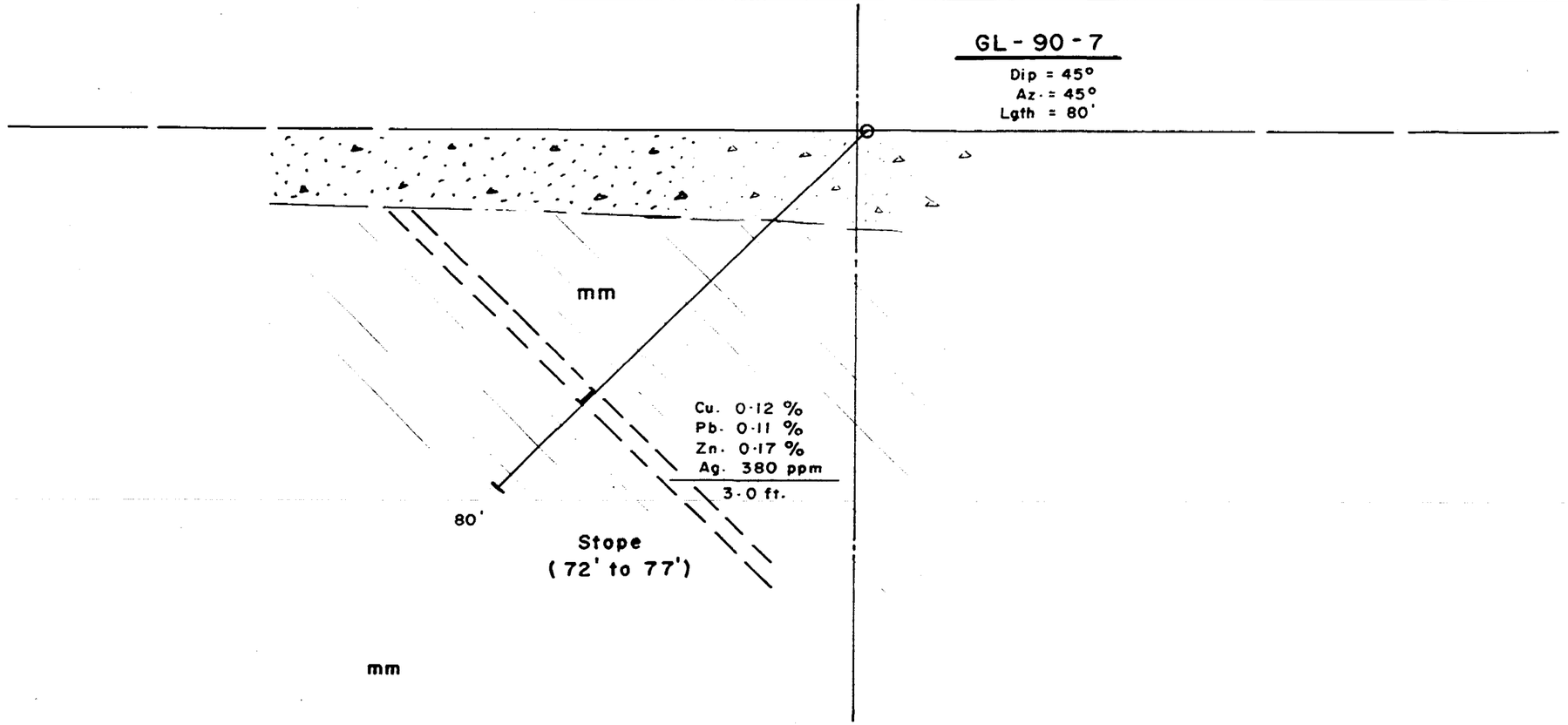
Geneva Lake Minerals Corporation Benny, Ontario		
Section D.D. Hole GL-90-6		
Date : Dec. 90	Scale : 1 : 250 m	
Dwg. : S. Bell	App. :	



GL - 90 - 7

Scale 1:250m

mm = Mafic Metasediments

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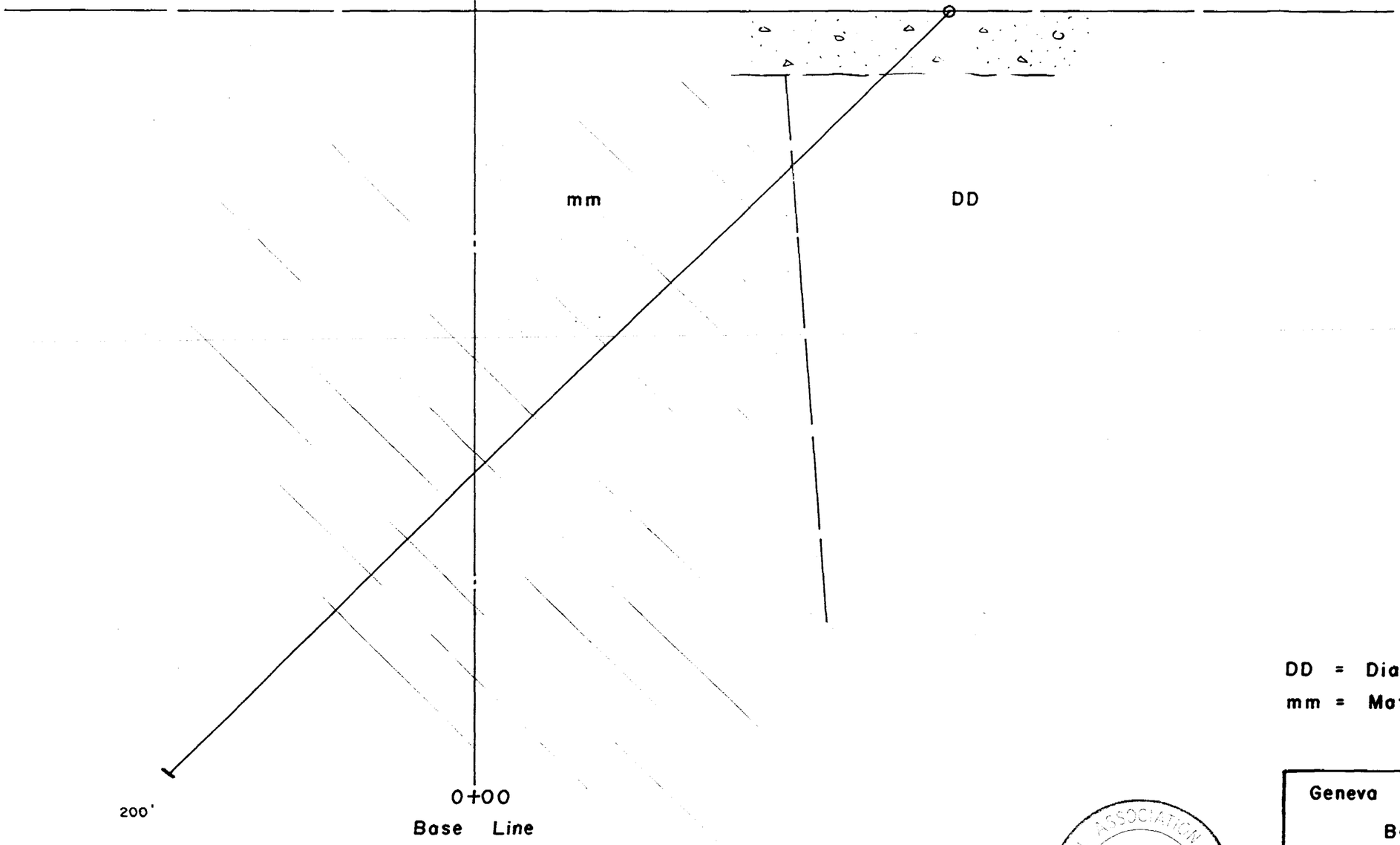
Geneva Lake Minerals Corporation Benny, Ontario	
Section D.D. Hole GL-90-7	
Date : Dec. 90	Scale : 1:250 m
Dwg. : S. Bell	App. :

GL-90-8

Dip = 45°
Lgth. = 200'

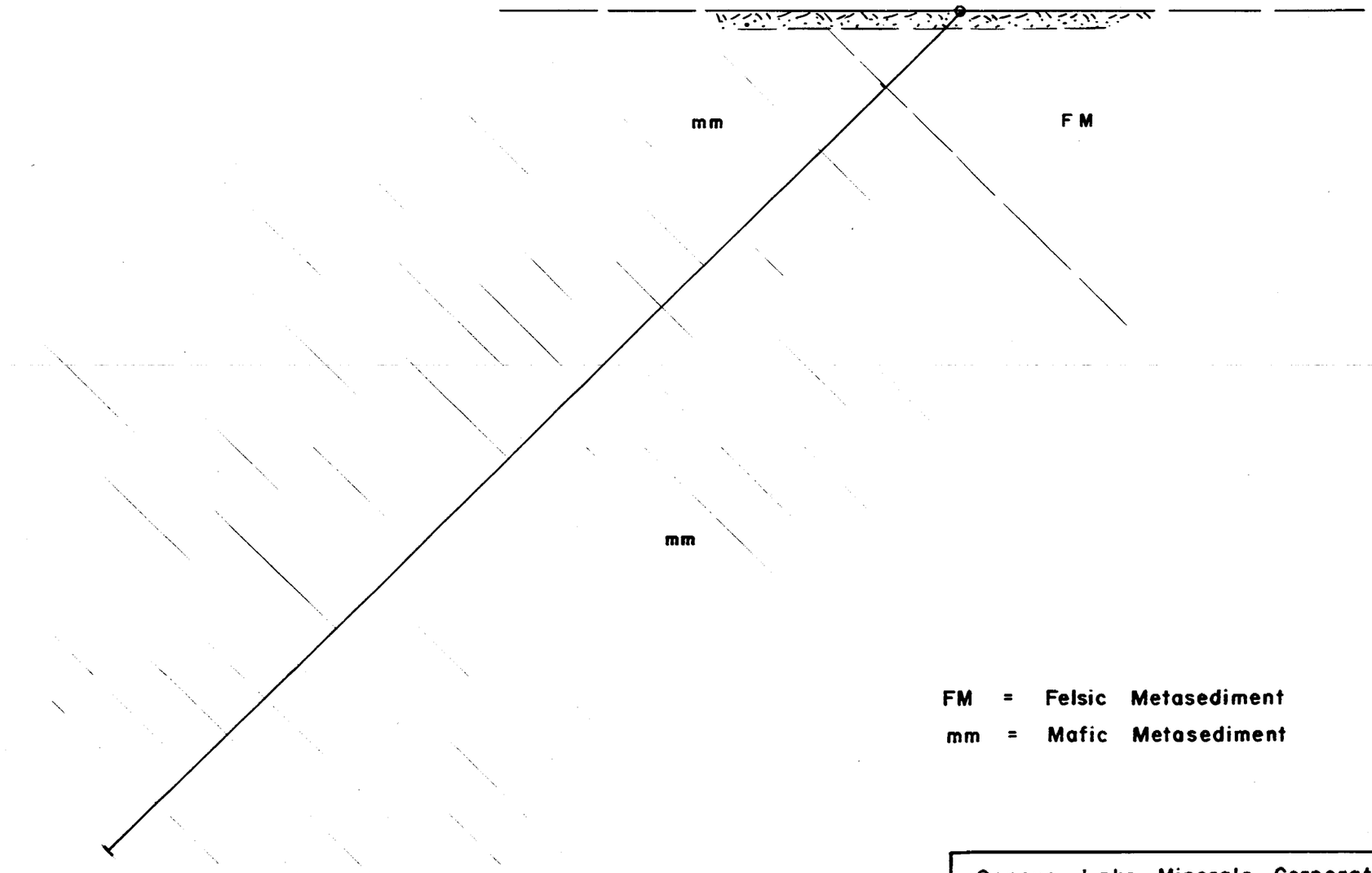


DD = Diabase Dyke
mm = Mafic Metasediment

Geneva Lake Minerals Corporation Benny, Ontario		
Section D.D. Hole GL-90-8		
Date : Dec. 90	Scale : 1 : 250 m	
Dwg. : S. Bell	App. :	

GL - 90 - 9

Dip = 45° Lgth. = (400') 121·9 m



FM = Felsic Metasediment

mm = Mafic Metasediment

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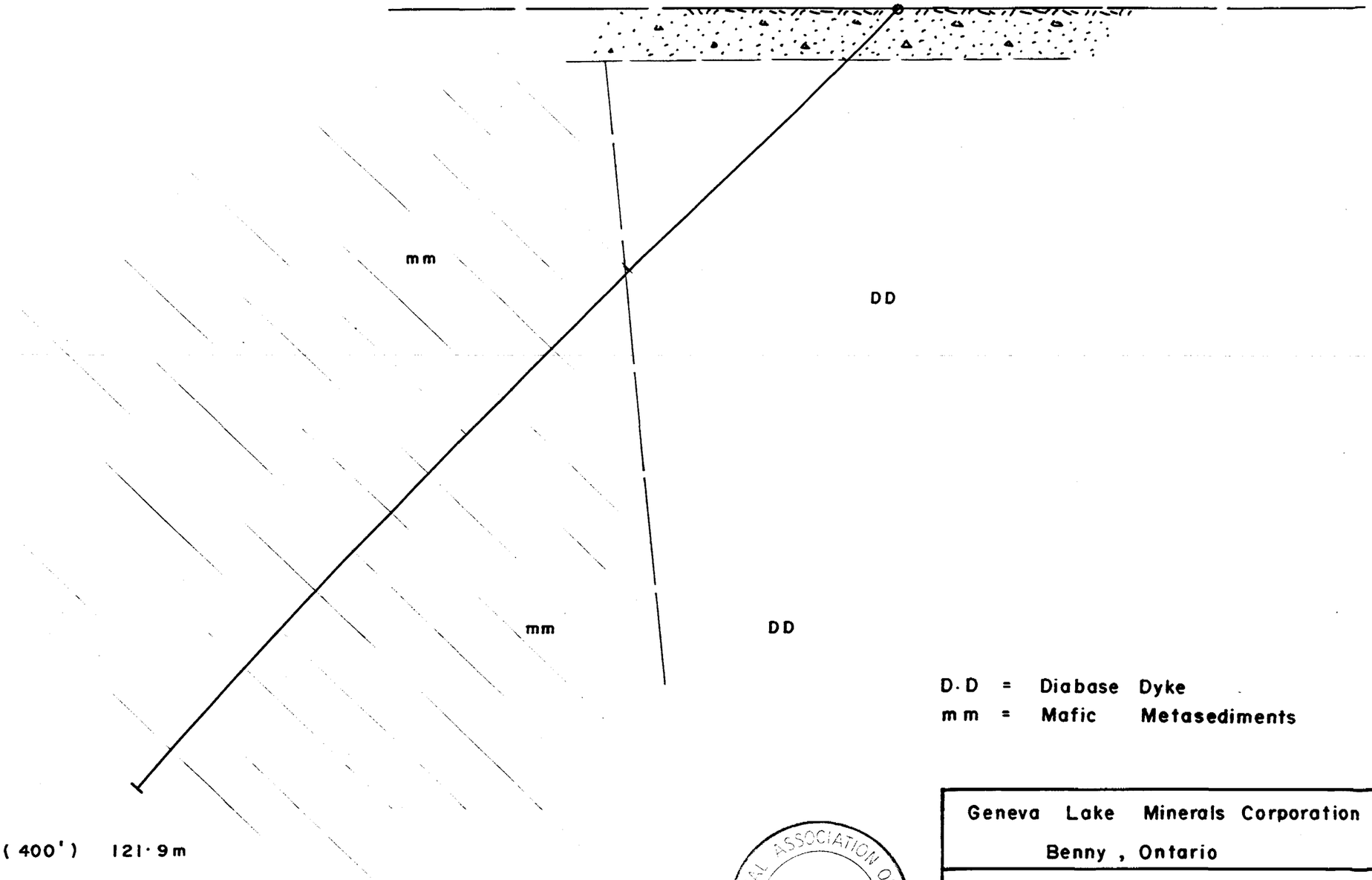
Geneva Lake Minerals Corporation Benny, Ontario		
Section D. D. Hole GL - 90 - 9		
Date : Jan. 91	Scale 1 : 500 m	

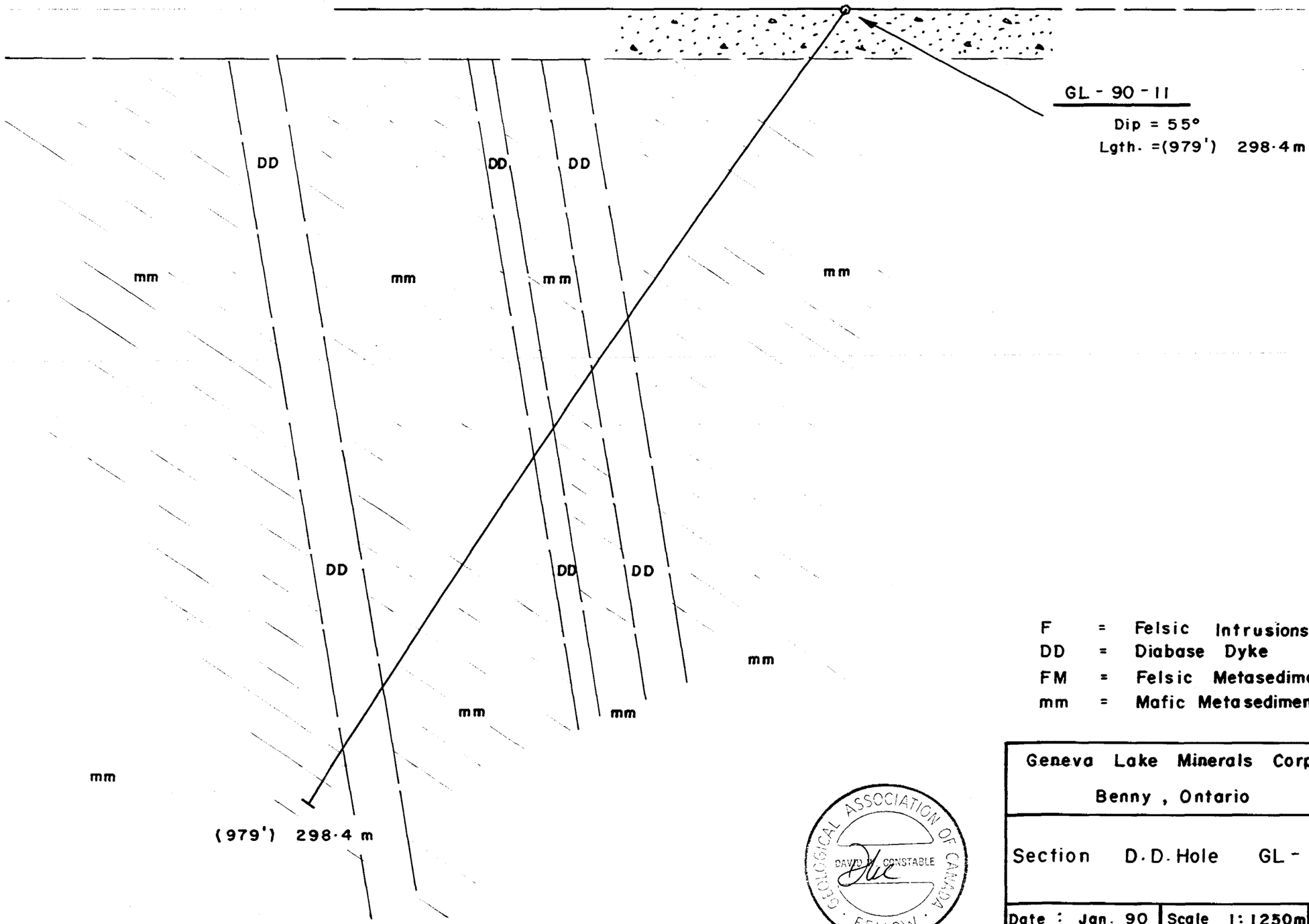
GL - 90 - 10

Dip = 45° Lgth. = (400') 121·9 m



D·D = Diabase Dyke
m m = Mafic Metasediments

Geneva Lake Minerals Corporation Benny , Ontario		
Section D.D. Hole GL - 90 - 10		
Date : Jan. 91	Scale 1 : 500 m	



F = Felsic Intrusions
DD = Diabase Dyke
FM = Felsic Metasediments
mm = Mafic Metasediments

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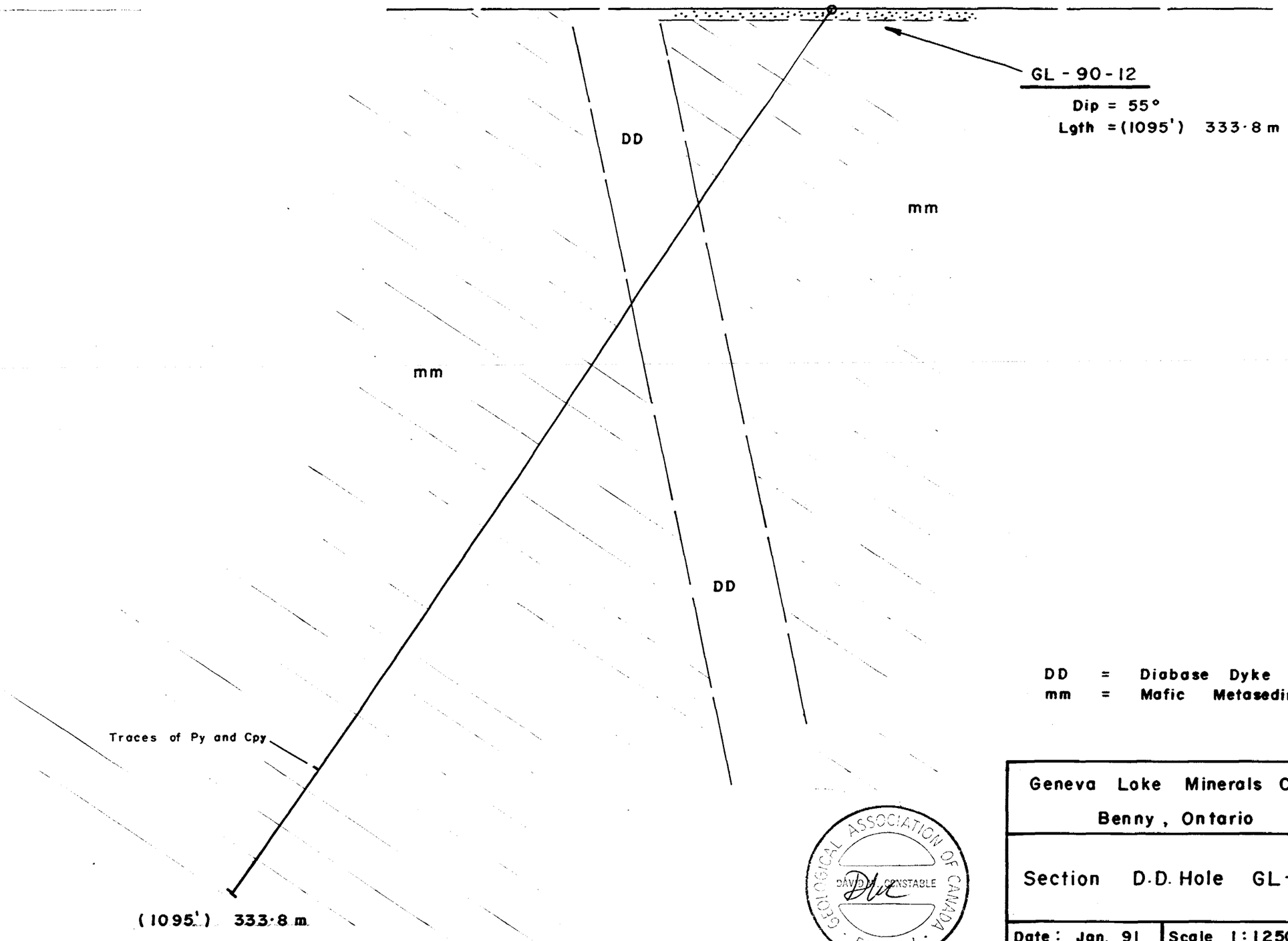
Section D.D. Hole GL - 90 - 11		
Date : Jan. 90	Scale 1: 1250m	



DD = Diabase Dyke
mm = Mafic Metasediments

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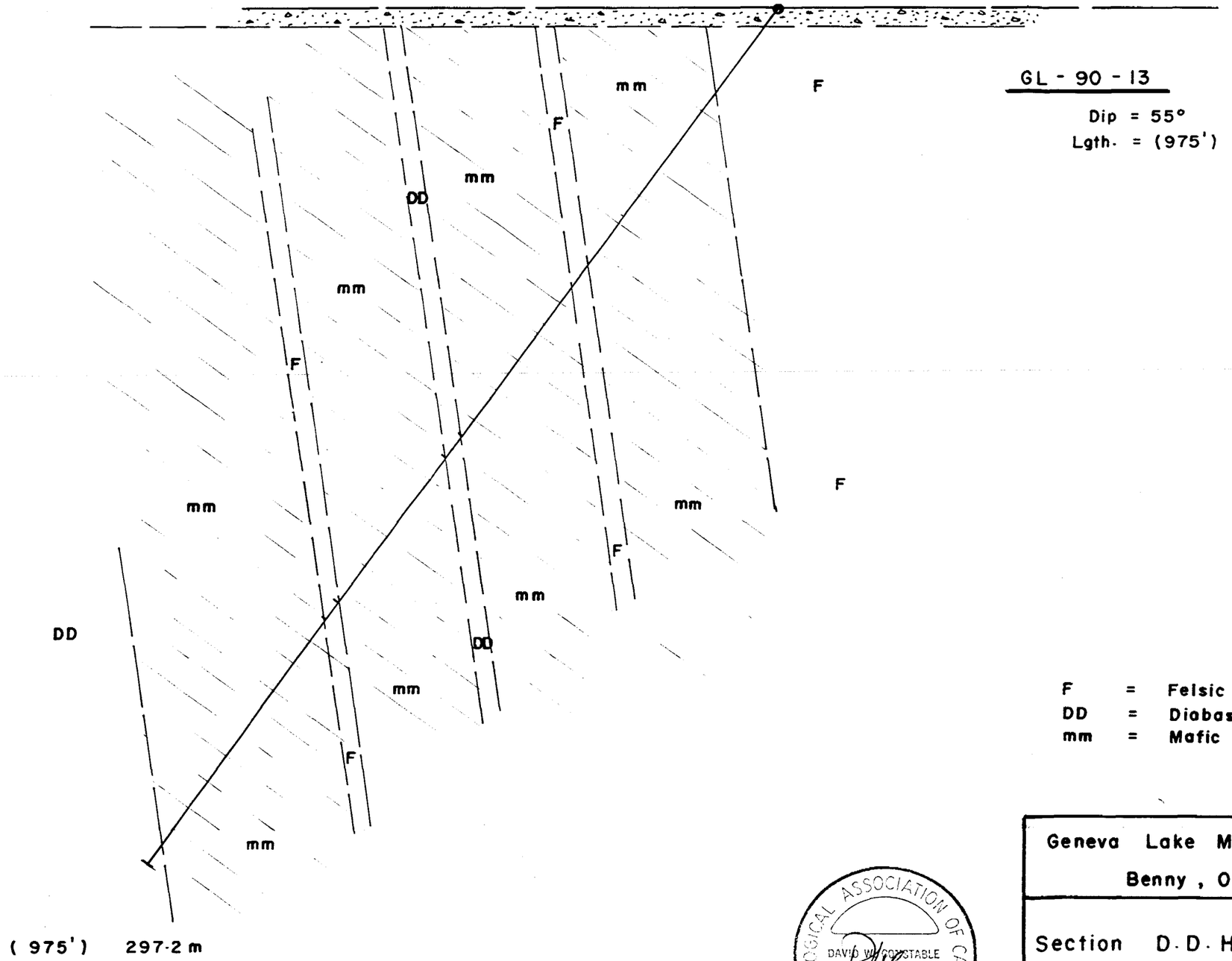
Benny, Ontario

Section D.D. Hole GL-90-12

Date: Jan. 91	Scale 1:1250m	



GL - 90 - 13

Dip = 55°

Lgth. = (975') 297·2 m

F = Felsic Intrusions
DD = Diabase Dyke
mm = Mafic Metasediments

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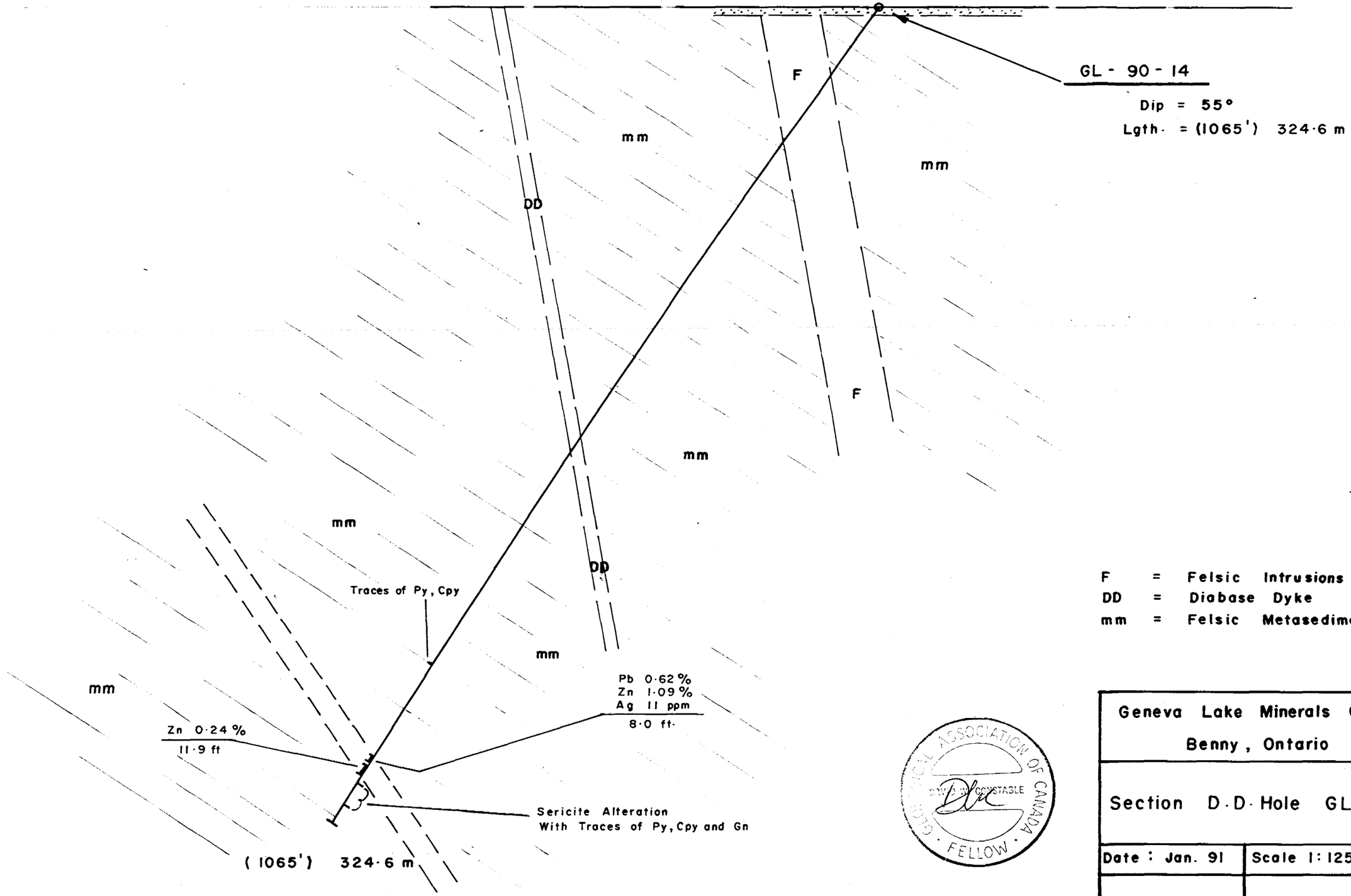
Geneva Lake Minerals Corporation Benny , Ontario		
Section D.D. Hole GL-90-13		
Date: Jan. 91	Scale 1:1250	



F = Felsic Intrusions
DD = Diabase Dyke
mm = Felsic Metasediments

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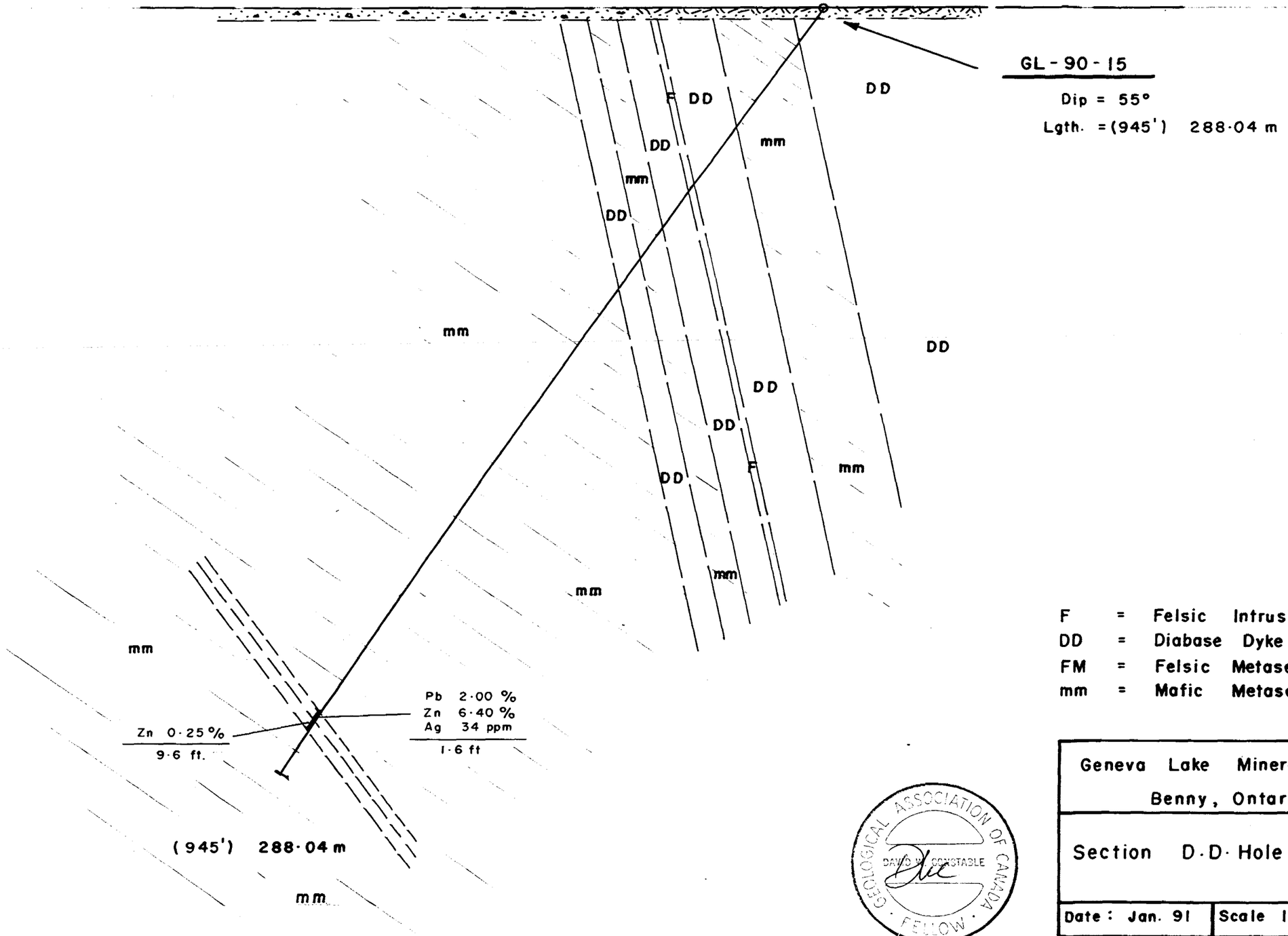
DATE AWARDED OCCASTABLE
FELLOW

Geneva Lake Minerals Corporation Benny, Ontario		
Section D.D. Hole GL-90-14		
Date : Jan. 91	Scale 1:1250	



F = Felsic Intrusions
DD = Diabase Dyke
FM = Felsic Metasediments
mm = Mafic Metasediments

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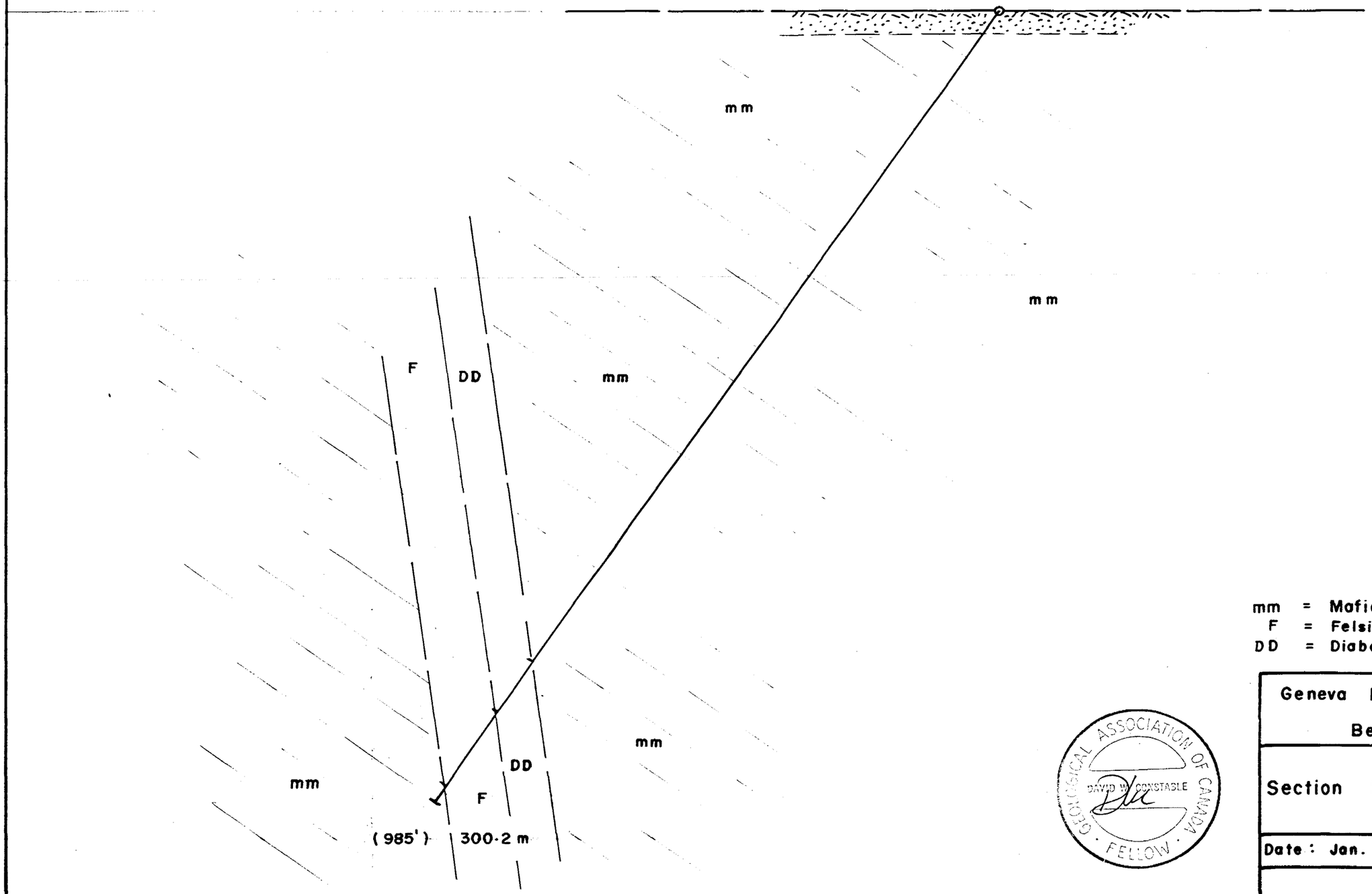
Geneva Lake Minerals Corporation Benny, Ontario		
Section D·D· Hole GL-90-15		
Date : Jan. 91	Scale 1: 1250	

GL - 90 - 16

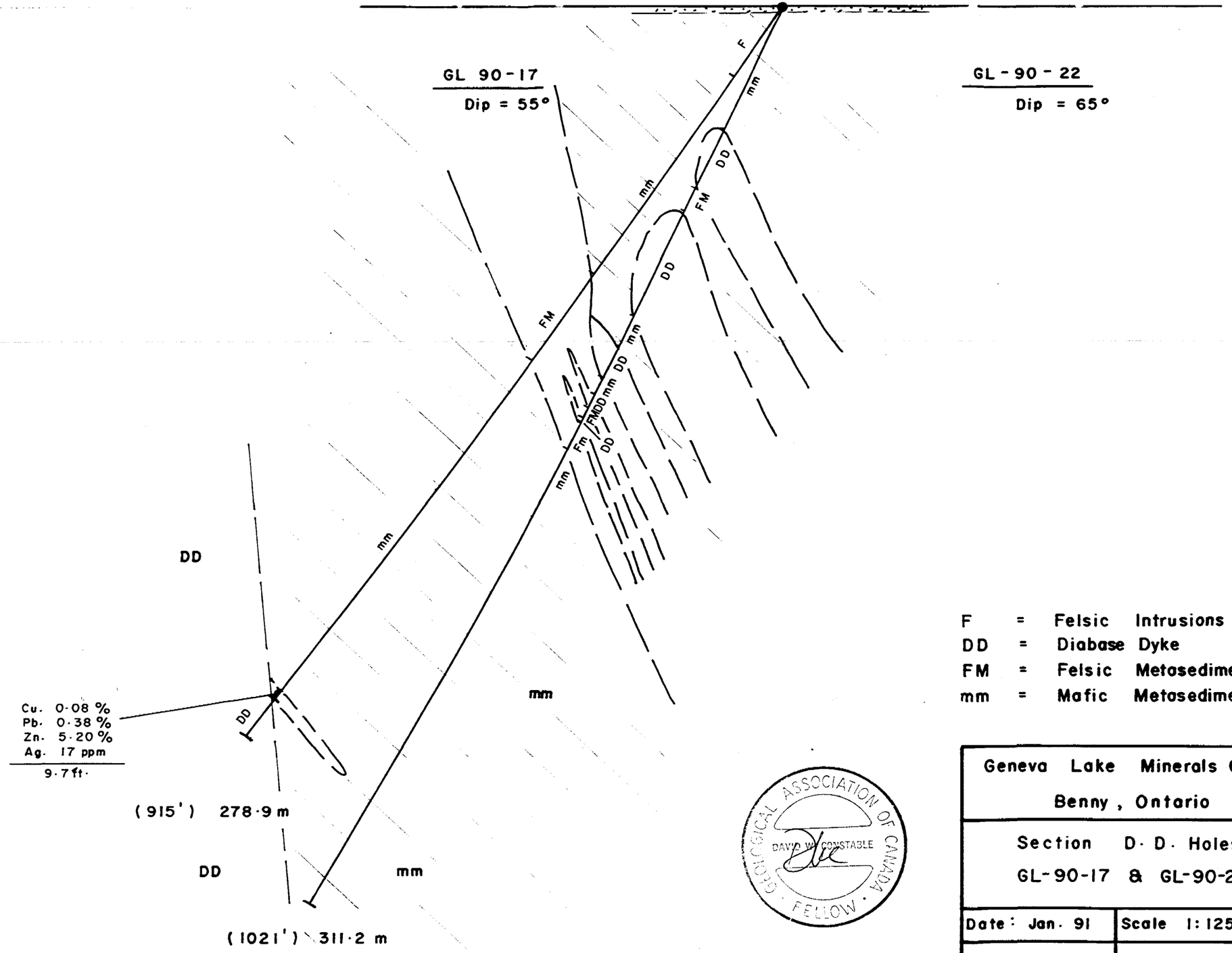
Dip = 55°
Lgth. = 985 ft.



mm = Mafic Metasediments
F = Felsic Intrusions
DD = Diabase Dyke

DAVID W. CONSTABLE
GEOLOGICAL ASSOCIATION OF CANADA
FELLOW

Geneva Lake Minerals Corporation Benny, Ontario		
Section D.D. Hole GL - 90 - 16		
Date: Jan. 91	Scale 1:1250	



F = Felsic Intrusions
DD = Diabase Dyke
FM = Felsic Metasediments
mm = Mafic Metasediments

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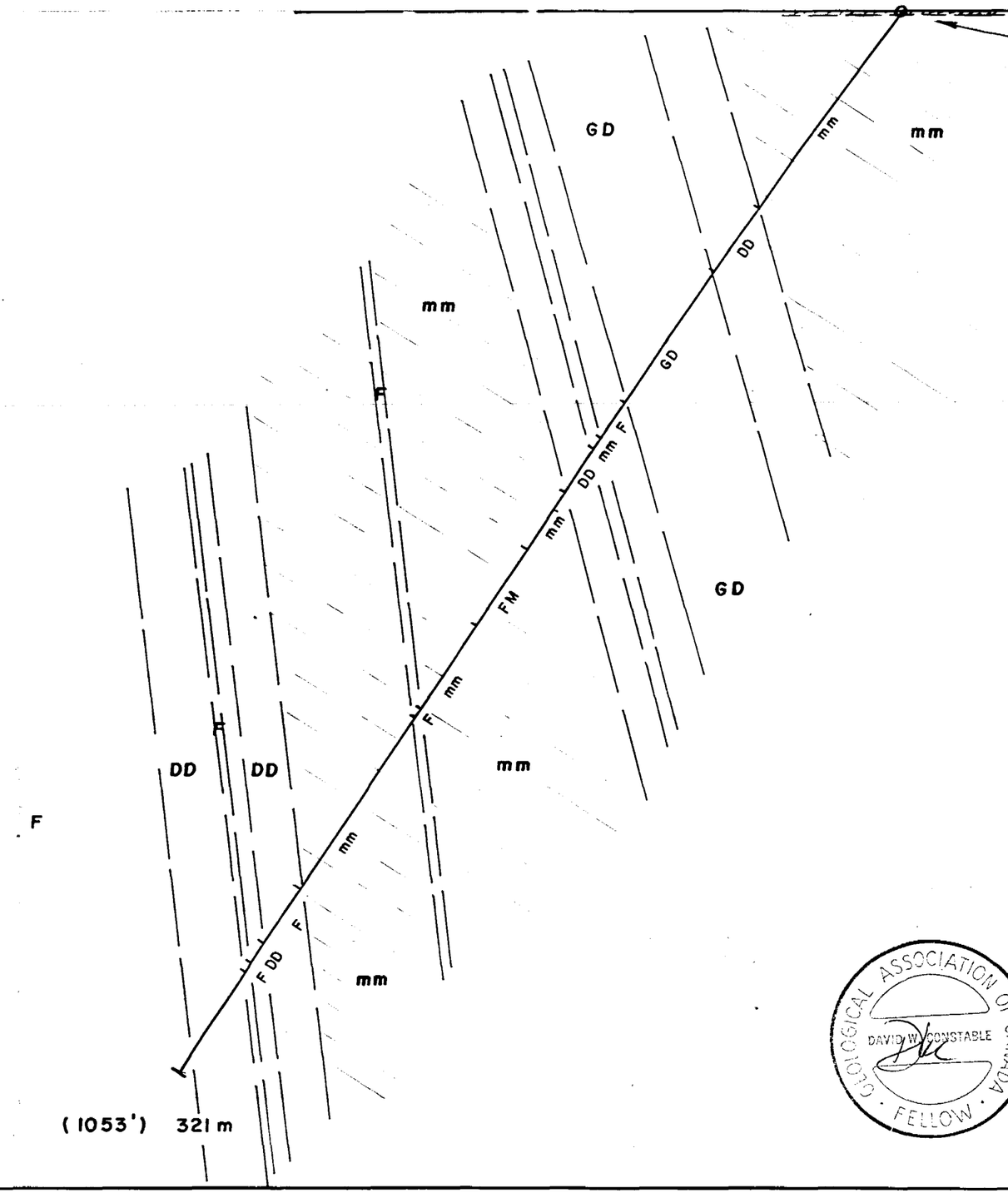
Geneva Lake Minerals Corporation Benny, Ontario		
Section D·D. Holes GL-90-17 & GL-90-22		
Date: Jan. 91	Scale 1:1250	



F = Felsic Intrusions
DD = Diabase Dyke
FM = Felsic Metasediments
mm = Mafic Metasediments

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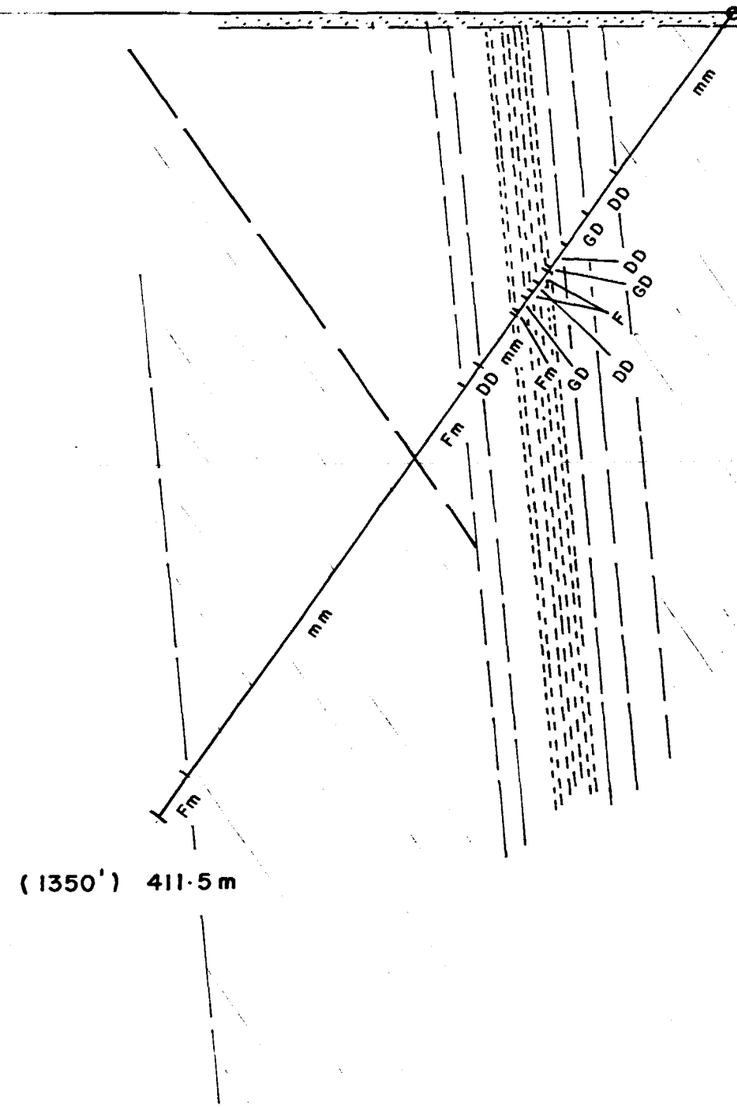
Geneva Lake Minerals Corporation Benny , Ontario		
Section D.D. Hole GL-90-18		
Date : Jan. 91	Scale 1:1250	



(1350') 411.5m

GL - 90 - 19

Dip = 55°
Lgth. =(1350') 411.5 m

Line 50 E , 325 S

F = Felsic Intrusions
DD = Diabase Dyke
Fm = Felsic Metasediments
mm = Mafic Metasediments
G D = Gabbroic Dyke

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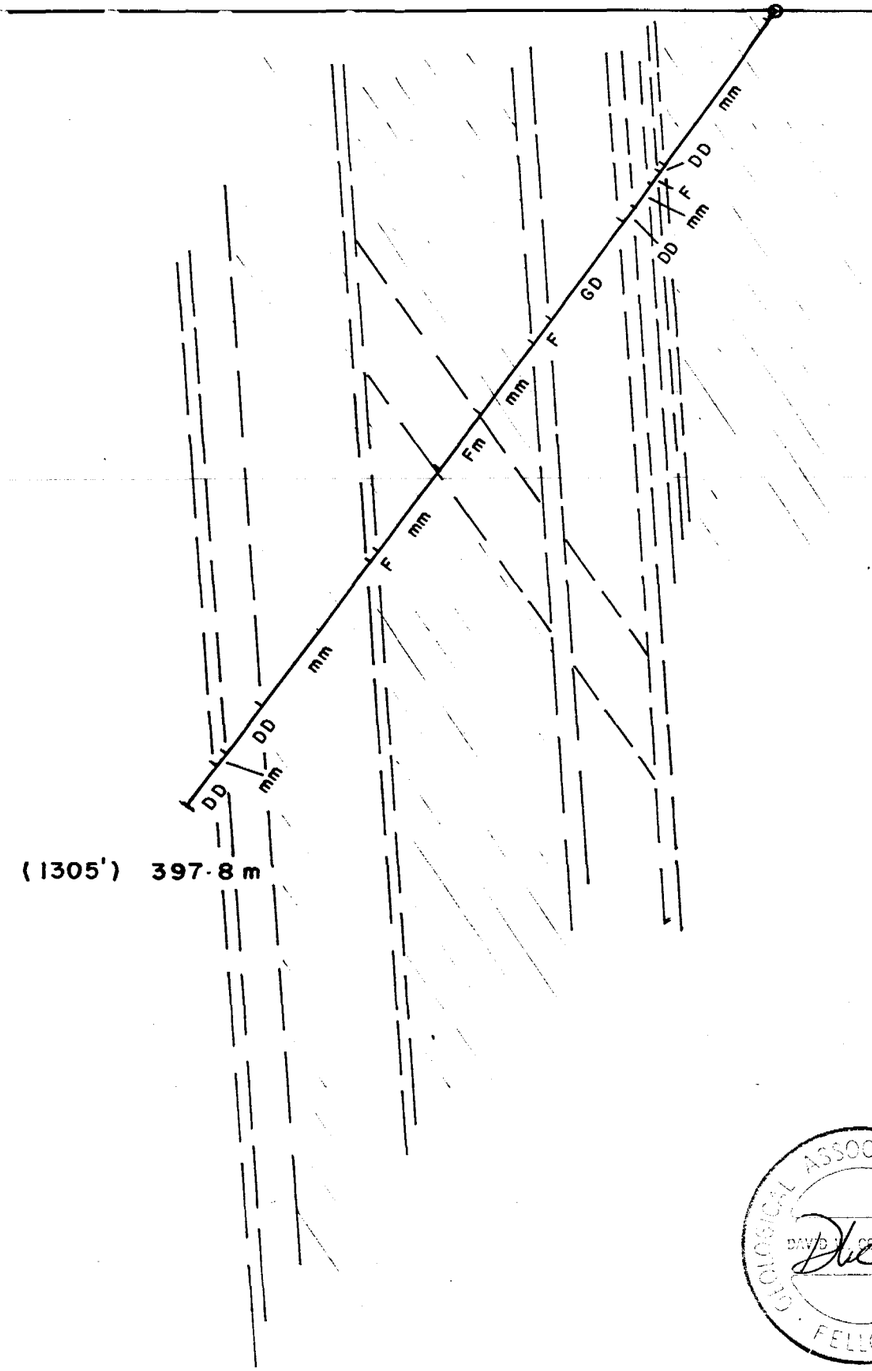
Geneva Lake Minerals Corporation Benny, Ontario		
Section D.D. Hole GL-90-19		
Date: Jan. 91	Scale	



(1305') 397·8 m

GL - 90 - 20

Dip = 55°

Lgth. = (1305') 397·8 m

Line 110 E , 277 S

F = Felsic Intrusions
DD = Diabase Dyke
Fm = Felsic Metasediments
mm = Mafic Metasediments
GD = Gabbroic Dyke

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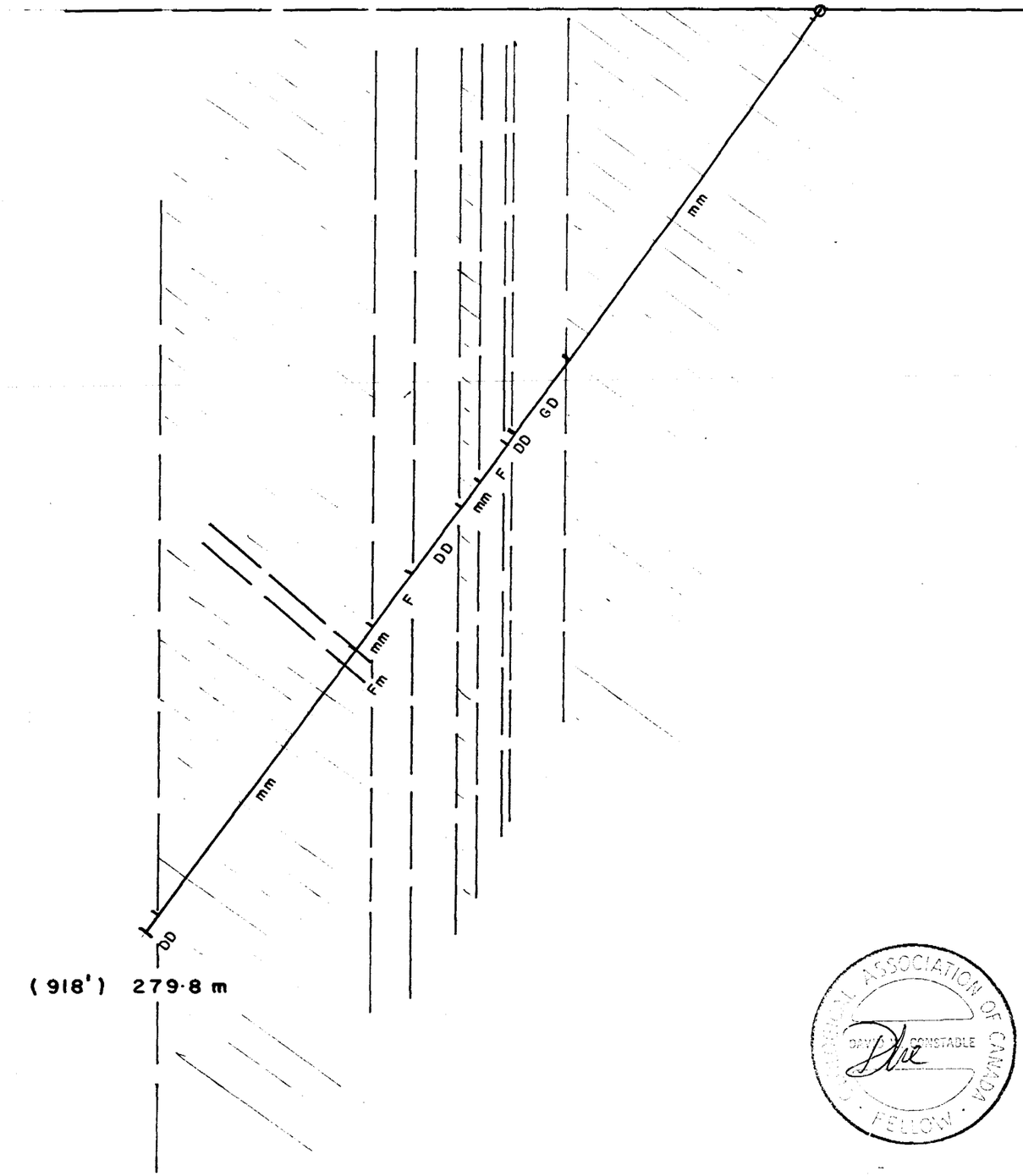
Geneva Lake Minerals Corporation Benny, Ontario		
Section D. D. Hole GL-90-20		
Date: Jan. 91	Scale 1:2500	



GL - 90 - 21

Dip = 55°
Lgth. =(918') 279.8 m
Az = 45°

F = Felsic Intrusions
DD = Diabase Dyke
Fm = Felsic Metasediments
mm = Mafic Metasediments
GD = Gabbroic Dyke

Geneva Lake Minerals Corporation
Benny, Ontario

Section D.D. Hole GL - 90 - 21

Date : Jan. 91	Scale 1:1250	

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

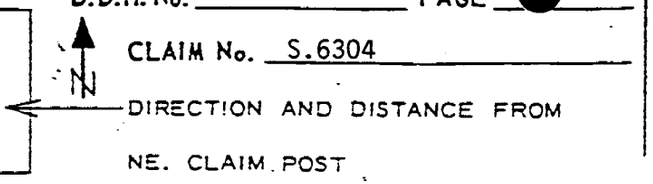
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-1 PAGE 1 of 1

LATITUDE 1 + 65W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 13-90

DEPARTURE 0 + 18S — DIP OF HOLE -45° — COMPLETED Sept. 14-90

ELEVATION — DIP TESTS nil — DEPTH 116.0



CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	21.0	OVERBURDEN					
21.0	116.0	MAFIC METASEDIMENT					
		Well blended at 82° to C.A. Dark green, slightly gneissic chloritic biotitic and contains hornblende. In places are feldspar porphyritic textures in and conformable to mafac unit.					
		From 33.3' to 35.2' and from 37.9' to 40.0' and from 40.0'-44.8' pink. hard feldspar-rich (85%) felsic intrusive dykes. Barren with sharp cross-cutting contacts.					
		Mafic metasediments continue through 100 with only slight textured changes and feldspar porphyry sections to end of hole. At 116.0' hit a stope. No mineralization in wall.					
		END OF HOLE GL-90-1 is at 116.0'					

GEOLOGICAL ASSOCIATION OF CANADA
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DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

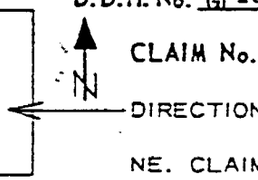
PROPERTY GENEVA LAKE MINERAL CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-1A — PAGE 1 of 2

LATITUDE 1+46W — BEARING OF HOLE Grid North ( ) — STARTED Sept. 17-90

DEPARTURE 0+07.5S — DIP OF HOLE -45° — COMPLETED Sept. 17-90

ELEVATION - — DIP TESTS Tropari at 16° Az 247.5' — DEPTH 116.0

Dip at 39°



CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
0.0	36.7	OVERBURDEN									
36.7	74.9	MAFIC METASEDIMENT									
		Dark green, massive and bedded at 86° to CA. Contains chlorite,									
		biotite and feldspar with minor quartz.									
		From 69.9'-72.3' slightly pink feldspar porphyry.									
		SHARP CONFORMABLE OUT CONTACT									
74.9	101.7	FELDSPAR PORPHYRY									
		Hard, massive, slightly pink feldspar porphyry with 40%									
		phenocrysts. Barren.									
101.7	116.0	MAFIC METASEDIMENT									
		Dark green, massive well-bedded at 85° to C.A. At 106.9' into	18619	106.9	107.8	0.9	40	7000	452	70	232
		sericite then at 107.0' sulfides appear and from 107.8'-110.2'	18620	107.8	110.1	2.3	340	9000	37200	96	228
		3-8% zinc in beds.	18621	110.1	113.7	3.6	220	820	1834	18	55
			18622	113.7	116.0	2.3	42	3800	872	72	162

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERAL CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-1A — PAGE 2 of 2

LATITUDE 1+46W — BEARING OF HOLE Grid North ( ) — STARTED Sept. 17-90 — CLAIM No. S.6304

DEPARTURE 0+07.5S — DIP OF HOLE -45° — COMPLETED Sept. 17-90 — DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION — DIP TESTS Tropari at 16° Az 247.5' Dip at 39° — DEPTH 116.0'

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		This followed by pyritic disseminated mineralization to end of hole. At 116.0' broke into stope.					
		END OF HOLE GL-90-1A is at 116.0'					

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DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

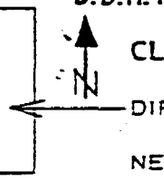
D.D.H. No. GL-90-2 PAGE 1 of 4

LATITUDE 1 + 00W BEARING OF HOLE -45° STARTED Sept. 25 90

DEPARTURE 2 + 92S DIP OF HOLE At 255' Az 047° Dip - 44° COMPLETED Nov. 2- 90

ELEVATION --- DIP TESTS At 735' Az 057° Dip - 47° DEPTH 1005.0'

CLAIM No. 3.6304



DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	90.0	OVERBURDEN					
90.0	1005.0	MAFIC METASEDIMENT					
		Green, fine-grained, blocky, dense and finely bedded at 83° to C.A.					
		Irregular (1%) white calcite veinlets criss cross the rock. Trace to nil					
		sulfides.					
		From 170.0 onwards is euhedral pyrite (1%).					
		From 202.0-204.4 and from 222.8-228.8 pink hard felsic metasediments					
		remobilized to pegmatites. Sharp conformable In and Out contcts. Barren.					
		After dykes rock has only traces of sulfides. Rocn contains light grey					
		blocky mafic metasediment with bedding at 78° to C.A. Rock is barren to					
		traces of sulfide.					
		From 325.0 rock gets very blocky with lots of epidote along bands and					
		fractures. At 333.0' -335.0' buff chert beds and fragments.					
		At 339.5 a 2" wide sand seam.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-2 PAGE 2 of 4

LATITUDE 1+ 00W BEARING OF HOLE -45° STARTED

DEPARTURE 2 + 92S DIP OF HOLE At 255' Az 047° Dip -44° COMPLETED

ELEVATION DIP TESTS At 735' Az 057° Dip -47° DEPTH 1005.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
		From 348.0-349.5' beds of pyrite (15%).									
		From 392.1-398.2' is a feldspar porphyry conformable and sharp contacts.									
		Felsic Metasediments.									
		Rock continues as mafic metasediment with epidote veinlets to 420.1-438.3'									
		feldspar porphyry texture, fainter in appearance.									
		From 456.9-460.1' feldspar porphyry. Always slightly pink to red with sharp									
		fonformable IN and OUT contacts. Again from 474.2 to 478.6.									
		From 480.7 to 483.4 Feldspar porphyry with blebs of 1-2% pyrite,	18606	480.8	483.4	2.6	100	40	94	36	7
		chalcopyrite.									
		At 500.0' a 10" wide joint gouge zone.									
		From 493.0 onwards rock is slightly pink, hard feldspar porphyry									
		interrupted by white quartz veins and patches of epidote. Barren. Appears									
		conformable in detail and on a macro scale. Ends at 561.2'.									

DIAMOND DRILL RECORD

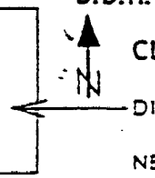
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-2 — PAGE 3 4

LATITUDE 1 + 00W — BEARING OF HOLE -45° — STARTED

DEPARTURE 2 + 92S — DIP OF HOLE At 255' Az 047° Dip -44° — COMPLETED

ELEVATION — DIP TESTS At 735' Az 057° Dip -47° — DEPTH 1005.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
		This is followed by grey-green, massive fine-grained, well-bedded mafic	18604	617.8	621.2	3.4	60	60	92	52	7
		metasediment. Porphyry Zones from 618.0-625.6 with 1-2% pyrite and	18605	621.2	625.5	4.3	80	40	108	48	5
		chalcopyrite.									
		From 649.7-655.7 a pink, coarse-grained pegmatite with Intrusive IN									
		contact. Mafic metasediments continue through 700.0'.									
		From 710.9-722.7 Feldspar Porphyry unit, black and green, barren with									
		sharp conformable IN and OUT Contacts. This occurs again from 754.6-765.8.									
		Between these porphyry units is a more felsic metasediment with bands, beds,									
		fractures and patches of epidote +- quartz +- pink feldspar. Harder rock									
		but blocky.									
		After 765.8 rock returns to more mafic metasediment with only minor (5%)									
		felsic beds. Rock contains trace to 1% pyrite +- chalcopyrite in beds. This									
		slightly mineralized unit continues with variable textures through 800' and									
		850'.									

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-2 — PAGE 4 of 4

LATITUDE 1 + 00W — BEARING OF HOLE -45° — STARTED — CLAIM No.

DEPARTURE 2 + 92S — DIP OF HOLE At 255' Az 047° Dip -44° — COMPLETED — DIRECTION AND DISTANCE FROM

ELEVATION — DIP TESTS At 735' Az 057° Dip -47° — DEPTH 1005.0' — NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
		From 846.5 to 854.3' slightly sericitic zone with splashes and beds of	18600	844.1	846.9	2.8	100	240	1758	8	11
		chalcopyrite and red sphalerite. Appears to be main zone. Quite weak.	18601	846.9	850.4	3.5	1400	1140	8880	38	59
			18602	850.4	853.4	3.0	80	100	1738	6	7
			18603	853.4	858.0	4.6	40	40	110	28	10
		From 901.7 to 921.1 an intensely epidotized zone with lots of silicification and quartz veins. Barren to traces of sulfides.									
		After 921.1 blocky, broken, mafic metasediment with minor pink quartz and pink feldspar bands 1 foot wide. Only traces of pyrite.									
		From 944.9-951.6 an intensive, hard, barren, pink, corase-grained pegmatite, and a smaller version of this unit from 974.2-975.2 and 983.9-985.6.									
		Continues in mafic metasediment to end. Traces of pyrite.									
		END OF HOLE GL-90-2 IS AT 1005.0 FEET.									

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DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-3 — PAGE 1 of 3

LATITUDE 2+00W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 19-90 — CLAIM No. S.6304

DEPARTURE 0+77S — DIP OF HOLE -45° — COMPLETED Sept. 21-90 — DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION -- — DIP TESTS Tropari at 330' Az 054° Dip - 40.5° — DEPTH 330.0'

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	22.0	OVERBURDEN					
22.0	85.1	MAFIC METASEDIMENT					
		Starts as grey, medium-hard, feldspar porphyry which appears to be a					
		sub-phase of the metasediment. At 38.3 conformable sharp contact					
		into usual dark green well-bedded (at 83°) to C.A.) soft with					
		chlorite and biotite. Traces of pyrite.					
		Feldspar porphyry occurs from 51.8 to 66.0 and from					
		70.2-70.8' and from 72.0' to 73.5'.					
85.1	102.7	MAFIC (DIABASE) DYKE					
		Black, fine-grained, soft, slightly blocky and barren.					
		SHARP IN AND OUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP - Hess Township — D.D.H. No. GL-90-3 — PAGE 2 of 3

LATITUDE 2+00W — BEARING OF HOLE Grid North (045°) — STARTED Sept 19-90 — CLAIM No. S.6304

DEPARTURE 0+77S — DIP OF HOLE -45° — COMPLETED Sept. 21-90 — DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION -- — DIP TESTS Tropari at 330' Az 054° — DEPTH 330.0'

Dip 40.5°

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
102.7	146.6	MAFIC METASEDIMENT									
		Starts in Feldspar Porphyry Phase of metasediment but by 110.0' back into dark green, soft, chloritic, well-bedded variety. Traces of pyrite. Some increase in irregular apple-green epidote veinlets and stringers throughout rock and along certain beds.									
		SHARP SILICIFIED OUT CONTACT									
146.6	271.0	MAFIC DIABASE DYKE									
		Dark green, soft, slightly blocky and barren. Major barren	18607	202.0	204.9	2.9	60	360	84	68	12
		quartz veins from 199.8-200.5'.	18608	204.9	206.4	1.5	360	5400	118	108	303
		At 203.7-211.1 pyrite 2-3% in stringers with some chalcopyrite,	18609	206.4	208.2	1.8	100	1120	126	22	122
		sphalerite and galena. Very weak. Sharp IN and OUT contacts for	18610	208.2	211.1	2.9	200	2600	1082	40	245
		sulfide zones.	18611	211.1	214.1	3.0	140	340	256	10	59
		At 233.0 faint feldspar porphyry content (4-5%) .									
		Then by 241.5' intense phenocrysts.									

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-3 PAGE 3 3

LATITUDE 2+00W BEARING OF HOLE Grid North (045°) STARTED Sept. 19-90

DEPARTURE 0+77S DIP OF HOLE -45° COMPLETED Sept. 2190

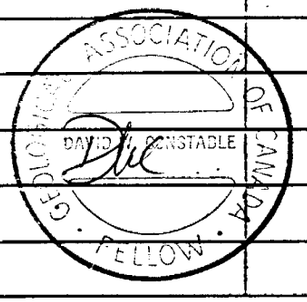
ELEVATION -- DIP TESTS Tropari at 330' Az 054° DEPTH 330.0'

Dip 40.5°

CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		Rock is granite massive but soft. By 247.0' phenocrysts end					
		only to occur from 253.0-255.4'					
		SHARP INTRUSIVE OUT CONTACT					
271.0	330.0	MAFIC (DIABASE) DYKE					
		Dark green, five-grained (chilled) IN contact.					
		Soft and massive. Barren.					
		END OF HOLE GL-90-3 IS AT 330.0 FEET					



DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE

CONSTABLE CONSULTING INC.

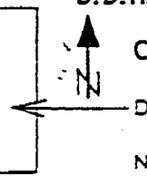
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-4 PAGE 1 of 3

LATITUDE 2 + 38W BEARING OF HOLE Grid North (045) STARTED Sept. 21-90

DEPARTURE 0 + 18S DIP OF HOLE -45° COMPLETED Sept. 23-90

ELEVATION -- DIP TESTS DEPTH 195.0'



CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	14.0	OVERBURDEN					
14.0	117.0	MAFIC METASEDIMENT					
		Dark green, slightly blocky, soft, well-bedded at 84° to C.A.					
		Contains veinlets of epidote as well as splashes of epidote.					
		Contains traces of pyrite as euhedral crystals along beds.					
		Some areas are silicified for example at 46.8-48.0' and quartz					
		veins (barren) occur at 46.5 and 53.5 to 56.2'.					
		Up to 1% pyrite +- chalcopyrite crystals occur in epidotized					
		mafic metasediment to 93.7'.					
117.0	121.6	MAFIC (DIABASE) DYKE					
		Black, fine-grained, blocky and barren.					
		SHARP INTRUSIVE IN AND OUT CONTACTS					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-4 PAGE 2 of 3

LATITUDE 2 + 38 W BEARING OF HOLE Grid North (045) STARTED Sept. 21-90

DEPARTURE 0 + 18S DIP OF HOLE -45° COMPLETED Sept. 23-90

ELEVATION -- DIP TESTS _____ DEPTH 195.0'

CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
121.6	136.8	MAFIC METASEDIMENT					
		Dark green as before. Barren to traces of pyrite.					
136.8	141.7	MAFIC (DIABASE) DYKE					
		Black, blocky, fine-grained and barren.					
		SHARP INTRUSIVE IN AND OUT CONTACTS					
141.7	189.8	MAFIC METASEDIMENT					
		Dark green and features as before. From 146.2-148.6' Mafic Dyke.					
		By 155.0' irregular epidote veinlets occur throughout rock for					
		rest of hole.					
		By 160.7 a brecciated texture appears with an apple-green					
		(epidotized) matrix. This continues to 180.5'. Rock fragments					
		in breccia are mafic metasediment.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No GL-90-4 — PAGE 3 of 3

LATITUDE 2 + 38W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 21-90

DEPARTURE 0 + 18S — DIP OF HOLE -45° — COMPLETED Sept. 23-90

ELEVATION -- — DIP TESTS — DEPTH 195.0'

CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
189.8	195.0	MAFIC (DIABASE) DYKE					
		Black, fine-grained and barren.					
		SHARP INTRUSIVE IN CONTACT					
		END OF HOLE GL-90-4 IS AT 195.0FEET					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-5 — PAGE 3 of 3

LATITUDE 2+00W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 27-90

DEPARTURE 5+57S — DIP OF HOLE -45° — COMPLETED Oct. 2 -90

ELEVATION -- — DIP TESTS Tropari at 450' Az 057° Dip 44° — DEPTH 450.0'

CLAIM No. S. 6602

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	6.5	OVERBURDEN					
6.5	18.1	FELSIC INTRUSIVE					
		Slightly pink, very hard and blocky, barren.					
		SHARP INTRUSIVE OUT CONTACT					
18.1	375.2	MAFIC METASEDIMENT					
		Dark green, soft, blocky and well bedded at 78° to C.A. Traces					
		of pyrite occurs as disseminated crystals.					
		From 41.0 - 42.6 pink Felsic Intrusive with sharp In and Out					
		Contacts.					
		Slightly more pyrite (up to 1%) occurs as disseminates from 90.0'					
		to 120.0' together with epidote beds from 105.0 to 120.0.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-5 — PAGE 2 3

LATITUDE 2+00W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 27-90 — CLAIM No. S.6602

DEPARTURE 5+57S — DIP OF HOLE -45° — COMPLETED Oct. 2-90 — DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION -- — DIP TESTS Tropari at 450' Az 057° Dip 44° — DEPTH 450.0'

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		By 130.0 although still well-bedded unit also shows 1-3% round vesicles orientated along bedding. May be porphroblastic in origin. From 152.6 to 153.4 and 157.3 to 160.2 white (feldspathic) felsic Intrusive and again from 160.9-161.3'.					
		From 174.9-176.3' and 190.5-194.4 sharp contacted Felsic Intrusive (pink). Minor 2+06" wide pink Felsic Intrusives occur. At 216.8, 220.2, 220.5, 222.1 and 223.6.					
		By 228.0 epidote veins and beds occur throughout the metasediment. Traces of pyrite.					
		From 353.0 - 354.6' heavily broken up and blocky core. Very little variation in mafic metasediment through 300' and through 350'.					
		At 375.2' a sharp change into Pegmatite.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-5 PAGE 3 of 3

LATITUDE 2+00W BEARING OF HOLE Grid North (045°) STARTED Sept. 27-90

DEPARTURE 5+57S DIP OF HOLE -45° COMPLETED Oct. 2-90

ELEVATION -- DIP TESTS Tropari at 450' Az 057° DEPTH 450.0'

Dip 44°

CLAIM No. S.6602

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
375.2	392.9	PEGMATITE					
		Pink, hard, blocky, contains medium-grains of quartz (35%),					
		feldspar 60% and 5% muscovite +- biotitic books ½-inch					
		thick x 1-inch long.					
		SHARP OUT CONTACT					
375.2	450.0'	MAFIC METASEDIMENT					
		Dark green, soft, blocky and this time has 3 to 6% irregular					
		epidote veinlets throughout and blebs of pyrite +- chalcopyrite					
		along fractures. This intensifies by 422.0 with rock becoming bleached					
		and contains 1% euhedral pyrite +- chalcopyrite.					
		Still in alteration at end.					
		END OF HOLE GL-90-5 IS AT 450.0'					

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DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-6 — PAGE 1 2

LATITUDE 1 + 46W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 18-90 — CLAIM No. S 6304

DEPARTURE 0 + 01S — DIP OF HOLE -45° — COMPLETED Sept. 18-90 — DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION -- — DIP TESTS ~~Tropari at 75' Az 044°~~ Dip 44° — DEPTH 75.0'

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	26.0	OVERBURDEN					
26.0	37.7	MAFIC METASEDIMENT					
		Dark green, very blocky, slightly gneissic at 76° to C.A.					
		Traces of pyrite.					
		From 31.4-32.0' conformable slightly pink feldspar porphyry					
		and again at 37.7.					
		SHARP CONFORMABLE OUT CONTACT					
37.7	60.7	FELDSPAR PORPHYRY					
		Slightly pink, hard, massive and barren.					
		SHARP CONFORMABLE OUT CONTACT					
60.7	75.0	MAFIC METASEDIMENT					
		Dark green, slightly blocky with irregular epidote fractures.					
		Bedding is at 83° to C.A. At 66.3' diseminated pyrite appears					
		and a small quantity of sericite appears.					

DIAMOND DRILL RECORD

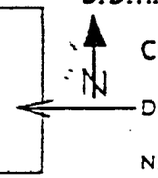
LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-6 — PAGE 1 OF 2

LATITUDE 1 + 46W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 18-90

DEPARTURE 0 + 01S — DIP OF HOLE -45° — COMPLETED Sept. 18-90

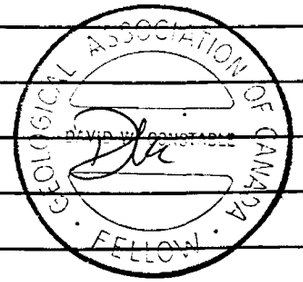
ELEVATION -- — DIP TESTS Tropari at 75" Az 044° Dip 44° — DEPTH 75.0



CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
		At 73.8' sulfides stop. Then at 75.0' broke into stope.									
			18616	66.2	68.9	2.7	200	680	682	18	37
			18617	68.9	71.3	2.4	80	9000	18200	124	727
			18618	71.3	73.8	2.5	500	480	546	14	32
		END OF HOLE GL-90-6 IS AT 75.0 FEET									



DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE

CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP.- HESS TOWNSHIP

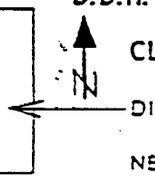
D.D.H. No. GL-90-7 PAGE 1 of 1

LATITUDE 1+59W BEARING OF HOLE Grid North (045°) STARTED Sept. 18-90

DEPARTURE 0+01S DIP OF HOLE -45° COMPLETED Sept. 19-90

ELEVATION - DIP TESTS Tropari at 80' Az 053° DEPTH 80.0'

Dip -45°



CLAIM No. S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
0.0	20.0	OVERBURDEN									
20.0	80.0	MAFIC METASEDIMENTS									
		Dark green, finely bedded at 80° to C.A., soft, slightly blocky with areas of fine veinlets of epidote e.g. at 33.0'. Some minor quartz veins (barren) at 36.0 and 79.2.									
		Minor beds of feldspar porphyry occur e.g. at 42.0 and 52.0'									
		From 58.0-65.6' pyrite +- chalcopyrite +- sphalerite as massive	18623	58.9	61.9	3.0	1160	1100	1664	380	230
		blebs and beds. Rock is slightly silicified from 58.0 to end of hole.	18624	61.9	65.6	3.7	80	220	248	6	10
		At 72.0-77.0' hit stope. 77.0-80.0' silicified mafic metasediments.									
		END OF HOLE GL-90-7 IS AT 80.0 FEET									

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DIAMOND DRILL RECORD

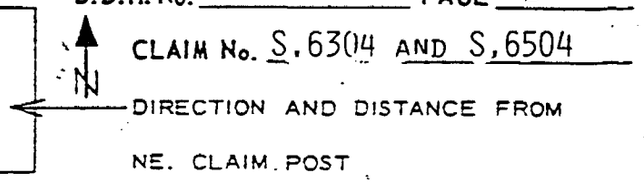
LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-8 — PAGE 1 OF 2

LATITUDE — 2+27W — BEARING OF HOLE Grid North (045°) — STARTED Sept. 23-90

DEPARTURE — 0+26S — DIP OF HOLE -45° — COMPLETED Sept. 25-90

ELEVATION -- — DIP TESTS Tropari at 200' Az 049.5° Dip -43° — DEPTH 200.0



CLAIM No. S.6304 AND S,6504

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	17.0	OVERBURDEN					
17.0	40.7	MAFIC (DIABASE) DYKE Grey, fine-grained very heavy with lots of ferro mags (80%) and 20% feldspar. Barren. SILICIFIED OUT CONTACT					
40.7	200.0	MAFIC METASEDIMENT Dark green, soft, blocky, well-bedded at 84° to C.A. Barren to traces of pyrite. Disseminated. Contains 2-3% irregular apple-green epidote stringers throughout the rock. The mafic metasediment unit continues with little variation through 100' and 150'. From 139.4-142.8' an epidote phase withl-2% disseminated pyrite and quartz.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE

CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-8 PAGE 2 of 2

LATITUDE 2+27W BEARING OF HOLE Grid North (045°) STARTED Sept. 23-90

DEPARTURE 0+26S DIP OF HOLE -45° COMPLETED Sept. 25-90

ELEVATION -- DIP TESTS Tropari at 200' Az 049.5° DEPTH 200.0'

Dip -43°

N

CLAIM No. S.6304 AND S.6504

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		By 155.0' rock becomes slightly more silicified with traces of					
		pyrite disseminated throughout; also irregular epidote stringers					
		become 4% of rock.					
		At 162.5 stringers become intense as does silicification to 166.9'					
		followed by a mafic (olivine) dyke to 168.4. Barren.					
		From 169.6 to 170.6' a hard, pink felsic dyke.					
		By 185.0' epidote stringers and patches disappear. Well-bedded					
		(82% to C.A.) mafic metasediment continues to end of hole.					
		END OF HOLE GL-90-8 IS AT 200.0 FEET					

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DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-9 PAGE 1 of 3

LATITUDE 200E BEARING OF HOLE True North (000°) STARTED Oct. 3-90

DEPARTURE 320S DIP OF HOLE -45° COMPLETED Oct. 9-90

ELEVATION -- DIP TESTS At 400' Az 002° Dip 37.5° DEPTH 400.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
0.0	8.0	OVERBURDEN									
8.0	35.8	FELSIC METASEDIMENTS Light grey to white, hard, blocky, fine to medium-grained with beds and patches of green mafic metasediment intercalated. Traces of pyrite. Sharp Conformable Out Contact									
35.8	400.0	Mafic Metasediment with beds and lenses of felsic metasediment (25%). Mafic metasediment is green, soft, more massive and well-bedded at 85° to C.A. From 73.3 - 74.0 slightly sericitic section From 77.0 - 80.3 mafic metasediment contains 2-3% pyrite-pyrrhotite along beds and fractures.	18515	77.0	80.4	3.4	20	160	276	6	5

DIAMOND DRILL RECORD

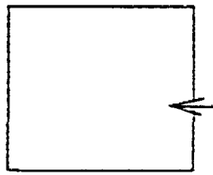
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-9 — PAGE 2 of 3

LATITUDE 200E — BEARING OF HOLE True North (000°) — STARTED

DEPARTURE 320S — DIP OF HOLE -45° — COMPLETED

ELEVATION --- — DIP TESTS At 400' Az 002° Dip 37.5° — DEPTH 400.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
		This continues through 100.0'. From 119.8' - 124.0' and from 136.2-139.0'	18614	119.9	124.0	4.1	60	40	70	12	12
		1-2% sulfides and lots of black biotite.									
		Interbedded pink, felsic, hard conformable beds occur from 150.0-151.8' and	18612	128.4	131.0	2.6	20	40	62	6	8
		157.8-158.8'. Barren.	18613	136.1	138.9	2.8	20	60	102	6	7
		Through 200.0' mafic metasediments with lots of ferro-mags. Very dense rock.									
		From 214.5-220.0' a slightly pink, felsic bed. Sharp conformable In and									
		Out contacts.									
		Still well bedded at 84° to C.A.									
		From 265.4-284.3 a pink felsite unit with sharp conformable In and OUt									
		contact. Probably a felsic metasediment unit. Still very dense rock.									

DIAMOND DRILL RECORD

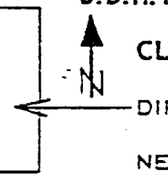
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-9 — PAGE 3 of 3

LATITUDE 200E — BEARING OF HOLE True North (000°) — STARTED

DEPARTURE 320S — DIP OF HOLE -45° — COMPLETED

ELEVATION --- — DIP TESTS At 400' Az 002° Dip 37.5° — DEPTH 400.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		By 318.0' numerous (3-5%) irregular epidote veinlets penetrate the rock. At 343.0' blebs of pyrite-pyrrhotite in a white felsic unit.					
		At 367.1-388.1' Pink, coarse-grained, sericitic, broken, barren pegmatite occurs with sharp conformable IN and OUT contacts.					
		This is followed by mafic metasediments with blebs, patches and veinlets of epidote +- pyrite+- chalcopyrite (traces only).					
		END OF HOLE GL-90-9 IS AT 400.0 FEET.					

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DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-10 PAGE 1 of 2

LATITUDE 8 +00W BEARING OF HOLE True North (000°) STARTED Oct. 10-90

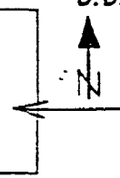
DEPARTURE 5 +25S DIP OF HOLE -45° COMPLETED Oct. 12-90

ELEVATION -- DIP TESTS Tropari at 400' Az 002.5° DEPTH 400.0'

Dip 38.5°

CLAIM No. S.6654 and S.6015

DIRECTION AND DISTANCE FROM NE. CLAIM POST



FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	27.0	OVERBURDEN					
27.0	138.8	MAFIC (DIABASE) DYKE					
		Dark green, very fine-grained, barren, blocky and soft to average					
		hardness.					
		By 44.0' rock is very blocky with 3-4% wide felsic intrusive dykes					
		present infrequently.					
		From 56.7-67.2' a slightly bedded sequence, altered in places to					
		epidotized metasediment.					
		A 10" white quartz vein at out contact.					
		This unit contains traces of euhedral pyrite.					
		Back into exclusively Diabase Dyke after vein.					
		FAULTED SHARP OUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D CONSTABLE

CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-10 PAGE 2 2

LATITUDE 8+00W BEARING OF HOLE True North (000°) STARTED Oct. 10-90

DEPARTURE 5+25S DIP OF HOLE -45° COMPLETED Oct. 12-90

ELEVATION -- DIP TESTS Tropari at 400' Az 002.5° DEPTH 400.0'

Dip 38.5°

CLAIM No. S.6654 and S.6015

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY ppm Cu	ppm Pb	ppm Zn	ppm Ag	ppb Au
138.8	400.0	BRECCIATED MAFIC METASEDIMENT									
		Epidotized, broken, soft and intruded by pink felsic dykes									
		6"-2' wide. Contains traces of pyrite +- chalcopyrite particularly									
		in epidotized sections. Dark green sections are broken and shot									
		full of epidote veinlets.									
		From 207.9-215.0' light grey, silicified variety with 1-3% blebs									
		and disseminates of pyrite. Again from 237.8-241.9' pyritic silicified	18625	237.9	240.0	2.1	80	100	128	2	86
		section. This is followed by intensely brecciated unit, fractured	18626	240.0	242.0	2.0	60	60	86	2	10
		and broken in fine detail past 250'.									
		From 271.1-276.5' quartz rick epidote section.									
		Epidote content increases below this quartz section to 35% of the hole.									
		Fault gouge from 310.0-317.0' followed by mylonized metasediment for									
		15.0'. Then epidote to 334.0'. Continuous as blocky, soft, green meta-									
		sediment. From 391.6-400.0' slightly silicified shadowy grey rock.									
		END OF HOLE GL-90-10 IS AT 400.0 FEET									

DIAMOND DRILL RECORD

LOGGED BY DAVID W. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

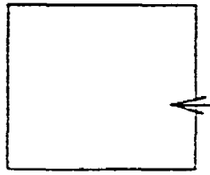
D.D.H. No. GL-90-11 PAGE 1 of 7

LATITUDE 0 + 67 W BEARING OF HOLE 042° STARTED Nov. 3-90

DEPARTURE 2 + 92 S DIP OF HOLE -55° COMPLETED Nov. 16-90

ELEVATION --- DIP TESTS Tropari 545' Az 053° Dip -56.5° DEPTH 979.0'

Tropari 915' Az 063° Dip -57°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	61.8	OVERBURDEN					
61.8	386.3	MAFIC METASEDIMENT					
		Dark green, average hardness, very blocky at start of hole, fine-grained with 50% feldspar, and 40% ferro-mags including chlorite, biotite and amphiboles. Contains traces of pyrite in blebs. Several areas of slightly pink, hard, barren felsic dyke eg. at 85.0-85.5'.					
		From 98.9-112.5' a fine-grained, green, homogeneous barren diabase dyke with sharp intrusive, chilled IN and OUT contacts.					
		From 140.0-144.0' a silicified zone with intrusive remnants and quartz veins. This is followed by a section with 1% euhedral pyrite crystals.					
		Entire mafic unit has 1-3% irregular green epidote fractures.					
		From 152.9- 154.1 orange pink felsic dyke remnant.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-11 PAGE 2 of 7

LATITUDE 0+67W BEARING OF HOLE 042° STARTED

DEPARTURE 2+92S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Tropari 545' Az 053° Dip - 56.5°
Tropari 915' Az 063° Dip - 57° DEPTH 979.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 125.0 to 170.0' a series of small pink or orange, hard, barren felsic dykes e.g. at 131.0' and 137.5' and 163.0' etc. After this zone eock becomes very epidotized with 5 to 15% epidote patches and veinlets. Some pyrite +- traces of chalcopyrite occurs along epidote patches.					
		From 207.7-210.7 grey felsic dyke shadow.					
		From 238.2-238.6 a fault gouge. This is followed by a series of patchy, pink, hard, felsic dykes to 289.0°. After 289.0' well-bedded mafic metasediment with bedding at 72° to C.A. Trace to nil sulfides throughout rock. Rock is quite blocky.					
		Small quartz partings along the beds occur from 318.4 to 344.0' The quartz beds are white and are seldom over 1" wide except at 330.0' and 343.2'. The veins are barren. Mafic metasediment continues through 350.0' with minor quartz and epidote with small (∠ 10" wide) pink felsic dykes. Bedding is still at 74° to C.A.					

DIAMOND DRILL RECORD

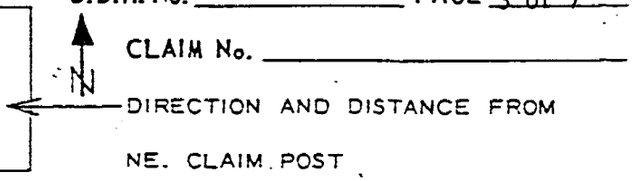
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-11 — PAGE 3 of 7

LATITUDE 0+67W — BEARING OF HOLE 042° — STARTED

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

ELEVATION --- — DIP TESTS Tropari 545' Az 053° Dip-56.5° Tropari 915' Az 063° Dip-57° — DEPTH 979.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		Sharp Intrusive Out Contact					
386.3	426.5	DIABASE DYKE					
		Dark green, soft, massive and barren. Low angled, sharp Out Contact.					
426.5	443.2	MAFIC METASEDIMENT					
		Dark green, massive, soft and fine-grained well-bedded at 71° to C.A.					
		Sharp Low-angled Out Contact					
443.2	446.7	DIABASE DYKE					
		Dark green, fine-grained, soft and barren.					

DIAMOND DRILL RECORD

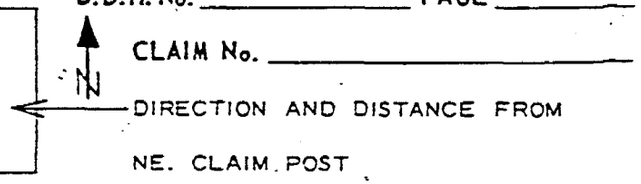
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-11 — PAGE 4 of 7

LATITUDE 0+67W — BEARING OF HOLE 042° — STARTED

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

ELEVATION -- — DIP TESTS Tropari 545' aZ 053° Dip-56.5° DEPTH 979.0'
Tropari 915' Az 063° Dip-57°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
446.7	525.5	MAFIC METASEDIMENT					
		Dark green, massive, fine-grained, soft and well-bedded. By 475.0'					
		bands of slightly coarser-grained phases appear. Traces of pyrite.					
		From 497.3-505-9' a pink, hard, felsic dyke, nearly a pegmatite in					
		composition and texture. Low-angled IN Contact.					
		Another felsic dyke or sill from 516.0' -517.8' only darker red and					
		finer-grained.					
		From 521.7-525.5' is a calcite-filled fault zone.					
		Sharp Intrusive Faulted Out Contact					
525.5	554.8	FELSIC DYKE					
		Pink, hard, blocky, feldspar-quartz rock with small fractures and					
		patches of dark green mafic host rock throughout.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

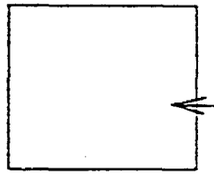
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-11 — PAGE 5 of 7

LATITUDE 0+67W — BEARING OF HOLE 042° — STARTED

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

ELEVATION --- — DIP TESTS Tropari 545'Az 053° Dip 56.5° — DEPTH 979.0'

Tropari 915' Az 063° Dip -57°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		Sharp Intrusive Out Contact					
554.8	835.1	MAFIC METASEDIMENT					
		Dark green, massive with coarser grained sections containing phenocrysts					
		of feldspar eg. 576.2-583.1. Rock is nearly barren; the coarser sections					
		have fragments of fine-grained mafic metasediment throughout as well					
		they display a bedding alignment.					
		These coarse-grained, slightly more felsic pinkish beds continue at					
		frequent intervals comprising 35% of the rock. The units are always					
		conformable. Between these beds is fine-grained, soft, epidotized (2%)					
		mafic metasediment.					
		From 678.5-680.0' pink, hard, felsic dyke and again from 682.3-686.1'					
		and 700.2-702.7, 705.3-707.7, 748.6-750.1'. There are also					
		numerous other pink felsic dykes less than 1-foot wide .					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

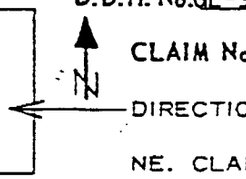
PROPERTY GENEVA LAKE MINERALS CORP. HESS TOWNSHIP — D.D.H. No. GL-90-11 — PAGE 6 of 7

LATITUDE 0+67W — BEARING OF HOLE 042° — STARTED —

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED —

ELEVATION --- — DIP TESTS Tropari 545' Az 053° Dip 56.5° — DEPTH 979.0'

Tropari 915' Az 063° Dip-57°



CLAIM No. —

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		The pink dyke material is related to the coarser-grained slightly pink					
		conformable beds and often changes from ont to the other; particularly					
		on the contacts. There is a major feldspar porphyry coarser-grained unit					
		from 768.0-795.3' . Conformable.					
		This is followed by well-bedded, epidotized fine-grained mafic meta-					
		sediments. These show signs of patchy silicification and < 1" wide					
		white quartz beds. By 828.0' rock starts to become blocky to 835.8'.					
		Only trace to nil pyrite.					
		Sharp Faulted Out Contact					
835.1	908.5	DIABASE DYKE					
		Dark green, homogeneous, soft, massive, barren, fine-grained rock.					
		Sharp Intrusive Out Contact					

DIAMOND DRILL RECORD

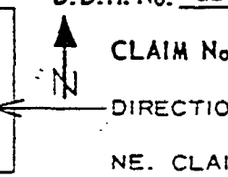
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-11 — PAGE 7 of 7

LATITUDE 0+67W — BEARING OF HOLE 042° — STARTED

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

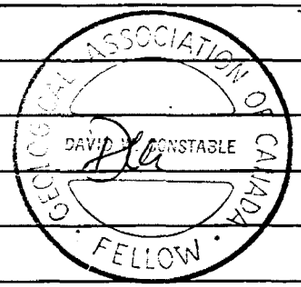
ELEVATION --- — DIP TESTS Tropari 545' Az 053° Dip 56.5° — DEPTH 979.0'
Tropari 915' Az 063° Dip 57°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
908.5	979.0	MAFIC METASEDIMENT					
		Starts slightly, lighter green, well-bedded at 70° to C.A. Traces of					
		pyrite. Fine-grained and quite massive.					
		From 933.6-936.0' pink, hard, felsic dyke and at 954.6 an 8" wide					
		calcite-feldspar-quartz vein. Barren. From 972.5-973.9 a pink, hard,					
		felsic dyke. Last 4 feet of hole is very silicic.					
		END OF HOLE GL-90-11 IS AT 979.0 FEET.					



DIAMOND DRILL RECORD

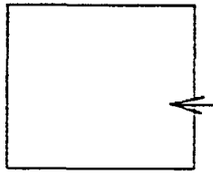
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-12 — PAGE 1 of 4

LATITUDE 0+34W — BEARING OF HOLE 045° (Ast.) — STARTED Nov. 16-90 — CLAIM No. S.6604 and S.6304

DEPARTURE 3+25S — DIP OF HOLE -55° — COMPLETED Nov. 26-90 — DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION -- — DIP TESTS Tropari at 325' Az 051° Dip -58° — DEPTH 1095.0'



FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	13.2	OVERBURDEN					
13.2	239.0	MAFIC METASEDIMENT Dark green, extremely blocky for first 10 feet, soft and contains only traces of pyrite. Fine-grained and finely-bedded at 77° to C.A. Rock contains 20% epidote fractures. From 53.5 to 57.8 pink, hard, quartz-veined felsic dyke (silk?) with sharp conformable IN and OUT contacts. From 107.5-160.0' section contains 65% pink, hard, felsic dykes with sericite or muscovite. The remaining 35% is green mafic metasediment. From 160.0-163.0' extremely blocky section, possible fault zone. Again from 172.8-179.4 is a pink, hard felsic dyke with sharp brecciated IN and OUT contacts. The hostrock contains up to 30.6' epidotized fractures and patches.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

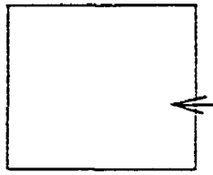
D.D.H. No. GL-90-12 PAGE 2 of 4

LATITUDE 0+34W BEARING OF HOLE --- STARTED

DEPARTURE 3+25S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Tropari at 325' Az 051° DEPTH 1095.0'

Dip -58°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 225.0-228.5' and from 228.9-235.0' (brecciated and fragmented)					
		are white intrusive dykes.					
		From 236.8-244.0' is an extremely broken, blocky fault gouge containing		CEMENTED HOLE			
		pink felsic veinlets and calcite.					
239.0	363.9	DIABASE DYKE					
		Dark green, soft, extremely blocky for 6 feet then massive homogeneous,					
		fine-grained and barren.					
		Sharp Intrusive Out Contact					
363.9	1095.0	MAFIC METASEDIMENT					
		Dark green, silicified, harder, blocky and fine-grained.					
		From 380.4-382.2' pink, hard, felsic dyke.					
		Followed by silicified patches and beds with epidotized fractures.					

DIAMOND DRILL RECORD

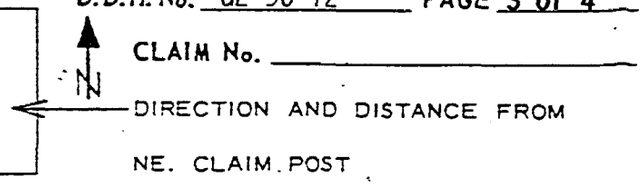
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-12 — PAGE 3 of 4

LATITUDE 0+34W — BEARING OF HOLE --- — STARTED

DEPARTURE 3+25S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 325' Az 051° Dip 058° — DEPTH 1095.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		This silicified area continues through 450 feet through 500 feet.					
		From 467.0-471.1' small diabase dyke.					
		The silicified patches continue as well as minor, white calcite veinlets and epidote patches. Bedding is at 76° to C.A. at 546 feet.					
		From 524.6-526.2 pink, hard, felsic, dyke.					
		By 550.0' silicified patches are replaced by white felsic intrusive dykes from 558.3-558.9' and 570.2-570.9' and 571.7 - 572.9'.					
		From 585.6-591.5 coarser-grained feldspar porphyry. Intrusive Sharp Out Contact.					
		From 629.3-645.1' is a hard, pink felsic dyke with sharp intrusive IN and OUT Contacts.					
		Minor 1" quartz beds at 674.2 and 680.0'					
		From 691.0' start of conformable slightly pink feldspar porphyry coarser-grained bed. This unit continues, except for conformable narrow beds of fine-grained mafic metasediment, through 775.0 feet.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-12 PAGE 4 of 4

LATITUDE 0+34W BEARING OF HOLE --- STARTED

DEPARTURE 3+25S DIP OF HOLE -55° COMPLETED

ELEVATION -- DIP TESTS Tropari at 325' Az 051° DEPTH 1095.0'

Dip 058°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY				
		By 780.3' sharp intrusive contact into pink, hard, felsic dyke. Barren. Contains remnants of slightly pink feldspar porphyry beds. The felsic dyke unit ends at 831.0' with a sharp chilled IN and OUT contact; back into slightly pink feldspar porphyry beds with minor conformable mafic metasediment. Porphyry unit has a bedded texture. Porphyry bed ends at 855.4'.	18662	966.3	970.6	4.3	20	100	574	4	7
		This is followed by a fine-grained, soft, dark green mafic metasediment which, by 902.0' contains 10% epidote-lined fractures.	18663	970.6	975.0	4.4	40	100	158	2	16
			18664	975.0	978.7	3.7	60	80	102	2	8
		Two small fault gouges at 905.0' and 916.2' (6" wide)	18665	978.7	982.5	3.8	60	40	68	2	8
		By 934.0' following 2 feet of silicified sediment sulfides start appearing along beds and fractures. Mostly pyrite but some minor chalcopyrite. Comprises up to 3% of rock.	18666	982.5	986.0	3.5	20	40	66	2	7
			18667	986.0	989.1	3.1	80	60	94	2	8
			18668	989.1	992.0	2.9	20	60	96	2	5
		Minor base metals appear in sericite schist from 975.0-1005.0' Followed by silicified, epidotized well bedded, barren to trace sulfide meta-	18669	992.0	995.0	3.0	60	40	68	4	4
			18670	995.0	998.4	3.4	120	160	2020	6	10
		sediment to the hole end at 1095.0'	18671	998.4	1002.6	4.2	20	220	356	4	7
		END OF HOLE GL-90-12 IS AT 1095.0 FEET									

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-13 — PAGE 1 of 6

LATITUDE 0+00 — BEARING OF HOLE 020° (Ast.) — STARTED Nov. 26-90 — CLAIM No. S.6604 and S.6304

DEPARTURE 0+10.3 S — DIP OF HOLE -55° — COMPLETED Dec. 4-90 — DIRECTION AND DISTANCE FROM

ELEVATION --- — DIP TESTS Tropari at 975' Az 037° — DEPTH 975.0' — NE. CLAIM POST

Dip -55°

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	21.0	OVERBURDEN					
21.0	97.4	FELSIC DYKE Pink, hard, massive, coarse-grained, rock composed of 70% pink feldspar, 25% quartz and 5% white mica (muscovite) and ferro-mags. Sharp Conformable Out Contact					
97.4	297.2	MAFIC METASEDIMENTS Green, soft, blocky with numerous (3%) irregular fine epidote-lined fractures. Fine-grained with bedding at 76° to C.A. Minor pink felsite dykes occur from 142.9-146.0' and 166.1-167.2'. Brecciated broken section (fault?) at 159.0'. The mafic unit continues through 200' with little change. Nil sulfides present. At 239.0' a blocky section which may be a fault zone. Brecciated Out Contact					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

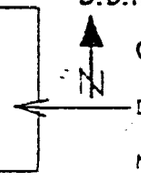
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-13 — PAGE 2 of 6

LATITUDE 0+00 — BEARING OF HOLE 020° (Ast.) — STARTED

DEPARTURE 0+10.3S — DIP OF HOLE -55° — COMPLETED

ELEVATION --- — DIP TESTS Tropari at 975' Az 037° — DEPTH 975.9'

Dip -55°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
297.2	323.0	FELSIC DYKE					
		Pink, hard, blocky compose of coarser-grained pink feldspar (70%),					
		quartz (25%) and muscovite +- ferro-mags (5%) Barren.					
		Slightly Brecciated Out Contact					
323.0	493.5	MAFIC METASEDIMENT					
		Dark green, soft, blocky, fine-grained and contains only traces of pyrite.					
		Bedding is at 73° to C.A. Patches and fractures filled with epidote.					
		From 330.0 onward there are 40% conformable, bedded, pink felsite beds					
		mixed with the green mafic beds. The felsic beds are quite silica-rich.					
		This continues in increasing amounts to 441.0, just after a faulted					
		blocky zone from 435.0-440.0'. This zone is in felsic, hard, siliceous					
		phase.					
		After 441.0' (sharp, conformable contact) we move back into dark green,					
		mafic metasediment with 2"-4" wide siliceous beds.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-13 PAGE 1 of 6

LATITUDE 0+00 BEARING OF HOLE 020° (Ast.) STARTED

DEPARTURE 0+10.3S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Tropari at 975' Az. 037° DEPTH 975.9'

Dip -55°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 477.7-478.5' is a small pink felsic dyke.					
		FAULTED GOUGE OUT CONTACT					
493.5	513.5	DIABASE DYKE					
		Dark green, slightly coarser-grained than mafic metasediment. Barren and fractureless.					
		Sharp Irregular Intrusive Contact					
513.5	679.5	MAFIC METASEDIMENTS					
		Dark green, siliceous in beds, fine-grained and well-bedded at 75° to C.A. Traces of pyrite and well epidotized in patches and along fractures.					
		From 520.8-521.4, 528.9-530.4, and 539.6-540.3 a series of pink felsite dykes with sharp intrusive In and OUt contacts.					
		From 556.0-562.9 is a coarse-grained conformable feldspar porphyry phase of mafic metasediment.					

DIAMOND DRILL RECORD

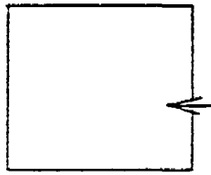
LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-13 — PAGE 1 of 6

LATITUDE 0+00 — BEARING OF HOLE 020° (Ast.) — STARTED

DEPARTURE 0+10.3S — DIP OF HOLE -55° — COMPLETED

ELEVATION --- — DIP TESTS Tropari at 975' Az 037° Dip -55° — DEPTH 975.9'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 570.0-573.0' extremely blocky, fault gouge.					
		From 577.9-579.2 a white quartz vein with blebs of pyrite on IN and OUT contacts. Another quartz vein runs from 600.1-600.9'. Trace of pyrite occurs in wall rock.					
		From 637.0-679.5' slightly reddish, hard, coarser-grained phase with 10-30% white feldspar phenocrysts (2 mm).					
679.5	697.8	FELSIC DYKE Pink, very hard, blocky with 30% quartz, 65% feldspar and balance ferro-mags.					
		From 682.9-687.0' Mafic Metasediment. Slightly brecciated Out Contact					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-13 PAGE 5 of 6

LATITUDE 0+00 BEARING OF HOLE 020° (Ast.) STARTED

DEPARTURE 0+10.3S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Tropari at 975' Az 037° DEPTH 975.9'

Dip -55°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
697.8	959.0	MAFIC METASEDIMENT					
		Dark green, soft, massive and to 723.8' the unit is still slightly					
		reddish feldspar porphyry.					
		From 774.0-700.8' a slightly reddish, conformable, hard feldspar porphyry					
		phase. Barren. Conformable gradational Out Contact					
		This is followed by normal mafic metasediments with traces of euhedral					
		pyrite.					
		From 865.3-865.9, 868.7-874.9, 877.3-878.8 and 884.0-884.5 are pink,					
		hard felsic dykes. At 883.5 a 1-foot section of fault gouge.					
		At 912.5 rock contains 1 to 2% pyrite along beds and disseminated.					
		This sulfide content continues through where a 1/8" wide galena vein					
		is noted.					
		Sharp Intrusive OUt Contact					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No GL-90-13 PAGE 6 of 6

LATITUDE 0+00 BEARING OF HOLE 020° (Ast.) STARTED

DEPARTURE 0+10.3S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Tropari at 975' Az 037° Dip -55° DEPTH 975.9'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
959.0	975.0	DIABASE DYKE Dark green, fine-grained, massive and barren to end of hole.					
		END OF HOLE GL-90-13 IS AT 975.9'					

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

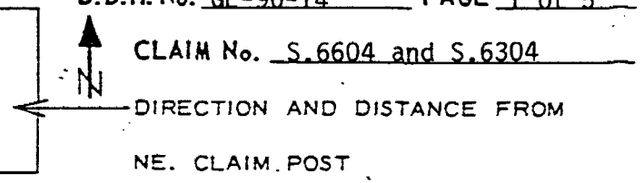
D.D.H. No. GL-90-14 PAGE 1 of 5

LATITUDE 0+18,5 E BEARING OF HOLE 038° (Ast.) STARTED Dec. 4-90

DEPARTURE 3+26.6S DIP OF HOLE -55° COMPLETED Dec. 10-90

ELEVATION --- DIP TESTS Trop. 345' Az 046°Dip -57° DEPTH 1065.0'

Trop. 945' Az 053°Dip -57°



CLAIM No. S.6604 and S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	9.0	OVERBURDEN					
9.0	78.7	FELSIC DYKE					
		Pink, hard, coarse-grained, blocky, composed of 60% feldspar 35% quartz,					
		5% muscovite. Barren.					
		At 21.0' a 1-foot section of fault gouge.					
		Sharp Intrusive Out Contact					
78.7	568.0	MAFIC METASEDIMENT					
		Dark green, soft, fine-grained, massive, well-bedded at 74° to C.A.					
		Epidotized and contains traces of pyrite.					
		From 120.5-129.0' hard, pink felsic dyke. Sharp Intrusive In and OUt Contact					
		From 171.7-174.2 and 177.8-178.5' pink, hard, felsic, dykes.					
		Sharp brecciated IN and OUT Contacts.					
		Fault gouge at 215.0-219.0 and 220.0-221.0. Rock is very blocky from					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-14 PAGE 2 of 5

LATITUDE 0+18.5S BEARING OF HOLE 038° (Ast.) STARTED

DEPARTURE 3+26.6S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop. 345' Az 046°Dip - 57° DEPTH 1065.0'

Trop. 945' Az 053°Dip -57°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		215.0-226.0'.					
		From 270.1-272.2 pink, hard, felsic dyke.					
		From 275.0-281.0 very blocky ground.					
		From 282.0-287.0' series of grey feldspar porphyry dykes are present.					
		After 282.0' rock is massive and slightly coarser-grained.					
		From 301.0-302.6' large patch of epidotized metasediment.					
		From 361.0-376.7' series of (30%) slightly pink to white quartz veins and patches which show signs of being intrusive in nature even though they lie conformably along the bedding planes.					
		From 398.2 - 411.3' diabase dyke; dark green, soft, homogeneous, fine-grained and barren.					
		From 425.0-430.0' extremely broken section.					
		From 440.3' - series of silicified patches and increasing epidotization. Traces of euhedral pyrite crystals throughout this alteration.					
		From 515.0-516.0' fault gouge.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-14 PAGE 1 of 5

LATITUDE 0+18.5S BEARING OF HOLE 038° (Ast.) STARTED

DEPARTURE 3+26.6S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop. 345' Az 046° Dip - 57° DEPTH 1065.0'

Trop. 945' Az 053° Dip - 57°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 516.0-565.0' series of silicified zones (25%) made up of white felsic dykes with brecciated shapes and quartz beds. Sharp Chilled Intrusive Out Contact					
568.0	583.1	DIABASE DYKE Dark green, massive, fine-grained and barren. Sharp Out Contact					
583.1	1065.0	MAFIC METASEDIMENT Green, soft, blocky, fine-grained and finely bedded at 70° to C.A. Minor epidote along fractures. Traces of pyrite. From 632.0-633.0' 637.2-638.5 and 640.5-641.1', white felsic dykes. Again from 652.0-663.0' is a white felsic intrusive. Beds of pyrite 1/8" wide occur from 663.0-684.0'.					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-14 PAGE 4 of 5

LATITUDE 0+18.5S BEARING OF HOLE 038° (Ast.) STARTED

DEPARTURE 3+26.6S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop. 345' Az 046° Dip - 57° DEPTH 1065.0'
Trop. 945' Az 053° Dip - 57°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB
		Sulfides comprise < 1% of section.									
		This is followed by barren mafic metasediments.									
		From 708.7-725.8 is a coarse-grained slightly pinkish, feldspar-rich variety of metasediment.									
		From 740.1-740.6, 742.0-743.5 and 747.1-749.0 is a series of small, white felsic dykes.									
		From 759.8-781.3 is a slightly reddish coarser-grained, feldspar-rich variety of metasediment. Barren with well-developed bedding at 72° to CA.									
		From 781.3-785.0 rock is blocky. Whole series of slightly reddish, feldspar-rich, coarser-grained conformable units from 804.5-818.9, 821.6-829.7, 837.0-837.9, 848.5-849.2, 852.8-853.4 and 856.9-872.8. The latter section has 1-2% pyrite and chalcopyrite along some of the section.	18644	857.1	860.1	3.0	80	40	56	2	11
			18645	860.1	864.5	4.4	160	40	70	2	15
			18646	864.5	867.1	2.6	140	40	60	2	69
			18647	867.1	870.1	3.0	60	40	84	2	10

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-14 PAGE 5 5

LATITUDE 0+18.5S BEARING OF HOLE 038° (Ast.) STARTED

DEPARTURE 3+26.6S DIP OF HOLE -55° COMPLETED

ELEVATION ---- DIP TESTS Trop. 345' Az 046° Dip -57° DEPTH 1065.0'
Trop. 945' As 053° Dip - 57°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB
		A sequence of green, fine-grained epidotized metasediment followed with									
		a feldspathic bed at 928.2-929.6'. This is followed by quartz beds and	18648	981.3	985.0	3.7	340	7000	11900	12	48
		silicified patches and beds.	18649	985.0	989.3	4.3	260	5600	10080	10	34
		This continues to 980.0' where pyritic beds appear for a long stretch.	18650	989.3	993.1	3.8	160	160	304	4	90
		At 997.9 a 4" wide quartz vein with massive chalcopyrite. Galena is	18651	993.1	996.0	2.9	160	1480	3820	8	25
		noted in places (weak) and a sericite schist developed from 1016.0-	18652	996.0	999.7	3.7	80	1340	2340	8	26
		1045.0'. Pyritized zone wnds at 1047.3'.	18653	999.7	1005.0	5.3	80	100	1632	6	10
		This is followed by an epidotized mafic metasediment with only minor	18654	1005.0	1009.1	4.1	20	40	106	2	12
		pyrite (< 1%) present as shadowy beds and wisps.	18655	1009.1	1014.0	4.9	40	80	86	2	10
			18656	1014.0	1017.2	3.2	60	40	1840	4	12
			18657	1017.2	1021.0	3.8	20	40	106	4	14
		END OF HOLE IS AT GL-90-14 is at 1065.0 FEET.	18658	1021.0	1025.0	4.0	60	80	80	4	11
			18659	1025.0	1028.8	3.8	80	60	310	6	16
			18660	1028.8	1032.2	3.4	20	120	442	4	14
			18661	1032.2	1037.2	5.0	20	100	270	2	10

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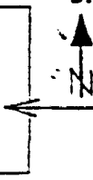
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-15 — PAGE 1 of

LATITUDE 0+00 — BEARING OF HOLE 040° — STARTED Nov. 26-90 — CLAIM No.

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED Dec. 2-90 — DIRECTION AND DISTANCE FROM

ELEVATION --- — DIP TESTS Trop 415' Az 048° Dip 55° / Trop 815' Az 051° Dip 56° — DEPTH 945.0' — NE. CLAIM POST



FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	9.2	OVERBURDEN					
9.2	40.9	FELSIC DYKE					
		Pink, hard, coarse-grained, blocky felsic dyke composed of 60% feldspar					
		5% muscovite and 35% quartz. Barren rock.					
		Sharp Intrusive Out Contact					
40.9	145.2	MAFIC METASEDIMENT					
		Dark green, soft, massive, epidotized, fine-grained and finely bedded					
		at 81° to C.A. Traces of pyrite.					
		From 48.9-53.6' and 69.7-70.9' hard, pink, coarse-grained felsic dyke					
		with sharp conformable and non-conformable IN and OUT contacts.					
		By 98.0' rock contains 10% epidote patches and fractures.					
		Sharp Intrusive Out Contact.					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-15 — PAGE 2 of

LATITUDE 0+00 — BEARING OF HOLE 040° — STARTED

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

ELEVATION --- — DIP TESTS Trop. 415' Az 048° Dip 55° / Trop 815' Az 051° Dip 56° — DEPTH 945.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	ASSAY
145.2	218.2	DIABASE DYKE					
		Dark green, massive, fine-grained, homogeneous and barren.					
		Sharp Intrusive OUt Contact					
218.2	226.0	FELSIC DYKE					
		Light pink, hard very blocky, medium-grained, with 15 % dark green					
		diabase remnants throughout. Barren.					
		Sharp Intrusive Out Contact					
226.0	272.8	DIABASE DYKE					
		Dark green, soft, massive, barren, coarser-grained rock.					
		By 237.0 diabase becomes medium-grained with amphibole crystals and					
		biotite. Barren.					
272.8	310.0	MAFIC METASEDIMENTS					
		Dark green, massive, soft, fine-grained, well-bedded at 71° to C.A.					
		After diabase contact silicified patches and beds appear associated with					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY — D.D.H. No. GL-90-15 — PAGE 3 pf

LATITUDE 0+00 — BEARING OF HOLE 040° — STARTED

DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

ELEVATION --- — DIP TESTS Trop 415' Az 048° Dip 55° / Trop 815' Az 051° Dip 56° — DEPTH 945.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		epidote areas. Rock becomes white to tan where silicified and microbrecciated					
		in spite eg. at 305.8'. Appear to be felsic dyke or sill material which has					
		partly digested the mafic metasediment.					
		Sharp Intrusive Out Contact					
310.0	344.8	DIABASE DYKE					
		Dark green, slightly coarser-grained, blocky, epidotized and barren.					
344.8		MAFIC METASEDIMENT					
		Starts in gneissic, white, hard, felsic sill or dyke which is conformable					
		to bedding and gradually becomes more mafic by 356.5'; but still with					
		conformable quartz beds and slightly pink to white felsic sills to 377.0'.					
		This is followed by normal mafic metasediment.					
		At 389.3' a 4" wide diabase dyke.					
		From 392.2 to 398.8' is a section dominated by white felsic sills.					
		Conformable .					

DIAMOND DRILL RECORD

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PROPERTY ~~GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY~~

D.D.H. No. GL-90-15 — PAGE 4 of 6

LATITUDE 0+00 — BEARING OF HOLE 040° — STARTED

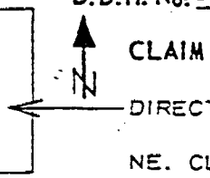
DEPARTURE 2+92S — DIP OF HOLE -55° — COMPLETED

ELEVATION -- — DIP TESTS Trop. 415' Az 048° Dip 55° — DEPTH 945.0'

Trop. 815' Az 051° Dip 56°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST



FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 405.0'-430.8' is a well-bedded coarser-grained massive variety of mafic metasediments. Followed by 45% white quartz beds to 437.6'. After 437.6' a return to dark green, epidotized mafic metasediments. At 453.0' a 10" wide fault gouge zone. From 464.8-467.2' pink, hard felsic dyke. Sharp Intrusive IN and OUT Contact. From 477.4-478.5 extremely blocky section. Rock contains 3-5% epidote veins and patches, throughout. From 522.3-527.8 white felsic sills -- conformable to bedding. Continues as dark green, soft, fine-grained, metasediments with very infrequent quartz beds e.g. at 611.0'; and minor conformable coarser-grained beds e.g. at 580.0'. Traces of pyrite only.					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-15 PAGE 5 of 6

LATITUDE 0+00 BEARING OF HOLE 040° STARTED

DEPARTURE 2+92S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop 415' Az 048° Dip 55° DEPTH 945.0'

Trop 815' Az 052° Dip 56°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB
		From 619.7 to 641.5 and 656.0 to 669.8' are coarser-grained, feldspar									
		rich, conformable beds.									
		From 669.8-678.2 hard coarse-grained felsic dyke. Sharp Intrusive IN	18632	858.1	861.7	3.6	220	80	168	8	14
		and Out Contacts.	18633	861.7	865.0	3.3	180	320	88	10	16
		From 700-9-753.8' white to light pink, hard, coarser-grained feldspar-rich	18634	865.0	868.1	3.1	180	140	156	8	32
		variety.	18635	868.1	871.7	3.6	180	80	206	8	10
		At 749.1 a few coarse blebs of chalcopyrite.	18636	871.7	873.4	1.7	120	600	528	8	64
		After 753.8 fine-grained, dark green poorly bedded mafic metasediment.	18637	873.4	875.0	1.6	140	26000	64000	34	63
		By 797.0' patches of white silicified rock with some epidote staining.	18638	875.0	877.6	2.6	100	480	442	12	12
		Still only traces of pyrite. Poorly bedded.	18639	877.6	881.1	3.5	80	200	280	8	86
		From 843.0-843.8' pink feldspar dyke.	18640	881.1	884.0	2.9	140	220	2660	4	15
		From 858.4-887.0' is a slightly sericitic zone with 1-3% pyrite +-	18641	884.0	886.1	2.1	40	160	2540	2	12
		galena and sphalerite with infrequent blebs of chalcopyrite.	18642	886.1	890.7	3.6	40	80	2360	2	19
		From 874.0-875.0' massive band of sphalerite-galena-chalcopyrite and	18643	890.7	895.5	4.8	20	80	212	2	23
		pyrite followed by 5 to 6 feet of red sphalerite.									
		Mineralization is conformable to bedding.									
		The minerlization is followed by very broken blocky ground to contact.									

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-15 PAGE 6 of 6

LATITUDE 0+00 BEARING OF HOLE 040° STARTED

DEPARTURE 2+92S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop 415' Az 048° Dip 55° DEPTH 945.0'
Trop 815' Az 052° Dip 56°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		Sharp Conformable Out Contact					
895.5	945.0	DIABASE DYKE					
		Dark green, soft, homogeneous, barren.					
		This unit continues to the end of the hole.					
		END OF HOLE GL-90-15 IS AT 945.0 FEET					

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DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-16 PAGE 1 of 5

LATITUDE 0+50W BEARING OF HOLE 045° STARTED Dec. 10-90

DEPARTURE 2+77S DIP OF HOLE -55° COMPLETED Dec. 14-90

ELEVATION ---- DIP TESTS Trop. at 695' Az 055° Dip 55° DEPTH 985.0'

CLAIM No. S.6304 S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	28.7	OVERBURDEN					
28.7	810.5	MAFIC METASEDIMENT Dark green, extremely blocky to 38.0 feet, fine-grained, soft, finely bedded at 68° to C.A. Traces of pyrite throughout Also 2-4% epidotized fractures. From 58.0-60.0' blocky section as well as 75.0-76.0'. This is followed by normal massive metasediments. From 108.0-123.9' series of patchy silicified zones with lots of white free quartz and pink feldspar. Also patches of epidote. From 130.0-145.0' very blocky section with a pink dyke (felsic) from 127.5-128.1' and 133.3-134.4' Sharp IN and OUT contacts. By 138.0' slightly coarser grained, very mafic phase. From 175.0-179.0' extremely blocky. From 188.2-200.8' a pink, hard, barren felsic dyke with faulted, sharp, Intrusive IN and OUT contacts.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-16 PAGE 2 of 5

LATITUDE 0+50W BEARING OF HOLE 045° STARTED

DEPARTURE 2+77S DIP OF HOLE -55° COMPLETED

ELEVATION ---- DIP TESTS Trop. at 695' Az 055° Dip 55° DEPTH 985.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		After 200.8' very blocky ground with small felsic dykes from 209.6 to 210.3' and 217.1-219.6'. Lots of epidotized beds, patches and fractures. Traces of pyrite.					
		From 257.7 to 335.0' is a series of conformable silicified beds; white-pink, or white-quartz; with minor epidote to 20% epidote patches and from 305.8-307.0' a pink felsic dyke with sharp Intrusive IN and OUT contacts. Narrow Diabase Dykes are present from 281.9-286.3', 294.4-296.3' and 307.0-308.9' fine-grained and barren. From 347.0-348.0' pink, hard, felsic dyke. From 376.7-382.2' extremely blocky zone with a 2-foot pink, felsic dyke. From 399.7-427.0' series of 1/16" wide pyritic beds well bedded at 73° to C.A. Minor conformable white coarser-grained unit e.g. 429.5-430.7 and 458.3-460.7 and from 465.1-482.9.					

DIAMOND DRILL RECORD

LOGGED BY DAVID CONSTABLE — CONSTABLE CONSULTING INC.

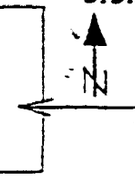
PROPERTY GENEVA LAKE MINERALS CORP. _ HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-16 PAGE 3 of 5

LATITUDE 0+59W BEARING OF HOLE 045° STARTED

DEPARTURE 2+77S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop. at 695' Az 055° Dip55° DEPTH 985.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		The latter is dark green and massive with traces of pyrite.					
		After 482.9' epidotized, finr-grained, finely-bedded mafic metasediment.					
		From 538.7-554.2' hard, pink, felsic dyke with Sharp Intrusive IN and OUT Contacts.					
		This is followed by coarser-grained, dark green, massive variety of metasediment to 563.5 and again from 576.0-'.					
		By 581.5 rock has a gabbroic texture but work is slightly bedded // to bedding.					
		Barren rock and by 589.6 rock has slightly reddish-white colour and is felsic. This ends at 645.8' with a sharp conformable Out Contact back into fine-grained, finely bedded, green, soft, epidotized mafic metasediment.					
		From 666.5-683.3' hard, pink, felsic dyke with coarse blebs of pyrite at 682.0' **Again** from 685.8-690-2 a pink, hard, felsic sill (?). Conformable and sharp IN and OUT contacts.					
		From 695.9-705.0, 706.8-708.5 and from 715.1-738.2 pink, hard, barren felsic dykes with sharp conformable and discordant IN and OUT contacts.					

DIAMOND DRILL RECORD

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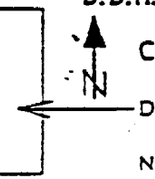
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-16 PAGE 4 of [illegible]

LATITUDE 0+59W BEARING OF HOLE 045° STARTED

DEPARTURE 2+77S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop. at 695' Az 055° Dip 55° DEPTH 985.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		This is followed by dark green metasediment with areas and beds of green epidote and conformable beds of coarser-grained, porphyritic phases.					
		By 769.0 minor (< 1%) pyrite starts to appear as we approach the zone. Quartz beds appear as do epidotized patches. Minor sericite also appears as does very minor traces of sphalerite at 805.8.					
		BROKEN OUT CONTACT					
810.5	873.7	DIABASE DYKE Grey-green, fine-grained, soft, homogeneous barren rock. Massive.					
		SHARP, LOW ANGLED, OUT CONTACT					
873.7	966.0	FELSIC METASEDIMENT Grey, siliceous, hard, finely bedded at 76° to C.A. Contains 1-2% pyrite +- chalcopyrite beds and blebs. Very small (less than 1-foot wide) mafic metasediment beds occur as 2% of the rock.					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP PROPERTY

D.D.H. No. GL-90-16 PAGE 5 of [redacted]

LATITUDE 0+59W BEARING OF HOLE 045° STARTED

DEPARTURE 2+77S DIP OF HOLE -55° COMPLETED

ELEVATION --- DIP TESTS Trop. at 695' Az 055° Dip 55o DEPTH 985.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		By 924.2 rock becomes more blocky.					
		From 934.0-936.1 a dark green, heavy mafic dyke with calcite fractures					
		and euhedral pyrite crystals (1-3%).					
		From 936.1-950.0' is a mixture of mafic dyke and fragments of siliceous					
		metasediments.					
		SHARP OUT CONTACT OF DYKE.					
		This is followed by more siliceous felsic metasediments with 15% white					
		quartz beds and slightly pink, hard felsice dyke material. Barren rock					
		with fractures lined with epidote.					
966.0	985.0	MAFIC METASEDIMENTS					
		Green, soft, massive, well-bedded at 73° to C.A. Barren rock with					
		patches of epidote and narrow (2" wide) quartz and/or felsite beds.					
		END OF HOLE GL-90-16 IS AT 985.0 FEET					

GEOLOGICAL ASSOCIATION OF CANADA FELLOW DAVID W. CONSTABLE

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE

CONSTABLE CONSULTING INC.

PROPERTY

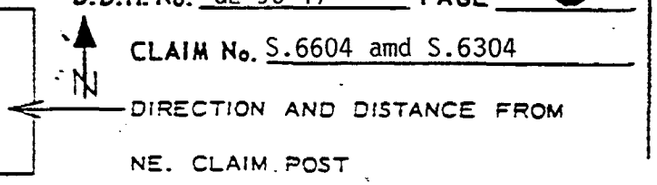
D.D.H. No. GL-90-17 PAGE 1

LATITUDE 0 + 25E BEARING OF HOLE 045° (Ast.) STARTED Dec. 15-90

DEPARTURE 2 + 77S DIP OF HOLE -55° COMPLETED Dec. 20-90

ELEVATION DIP TESTS Tropari at 305' DEPTH 915.0'

Az. 048° Dip -54°



CLAIM No. S.6604 amd S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	4.5	OVERBURDEN					
4.5	86.0	FELSIC INTRUSIVE					
		Pink, hard, blocky, medium-grained barren and interspersed with sections					
		of dark green mafic metasediments e.g. from 16.6 - 19.0 and from					
		21.2 - 32.0 and 41.5 - 61.0.					
		SHARP INTRUSIVE IN AND OUT CONTACTS					
86.0	331.1	MAFIC METASEDIMENTS					
		Green, soft, massive, fine-grained rock with fine bedding at 77° to C.A.					
		Rock is epidotized in numerous fractures and patches with lots of pink					
		felsic sills and dykes, for example from 122.9 - 132.5. By 141.0'					
		rock becomes extremely fractured and blocky with lots of (5%) fine					
		epidotized fractures. From 174.0 - 176.8 pink felsic dyke followed					
		from 176.8- 187.1 a fine-grained diabase dyke. Both barren with					
		sharp, discordant, chilled IN and OUT Contacts.					
		From 187.1 coarser-grained, porphoritic phases of mafic metasediment.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY

D.D.H. No. GL-90-17 PAGE 2 of ●

LATITUDE 0 + 25E — BEARING OF HOLE 045° (Ast.) — STARTED

DEPARTURE 2 + 77S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS — DEPTH 915.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 228.8 - 230.1 pink felsic dyke with blocked IN and OUT contacts.					
		From 233.0 is a dense, soft, medium-grained, gabbroic-textured meta-sediment phase. Traces of pyrite.					
		From 245.0 - 246.7' a deep red, clay, iron oxide fault gouge. Very soft and earthy in texture.					
		The mafic, gabbroic phase ends sharply and conformably at 300.1'.					
		After 300.1' is a siliceous variety of metasediment with lesser areas of mafic metasediments. This ends at 314.2'.					
		After 314.2' is a soft, blocky, mafic metasediment which at 331.1' sharply and conformable becomes a siliceous variety of metasediment.					
331.1	439.4	FELSIC METASEDIMENT Grey, hard, quite massive and fine-grained with fine bedding at 68° to C.A. Some of the beds are re-crystallized to white felsitic material with transitional contacts. By and large the unit is barren or has only traces of pyrite. Some sericite or muscovite also occurs.					

DIAMOND DRILL RECORD

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PROPERTY

D.D.H. No. GL-90-17 — PAGE 3 of

LATITUDE 0 + 25E — BEARING OF HOLE 045° (Ast.) — STARTED

DEPARTURE 2 + 77S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS — DEPTH 915.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
439.4	867.6	MAFIC METASEDIMENT					
		Conformable, sharp IN contact. Grey-green, biotitic and slightly					
		coarser-grained than normal. Soft, well-bedded at 68° to C.A. Contains					
		minor traces of pyrite throughout and at 443.2 a quartz vein with					
		massive pyrite for 2 inches.					
		From 453.5- 455.1 a hard pink felsic dyke. The mafic metasediments have					
		2-3% epidote- lined fractures throughout the rock.					
		From 516.1-522.4' is a grey felsic-fractured intrusive; contains 5%					
		slightly greenish sub-rounded phenocrysts.					
		After the dyke (522.4') the rock is finer-grained with 2-3% fine					
		pyrite beds to 543.0' .					
		After 543.0' the rock contains less pyrite (< 1%).					
		From 578.5 - 593.9 a slightly reddish conformable feldspar porphyry					
		phase with a few narrow (< 1 foot) pink felsic intrusive dykes followed					
		by more dark green, massive, finely-bedded mafic metasediments.					
		Again slightly reddish porphoritic phases occur from 620.8 - 655.0 and					
		677.5 - 686.0 including an intense fault gouge from 677.5 - 679.7 .					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY

D.D.H. No. GL-90-17 — PAGE 4 of

LATITUDE 0 + 25E — BEARING OF HOLE 045° (Ast.) — STARTED

DEPARTURE 2 + 77S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS — DEPTH 915.0'

N — CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB
		More minor, conformable feldspar porphyry phases from 722.8 - 733.2									
		and from 787.5 - 803.4.									
		This is followed by a grey, highly silicified very hard, barren section									
		of mafic metasediment which ends sharply at 823.8.									
		More dark green mafic metasediment follows with less than 1% pyrite beds.									
		From 857.9 to 867.6 is a short contact into a reddish sphalerite bed,	18672	855.0	857.9	2.9	160	140	2800	10	44
		conformable with fleck and blebs of chalcopyrite. Well bedded at	18673	857.9	860.3	2.4	1300	120	50800	16	47
		75° to C.A.	18674	860.3	863.8	3.5	320	60	68400	10	19
		This is followed by Diabase dyke with a sharp IN contact.	18675	863.8	865.3	1.5	660	720	3560	14	23
			18676	865.3	867.6	2.3	1240	15200	60000	32	45
867.6	915.0	DIABASE DYKE	18677	867.6	870.2	2.6	60	300	1452	8	19
		Green, fine-grained, massive, homogeneous and barren.									
		END OF HOLE GL-90-17 IS AT 915.0 FEET									

ASSOCIATION OF CANADA · FELLOW

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP

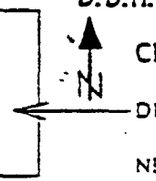
D.D.H. No. GL-90-18 PAGE 1/5

LATITUDE Line 0+70E BEARING OF HOLE 045° STARTED Dec. 20-90

DEPARTURE St. 2+77S DIP OF HOLE -55° COMPLETED Dec. 28-90

ELEVATION _____ DIP TESTS Tropari at 700' DEPTH 1053.0'

Az 053° Dip -57°



CLAIM No. _____

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	2.0	OVERBURDEN					
2.0	201.8	MAFIC METASEDIMENT					
		Dark green, soft, blocky and fine-grained. Chloritic and finely-bedded.					
		at 55° to C.A. Contains only traces of pyrite.					
		From 46.9-61.8' and from 68.8-72.0' and from 74.4-75.5' hard pink					
		felsic dykes with Sharp Intrusive IN and OUT contacts. The dykes					
		are very blocky and are muscovite-rich.					
		From 101.0-104.8', and 116.7-120.0' hard, pink felsic dyke.					
		From 111.3-113.5' fault gouge followed by a quartz vein from					
		113.5-115.7.					
		From 140.6-142.1 hard pink felsic dyke.					
		From 174.7-181.1' hard, pink, felsic dyke.					
		By 195.0 rock becomes extremely broken and blocky.					
		SHARP OUT CONTACT					

DIAMOND DRILL RECORD

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CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP

D.D.H. No. GL-90-18 PAGE 2

LATITUDE line 0+70E BEARING OF HOLE 045° STARTED

DEPARTURE St. 2+77S DIP OF HOLE -55° COMPLETED

ELEVATION DIP TESTS Tropari at 705' DEPTH 1053.0'

Az 053° Dip -57°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
201.8	265.2	DIABASE DYKE					
		Dark green, soft, extremely broken and blocky, barren, fine-grained					
		and fractured // to C.A.					
		From 254.0-265.2' a series of pink, hard, felsic dykes.					
		Extremely blocky.					
265.2	396.0	GABBROIC DYKE					
		Dark green, medium-grained, massive, soft and crossed by minor					
		white calcite veinlets.					
		Minor felsic dykes cut the unit from 287.0-289.7, and from 298.5-					
		315.8' felsic dyke. Extremely broken up core. Again a major felsic					
		dyke from 322.0-333.8'. Surrounding rock is sheared and broken.					
		Felsic dyke again from 342.0-364.0. Minor gabbroic rock is mylonized.					
		SHARP OUT CONTACT					
396.0	430.9	FELSIC DYKE					
		Pink, hard, blocky and fine-grained with interbanded mafic dyke rock					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP — D.D.H. No. GL-90-18 — PAGE 3/

LATITUDE ~~Line 0+70E~~ — BEARING OF HOLE 045° — STARTED

DEPARTURE St. 2+77S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 705' Az 053° Dip -57° — DEPTH 1053.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		and some minor metasediments.					
430.9	442.4	MAFIC METASEDIMENT					
		Green, soft, fine-grained, bedded at 52° to C.A. Traces of pyrite.					
		SHARP INTRUSIVE OUT CONTACT					
442.4	483.8	DIABASE DYKE					
		Dark green, soft, slightly blocky, fine-grained and barren.					
483.8	541.5	MAFIC METASEDIMENT					
		Green, fine-grained, soft and finely bedded.					
		From 484.9-492.9 a fine-grained pink felsic dyke (sill? conformable).					
		May represent a felsic metasediment which is intercalated with the					
		mafic metasediment (chert).					
		Another felsic bed runs from 515.9-525.9'. Chert contains traces of					
		pyrite in blebs plus more specks of chalcopyrite. Cherty beds run					
		until 541.5'.					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP — D.D.H. No. GL-90-18 — PAGE 4/

LATITUDE Line 0+70E — BEARING OF HOLE 045° — STARTED

DEPARTURE St. 2+77S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 705' Az 053° Dip -57° — DEPTH 1053.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
541.5	614.0	FELSIC METASEDIMENT					
		Grey, hard, fine-grained and finely bedded. Very siliceous and					
		sugary texture. 25% Interbeds of mafic (chloritic) metasediments.					
		Has traces of pyrite.					
		SHARP CONFORMABLE OUT CONTACT					
614.0	697.0	MAFIC METASEDIMENT					
		Green, massive, soft, fine-grained. Chloritic and finely bedded at					
		48° to C.A. Contains traces of pyrite and 10% more siliceous beds.					
		By 666.0 pyrite content rises to 1-2%.disseminated throughout the matrix.					
		SHARP INTRUSIVE OUT CONTACT					
697.0	704.4	FELSIC DYKE					
		Pink, hard, massive, medium-grained and barren.					
704.4	872.6	MAFIC METASEDIMENT					
		Dark green, massive, chloritic, fine-grained and soft. Only contains					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP — D.D.H. No. GL-90-18 — PAGE 5/

LATITUDE Line 0+70E — BEARING OF HOLE 045° — STARTED

DEPARTURE St. 2+77S — DIP OF HOLE -55° — COMPLETED

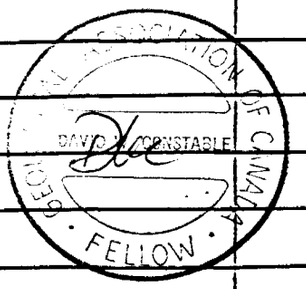
ELEVATION — DIP TESTS Tropari at 705' — DEPTH 1053.0'

Az 053° Dip -57°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		traces of pyrite. Also patches of slightly pink, hard, siliceous					
		interbeds which are conformable with shadowy, transitional contents.					
		The pyrite content varies up to 2% disseminated within the unit e.g.					
		at 775.0'. Minor flecks of chalcopyrite were noted e.g. at 785.1', but					
		these are exceptions to the trace content of pyrite.					
		CONFORMABLE OUT CONTACT					
872.6	925.4	FELSIC DYKE					
		Slightly pink, hard, massive, feldspar-rich rock which has slight					
		bedding and is barren.					
		SHARP OUT CONTACT					
925.4	1043.0	DIABASE DYKE					
		Dark green, fine-grained, slightly blocky and barren.					
1043.0	1053.0	FELSIC DYKE					
		Pink, hard, felsic dyke. Barren.					



END OF HOLE GL-90-18 IS AT 1053.0 FEET

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

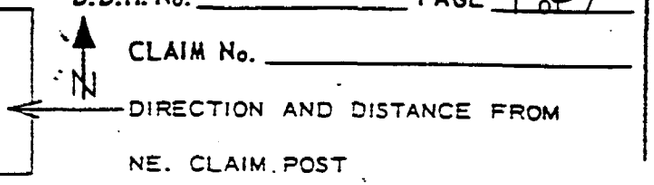
PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP

D.D.H. No. GL-90-19 PAGE 1 of 7

LATITUDE Line 0+50E — BEARING OF HOLE 045° — STARTED Dec. 15-90

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED Dec. 20-90

ELEVATION ____ — DIP TESTS ____ — DEPTH 1350.0'



CLAIM No. ____

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	13.7	OVERBURDEN					
13.7	274.2	MAFIC METASEDIMENT					
		Green, extremely blocky, soft with fine-bedding at 63° to C.A.					
		Fine-grained and barren.					
		From 31.5-45.0', 47.1-47.7', 48.4-49.4' and 62.6-63.8' and					
		68.1-82.2 are all hard, pink felsic dykes with 2% muscovite and					
		SHARP INTRUSIVE IN AND OUT CONTACTS.					
		From 98.5-101.2' and 122.1-138.5' are hard, pink, felsic dykes.					
		Barren. There are several 1"-10" wide quartz and/or quartz-feldspar					
		felsic dykes in the rock. Mafic-Metasediment is finely fractured					
		with minor epidote along the fractures.					
		From 182.0-183.8 an apple-green epidote patch with 1% disseminated pyrite.					
		From 192.0-206.4' a hard, pink, felsic dyke. Barren. Assimilated					
		transitional IN Contact and a Sharp. Out Contact.					
		After this dyke the mafic metasediment is slightly coarser grained					
		with chloritic bands // to the bedding at 61% to C.A.					

DIAMOND DRILL RECORD

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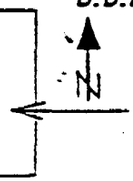
PROPERTY ~~GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP~~

D.D.H. No. GL-90-19 PAGE 2/7

LATITUDE Line 0+50E BEARING OF HOLE 045° STARTED

DEPARTURE Station 3+25S DIP OF HOLE -55° COMPLETED

ELEVATION DIP TESTS DEPTH 1350.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 246.8-249.0', 251.9-254.0' and 263.2-274.2' are hard, pink felsic dykes with sharp IN AND OUT CONTACTS.					
274.2	341.0	DIABASE DYKE Green, soft, homogeneous, fine-grained and barren. Blocky at 284.0' and from 285.0-287.5' and at 300.0' and 305.0'.					
341.0	394.0	GABBROIC DYKE Green, soft, extremely blocky at the start for 3.0'. Barren and fine-grained. From 343.1-360.8' series of pink, hard, irregularly-shaped, felsic dykes with Sharp Intrusive In and Out Contacts. This is followed by a medium-grained soft, mafic metasediment phase that has a gabbroic texture and sharp Intrusive Out Contact at 394.0. After 394.0' fine-grained Diabase Dyke.					

DIAMOND DRILL RECORD

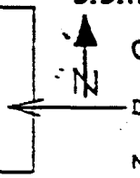
LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP — D.D.H. No. GL-90-19 — PAGE 3 7

LATITUDE Line 0+50E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 3+25S — DIP OF HOLE - 55° — COMPLETED

ELEVATION — DIP TESTS — DEPTH 1350.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
394.0	427.1	DIABASE DYKE					
		Dark green, fine-grained, soft, massive, homogeneous and barren dyke rods. Sharp Out Contact					
427.1	435.6	GABBROIC DYKE					
		Dark green, soft, medium-grained and massive. This sequence appears to be two-phase of mafic dyke, a diabase with gabbroic sub-phases with distinct contacts.					
		FAULTED SHARP OUT CONTACT					
435.6	458.5	FELSIC DYKE					
		Pink, hard, massive, mica-rich and barren with Sharp Intrusive IN and Out Contacts.					
458.5	472.9	DIABASE DYKE					
		Green, coarser than before. A hybrid rock between diabase and gabbro.					
		SHARP INTRUSIVE OUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP

D.D.H. No. GL-90-19 PAGE 4 7

LATITUDE Line 0+50E BEARING OF HOLE 045° STARTED

DEPARTURE Station 3+25S DIP OF HOLE -55° COMPLETED

ELEVATION DIP TESTS DEPTH 1350.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
472.9	482.5	FELSIC DYKE					
		Pink, hard, micaceous and barren.					
		SHARP INTRUSIVE OUT CONTACT					
482.5	505.8	GABBROIC DYKE					
		Dark green, medium-grained, soft massive. Rock contains 1%					
		disseminated pyrite +- pyrrhotite and traces of chalcopyrite. The rock					
		gradually becomes finer-grained and develops a gneissic texture.					
		SHARP INTRUSIVE OUT CONTACT					
505.8	511.2	FELSIC METASEDIMENT					
		Grey-white faulty bedded at 55° to C.A., hard, fine-grained and					
		sugary. Barren.					
		TRANSITIONAL OUT CONTACT					
511.2	594.5	MAFIC METASEDIMENT					
		Green, soft, fine-grained, slightly blocky with micaceous minor quartz-					

DIAMOND DRILL RECORD

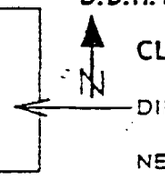
LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP — D.D.H. No. GL-90-19 — PAGE 3 OF 7

LATITUDE Line 0+50E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS — DEPTH 1350.0'



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		feldspar dykes and bands e.g. from 340.1-343.0'.					
		From 343.0-345.0' a fault gouge zone.					
		The mafic metasediment unit has numerous textural changes and even					
		gabbroic textures. Barren to trace pyrite 576.9.					
		From 576.9-594.5 grey felsic metasediment bed.					
		SHARP FAULTED OUT CONTACT					
594.5	630.4	DIABASE DYKE					
		Green, soft, massive, slightly coarser than fine-grained. Barren.					
		SHARP CHILLED OUT CONTACT					
630.4	744.4	FELSIC METASEDIMENT					
		Grey, hard, fine-grained, massive, fractured at a micro scale and well					
		bedded at 54° to C.A. Contains only traces of pyrite. By 664.8'					
		gradually becomes more mafic and slightly green. Whole sequence for					
		over 100 feet is felsic metasediments with minor beds (10%) mafic					
		metasediments. SHARP CONFORMABLEOUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - HESSS TOWNSHIP — D.D.H. No. GL-90-19 — PAGE 6 of

LATITUDE Line 0+50E — BEARING OF HOLE 045° — STARTED — CLAIM No.

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED — DIRECTION AND DISTANCE FROM

ELEVATION — DIP TESTS — DEPTH 1350.0' — NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
744.4	1286.0	MAFIC METASEDIMENT					
		Green, massive, fine-grained and finely bedded at 48° to C.A. Contains					
		traces of pyrite and calcite fractures (irregular).					
		From 812.1-825.0' hard pink felsice dyke. Barren.					
		From 853.1-869.6 and from 874.2-889.0 Pink Felsic Dyke.					
		This is followed by a faulted zone for 2 feet in Gabbroic Dyke. The					
		Dyke ends at 897.0 feet.					
		From 897.0-934.0' hard pink felsic dyke. Barren. Sharp Intrusive IN					
		and OUT Contacts.					
		From 934.0-938.9 feet Gabbroic Dyke.					
		From 938.9-941.1 feet pink felsic dyke.					
		From 941.1-953.7 feet Gabbroic Dyke.					
		From 953.7- onwards Mafic Metasediment with bedding at 46° to C.A.					
		Minor pink felsic dykes occur from 969.9-774.9.					
		The mafic metasediment continues through 1000' and contains only					
		minor pink felsic dykes from 1048.0-1048.7' and 1050.1-1078.0 feet.					
		This latter unit is a slightly coarser-grained conformable interbed of					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORPORATION - Hess Township

D.D.H. No. GL-90-19 PAGE 7 of 7

LATITUDE Line 0+50E BEARING OF HOLE 045° STARTED

DEPARTURE Station 3+25S DIP OF HOLE -55° COMPLETED

ELEVATION DIP TESTS DEPTH 1350.0'

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		the mafic metasediment.					
		By 1117.0' the rock becomes slightly more felsic but still intercalated					
		with mafic metasediments.					
		Minor white felsic dykes occur from 1176.5-1176.8 and 1196.3-1198.8 and					
		again from 1123.4-1127.5.					
		At 1127.5-1128.0' a low angled fault zone and a distinct change into					
		grey sericite schist with 1% less pyrite. There are flecke of chalco-					
		pyrite at 1257.7 and pyrrhotite at 1287.0. At 1240.3' is a splash of					
		semi-massive chalco-pyrite-pyrrhotite. Fault zone over 1 foot at					
		1286.0'.					
		By 1286.0' onward we are in the felsic metasediment.					
1286.0	1350.0	FELSIC METASEDIMENT					
		Grey, hard, massive very quartzose and sugary. Rock contains 1%					
		pyrite-pyrrhotite. Also about 5% mafic beds as wisps and patches.					
		Bedding is very irregular.					
		END OF HOLE GL-90-19 IS AT 1350.0 FEET					

GEOLOGICAL ASSOCIATION OF CANADA DAVID W. CONSTABLE FELLOW

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

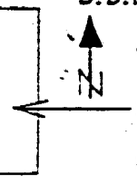
D.D.H. No. GL-90-20 PAGE 1/6

LATITUDE Line 1+00E BEARING OF HOLE 045° STARTED Dec. 10-90

DEPARTURE Station 3+25S DIP OF HOLE -55° COMPLETED Dec. 15-90

ELEVATION _____ DIP TESTS Tropari at 270' DEPTH 1305.0'

Az 051° Dip -52°



CLAIM No. _____

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	16.0	OVERBURDEN					
16.0	263.2	MAFIC METASEDIMENT					
		Green, soft, slightly blocky, fine-grained, and finely-bedded at					
		38° to C.A. Contains traces of pyrite and felsic dykes e.g. from					
		27.9 to 34.1'.					
		From 133.8-151.8 is a series of pink felsic dykes with numerous					
		fault zones and breccia zones. Bedding is distorted to 194.0'. At					
		186.5' a 10" wide fault gouge zone exists.					
		From 219.8-245.0' rock is very, very blocky. Distorted or obscured					
		bedding. Again from 249.0-263.2' extremely broken and blocky core.					
		SHARP INTRUSIVE OUT CONTACT					
263.2	275.3	DIABASE DYKE					
		Green, fine-grained, soft, slightly blocky and barren.					
		SHEARED SHARP OUT CONTACT					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-20 — PAGE 2/6

LATITUDE Line 2+00E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 270' — DEPTH 1305.0'

Az 051° Dip -52°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
275.3	295.5	FELSIC DYKE					
		Pink, hard, blocky muscovite-rich rock. Fine-grained and barren.					
		CHILLED SHARP OUT CONTACT					
295.5	332.0	MAFIC METASEDIMENT					
		Green, biotitic and chloritic with slightly coarser-grained texture.					
		Fine-grained and finely bedded at 53° to C.A. Traces of pyrite.					
		From 322.0-326.2' pink felsic dyke.					
		SHARP QUARTZ-VEINED OUT CONTACT					
332.0	358.5	DIABASE DYKE					
		Green, fine-grained with a 1% pyrite content as euhedral pyrite					
		crystals.					
		SHARP INTRUSIVE OUT CONTACT					
358.5	521.0	GABBROIC DYKE					
		Dark green, medium-grained, massive soft rock with minor, irregular					

DIAMOND DRILL RECORD

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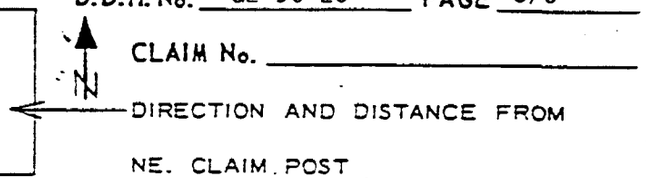
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-20 — PAGE 3/6

LATITUDE Line 1+00E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 270' — DEPTH 1305.0'

Az 051° Dip -52°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		epidote-or calcite-lined-veinlets. Contains 1-2% pyrite and minor					
		chalcopyrite as disseminates.					
		At 450.4' a few rounded fragments of brick-red jasper. Rock is slightly					
		finer-grained from here to end of unit.					
		From 452.0-455.9' a series of brick-red felsic intrusives.					
		SHARP OUT CONTACT					
521.0	561.0	FELSIC DYKE					
		Pink, hard, medium-grained and massive with ½"-wide muscovite books					
		throughout (5-8%).					
		SHARP OUT CONTACT					
561.0	684.6	MAFIC METASEDIMENT					
		Green, soft, fine-grained, more massive and finely bedded at 47° to					
		C.A. Traces of pyrite throughout.					
		From 624.1 to 674.0' rock contains 30% pink, hard, felsic dykes,					
		usually less than 3 feet wide. SHARP CONFORMABLE OUT CONTACT					

DIAMOND DRILL RECORD

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PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-20 — PAGE 4/6

LATITUDE Line 1+00E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 270' — DEPTH 1305.0'

Az 051° Dip -52°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
684.6	777.0	FELSIC METASEDIMENT					
		White to tan, hard, quartzose fine-grained and contains only traces					
		of pyrite. Interbeds of mafic comprise (5-8%).					
		At 734.0' is a 6" wide sand zone. Rock is finely bedded to 43° to C.A.					
		BROKEN, BLOCKY OUT CONTACT					
777.0	918.5	MAFIC METASEDIMENT					
		Green, soft, massive, fine-grained and interbedded with felsic beds					
		(3%). Rock contains trace to 1% disseminated pyrite.					
		At 879.8' onwards the unit is slightly coarser-grained to 909.7' then					
		back to finer-grained variety.					
		SHARP INTRUSIVE OUT CONTACT					
918.5	935.7	FELSIC DYKE					
		Pink, hard, extremely blocky and barren.					
		SHARP INTRUSIVE OUT CONTACT					

DIAMOND DRILL RECORD

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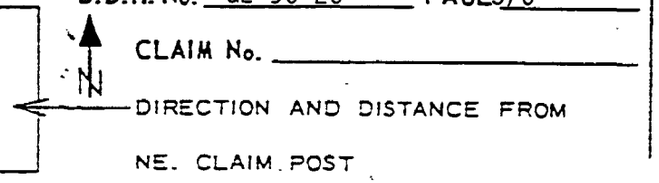
PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP — D.D.H. No. GL-90-20 — PAGE 5/6

LATITUDE Line 1+00E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 3+25S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 270' — DEPTH 1305.0'

Az 051° Dip -52°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
935.7	1182.1	MAFIC METASEDIMENT					
		Green, fine-grained, soft, massive and finely-bedded at 44° to C.A.					
		Traces of pyrite.					
		At 986.3' unit becomes feldspar-rich and medium-grained until 995.0'					
		The feldspar units are intermittent until 1024.0 to 1059.8', where					
		it is 100% of the rock. This is followed by a fine-grained variety,					
		chloritic and finely-bedded at 42° to C.A. Traces of pyrite.					
		Pyrite content picks up by 1153.0' with a fleck of chalcopyrite. Then					
		at 1155.0' rock becomes more siliceous and contains 1-2% coarse					
		sphalerite. Simultaneously the rock turns to sericite-rich variety					
		with 1-3% disseminated pyrite. Sphalerite zone is less than 1-foot wide.					
		Sericite zone continues to end of unit.					
		SHARP INTRUSIVE OUT CONTACT					
1182.1	1261.5	DIABASE DYKE					
		Green, soft, massive and fine-grained; gets blocky around 1210.0 to					
		1220.0'. Homogeneous and barren. SHEARED SHARP OUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE

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PROPERTY GENEVA LAKE MINERALS CORPORATION - HESS TOWNSHIP

D.D.H. No. GL-90-20 PAGE 6/6

LATITUDE LINE 1+00E BEARING OF HOLE 045° STARTED

DEPARTURE STATION 3+25S DIP OF HOLE -55° COMPLETED

ELEVATION DIP TESTS Tropari at 270' DEPTH 1305.0'

Az 051° Dip -52°

CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
1261.5	1283.0	MAFIC METASEDIMENT					
		Grey, distorted and low-angled bedding and fine-grained. Traces of					
		pyrite.					
		SHARP INTRUSIVE OUT CONTACT					
1283.0	1305.0	DIABASE DYKE					
		Dark green, fine-grained, homogeneous, massive and soft. Barren.					
		END OF HOLE GL-90-20 IS AT 1305.0 FEET					

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DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-21 — PAGE 1/4

LATITUDE Line 1+10E — BEARING OF HOLE 045° — STARTED Dec. 28-90 — CLAIM No.

DEPARTURE Station 2+77S — DIP OF HOLE -55° — COMPLETED ~~Dec. 31-90~~ — DIRECTION AND DISTANCE FROM

ELEVATION — DIP TESTS Tropari at 505' — DEPTH 918.0' — NE. CLAIM POST

Az. 049° Dip -54° / at 950' Az 052° Dip -54°

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	7.3	OVERBURDEN					
7.3	350.0	MAFIC METASEDIMENT					
		Dark green, soft, chloritic, fine-grained and massive with slightly					
		blocky sections. Finely bedded at 47° to C.A. and contains 1%					
		disseminated pyrite.					
		From 53.0-55.6' and from 65.9-80.9' and from 90.8-103.8' are all					
		hard pink felsic dykes with sharp Intrusive IN and OUT Contacts.					
		Barren rock units with minor muscovite.					
		Again from 136.5-140.8' is a pink hard felsic dyke.					
		Fault gouge at 168.7 and 169.8 and at 171.9' All zones are less					
		than a foot. By 180.0' rock becomes blocky until 202.0'.					
		From 180.8-197.0' and from 201.3-212.1' hard pink felsic dyke					
		with lots of faulting and blocky ground.					
		From 219.9-222.2 hard pink felsic dyke. After this mafic metasediment					
		is micro fractured with epidote linings and traces of pyrite.					
		By 280.0' mafic metasediment is slightly coarser-grained and mylonized.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-21 — PAGE 2 /4

LATITUDE Line 1+10E — BEARING OF HOLE 045° — STARTED — CLAIM No.

DEPARTURE Station 2+77S — DIP OF HOLE -55° — COMPLETED — DIRECTION AND DISTANCE FROM

ELEVATION — DIP TESTS Tropari 505' — DEPTH 918.0' — NE. CLAIM POST

Az 049° Dip -54°// at 950' Az 052° Dip -54°

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		From 324.0-350.0' hard, pink, felsic dykes.					
350.0	425.2	GABBROIC DYKE					
		Dark green, soft, massive, dense, medium-grained rock with traces of pyrite +- chalcopyrite.					
		From 362.7-365.7' and from 370.7-375.0' hard, pink, felsic dykes.					
		By 400.0' rock becomes finer-grained.					
		SHARP OUT CONTACT					
425.2	436.2	DIABASE DYKE					
		Dark green, fine-grained, soft, massive and barren.					
		SHARP OUT CONTACT					
436.2	473.2	FELSIC DYKE					
		Pink, hard, medium-grained, muscovite-rich and massive.					
		SHARP INTRUSIVE OUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-21 — PAGE 3/4

LATITUDE Line 1+10E — BEARING OF HOLE 045° — STARTED — CLAIM No.

DEPARTURE Station 2+77S — DIP OF HOLE -55° — COMPLETED — DIRECTION AND DISTANCE FROM

ELEVATION — DIP TESTS Tropari 505' — DEPTH 918.0' — NE. CLAIM POST

Az 049° Dip -54°/ at 950' Az 052° Dip - 54°

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
473.2	497.5	MAFIC METASEDIMENT					
		Dark green, fine-grained, soft, massive, finely-bedded at 48° to					
		C.A. Contains siliceous beds (40%).					
		SHARP OUT CONTACT					
497.5	565.0	DIABASE DYKE					
		Dark green, fine-grained, epidotized and massive. Barren.					
565.0	618.3	FELSIC DYKE					
		Hard, pink, felsic dyke with minor green diabase dyke wisps.					
618.3	641.0	MAFIC METASEDIMENT					
		Green, soft, extremely blocky and cut by numerous felsic dyke					
		and felsic metasediment beds (35%).					
		From 637.3-641.0' hard, blocky, pink felsic dyke.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

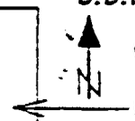
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-21 — PAGE 4/4

LATITUDE Line 1+10E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 2+77S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari 505' — DEPTH 918.0'

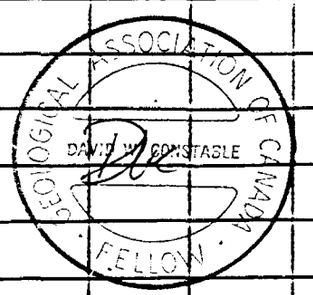
Az.049° Dip -54°/ at 950' Az 052° Dip -54°



CLAIM No.

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
641.0	655.0	FELSIC METASEDIMENT					
		Grey, hard, fine-grained, slightly blocky with 1% pyrite.					
		Interbeds of mafic metasediment (45%).					
655.0	905.0	MAFIC METASEDIMENT					
		Green, soft, more massive with fine bedding at 48° to C.A. Traces					
		of pyrite and minor felsic metasedimentary interbeds (15%).					
		The mafic metasediment continues through 800 feet with some coarser					
		grained felsic beds and slightly coarser mafic phases and by 800'					
		pyrite becomes slightly more frequent at 1%.					
		From 846.2-856.1 slightly coarser-grained felsic horizon and again					
		from 860.3-872.0'. Rock has 1% pyrite-pyrrhotite as disseminates					
		and along fractures.					
		SHARP CONFORMABLE OUT CONTACT					
905.0	918.0	DIABASE DYKE					
		Dark green, massive, soft and homogeneous. Barren.					
		END OF HOLE GL-90-21 IS AT 918.0 FEET					



DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

D.D.H. No. GL-90-22 PAGE 1/5

LATITUDE Line 0+22E BEARING OF HOLE 045° STARTED Dec. 15-90

DEPARTURE Station 2+80S DIP OF HOLE -65° COMPLETED Dec. 20-90

ELEVATION _____ DIP TESTS Tropari at 958' DEPTH 1025.0'

Az 044° Dip -60°

CLAIM No. S.6604 & S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
0.0	4.5	OVERBURDEN					
4.5	138.5	MAFIC METASEDIMENT					
		Dark green, blocky, soft, fine-grained and finely bedded at 78° to C.A.					
		Traces of pyrite in matrix chloritic rock. Contains lots of hard, pink					
		felsic dykes, e.g. from 25.0-26.2', 33.8-37.2' and 76.8-79.1'.					
		Sharp IN and OUT Contacts. Also 81.5-83.0' and 124.8-127.1' hard,					
		felsic dykes.					
		From 125.0-138.5' extremely blocky zone with faults // to C.A.					
138.5	206.9	DIABASE DYKE					
		Dark green, soft and fractured. Some more medium-grained phases					
		(Gabbroic). Traces of pyrite.					
		SHARP INTRUSIVE OUT CONTACT					
206.9	233.5	FELSIC METASEDIMENT					
		Grey, hard, blocky, fine-grained and poorly-bedded. Interbedded with					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-22 — PAGE 2/5

LATITUDE Line 0+22E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 2+80S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 958' — DEPTH 1025.0'

Az 044° Dip -60°

CLAIM No. S.6604 & S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		mafic beds and patches. Some bedding nearly // to C.A. (15°).					
		SHARP CONFORMABLE OUT CONTACTS					
233.5	351.1	DIABASE DYKE					
		Dark green, soft, fine-grained and barren.					
		From 260.1-262.7' hard, pink, felsic dykes.					
		SHARP INTRUSIVE IN AND OUT CONTACTS					
		At 240.8' a 6" wide fault gouge zone.					
		From 347.0-351.1' hard pink felsic dyke with Sharp Intrusive IN					
		and OUT Contacts.					
351.1	375.0	MAFIC METASEDIMENT					
		Green, fine-grained, poorly bedded and soft.					
		SHARP OUT CONTACT					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP

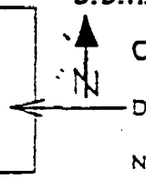
D.D.H. No. GL-90-22 PAGE 3/5

LATITUDE Line 0+22E BEARING OF HOLE 045° STARTED

DEPARTURE Station 2+80S DIP OF HOLE -55° COMPLETED

ELEVATION DIP TESTS Tropari at 958' DEPTH 1025.0'

Az 044° Dip -60°



CLAIM No. S.6604 & S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
375.0	417.0	DIABASE DYKE					
		Dark green, fractured, fine-grained, epidotized and barren.					
		SHARP BLOCKY OUT CONTACT					
417.0	437.7	MAFIC METASEDIMENT					
		Green, soft, massive, fine-grained and poorly bedded at 48° to C.A.					
		Contains 10% grey felsic metasediments.					
437.7	455.8	DIABASE DYKE					
		Dark green, soft, massive, fine-grained and barren. Stoped IN and OUT					
		Contacts.					
455.8	463.5	FELSIC METASEDIMENT					
		Grey, hard, blocky, fine-grained and finely-bedded at 49° to C.A.					
		Traces of pyrite.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

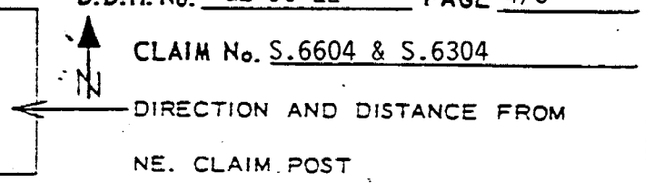
PROPERTY GENEVA LAKE MINERALS CORP. - HESS TOWNSHIP — D.D.H. No. GL-90-22 — PAGE 4/5

LATITUDE Line 0+22E — BEARING OF HOLE 045° — STARTED

DEPARTURE Station 2+80S — DIP OF HOLE -55° — COMPLETED

ELEVATION — DIP TESTS Tropari at 958' — DEPTH 1025.0'

Az 044° Dip -60°



CLAIM No. S.6604 & S.6304

DIRECTION AND DISTANCE FROM NE. CLAIM POST

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
463.5	465.4	DIABASE DYKE					
		Dark green, sharp intrusive IN and OUT Contacts.					
465.4	498.0	FELSIC METASEDIMENT					
		Grey, hard, blocky, fine-grained rock with 15% mafic metasediment					
		interbedded.					
498.0	1025.0	MAFIC METASEDIMENT					
		Green, soft, fine-grained and finely-bedded at 41° to C.A.					
		By 539.0-540.2' fault gouge - very blocky.					
		By 582.0' thin bands of massive pyrite throughout rock (1%).					
		From 613.5-638.8' hard, pink, felsic dyke.					
		At 656.0' a 6" wide fault gouge. Rock is bery mafic and green					
		but at 693.5' a conformable, slightly pink, coarser-grained					
		metasediment appears.					
		From 704.0-719.0' hard, massive, pink, felsid dyke.					
		Mafic Metasediment still has 1% disseminated pyrite or less throughout.					

DIAMOND DRILL RECORD

LOGGED BY D. CONSTABLE — CONSTABLE CONSULTING INC.

PROPERTY GENEVA LAKE MINERALS CORP - HESS TOWNSHIP

D.D.H. No. GL-90-22 PAGE 5/5

LATITUDE Line 0+22E BEARING OF HOLE 045° STARTED

CLAIM No. S.6604 & S.6304

DEPARTURE Station 2+80S DIP OF HOLE -65° COMPLETED

DIRECTION AND DISTANCE FROM NE. CLAIM POST

ELEVATION DIP TESTS Tropari at 958' DEPTH 1025.0'

Az 044° Dip -60°

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE No.	FOOTAGE FROM	FOOTAGE TO	SAMPLE LENGTH	ASSAY
		Bedding is at 46° to C.A.					
		From 789.6-792.6' hard, pink, felsic dyke with Sharp Intrusive IN and OUT Contacts.					
		Pyritic content of 1% in areas from 792.6 to 805.0'.					
		At 925.0' we hit small zone of sphalerite-galena-chalcopyrite to 928.5' and by 934.5 we are into sericite schist alteration with 1-2% pyrite.					
		Best of zone ends at 1005.0'.					
		END OF HOLE GL-90-22 IS AT 1025.0 FEET					

GEOLOGICAL ASSOCIATION OF CANADA
DAVID H. CONSTABLE
FELLOW

CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client	: **CONSTABLE**	Hole	: **GL-90-12**
Grid	: **GENEVA-LK**	Tx Loop	: **C**
Time Base	: 16.66 ms	Date	: Nov 26, 1990
Ramp Time	: 1.50 ms	File	: HGL12C.PEM
Sync Type	: Cable	Coil Area	: 4000 sq m
# Channels	: 10	Polarity	: +
# Readings	: 33	Stn Units	: Imperial
Loop Size	: 200m X 200m	Receiver	: Digital #102
Current	: 10 Amps	Operator	: JIM MACNEIL

Loop Coordinates (X,Y,Z)

1. -100m, -150m, 0m
2. 100m, -150m, 0m
3. 100m, -350m, 0m
4. -100m, -350m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. 75m, -325m, 0m
2. 45deg, 60deg, 330m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	131	104	2	131	225	178
3	225	378	302	4	378	639	508	5	639	1075	857
6	1075	1809	1442	7	1809	3046	2428	8	3046	5121	4084
9	5121	8617	6869	10	8617	14490	11554				

Comments

<GEN> DUMMY STICKING, TRIED THREE TIMES, LOST ONE ON BOTTOM

CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client : CONSTABLE
Grid : GENEVA-LK
Time Base : 16.66 ms
Ramp Time : 1.50 ms

Hole : GL-90-12
Tx Loop : C
Date : Nov 26, 1990
File : HGL12C.PEM

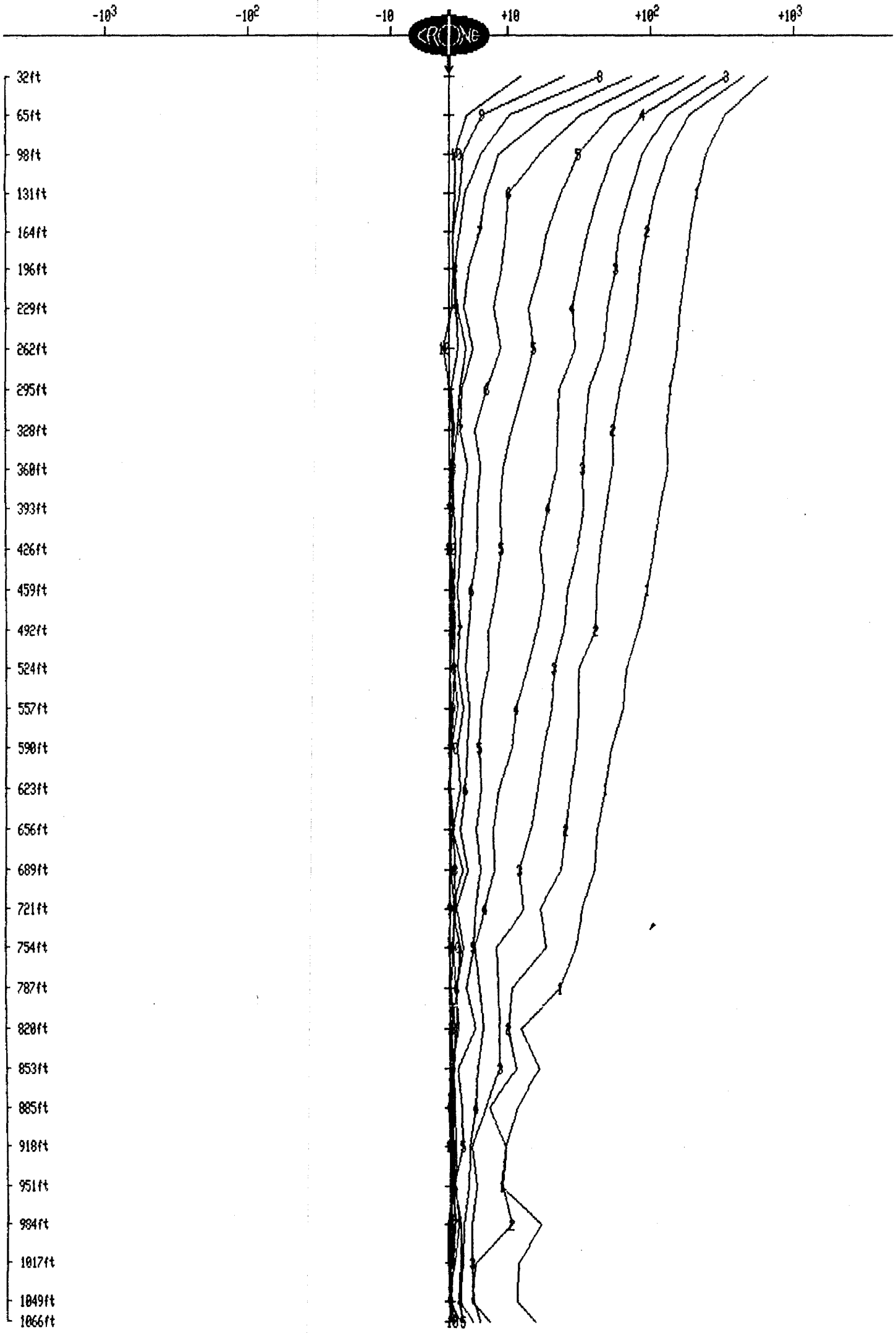
Station	Cmp	Gains	ZTS	Delay	Stack	Ovld	Rdg#	PP	1	2	3	4	5	6	7	8	9	10
32ft	Z	7 A7	1512.0	90	512	PP	145	78880	670	452	339	244	171	115	74	45	25	12
65ft	Z	7 A7	1512.0	90	512	PP	146	57630	334	188	132	88	54	32	19	10	6	3
98ft	Z	7 A7	1512.0	90	512	PP	147	47640	248	135	89	55	32	17	8	5	2	1
131ft	Z	7 A7	1512.0	90	512	PP	148	41690	215	109	73	44	24	10	6	3	2	1
164ft	Z	7 A7	1512.0	90	512	PP	149	37460	192	96	61	37	19	10	5	2	1	1
196ft	Z	7 A7	1512.0	90	512	PP	150	34020	179	86	58	32	17	9	4	1	1	1
229ft	Z	7 A7	1512.0	90	512	PP	151	31200	164	81	51	28	14	8	3	1	1	1
262ft	Z	7 A7	1512.0	90	512	PP	152	28530	155	72	48	30	15	9	4	3	2	-1
295ft	Z	7 A7	1512.0	90	512	PP	153	26180	138	62	38	23	13	7	2	2	0	0
328ft	Z	7 A7	1512.0	90	512	PP	154	24190	131	55	35	22	11	5	2	1	1	1
360ft	Z	7 A7	1512.0	90	512	PP	155	22330	132	54	34	22	9	5	3	1	0	1
393ft	Z	7 A7	1512.0	90	512	PP	156	20530	117	49	34	19	9	5	2	1	0	1
426ft	Z	7 A7	1512.0	90	512	PP	157	18850	106	45	31	17	9	5	2	1	0	0
459ft	Z	7 A7	1512.0	90	512	PP	158	17290	94	42	26	18	8	4	1	1	0	1
492ft	Z	7 A7	1512.0	90	512	PP	159	15790	81	41	25	16	7	3	2	1	0	1
[illegible]	Z	4 A7	1512.0	90	1024	PP	160	14410	68	31	21	14	7	3	1	1	1	0
[illegible]	Z	7 A7	1512.0	90	512	PP	161	13120	64	31	21	12	5	3	2	1	1	0
590ft	Z	4 A7	1512.0	90	1024	PP	162	11770	54	30	18	11	5	3	1	0	0	0
623ft	Z	7 A7	1512.0	90	512	PP	163	10790	48	28	16	8	6	3	2	0	0	0
656ft	Z	4 A7	1512.0	90	1024	PP	164	9795	43	25	15	8	5	2	1	1	1	0
689ft	Z	7 A7	1512.0	90	512	PP	165	8846	41	23	12	8	5	3	2	1	0	0
721ft	Z	4 A7	1512.0	90	1024	PP	166	8023	33	17	13	6	5	1	1	1	0	1
754ft	Z	5 A7	1512.0	90	512	PP	167	7263	30	19	8	4	4	2	2	1	0	1
787ft	Z	5 A7	1512.0	90	1024	PP	168	6564	23	11	8	5	3	1	1	1	0	0
820ft	Z	5 A7	1512.0	90	512	PP	169	5924	12	10	9	6	5	1	0	2	1	1
853ft	Z	5 A7	1512.0	90	512	PP	170	5372	17	11	9	5	1	1	1	0	1	0
885ft	Z	5 A7	1512.0	90	1024	PP	171	4872	12	7	6	5	2	1	1	0	0	1
918ft	Z	5 A7	1512.0	90	2048	PP	172	4416	10	10	4	4	2	1	1	0	1	0
951ft	Z	5 A7	1512.0	90	1024	PP	173	4023	9	9	5	3	1	1	0	1	1	0
984ft	Z	6 A7	1512.0	90	1024	PP	174	3673	17	11	4	2	2	2	1	1	0	0
1017ft	Z	6 A7	1512.0	90	512	PP	175	3353	12	4	4	2	2	1	1	0	0	1
1049ft	Z	6 A7	1512.0	90	512	PP	176	3066	12	4	4	2	2	0	0	0	0	0
1066ft	Z	6 A7	1512.0	90	1024	PP	177	2943	16	7	5	4	2	2	1	1	1	0

CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client	: **CONSTABLE**	Hole	: **GL-90-12**
Grid	: **GENEVA-LK**	Tx Loop	: **C**
Time Base	: 16.66 ms	Date	: Nov 26, 1990
Ramp Time	: 1.50 ms	File	: HGL12C.PEM
Scale	: 1in = 100 ft		

AXIAL COMPONENT dBa/dt nanoTesla/sec - 10 channels



CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client	: **CONSTABLE**	Hole	: **GL-90-14**
Grid	: **GENEVA-LK**	Tx Loop	: **C2**
Time Base	: 16.66 ms	Date	: Dec 12, 1990
Ramp Time	: 0.50 ms	File	: HGL14C2.PEM
Sync Type	: Cable	Coil Area	: 4000 sq m
# Channels	: 10	Polarity	: +
# Readings	: 32	Stn Units	: Imperial
Loop Size	: 200m X 200m	Receiver	: Digital #102
Current	: 10 Amps	Operator	: JIM MACNEIL

Loop Coordinates (X,Y,Z)

1. -100m, -175m, 0m
2. 100m, -175m, 0m
3. 100m, -375m, 0m
4. -100m, -375m, 0m

Hole Coordinates (X,Y,Z) or (Azimuth,Dip,Length)

1. -25m, -325m, 0m
2. 45deg, 60deg, 320m

Channel Times (usec)

Ch	Start	End	Center	Ch	Start	End	Center	Ch	Start	End	Center
PP	-198	-99	-149	1	76	131	104	2	131	225	178
3	225	378	302	4	378	639	508	5	639	1075	857
6	1075	1809	1442	7	1809	3046	2428	8	3046	5121	4084
9	5121	8617	6869	10	8617	14490	11554				

CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client : CONSTABLE
Grid : GENEVA-LK
Time Base : 16.66 ms
Ramp Time : 0.50 ms

Hole : GL-90-14
Tx Loop : C2
Date : Dec 12, 1990
File : HGL14C2.PEM

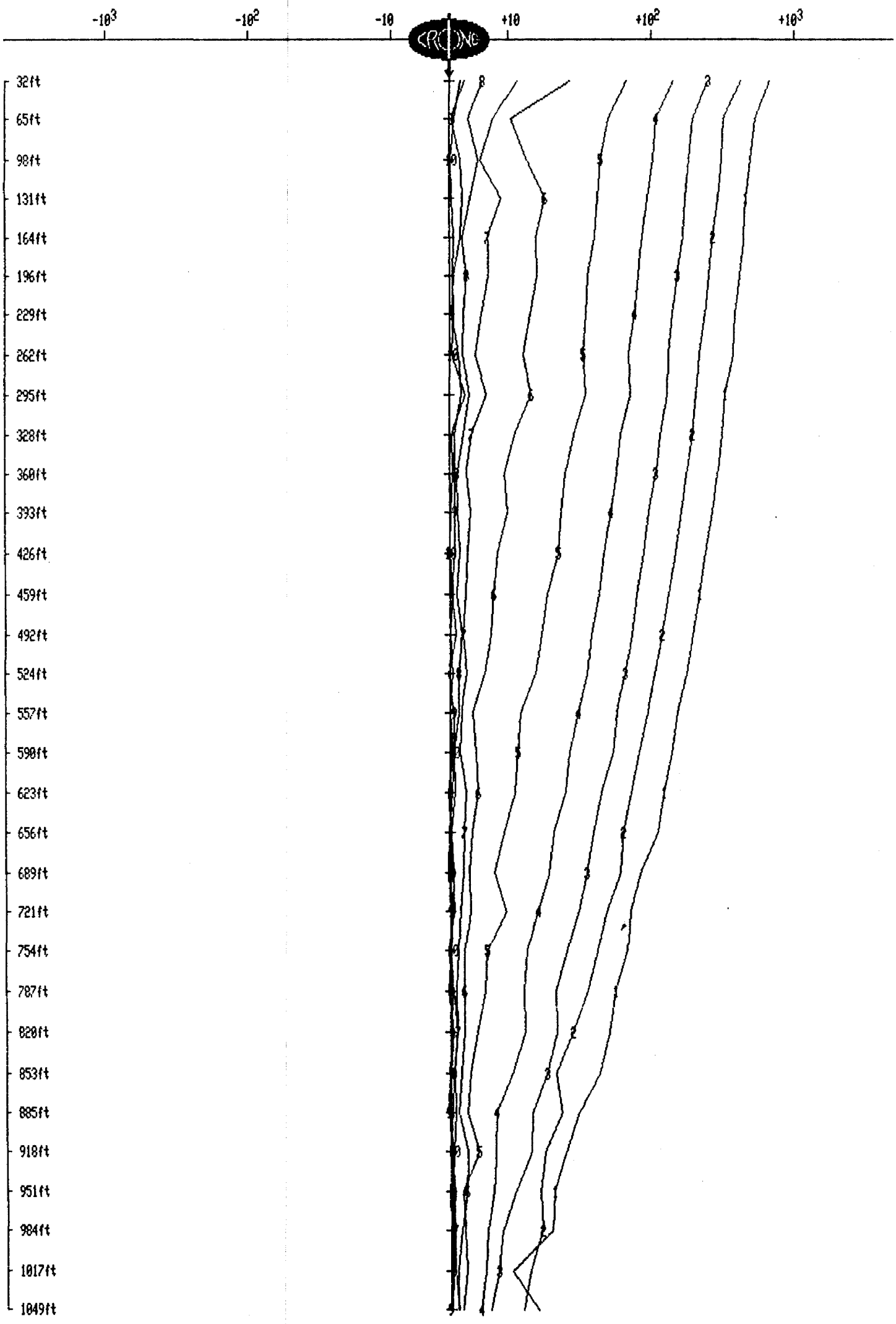
Station	Cmp	Gains	ZTS	Delay	Stack	Ovld	Rdg#	PP	1	2	3	4	5	6	7	8	9	10
32ft	Z	7 A7	513.0	90	512	PP	1	232500	678	427	253	143	67	27	12	6	3	2
65ft	Z	7 A7	513.0	90	512	PP	2	210200	540	322	196	109	51	11	7	3	0	1
98ft	Z	7 A7	513.0	90	512	PP	3	194200	500	312	185	104	44	14	5	5	2	0
131ft	Z	7 A7	513.0	90	512	PP	4	181400	463	294	175	95	43	18	9	4	2	0
164ft	Z	7 A7	513.0	90	512	PP	5	171300	449	272	167	87	41	16	7	2	2	1
196ft	Z	7 A7	513.0	90	512	PP	6	162200	419	254	152	82	36	16	7	3	1	1
229ft	Z	7 A7	513.0	90	512	PP	7	153100	384	239	142	77	35	14	5	2	0	1
262ft	Z	7 A7	513.0	90	512	PP	8	144400	374	218	133	70	33	13	5	2	2	0
295ft	Z	0 A7	513.0	90	1024	PP	9	135300	327	208	130	72	35	14	6	4	2	3
328ft	Z	7 A7	513.0	90	512	PP	10	126100	315	194	116	62	29	11	4	3	1	0
360ft	Z	7 A7	513.0	90	512	PP	11	115900	290	178	108	57	25	9	3	1	1	1
393ft	Z	7 A7	513.0	90	512	PP	12	106400	269	163	96	52	23	10	4	1	1	0
426ft	Z	7 A7	513.0	90	512	PP	13	96890	237	148	89	47	22	8	3	2	1	0
459ft	Z	7 A7	513.0	90	512	PP	14	87550	216	133	80	43	19	8	3	1	0	1
492ft	Z	7 A7	513.0	90	512	PP	15	78690	196	118	73	38	17	7	2	2	1	0
524ft	Z	7 A7	513.0	90	512	PP	16	70440	177	105	65	35	16	6	3	2	0	1
557ft	Z	7 A7	513.0	90	512	PP	17	62940	153	94	57	31	12	4	2	2	1	0
590ft	Z	7 A7	513.0	90	512	PP	18	56130	140	82	54	27	12	5	2	1	1	1
623ft	Z	7 A7	513.0	90	512	PP	19	49930	123	72	45	25	11	5	3	1	0	0
656ft	Z	7 A7	513.0	90	512	PP	20	44410	110	64	39	21	9	4	2	0	0	0
689ft	Z	7 A7	513.0	90	512	PP	21	39550	83	61	35	19	7	3	2	0	0	1
721ft	Z	7 A7	513.0	90	512	PP	22	35230	71	48	31	16	10	4	2	1	0	0
754ft	Z	7 A7	513.0	90	512	PP	23	31370	68	42	25	13	6	2	1	0	0	0
787ft	Z	7 A7	513.0	90	512	PP	24	28050	56	36	22	13	6	2	1	1	0	0
820ft	Z	7 A7	513.0	90	512	PP	25	25100	50	28	22	13	5	2	1	1	1	0
853ft	Z	7 A7	513.0	90	512	PP	26	22370	44	21	18	11	4	2	1	1	0	0
885ft	Z	7 A7	513.0	90	512	PP	27	20230	31	24	15	8	3	1	1	0	0	0
918ft	Z	7 A7	513.0	90	512	PP	28	18280	25	18	14	8	5	3	1	0	0	0
951ft	Z	3 A7	513.0	90	1024	PP	29	16490	21	17	11	7	2	3	0	1	1	0
984ft	Z	4 A7	513.0	90	1024	PP	30	14930	20	17	9	6	2	2	1	0	0	0
1017ft	Z	4 A7	513.0	90	2048	PP	31	13550	11	14	8	6	3	1	1	1	0	0
1049ft	Z	7 A7	513.0	90	512	PP	32	12380	16	13	7	5	2	1	1	0	0	0

CRONE GEOPHYSICS & EXPLORATION LTD

BOREHOLE PEM

Client	: **CONSTABLE**	Hole	: **GL-90-14**
Grid	: **GENEVA-LK**	Tx Loop	: **C2**
Time Base	: 16.66 ms	Date	: Dec 12, 1990
Ramp Time	: 0.50 ms	File	: HGL14C2.PEM
Scale	: 1in = 100 ft		

AXIAL COMPONENT dBa/dt nanoTesla/sec - 10 channels



REPORT

on the

INDUCED POLARIZATION/RESISTIVITY and

MAGNETIC SURVEY

for

GENEVA LAKE MINERALS CORPORATION

GENEVA LAKE POLYMETALLIC DEPOSIT

HESS TOWNSHIP

SUDBURY MINING DIVISION

NTS 41 I/13 E

D. R. Carriere
Consulting Geophysicist
Guelph, Ontario
August 30, 1990

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1.0 INTRODUCTION

During the period August 2 to August 25, 1990, magnetic and IP/resistivity surveys were carried out on behalf of Geneva Lake Minerals Corporation by Mertens and MacNeil, ground geophysical contractors. The crew was under the direction of Mr. J. MacNeil. The field crew consisted of Mr MacNeil and three of their employees.

The purpose of the surveys was to assist in the geological mapping of the property and to define the subsurface distribution of sulphides.

The survey was carried out on the claims around the Geneva Lake polymetallic deposit, which was worked in the 30's and 40's. The known mineralization consists of massive sphalerite, galena, pyrite, pyrrhotite and chalcopyrite.

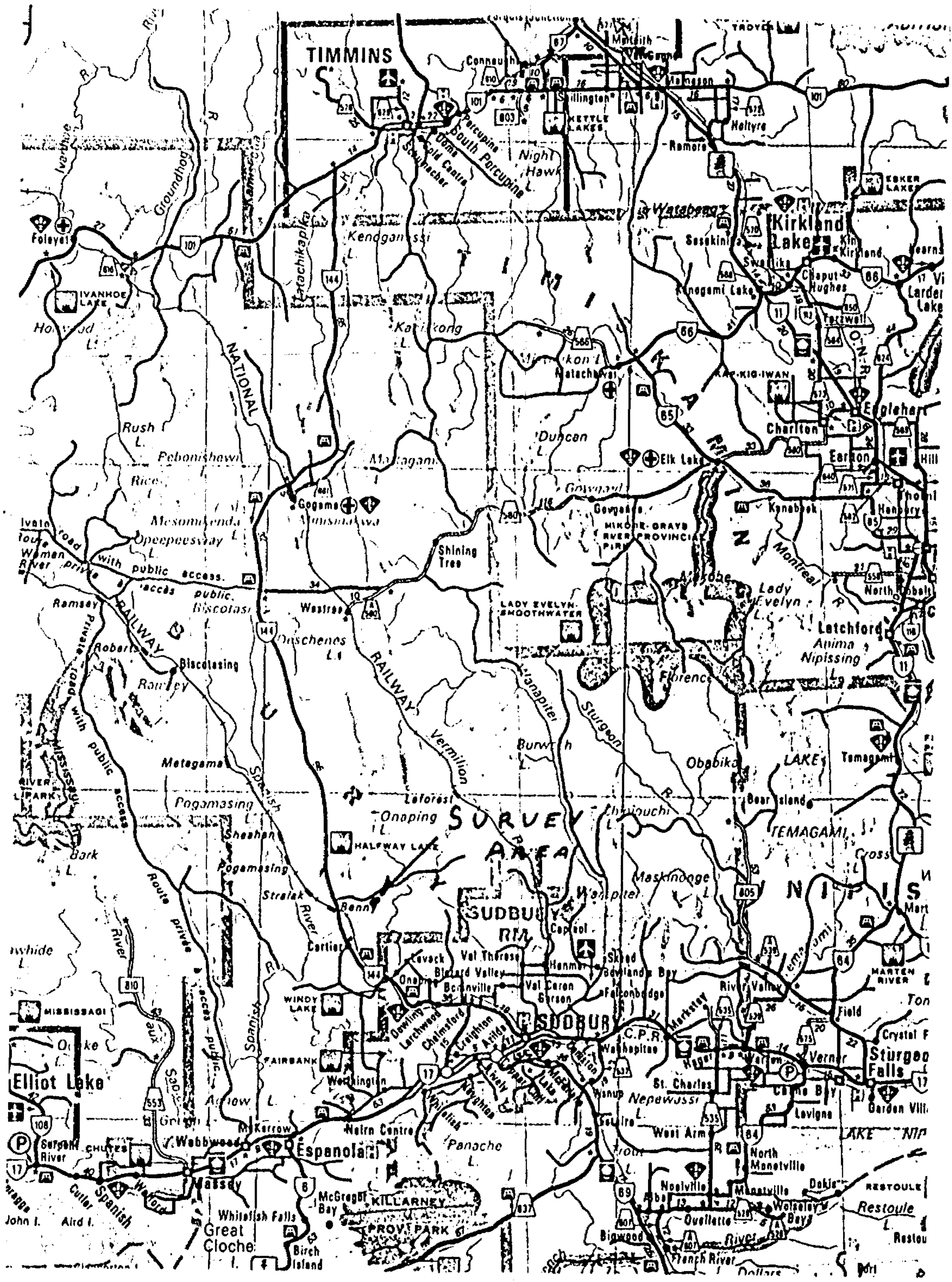
The magnetic survey successfully defined a number of geologic unit. The IP survey defined 13 anomalous response, of which 5 are considered significant.

2.0 LOCATION ACCESS and GRID

The property consists of 22 contiguous patented mining claims in Hess Township, Sudbury Mining Division, Ontario. The property is located 6 miles north north-east of the village of Cartier off Highway 144, between Sudbury and Timmins (Figure 1).

The claim numbers are listed below.

CLAIM NUMBERS	
6303	6635
6304	6641
6502	6654
6503	6657
6504	6758
6602	6738
6603	6739
6604	6740
6605	6741
6606	6742
6615	6749



LOCATION MAP

Scale 1:1.600.000	FIGURE 1

Access to the grid is by road from Highway 144 at the Benny Village turnoff onto the new Dunbar road.

The grid consists of a 2.7 km long baseline bearing 315 degrees with 27 cross lines perpendicular to the baseline. Line length varies from 437.5m to 2100m. The line spacing is 100m while the picket are at 25m intervals.

3.0 INSTRUMENTATION AND METHOD

MAGNETICS

The magnetic survey was carried out using the Scintrex MP3/IGS magnetometer system. A base station magnetometer was employed to measure the diurnal variation. The base station unit and sensor were established at L15N and 525S away from cultural noise. The base level was 58015 nts. The base station was set to take readings every 20 seconds. The diurnal variation was from 57990 nts to 58040 nts during the coarse of the survey.

The Scintrex MP3 magnetometers read the magnetic field to 0.1 of a nanotesla. The field magnetometer sensor was mounted on the monopod providing maximum sensitivity in the order of 2 to 5 nts. The data was collected at 12.5m. station intervals.

At the end of the survey dat the base station and field magnetometers were mated and the diurnal variations were automatically corrected. The field data was stored on floppy disk for printing if required.

IP/RESISTIVITY

A Phoenix Ltd. IPV-4 phase receiver and IPT-1 transmitter with a 2.5 Kw motor generator were employed in the IP survey. The transmitting frequency was 1 Hz. The dipole-dipole array was employed. In general the "A" spacing was 25 m and n = 1 to 5 were measured. Three lines, as indicated in the pseudo sections, were also read with "A" = 50 m to test the response.. The 25m spacing

was preferred.

The IP measurement, using phase equipment, is made by measuring delay, in milliradins, between the signal transmitted through the ground and the signal measured by a direct link between the transmitter and the receiver.

The resistivity is calculated using the following formula

$$R = K*V/I$$

where "I" is the maximum current measured at the transmitter, "V" is the voltage measured at the receiver and "K" is a constant dependant upon the geometry of the array.

The variations in resistivities are caused by one of, or a combination of three sources.

1) variations in resistivity of the overburden.
2) variations in the thickness of overburden.
3) variations in bedrock resistivity.

4.0 Data Presentation

MAGNETICS

Each day's work was merged and plotted in contour form using the Geosoft Ltd. computer processing package to insure quality of data collection. The data has been plotted using this program.

The final data plot is presented at a scale of 1:2500. The contours are at 20 nts intervals on Map 1.

IP/RESISTIVITY

The pseudo-sections are presented in Appendix I at a scale of 1:2500 for the 25m dipole work and a scale of 1:5000 for the 50m work. The anomalous responses have been indicated on the pseudo-sections.

In the selection of anomalous responses two criteria have been used: 1) the amplitude of the response 2) the shape of the response. The amplitude of the anomaly is related to the percent sulphides present by volume. The shape of the response can be

used to indicate the source; as broad areas of elevated IP response probably reflect changes in geology while the recognizable "A" shape of a relatively vertical response is of greater interest in locating economic sulphides.

The pseudo-sections are useful in defining the anomalies with respect to amplitude, depth, and relationship to resistivity. However the pseudo-section does not provide line to line correlation.

To obtain this information contour maps can be employed. However, this will miss deeper responses if the N=1 level is contoured; or it distorts the location of shallower anomalies if the deeper N levels are chosen.

To avoid these problems an interpretion of the complete data set is presented. The Interpretative IP Grid Plan is presented on Map 2 at a scale of 1:2500. This incorporates selected data from all spacing to provide a complete interpretation. The interpretation is at a scale of 1:2500. The anomalies are plotted using the standard definite, probable, and possible notation (solid bar, cross hatched, or open). A selected maximum phase and N level of the most definite part of the anomaly is noted on the map.

These values are used to indicate the strength and depth to the source, i.e., the larger the phase the greater the volume of sulphides and the greater the N the deeper the source. The numbers are to be treated as relatives, as the response depends on the depth to the source, the resistivity of the overburden, etc.

On this survey shallow responses are considered to be less than 15m, moderately deep responses are in the range of 25m to 50m, while deep responses are greater than 50m.

In general, resistivities less than 1000 ohm-m are considered to be very low. Resistivities from 1000 to 5000 ohm-m are low. Moderate resistivities range from 5000 to 15000 ohm-m, while over 15000 is high resistivity.

5.0 DISCUSSION of RESULTS

MAGNETICS

In general the magnetics on the Geneva grid are relatively flat. The variation is from near 56200 nts to a little over 60325 nts. The background level ranges from 57900 to 58200 nts.

Several cultural anomalies were noted on this grid . They are located as follows.

1) L 0 Station 25 S
2) L 200 E Station 287.5 S
3) L 200 W Station 1012.5 S
4) L 400 W Station 150 S

These areas have been marked with an "X"

ZONES

Anomaly A is an east west trending magnetic high running from L1300W at 925S to L400W at 400N. In general the response is 300 to 500 nts above background except at the west where it is 2000 nts above background. The source of the anomaly is probably a mafic volcanic unit.

Anomaly B is the northwest trending mag high running from L600W at 425N to L200W at 375N. The response may be due to a diabase dyke. A dyke is indicated as cutting this part of the grid from the geology maps. However, the magnetic high only extends over four or possibly five lines.

Zone C occurs on the southern part of the grid. Here the magnetics are in the order of 500 to 2000 nts. above background. The low to the north of this zone is a function of the mag high. The zone runs from the south end of L600E to the south end of L300E. The zone may extend as far as L100W, but the grid is broken in this area and response may be weakening. This zone may represent an east west trending granitic unit.

Zone D is a linear magnetic high running from L1500W at 650S to L1200W at 475S. It is generally 200 to 300 nts above background. The source of the zone is thought to be a mafic

volcanic.

The high on L1500W at 650S is 1000 nts above background. The reason for this is not clear, there may be some cultural noise or there may be diabase dyke cutting the zone here.

Anomaly E is in the central north eastern part of the grid. The magnetic high trends north west from L1800W at 300S to L1500W at 350S. This unit also varies from 300 to 1000 nts above background. The strike of this unit is not the same as the regional trend. Therefore it may be a weak diabase dyke or it may be a of unit with the same trend as the known mineralized area.

Zone F trends northwest from L500W at 575S to L0 at 550S. This zone may be related to sulphide mineralization as there is an IP anomaly coincident with the magnetic anomaly. The magnetics would suggest some pyrrhotite associated with the sulphides.

Zone G runs from L400W at 37.5S to L200W at 50S. While the zone is only 200 to 300 nts above background, it is spacially related to the known mineralization and the zone has a northwest trend.

Some minor magnetic units have been noted on the magnetic map. They are felt to be related to minor mafic units.

Some of the background geological information provided suggests there are diabase dykes to the south of the shaft. These do not stand out in the magnetic data. Anomalies F and G are roughly in the area where the dykes are supposed to be. However the amplitude of these responses is too weak to be considered to be caused be a standard diabase dyke.

FAULTS

Several faults are also defined on the magnetic map. The north east trending Dowes Lake fault is clearly noted and is labelled as H. Another clearly defined fault labelled I is seen to be trending southeast. Other possible faults have been noted.

INDUCED POLARIZATION/RESISTIVITY

The background levels on the IP and resistivity data are

variable. With the resistivity data this is in large part due to the changes in terrain from swamp/lake to outcrop. The changes in the IP response are reflecting change in rock type. The areas of negative IP response are typical of swamps. The survey has defined 13 zones of anomalous IP response. These are labelled A to M. This interpretation is based mainly on the A=25m data. The A=50m data is not very useful in this area as it averages several zones together thus producing broad nondescript anomalies.

ZONES

Zone A is on L1800W centered at 12.5S. As the response is only on the one line and open to the west and north. However the response on this line is strong (max Phase=22, n=3) and is associated with very low resistivity. The response is related to a magnetic high that is starting to develop in this area. Due to the limited information, no source is suggest for this zone.

Zone B extends from L1700W at 200S to L1800W at 200S. The anomaly is open to the west. The background IP response is much higher on L1800W than 1700W, while the resistivities are low on both lines. This may be due to a change in topography or geology. On L1800W the high phases have the appearance of being related more to a geological change rather a discreet body. There is no definite magnetic association.

Anomaly C runs from L1600W at 400S to L1800W at 500S. The zone is open to the west. Here again the line to line responses are variable. On L1800W the background phases are high and suggest a geological source. The response on L1700W is weak. However the response on L1600W, while not strong, is well defined. The resistivities vary from low on L1800W and L1700W to high on L1600W. There is no magnetic association.

Zone D runs from L1300W at 500S to L1600W at 725S and is open to the east and west. The zone has an east west trend. The response is moderately well defined and the phases are fairly high. The resistivities vary from high on L1600W to low on L1300W. On L1500W the resistivities suggest the anomaly is on a

contact between moderate resistivities to the north and high resistivities to the south. The IP anomaly is either directly associated with the magnetic anomaly D or on the flank. This suggests that the anomaly may be related to a sulphides on a contact between mafic and felsic volcanics.

Anomaly E is a single line response on L1200W at 825S. The phase suggests the response is shallow, moderately strong and well defined. The resistivity is moderate. The anomaly is directly associated with a mag high that is part of the magnetic anomaly A. In fact zone E is most likely a continuation of the next zone F.

Anomaly F trends east west from L1000W at 600S to L600W at 300S. Here again the response from line to line is quite variable. On L1000W the response is shallow, well defined and with low resistivities. On L900W it is poorly defined. The broad region of elevated phase responses suggests the response may be related to a broad geological source, associated with high resistivities. On L800W it is a discreet, fairly well defined shallow source associated with low resistivities. The response on L700W consist of two probable zones, in a region of distorted phase responses associated with low resistivities. On L600W the anomaly is quite well defined, deep and related to low resistivities. The zone is not associated with any of the magnetic anomalies.

Anomaly G is an approximately north south response running from L600W at 50S to L400W at 150S. On L600W the response is fairly well defined, at moderate depth. The resistivity is low. On L500W the anomaly is very poorly defined and is in the vicinity of a broad increase in the phase. The resistivities suggest the anomaly is on a contact. On L400W the response is well defined and shallow. The resistivities again suggest the zone is on a contact. There is no magnetic association.

Anomaly H is a northwest trending zone which runs from L250W at 25N to L50E at 25S. This anomaly is related to the known mineralization. This response is also quite variable, however it

clearly stands out as one of the best anomalies. On L250W the response is poorly defined, at moderate depth and associated with moderate resistivity. On L200W the anomaly is fairly well defined, shallow and associated with low resistivities. On L150W the response is shallow, strong, and well defined. The zone is has low to very low resistivities. On L100W the anomaly is a well defined, shallow, broad, anomaly associated with very low resistivity. On L50W the response is in a region of distorted phase responses. It is poorly defined, moderately strong, and related to low resistivity. The anomaly on L0 is also associated with distorted phase responses. The anomaly is poorly defined, shallow and related to low resistivities. The anomaly on L50E is again very poorly developed and associated with very low resistivities. The distorted results associated with this anomaly may be due to culture in the region of the shaft. There is no magnetic response associated with the zone.

Zone I is a northwest trending anomaly, running from L300W at 525S to L0 at 550S. There are two indicated breaks along the response, the first is between L250W and L200W and the second between L150W to L100W. The zone is directly associated with the magnetic high F. On L300W the response is fairly strong, ill-defined, shallow and associated with high resistivities. On L250W the response is strong, poorly defined and associated with moderate resistivities. On L200W the anomaly is moderately well defined, shallow, and fairly strong. The zone is associated with low resistivities. On L150W the response is weak, poorly defined and associated with moderate resistivities. On L100W the zone is broad, poorly defined, fairly strong and associated with low resistivities. On L50W the response is poor, ill defined and associated with high resistivities. Finally, on L0 the anomaly is fairly well define, shallow, moderately strong and associated with high resistivity.

Anomaly J is an east west trending zone that runs from L100E at 350S to L250E at 275S. There is no magnetic association. The response is variable along it's strike. On L100E the response is

a poorly defined broad response with associated high resistivities. On L150E the response is better defined, shallow and associated with high resistivities. On L200E the response is strong, well defined, shallow and associated with moderate resistivities within a region of high resistivity. On L250E the response is fairly strong, poorly defined with associated moderate resistivities.

Zone K runs from L200E at 212.5S to L500E at 200S. On L200E the anomaly is a poorly defined shallow, moderate source associated with moderate resistivities. The response on L250E is similar but the resistivities are moderate in this area. On L300E the anomaly is fairly well defined, moderately strong, shallow and associated with high resistivities. The fairly well defined response on L350E is weak, shallow and related to moderate resistivities. The weak response on L400E is possibly related to a geological change. Finally on L500E the ill defined response is weak, shallow and associated with high to moderate resistivities.

Zone L runs along the southern boundary of the grid from L400E at 800S to L800E at 475S and is open to the east, west and south. This response is directly related to the magnetic anomaly C. These responses are broad, weak, ill defined and associated with high resistivities. This zone is clearly related to a geological change, probably a granitic unit.

The final zone M runs from L700E at 150S to L800E at 75S and is open to the east. On L700E the poorly defined response is weak, deep and associated with high resistivities. On L800E the fairly well defined response is quite weak, at moderate depth and associated with low resistivities There is no magnetic association.

6.0 CONCLUSIONS and RECOMMENDATIONS

The results of both the magnetic and IP/resistivity survey indicates a very choppy nature of this property. There are only a few magnetic responses that are continuous across the grid. There

appear to be a number of minor faults and discreet magnetic units. The IP results show little coincidence with the magnetics. The resistivities are also quite variable along the length of the IP anomalies. This suggests that the geology is very blocky.

The magnetics outline a number of the mafic volcanic units trending east west across the property. The possible granitic source is clearly outlined on the southern part of the property. Some major and minor faults are also outlined. Of economic interest is the northwest trending anomaly F, as the northwest trend is associated with the known mineralization.

The IP/resistivity has outlined several responses. Of these the best anomaly is H which is associated with the known northwest trending mineralization. The best part of the zone is on L150W between 25N and 50N where the maximum phase is 58 on N=1. It is associated with very low resistivities.

The next priority zone is I. It has a northwest trend, a magnetic association and some reasonable IP responses. As well, there is the possibility of some faulting within the zone. The best line to test this zone is on L200W between 475S and 525S. The phase here is fairly high, the shape is good and the resistivities are low.

Zone F provides two areas of interest, although of lower priority. The zone has a roughly east west trend that could be interpreted as being along or near the contact defined by the magnetic anomaly F. The best part of this zone is on L1000W between 575S and 625S. Here the response is well defined, shallow and in a region of indefinite but relatively low magnetics. The other possible target on this zone is the well defined response on L800W between 450S and 500S. It is weak, moderately deep, and associated with low to moderate resistivities.

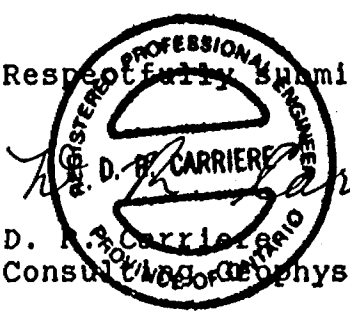
If zone F provides any interest then the isolated anomaly E on L1200W between 800S and 850S would be of interest. This anomaly is of moderate strength, well defined, shallow . The resistivities, which are at a moderate level, form a relative low.

The lack of geologic or magnetic correlation decreases the priority of the next zone J. However on L200E between 250S and 325S (centered 275S to 300S) there is a very well defined response. It is shallow, strong and while the resistivities are moderate they form a relative low.

The rest of the anomalies could be of interest, however they would require further data and information to improve their status. Gravity as well as geochem and geology may be used to improve these other responses

There are also several responses that have not been discussed. These anomalies are not considered to be of economic interest based on the given information. In may cases they probably represent geological changes in these areas. This is another indication of the blocky nature of the property.

Respectfully Submitted;



D. R. Carriere
Consulting Geophysicist

CERTIFICATE OF QUALIFICATIONS

I, undersigned, Donald R. Carriere, P. Eng., certify that:

I have resided at in Guelph, Ont. since 1989.

I graduated From Queen's University at Kingston with a B.Sc. Engineering in Geological Engineering in 1973.

I have been involved in exploration geophysics since 1969.

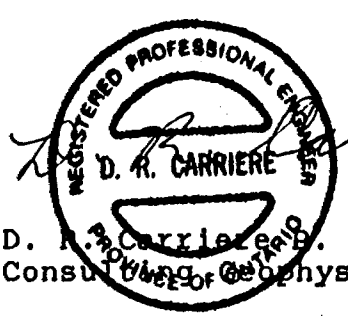
I have been a Professional Engineer in the province of Ontario since 1977.

I am a member of the society of Exploration Geophysicists, and the Prospector and Developers Association of Canada.

This report is based on the information contained in the survey described. The interpretion of the data was based on known methods and my personal experience.

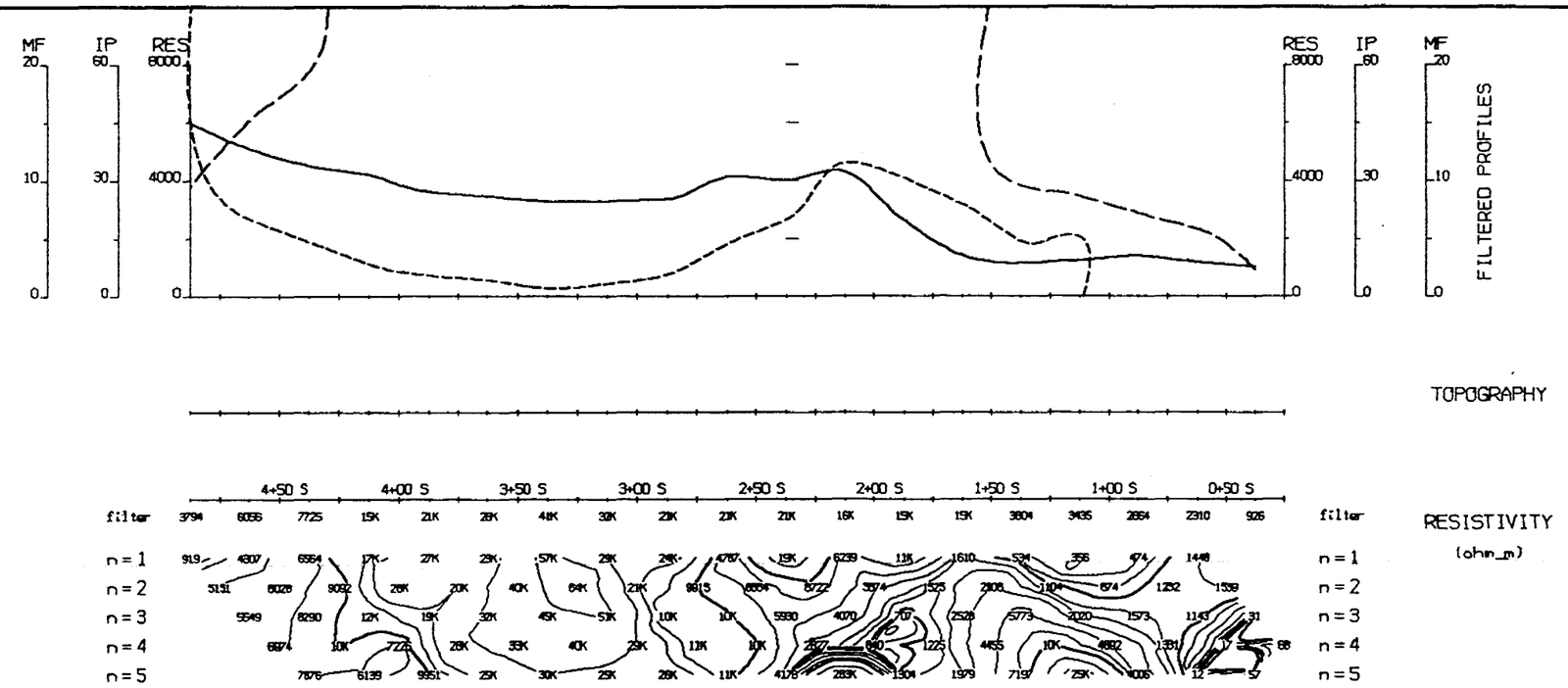
I have not received, nor do I expect to receive directly or indirectly any interest in the claims that belong to Geneva Lake Minerals Corp.

Guelph Ont
August, 1990



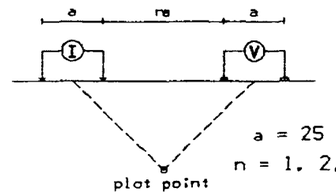
D. R. Carriere P. Eng
Consulting Geophysicist

APPENDIX I



Line 1800 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

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Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

D. R. CARRIERE
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

GENEVA LAKE MINERALS CORP.

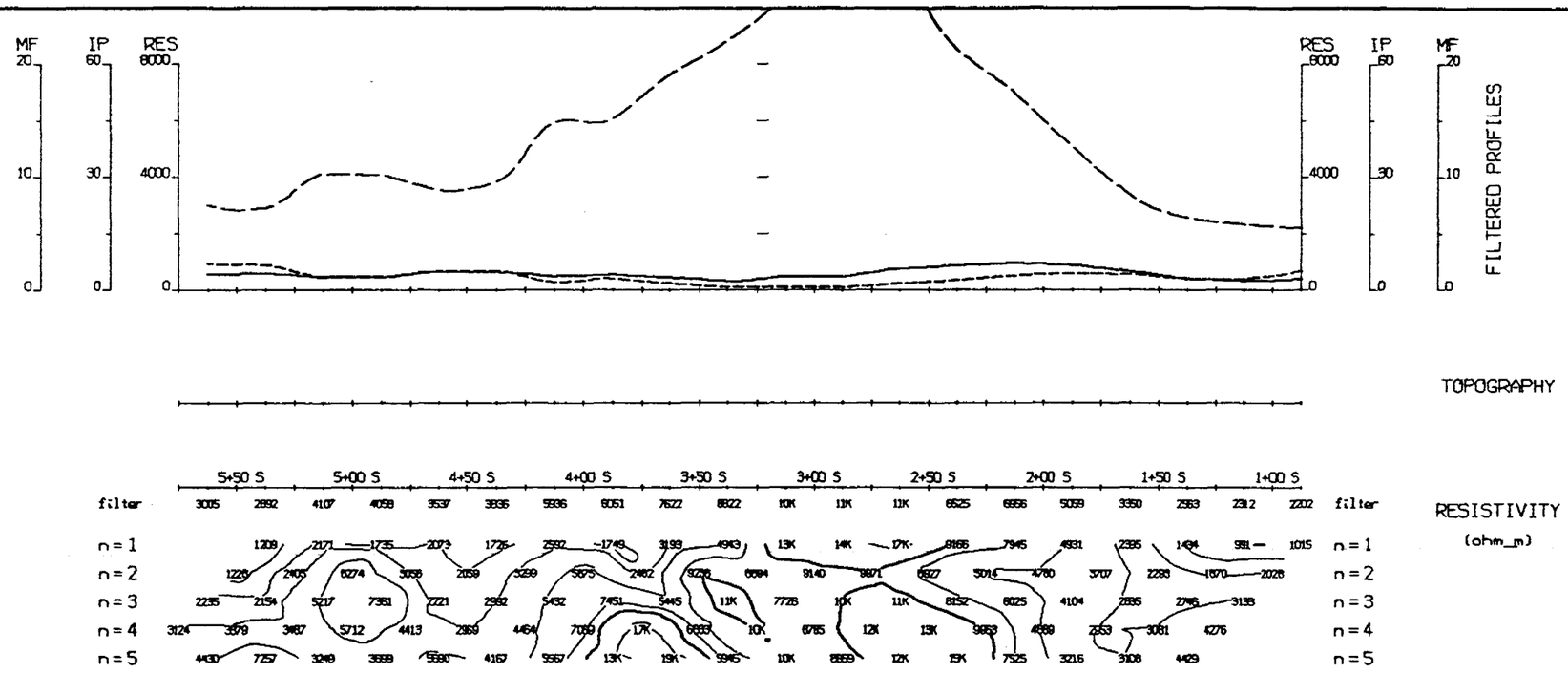
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

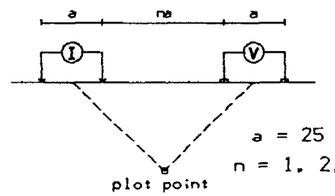
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



Line 1700 W

Dipole-Dipole Array



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Metal Factor	* * *
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Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

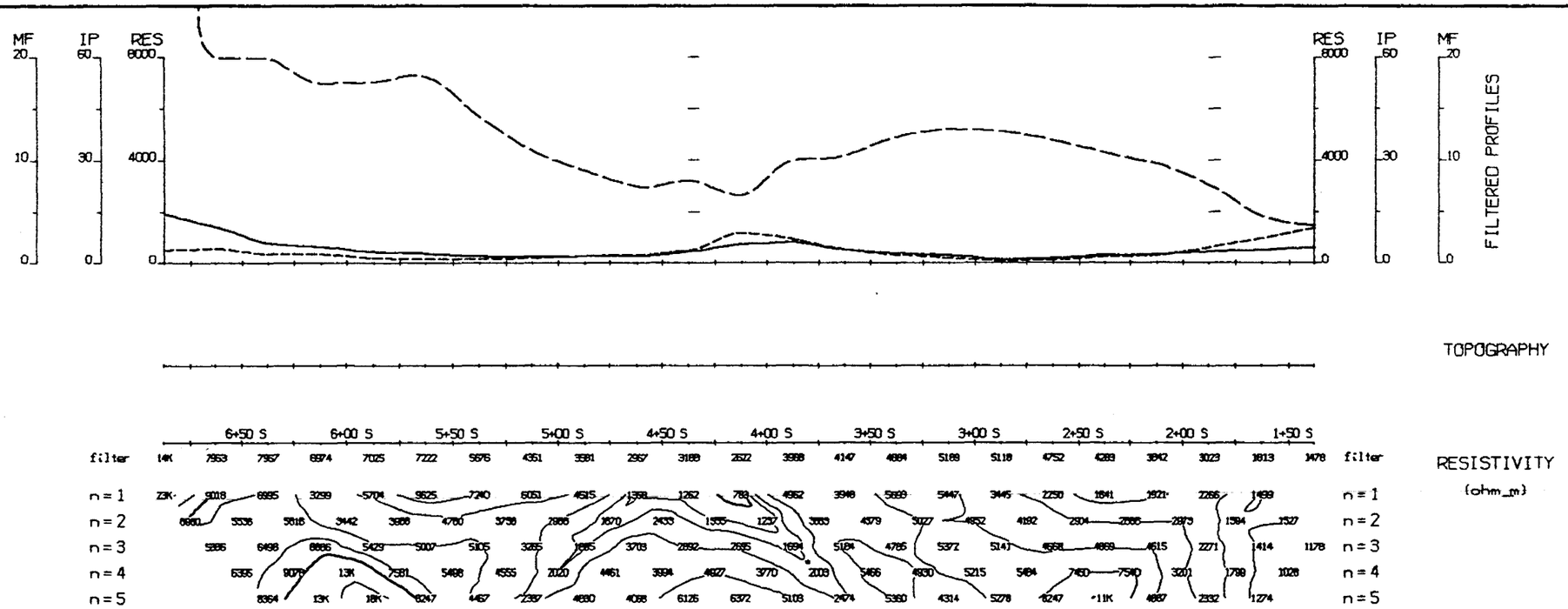
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

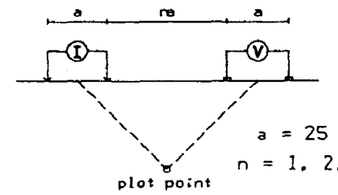
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



Line 1600 W

Dipole-Dipole Array



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Polarization	* *
Metal Factor	* * *
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Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,....

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

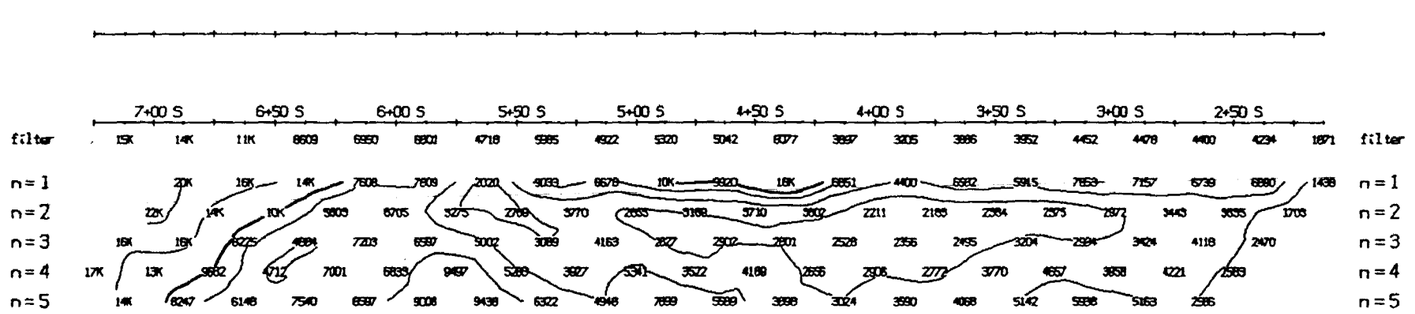
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

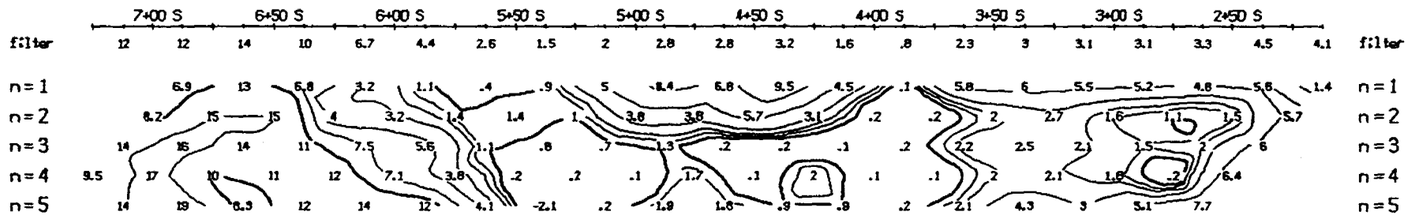
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



TOPOGRAPHY

RESISTIVITY
(ohm_m)



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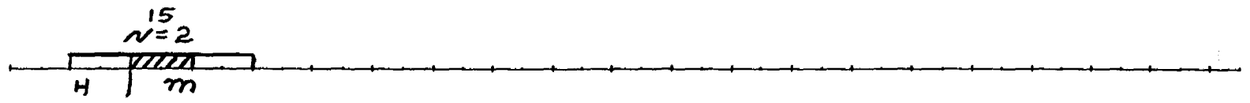

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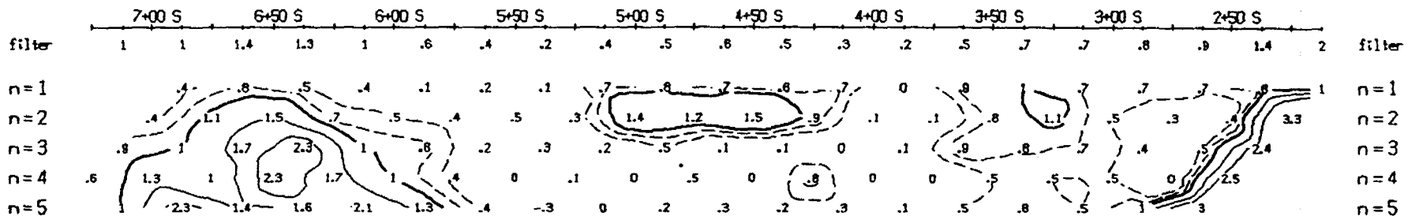
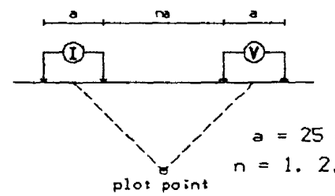


METAL FACTOR
(ip/res * 1000)

Line 1500 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

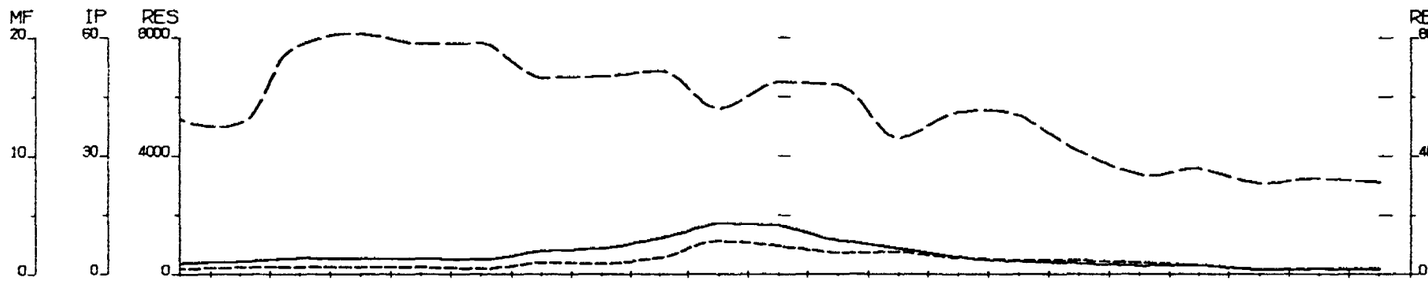
INDUCED POLARIZATION SURVEY

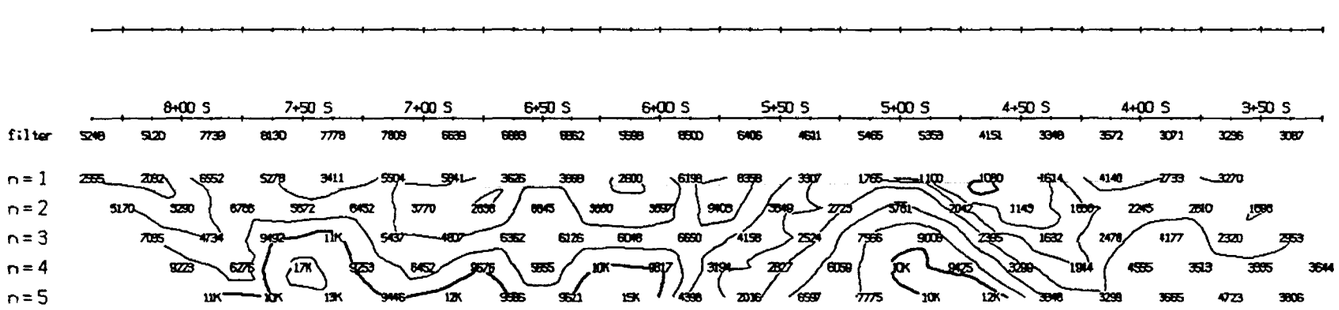
Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

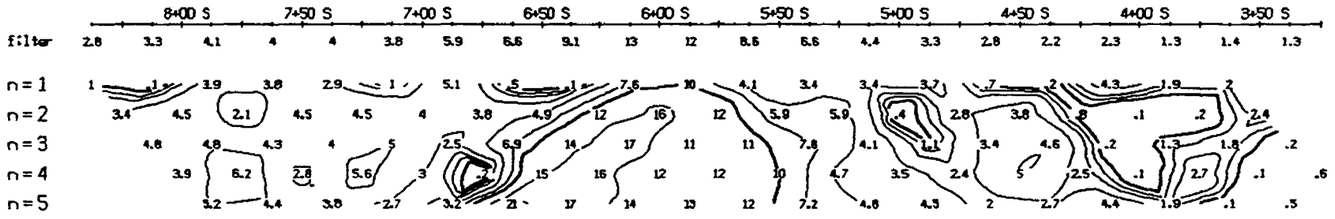
MERTENS & MacNEIL LTD.



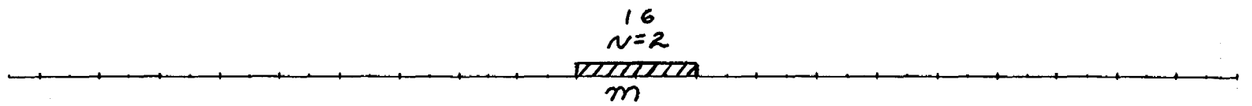


TOPOGRAPHY

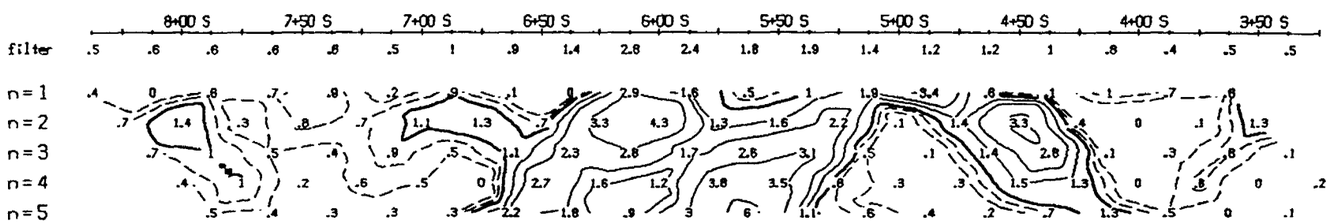
RESISTIVITY
(ohm_m)



PHASE
(milli-rad)



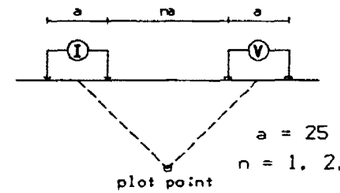
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 1400 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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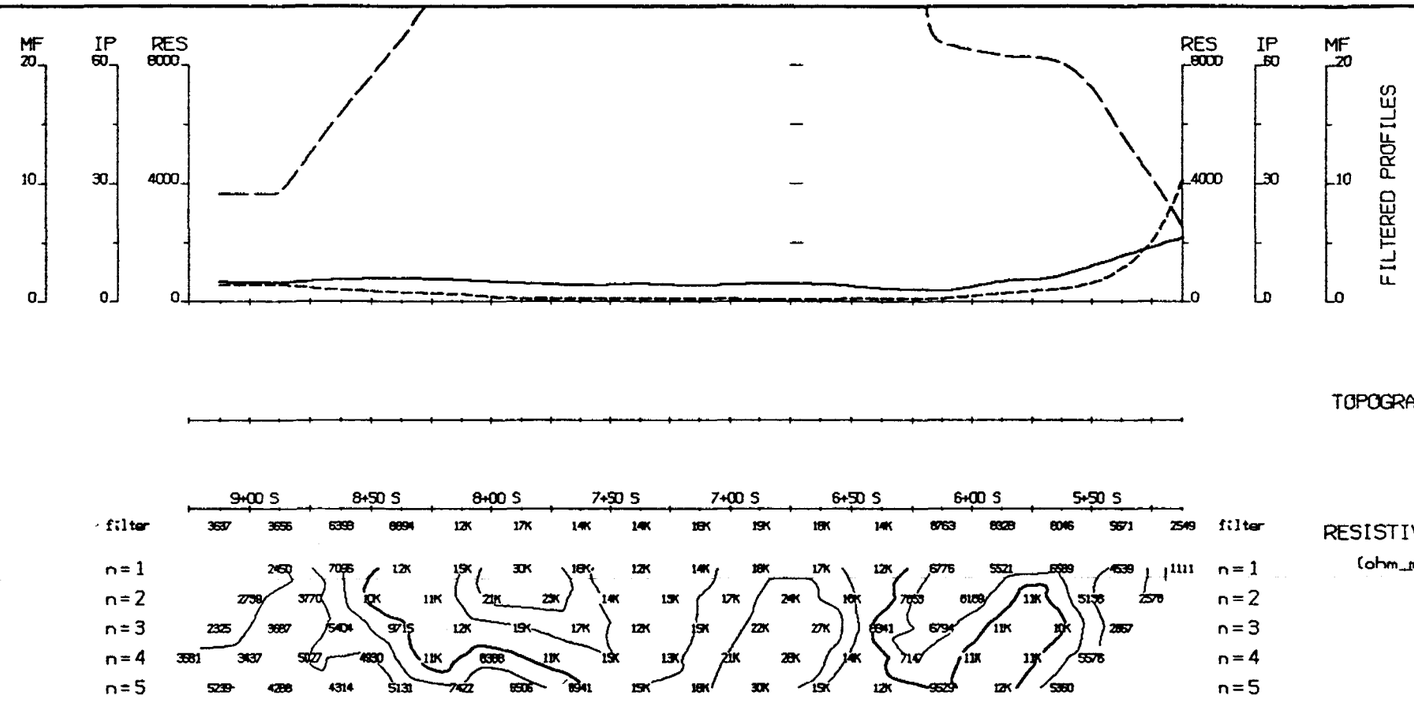
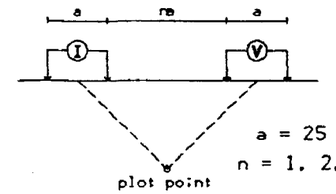


Line 1300 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity ———	*
Polarization ———	* *
Metal Factor - - - - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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Date: N.T.S.

Scale: 1 : 2500

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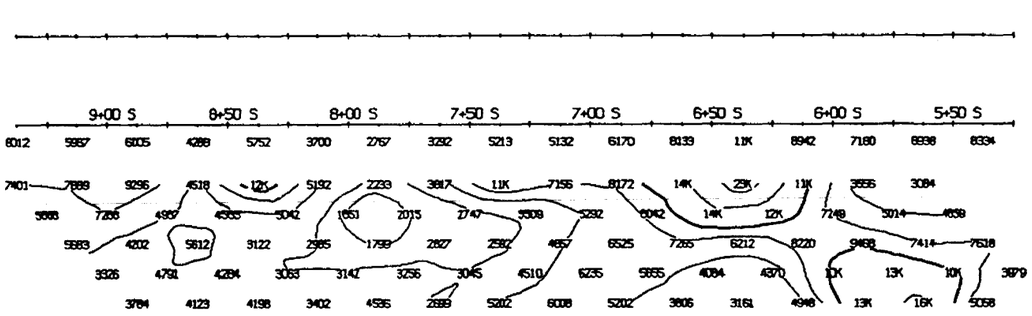
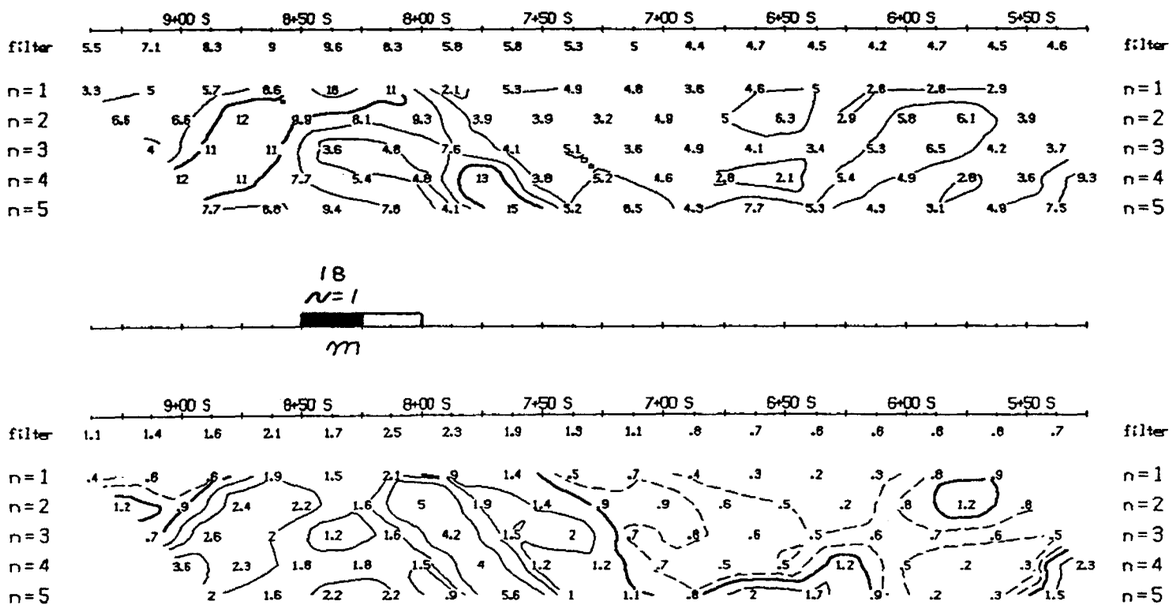


TOPOGRAPHY

RESISTIVITY
(ohm_m)



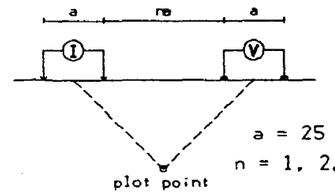
PHASE
(milli-rad)

INTERPRETATION

METAL FACTOR
(ip/res * 1000)

Line 1200 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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Benny Grid
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Date: N.T.S.

Scale: 1 : 2500

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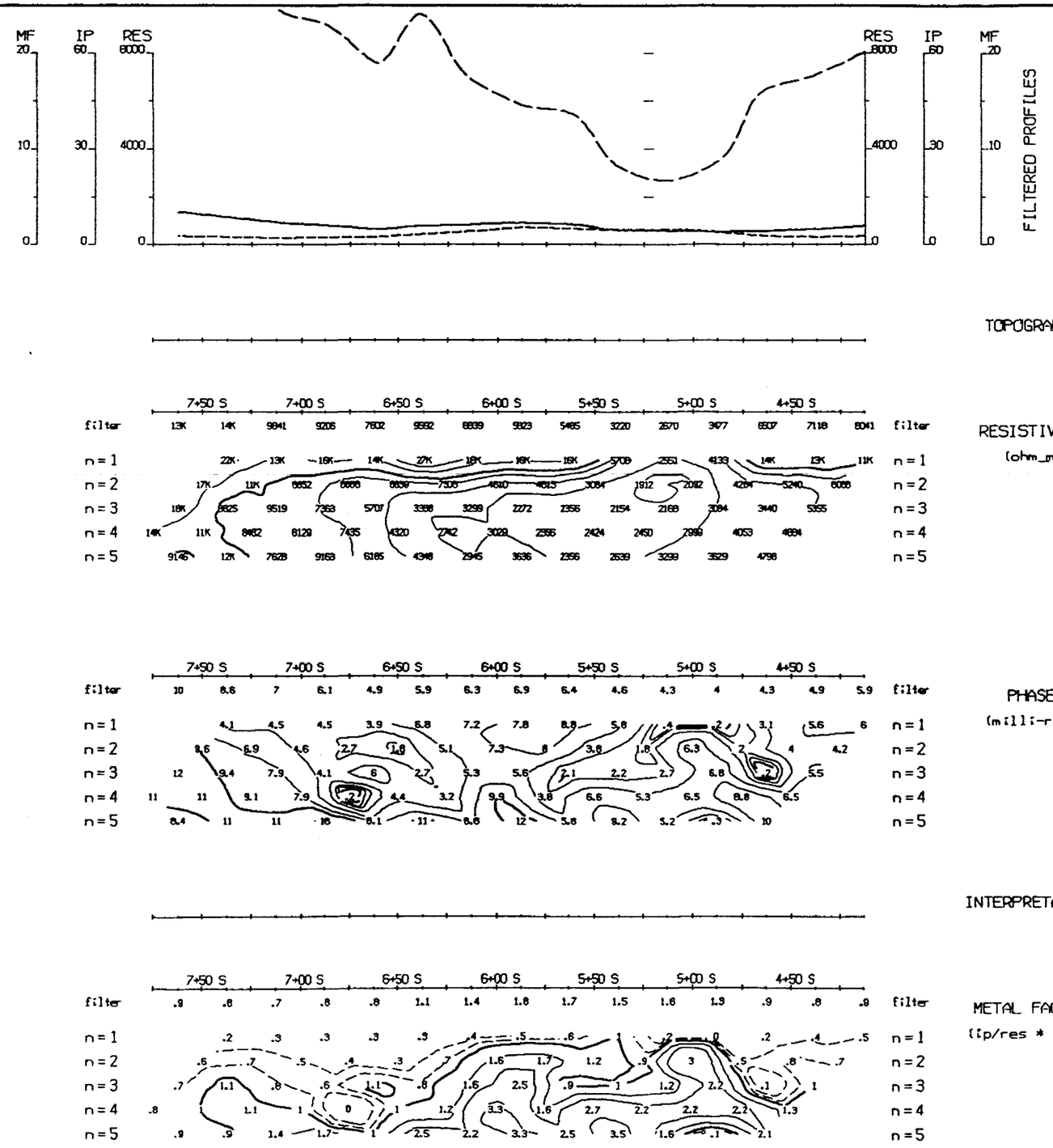
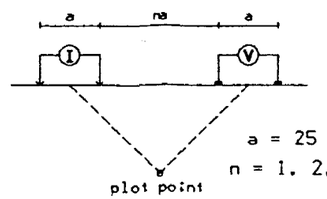


Line 1100 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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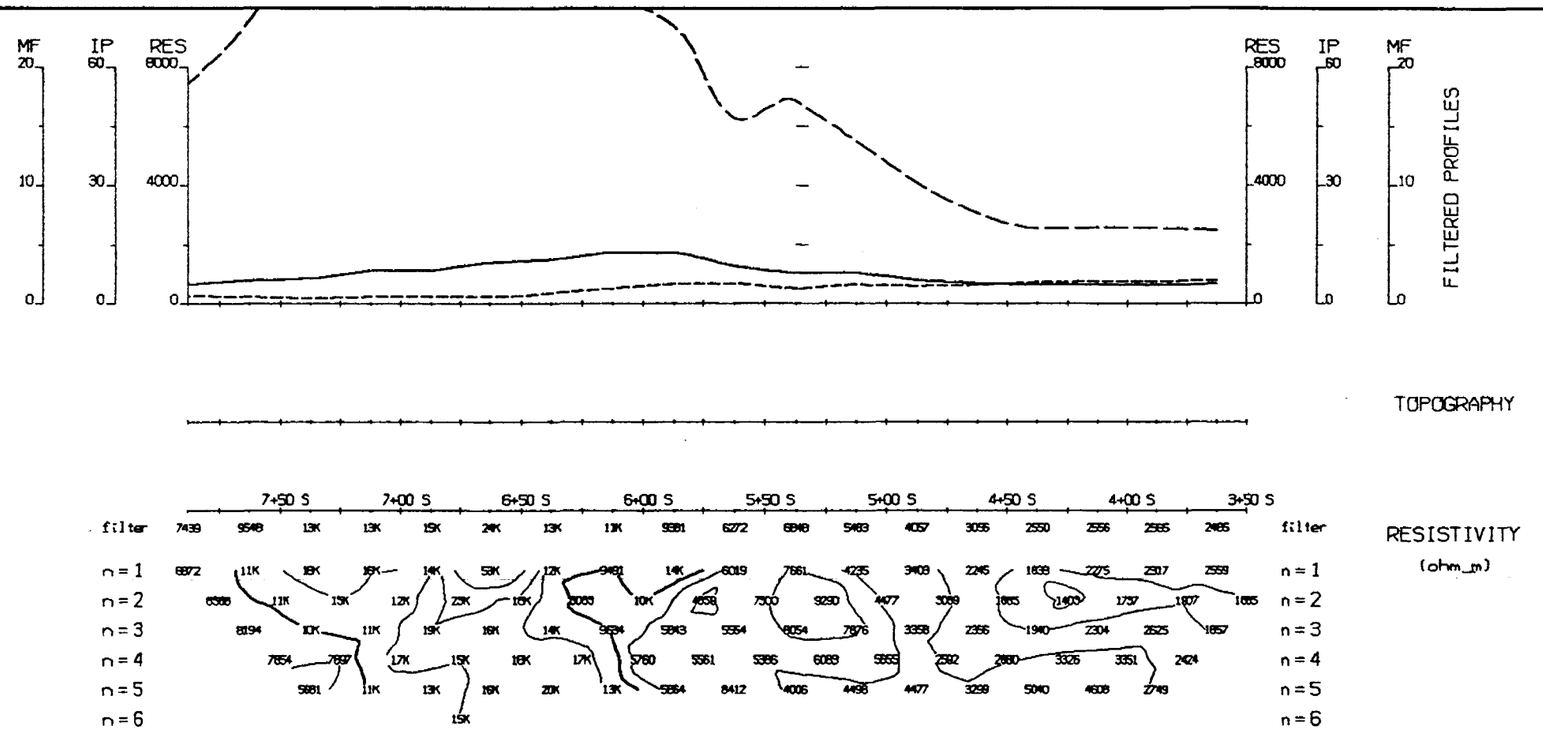
Date: N.T.S.

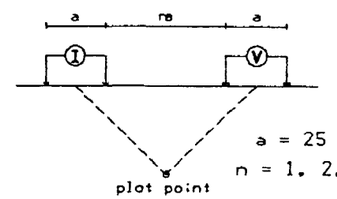
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



Line 1000 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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Scale: 1 : 2500

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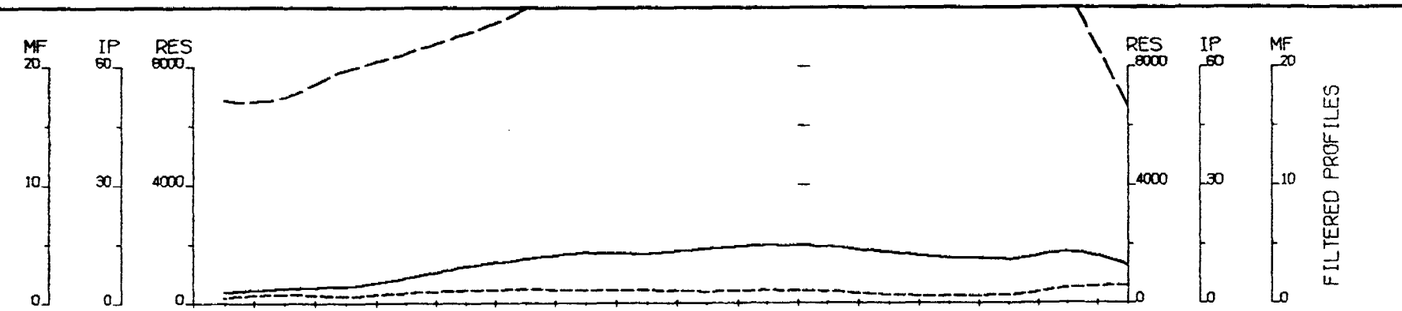
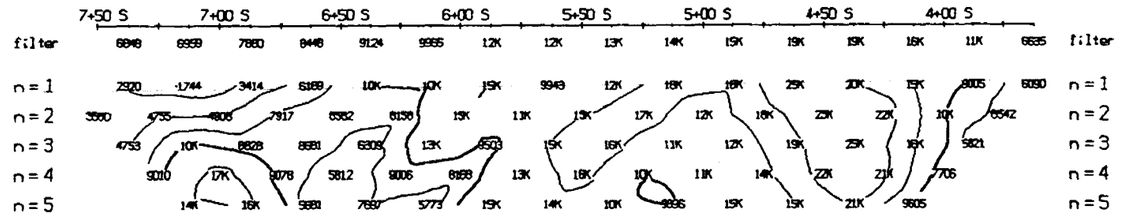
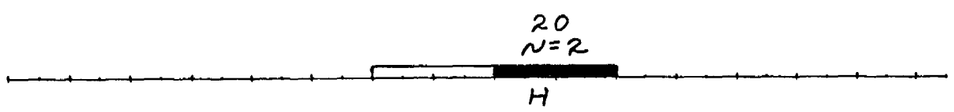


TOPOGRAPHY

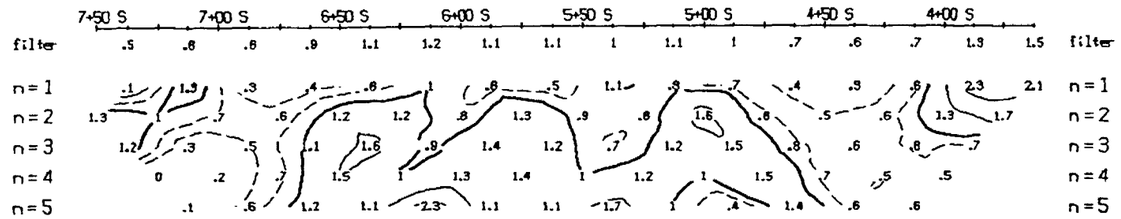


RESISTIVITY
(ohm_m)

PHASE
(milli-rad)



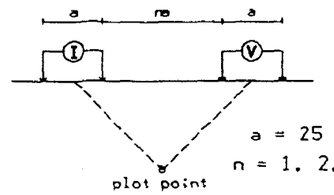
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 900 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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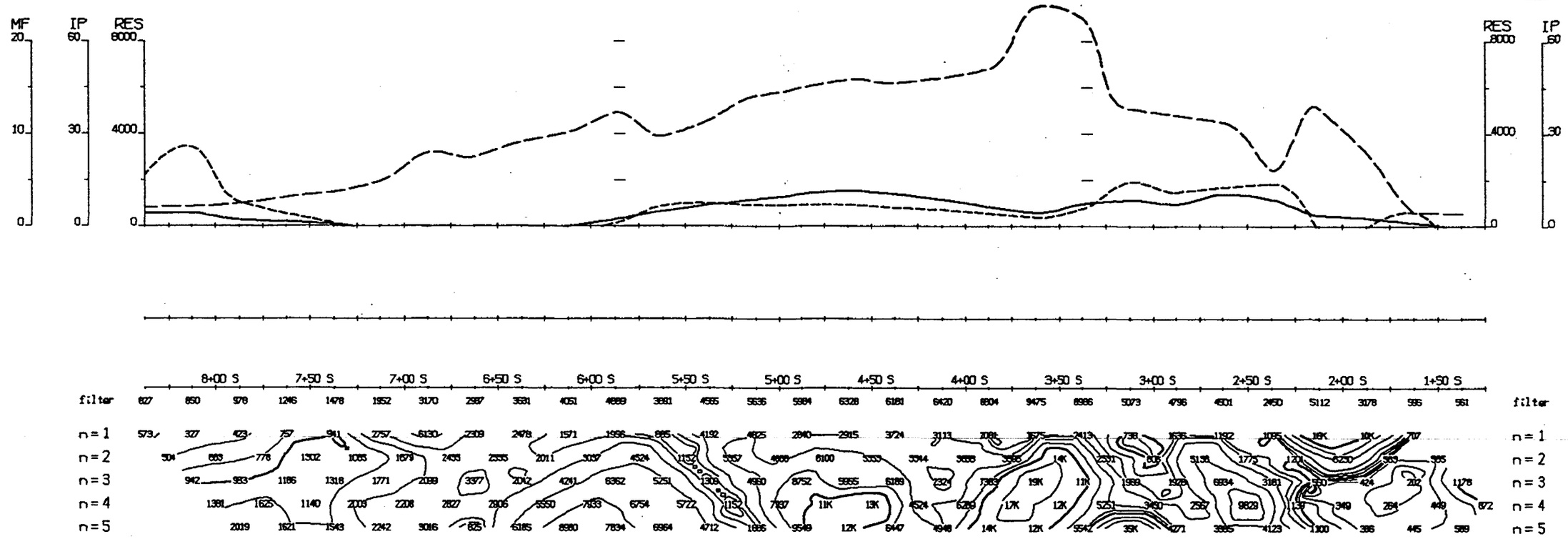

MF
IP
RES
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
15
N=2
L
?
L

FILTERED PROFILES

TOPOGRAPHY

RESISTIVITY
(ohm_m)

PHASE
(milli-rad)

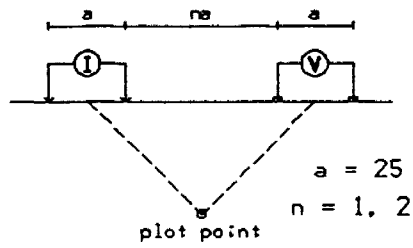
INTERPRETATION

METAL FACTOR
(p/res * 1000)

GEOSOFT

Line 800 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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Scale: 1 : 2500

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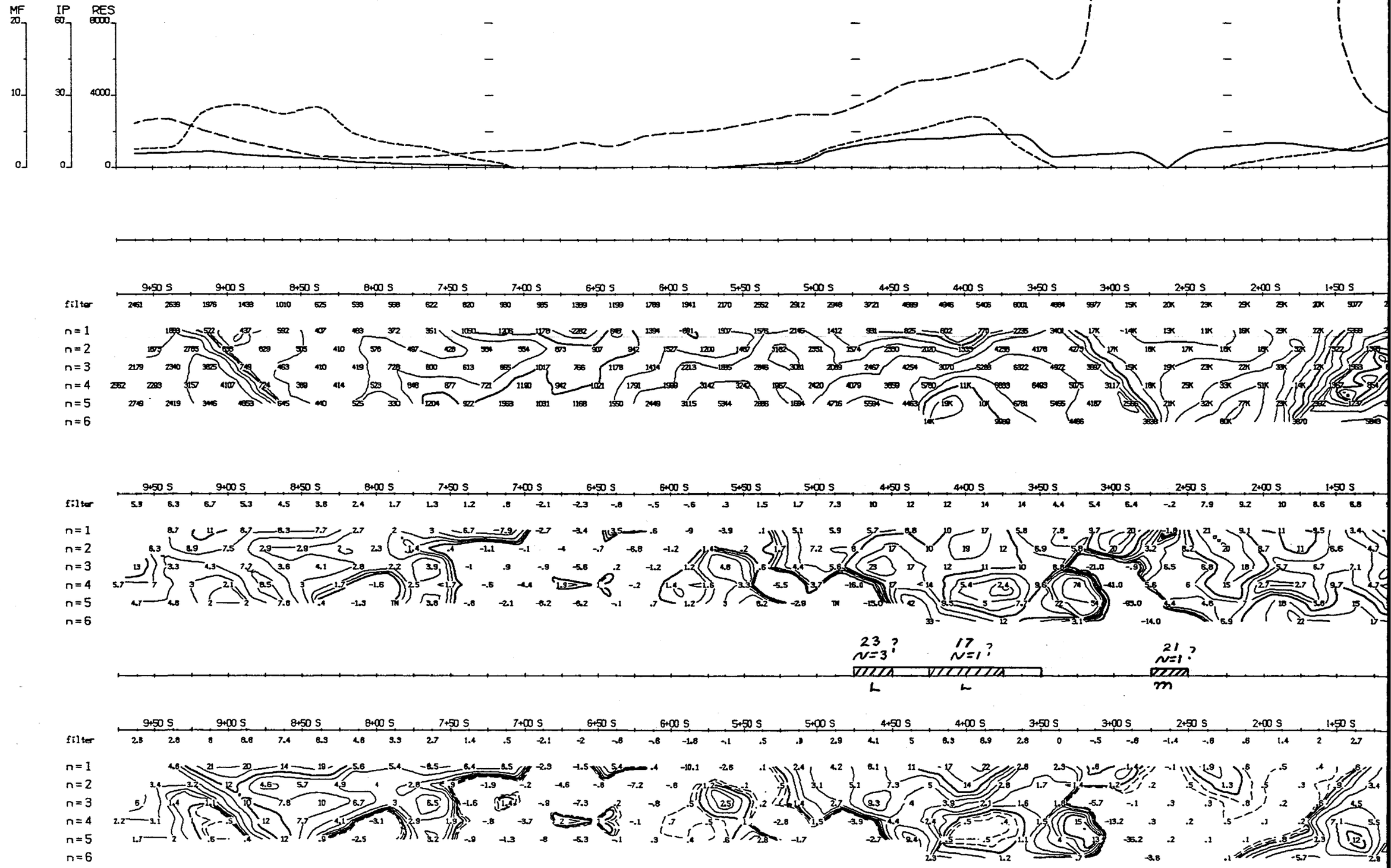
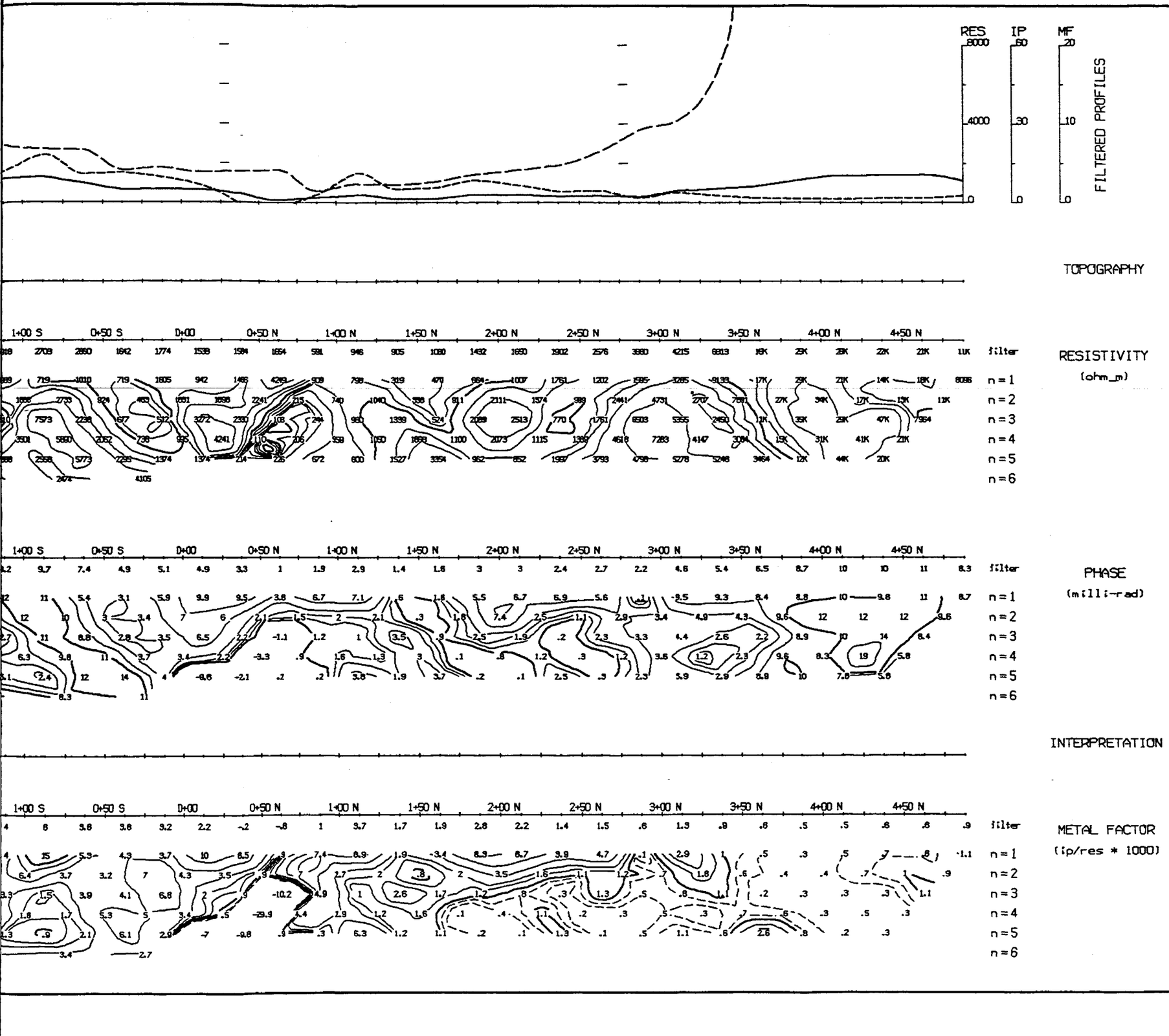
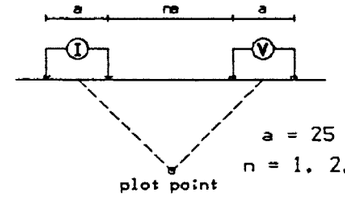

MF
IP
RES
20
10
0
60
30
0
8000
4000
0
9+50 S
9+00 S
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
23 ?
N=3 ?
17
N=1 ?
21
N=1 ?
L
L
m



Line 700 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity ————	*
Polarization ————	* *
Metal Factor - - - - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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INDUCED POLARIZATION SURVEY

Benny Grid
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Date: N.T.S.

Scale: 1 : 2500

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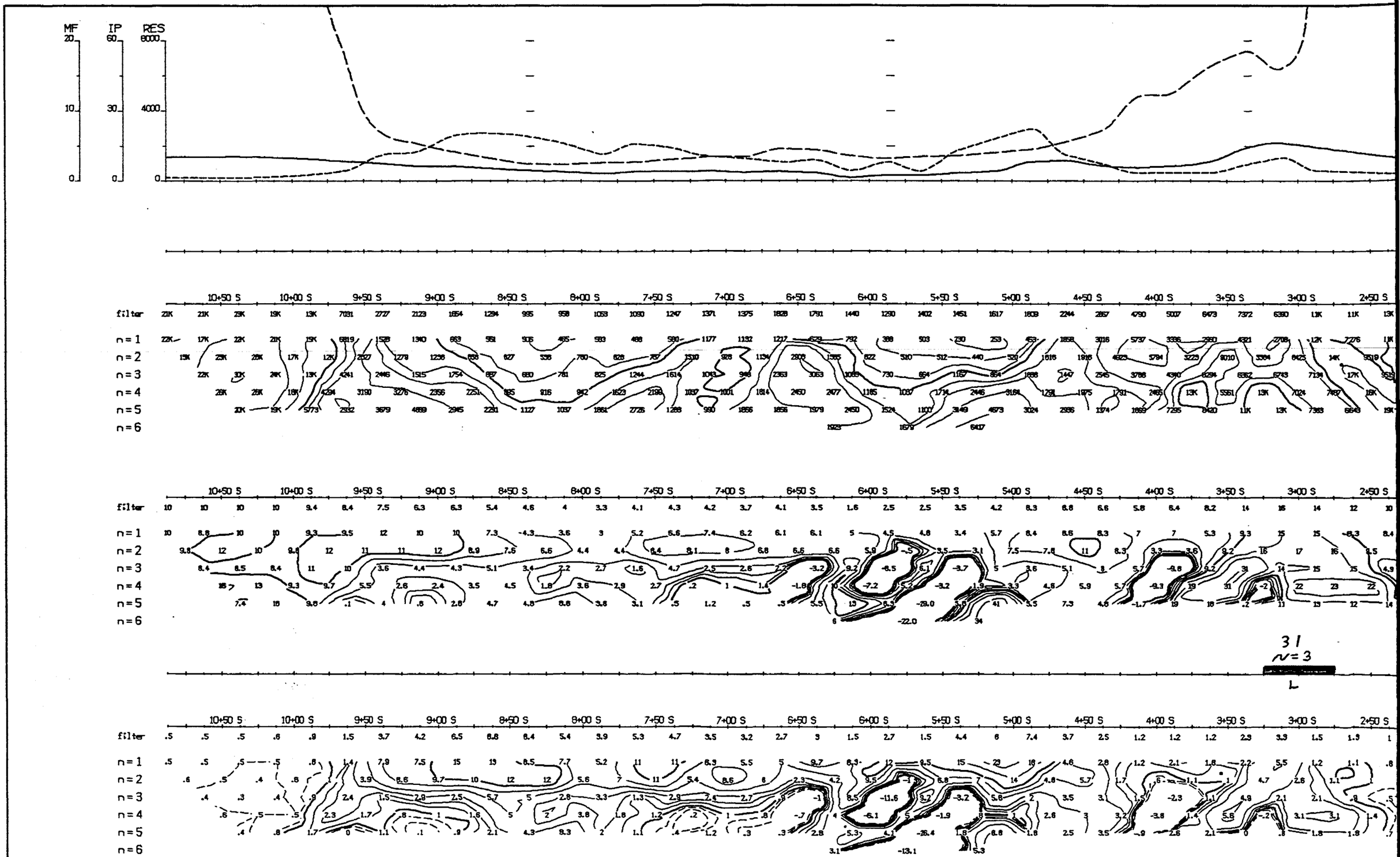
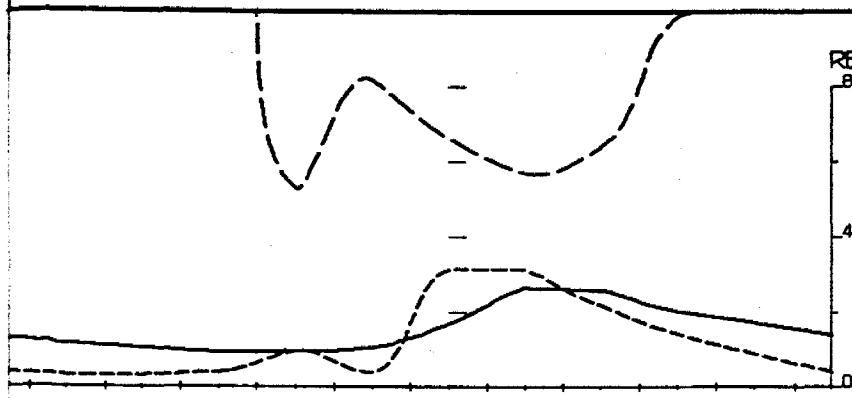
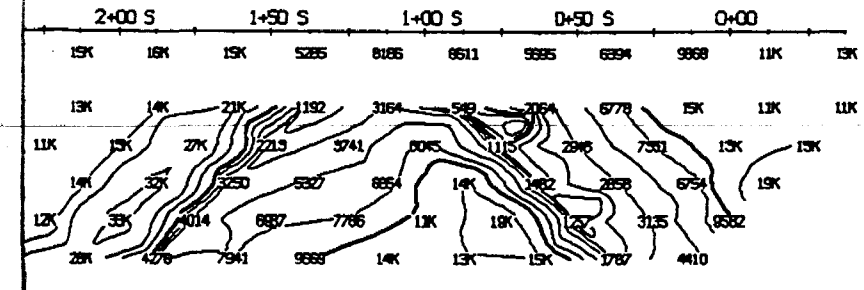
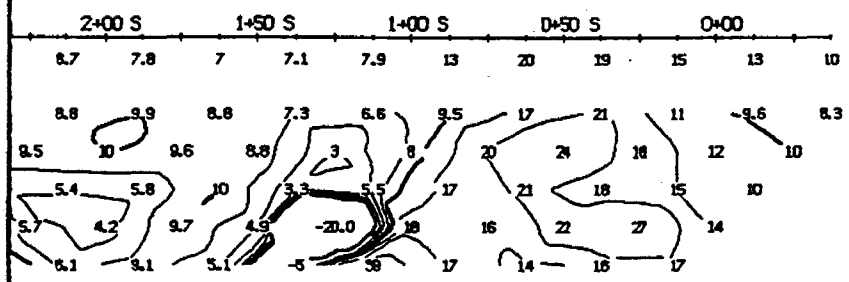

MF
IP
RES
20
10
0
60
30
0
8000
4000
0
10+50 S
10+00 S
9+50 S
9+00 S
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
31
n = 3



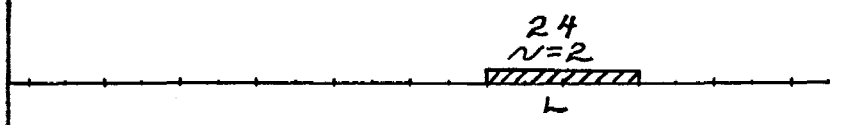
TOPOGRAPHY



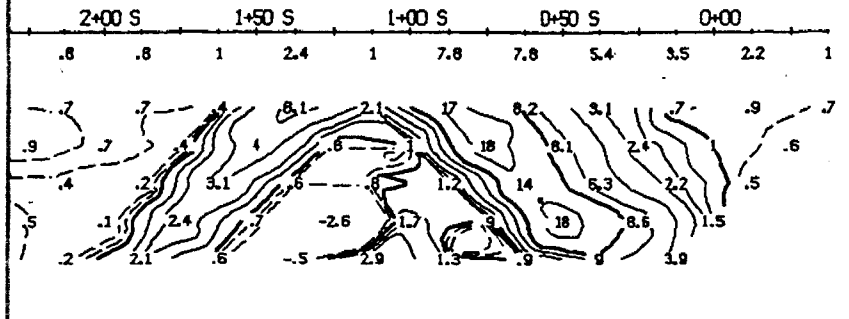
RESISTIVITY
(ohm_m)



PHASE
(milli-rad)



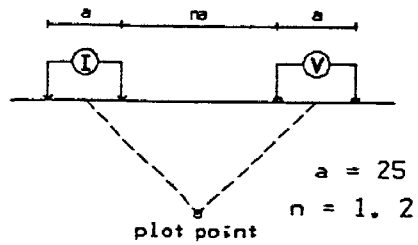
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 600 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	— — —	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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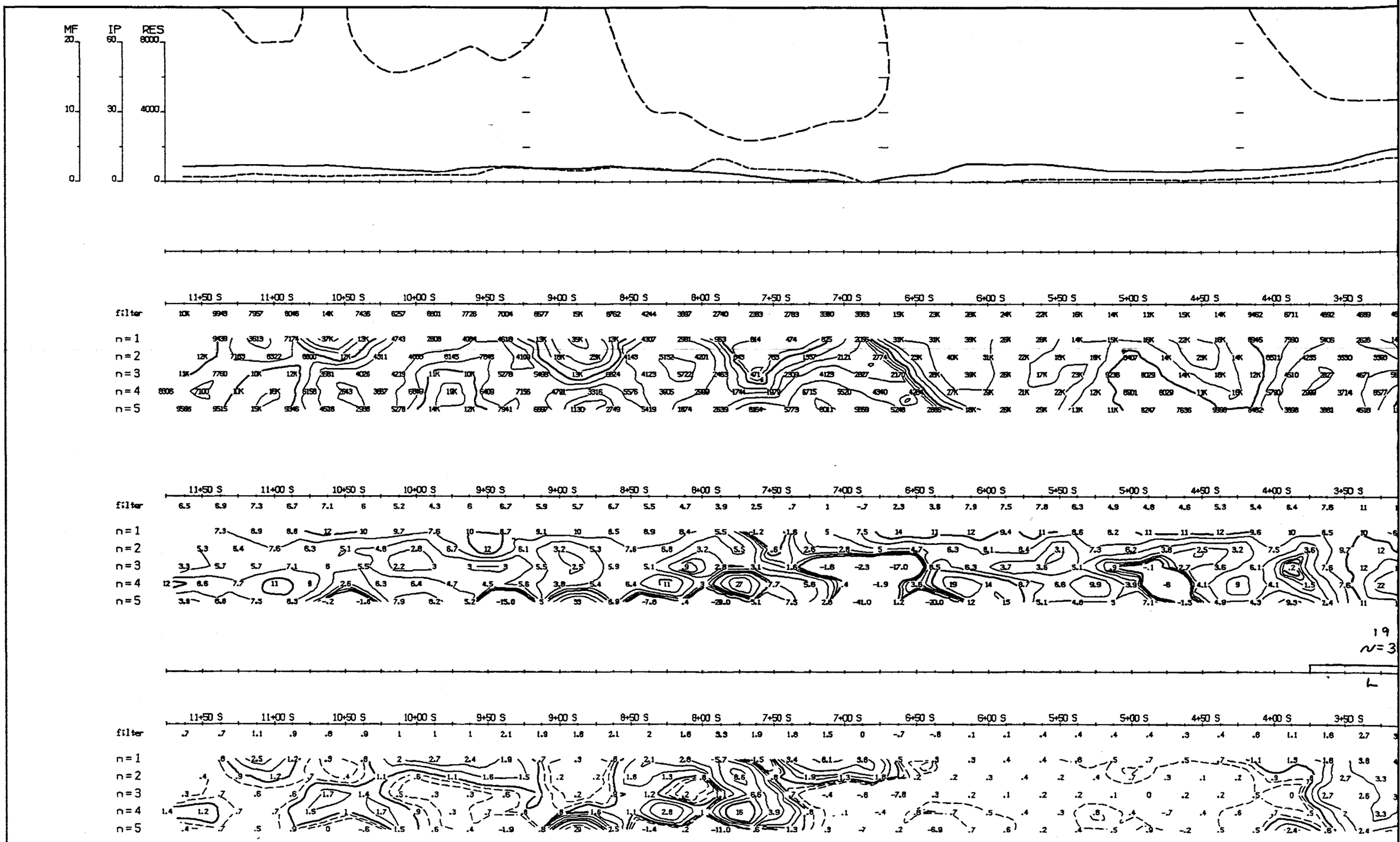
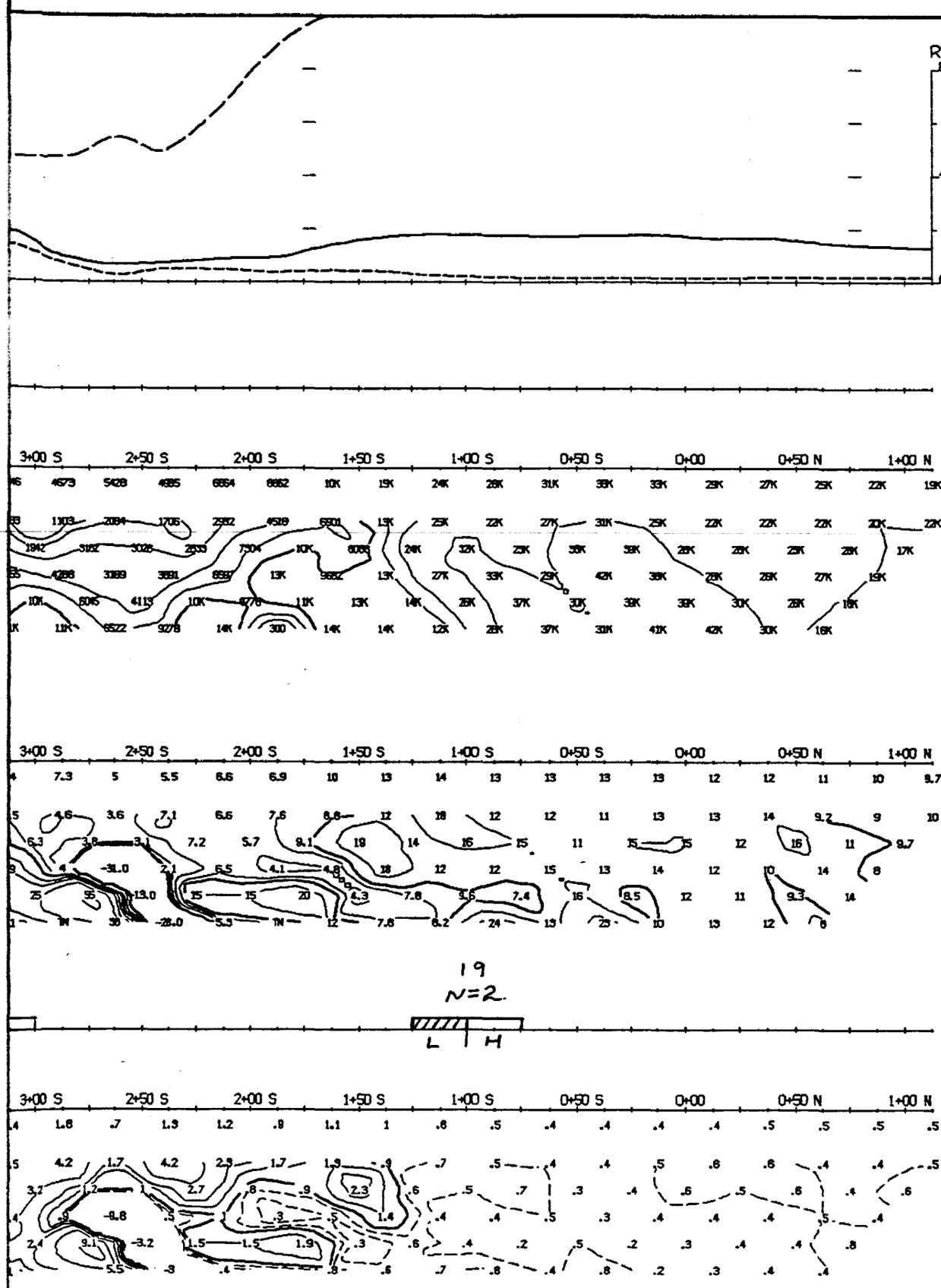
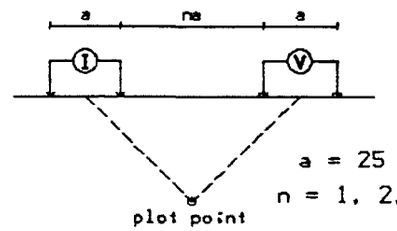




Line 500 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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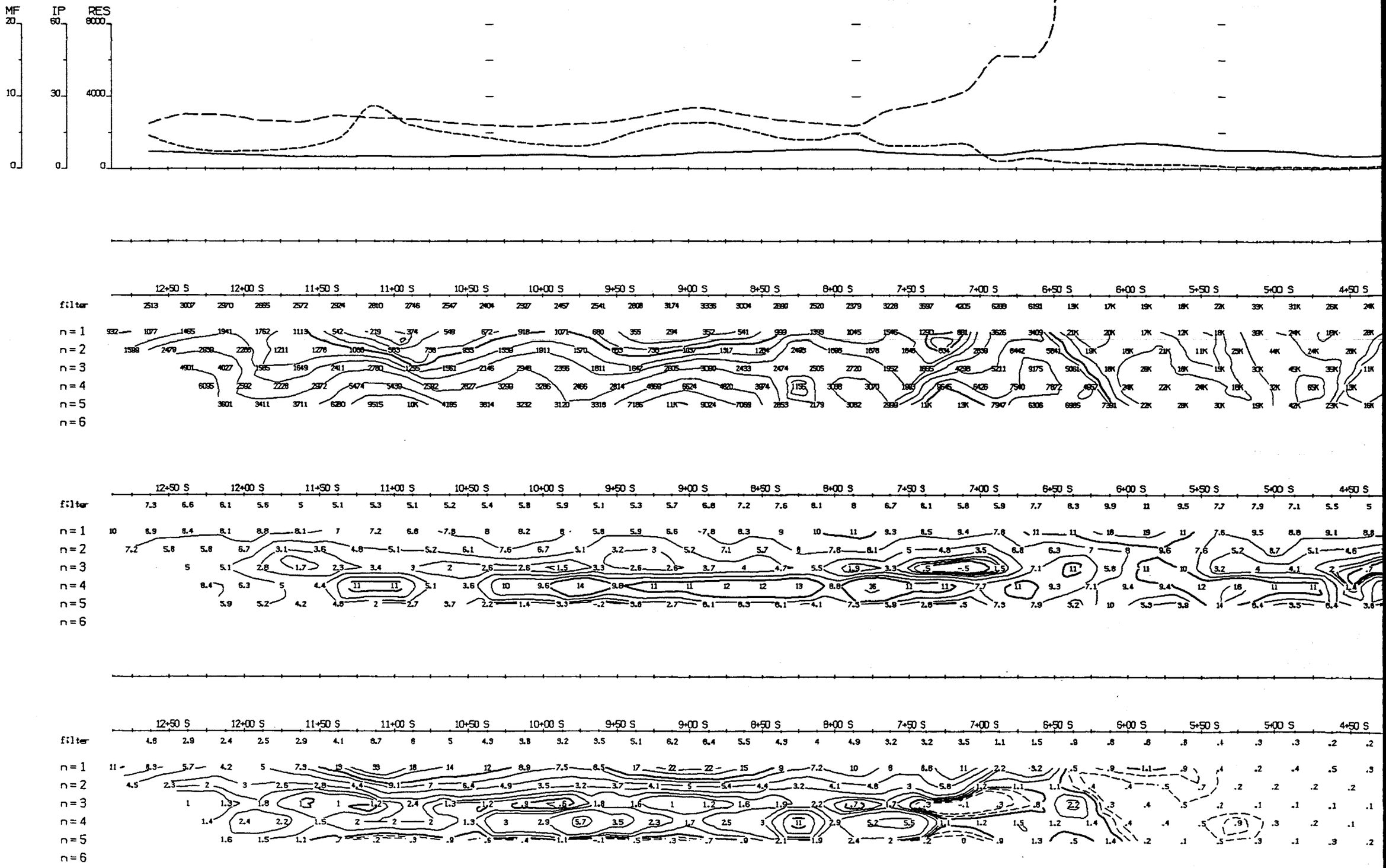
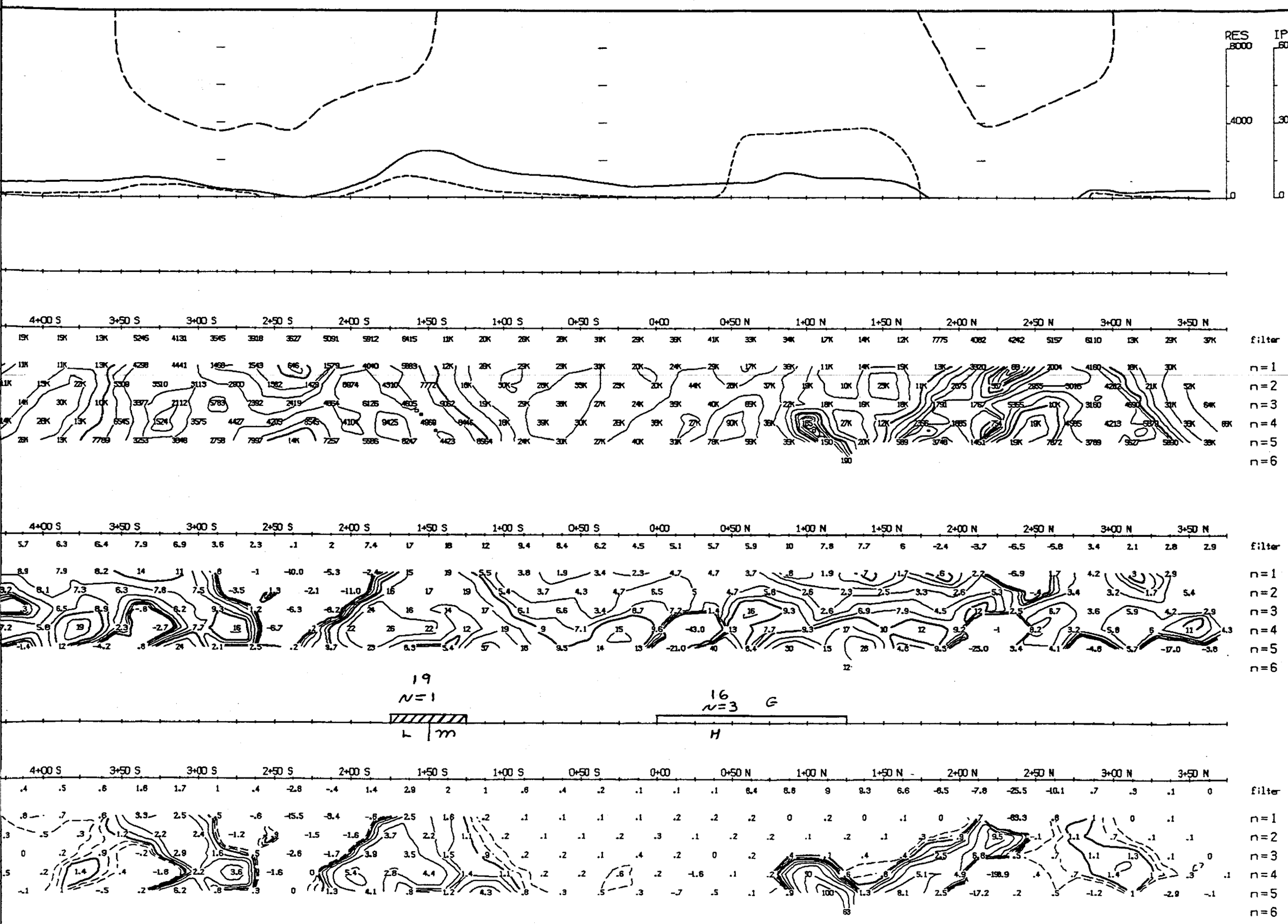



RES
8000
4000
0
IP
60
30
0
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
0+50 N
1+00 N
1+50 N
2+00 N
2+50 N
3+00 N
3+50 N
filter
n=1
n=2
n=3
n=4
n=5
n=6
19
N=1
L
m
16
N=3
G
H

MF
20
10
0
FILTERED PROFILES

TOPOGRAPHY

RESISTIVITY
(ohm_m)

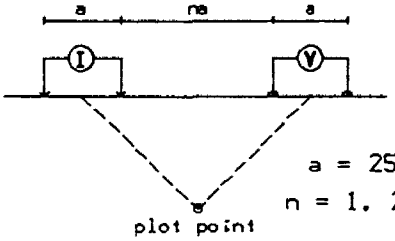
PHASE
(milli-rad)

INTERPRETATION

METAL FACTOR
(ip/res * 1000)

Line 400 W

Dipole-Dipole Array



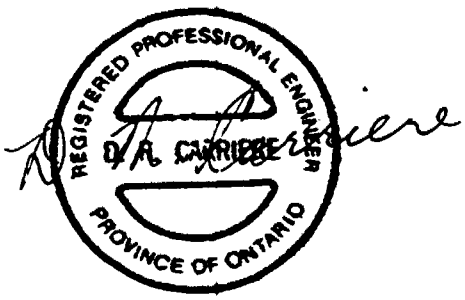
a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	--------	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.



GENEVA LAKE MINERALS CORP.

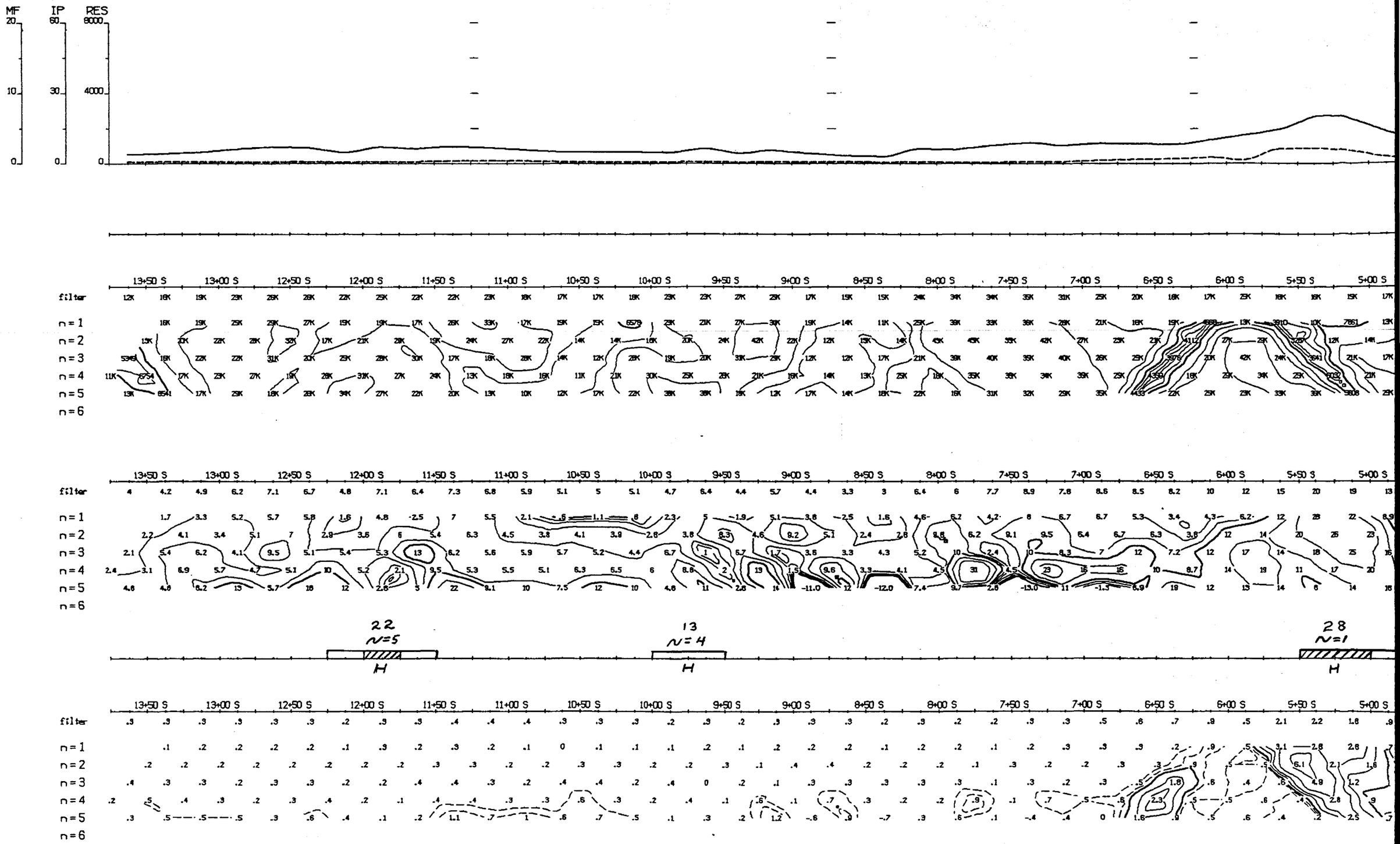
INDUCED POLARIZATION SURVEY

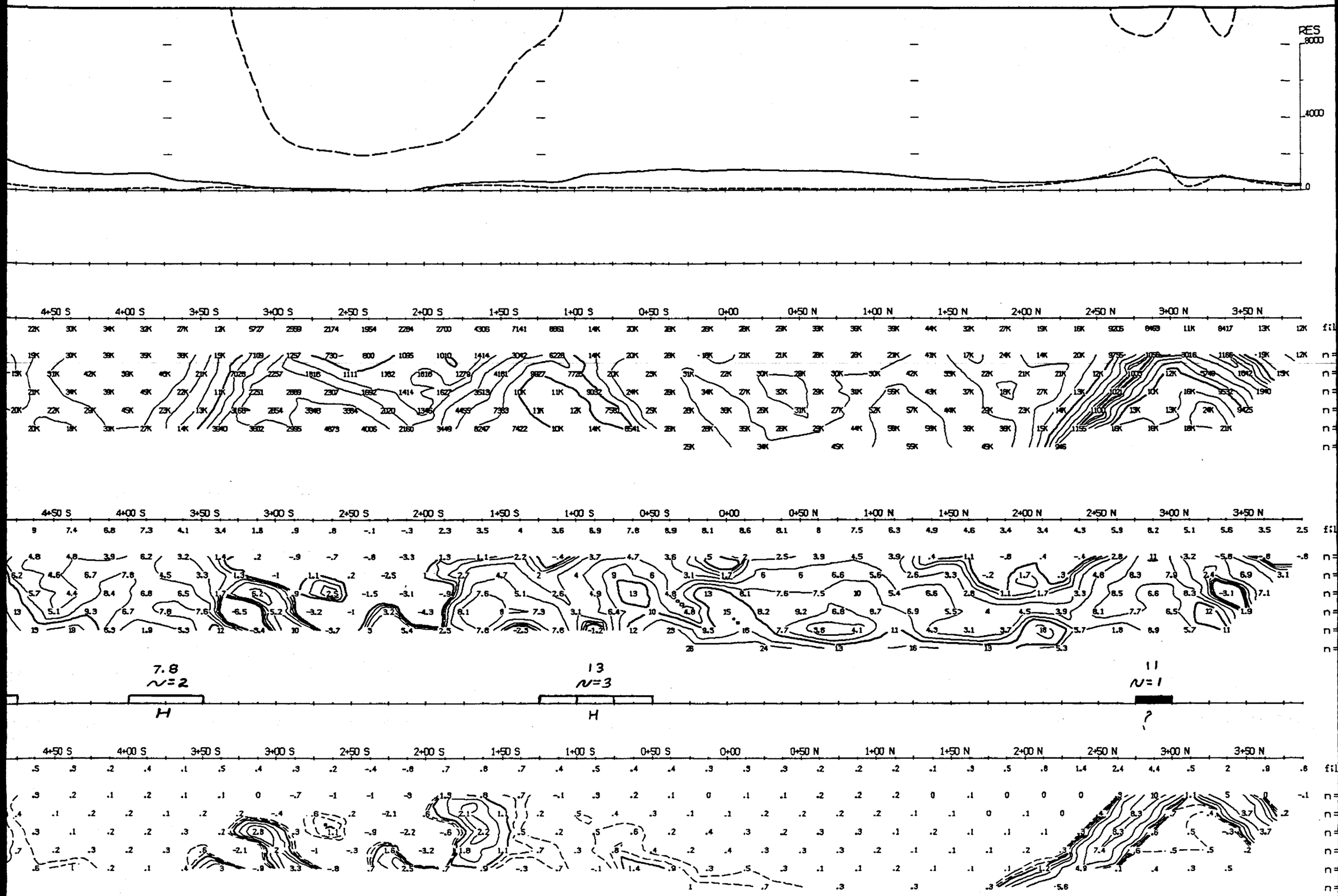
Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.


MF
IP
RES
20
10
0
60
30
0
8000
4000
0
13+50 S
13+00 S
12+50 S
12+00 S
11+50 S
11+00 S
10+50 S
10+00 S
9+50 S
9+00 S
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
22
N=5
H
13
N=4
H
28
N=1
H


RES
8000
4000
0
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
0+50 N
1+00 N
1+50 N
2+00 N
2+50 N
3+00 N
3+50 N
7.8
N=2
H
13
N=3
H
11
N=1
?

IP
60
30
0

MF
20
10
0

FILTERED PROFILES

TOPOGRAPHY

ter
1
RESISTIVITY
(ohm_m)
2
3
4
5
6

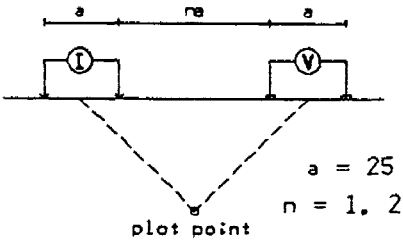
ter
1
PHASE
(milli-rad)
2
3
4
5
6

INTERPRETATION

ter
1
METAL FACTOR
(ip/res * 1000)
2
3
4
5
6

Line 300 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10....

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

REGISTERED PROFESSIONAL ENGINEER
R. CARRIERE
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GENEVA LAKE MINERALS CORP.

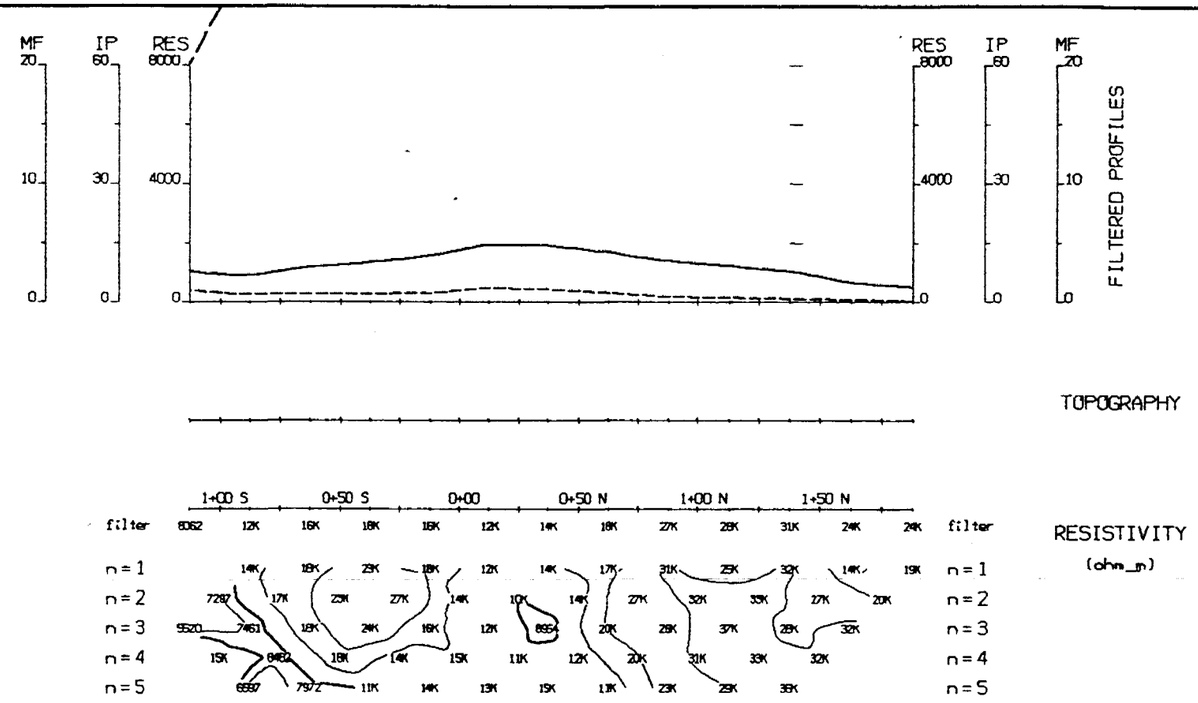
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

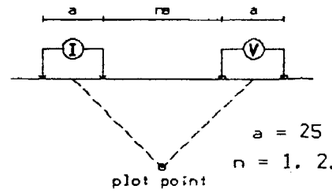
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



Line 250 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	- - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

REGISTERED PROFESSIONAL ENGINEER
D. R. CARRIERE
PROVINCE OF ONTARIO

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
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Date: N.T.S.

Scale: 1 : 2500

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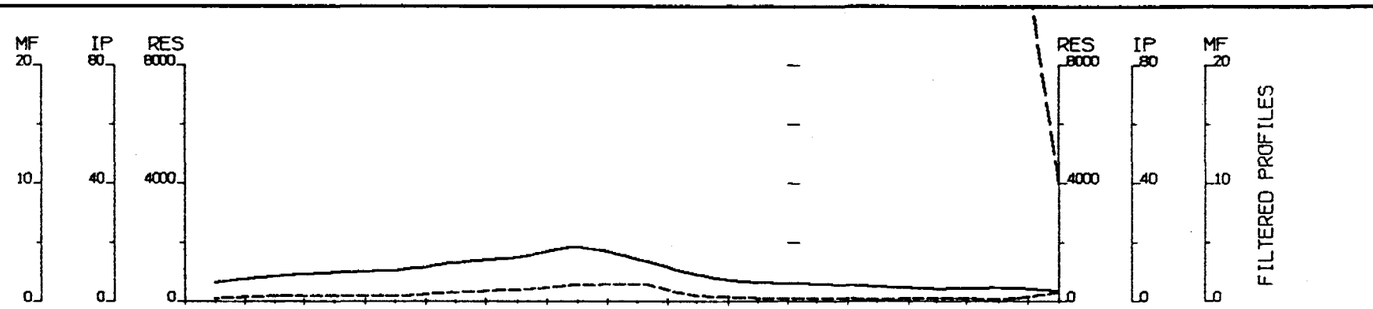
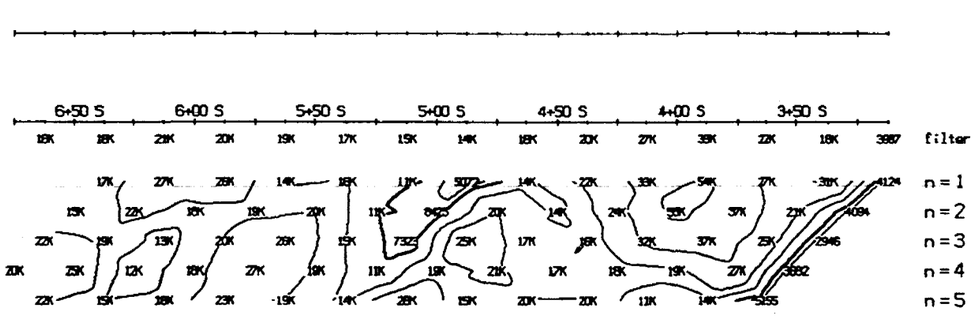
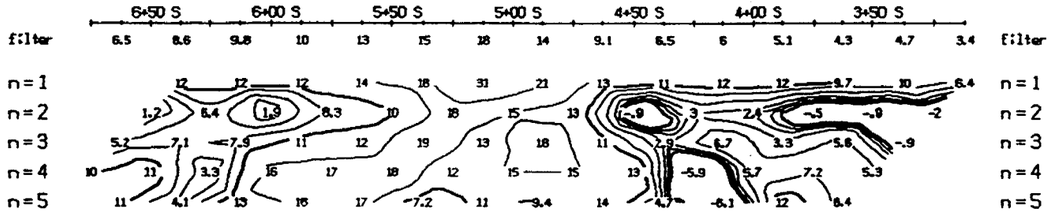


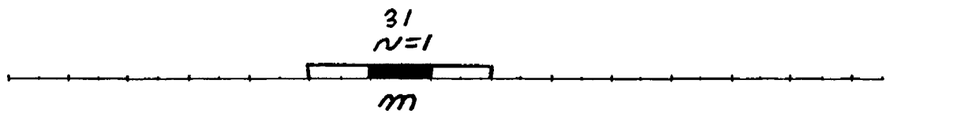


TOPOGRAPHY

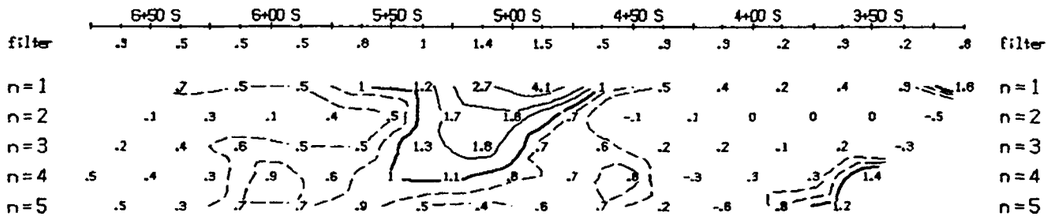
RESISTIVITY
(ohm-m)



PHASE
(milli-rad)



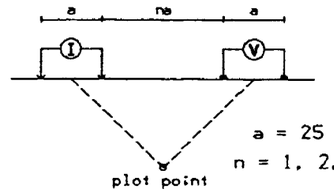
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 250 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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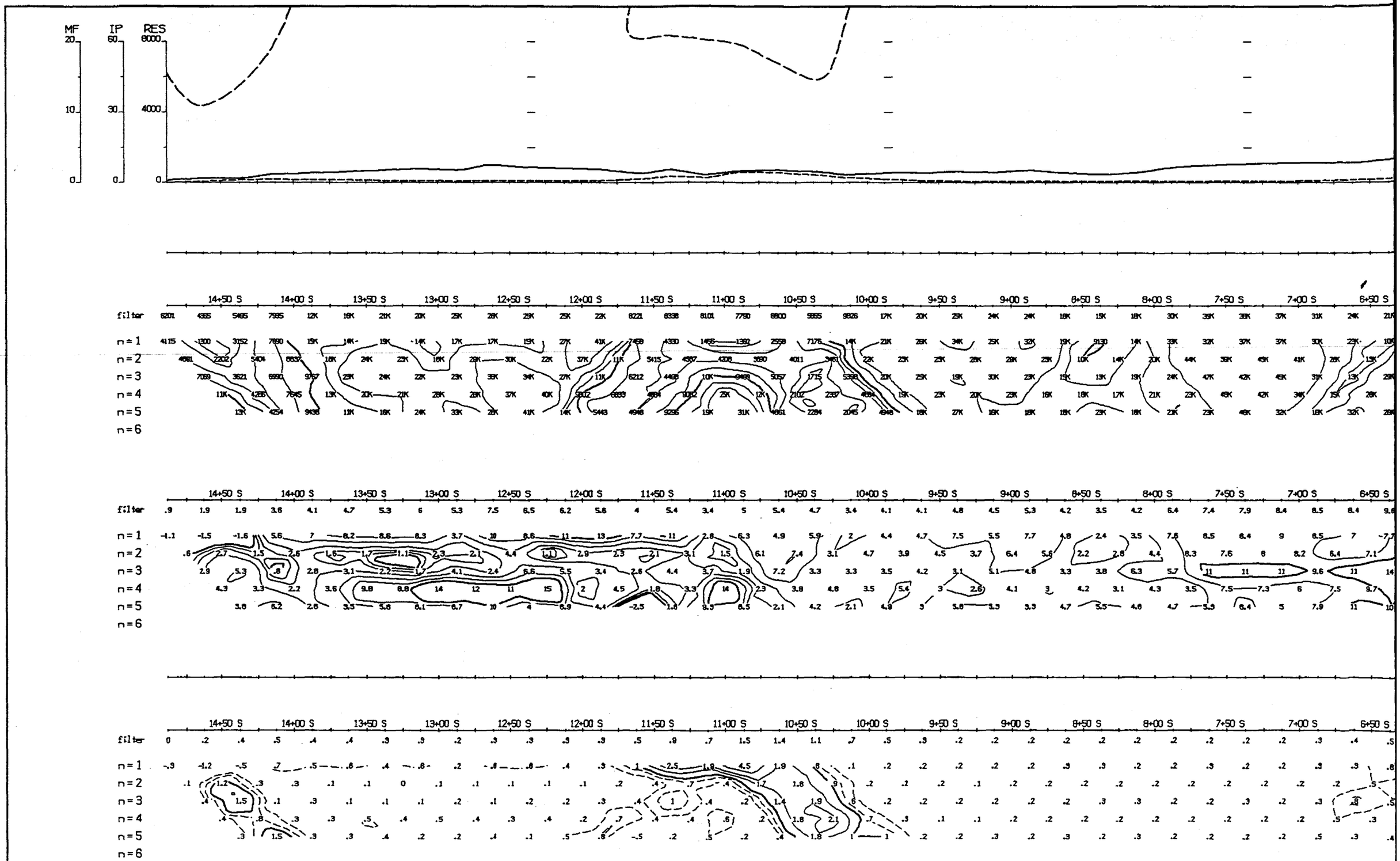
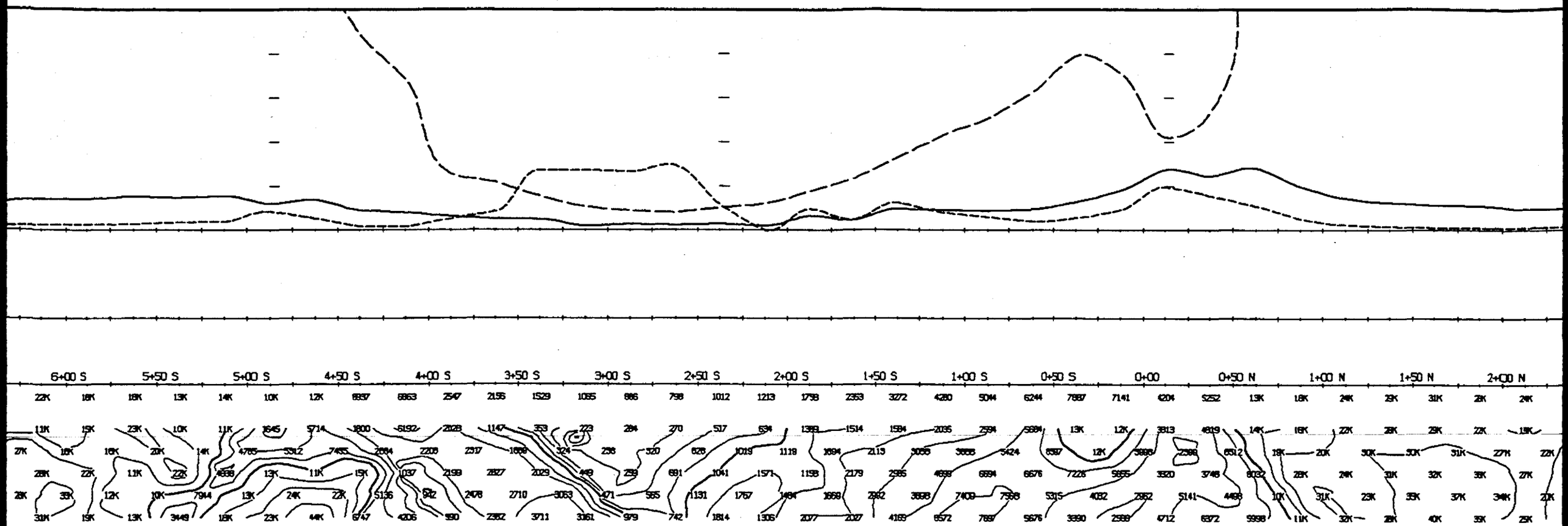

MF
IP
RES
20
10
0
60
30
0
8000
4000
0
14+50 S
14+00 S
13+50 S
13+00 S
12+50 S
12+00 S
11+50 S
11+00 S
10+50 S
10+00 S
9+50 S
9+00 S
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
filter
n=1
n=2
n=3
n=4
n=5
n=6


6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
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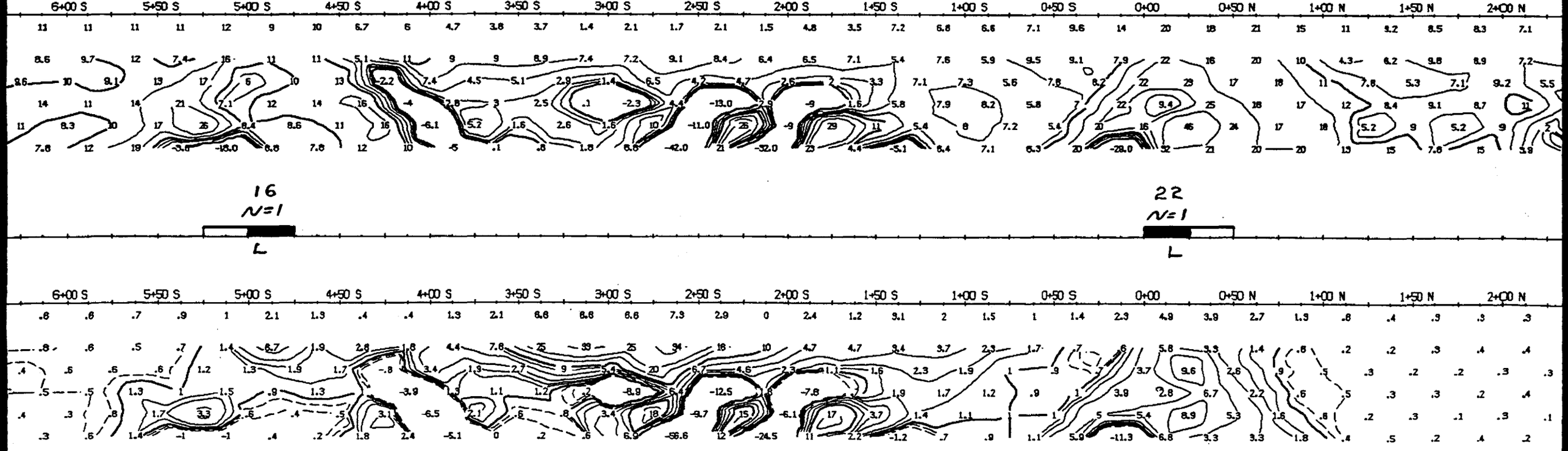
1+00 N
1+50 N
2+00 N


6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
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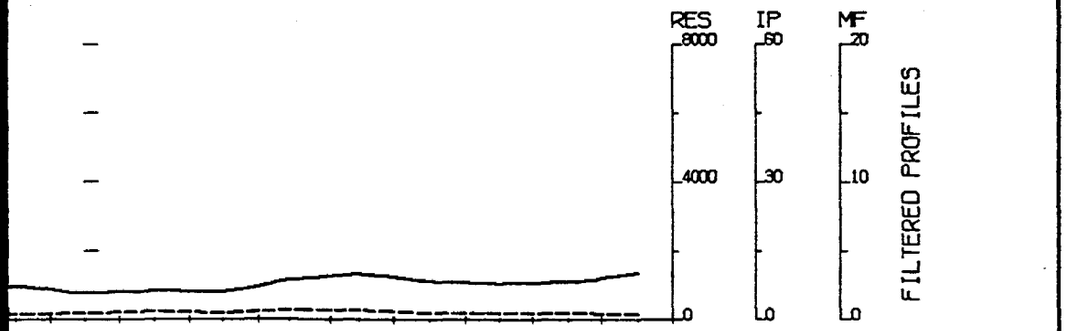
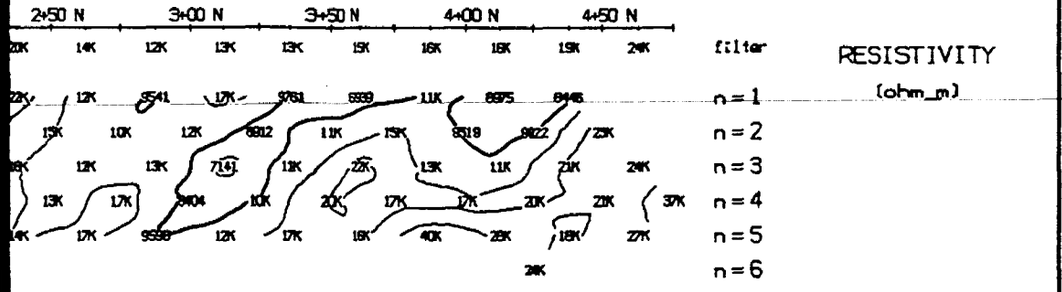
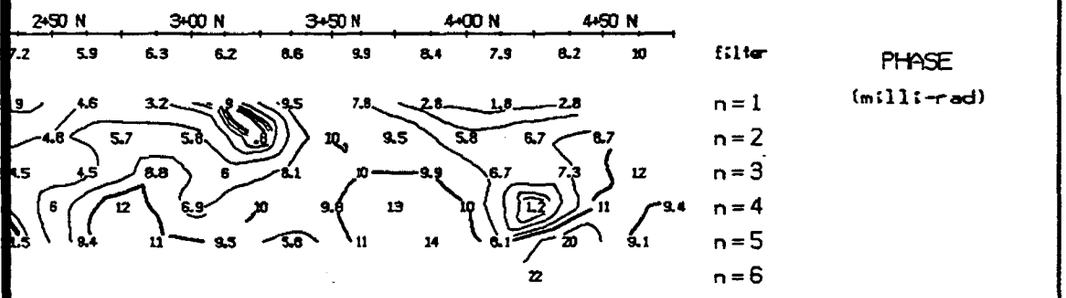
L
22
N=1
L



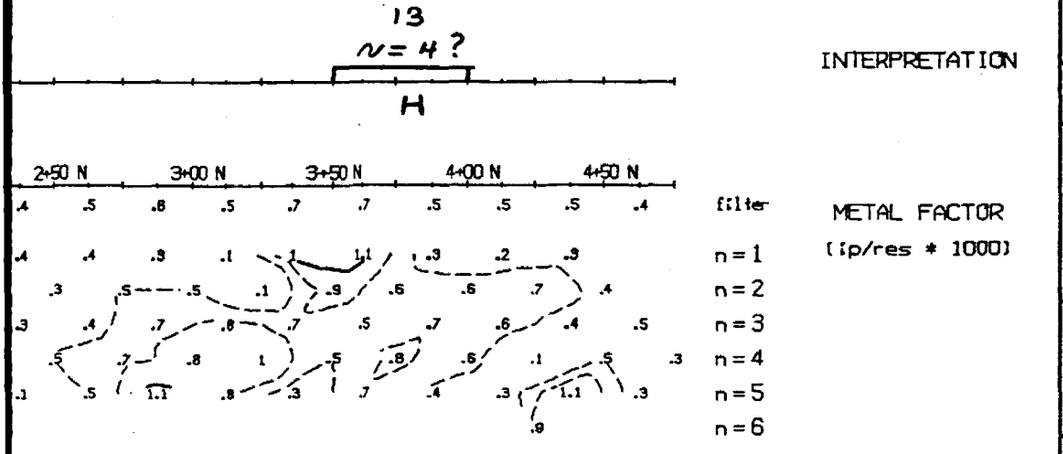
TOPOGRAPHY



RESISTIVITY
(ohm_m)



PHASE
(milli-rad)

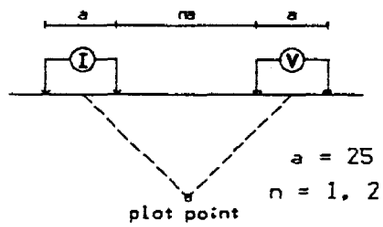


INTERPRETATION

METAL FACTOR
(ip/res * 1000)

Line 200 W

Dipole-Dipole Array



Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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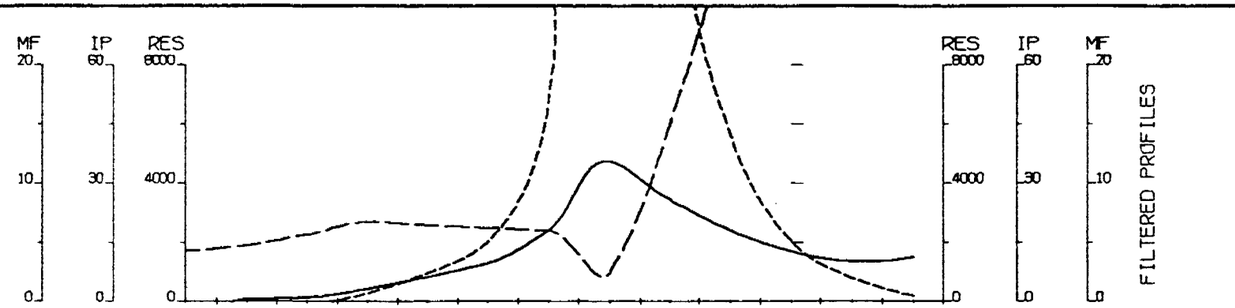
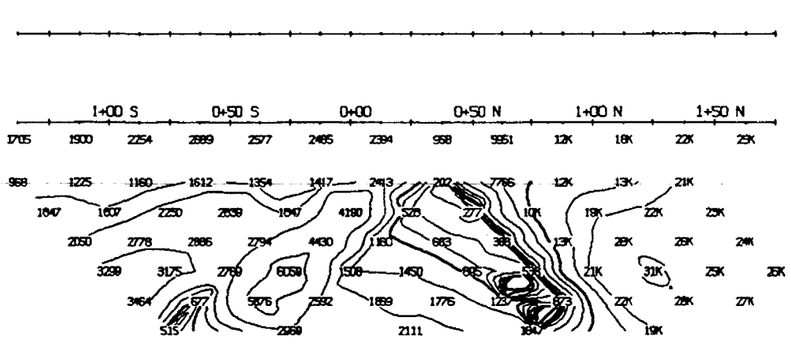
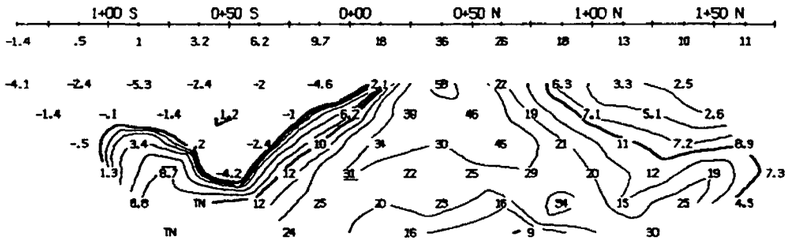


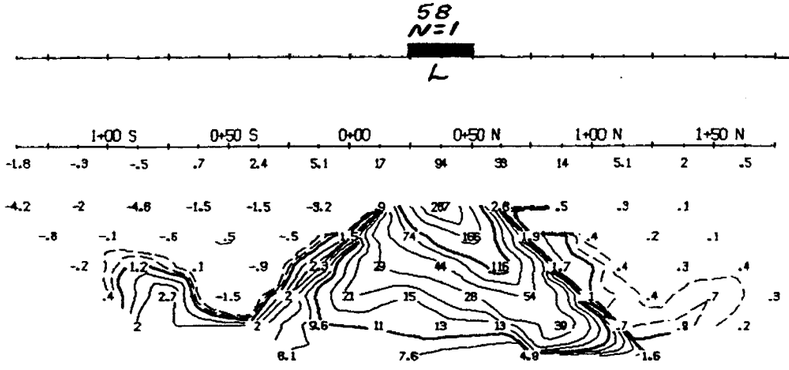


TOPOGRAPHY

RESISTIVITY
(ohm_m)



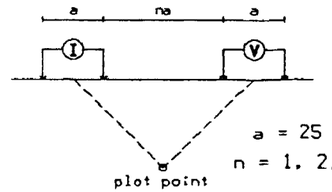
PHASE
(milli-rad)



INTERPRETATION

Line 150 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	- - - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

REGISTERED PROFESSIONAL ENGINEER
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GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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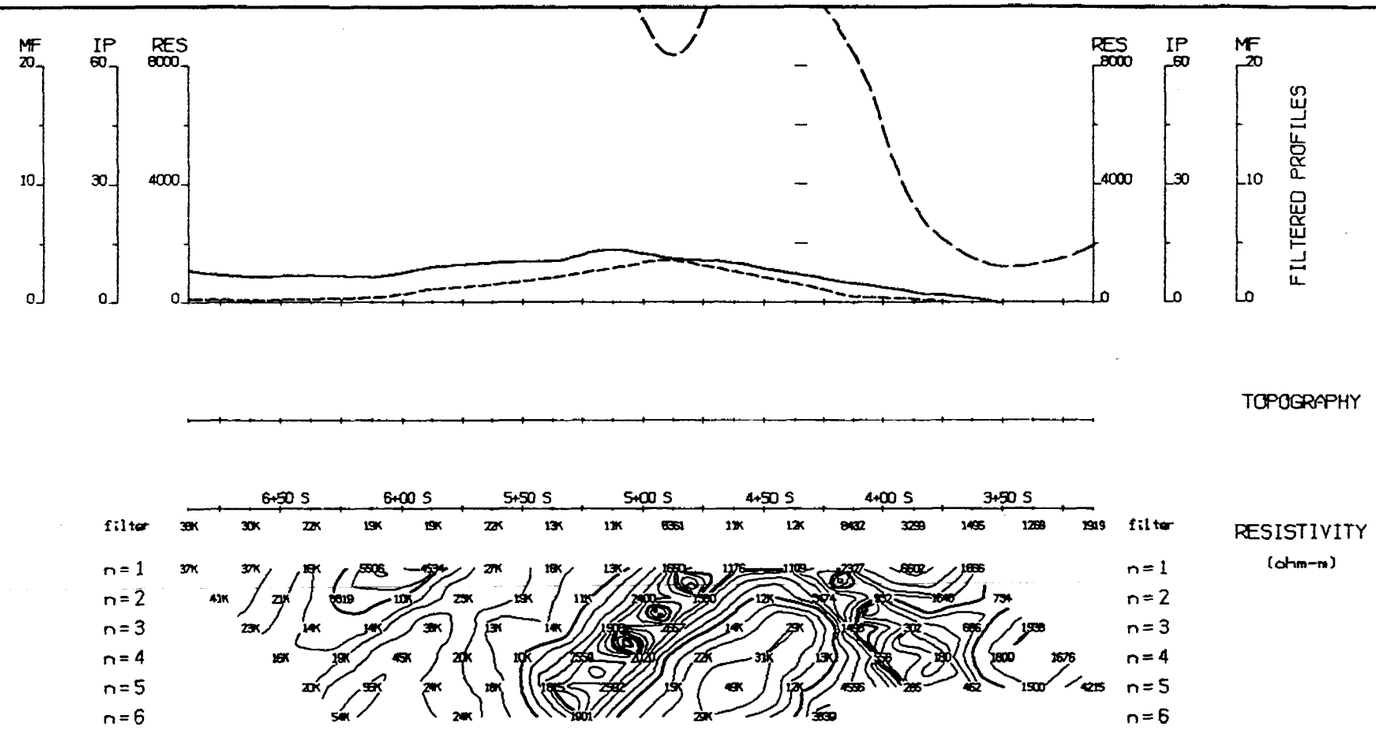
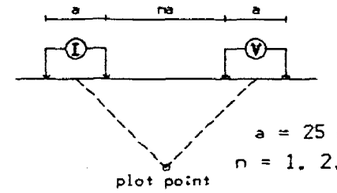


Line 150 W

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity ———	*
Polarization ———	* *
Metal Factor - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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Benny Grid
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Date: N.T.S.

Scale: 1 : 2500

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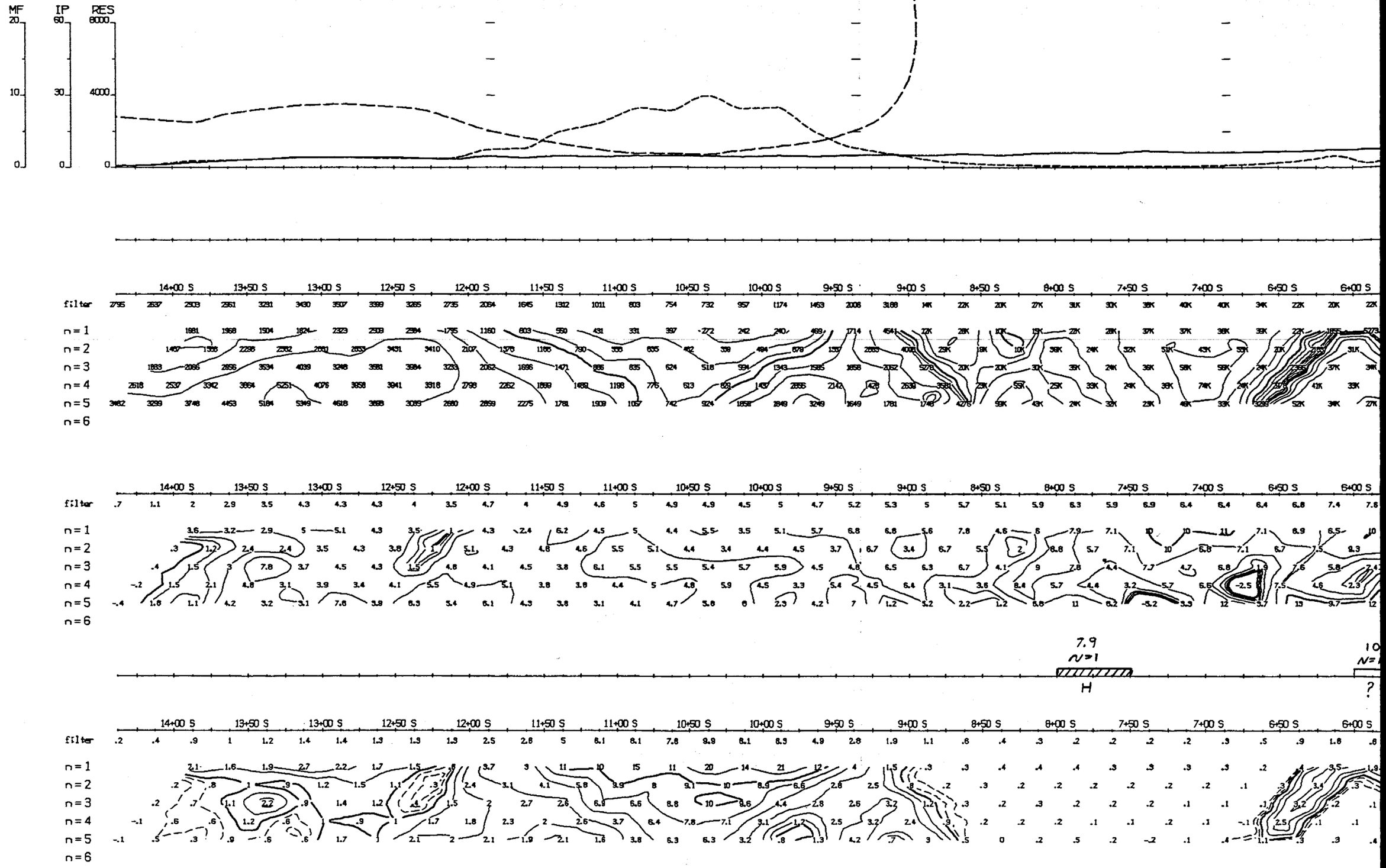

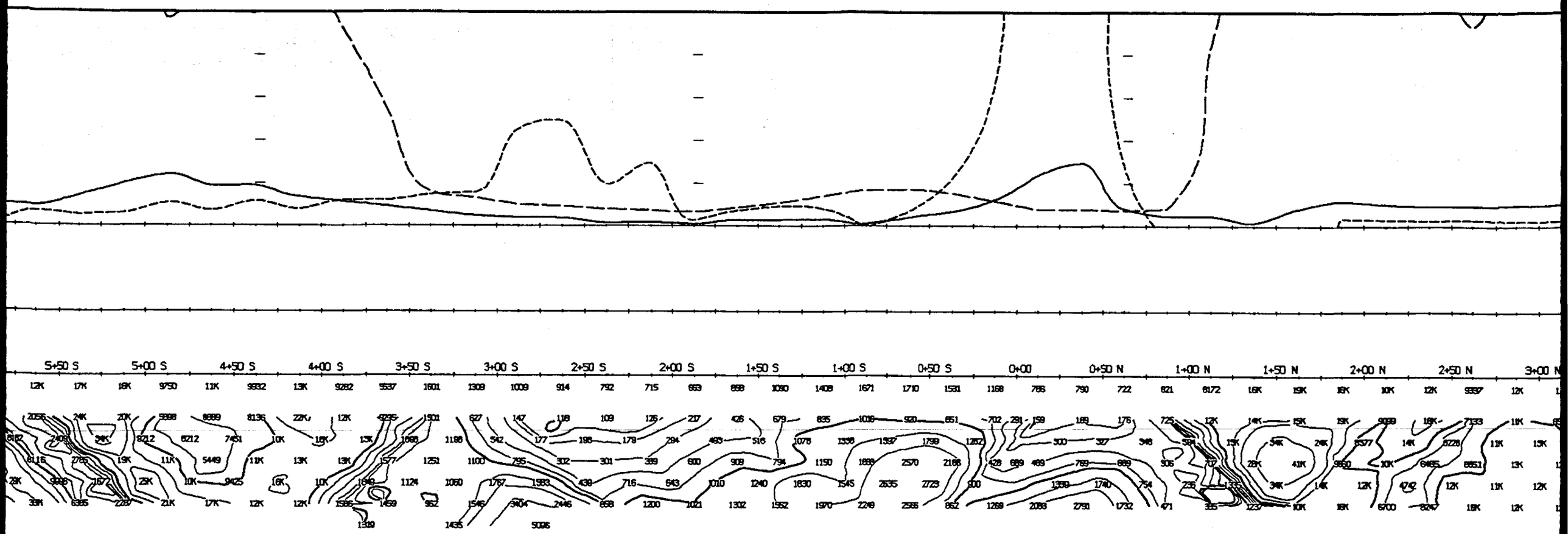
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
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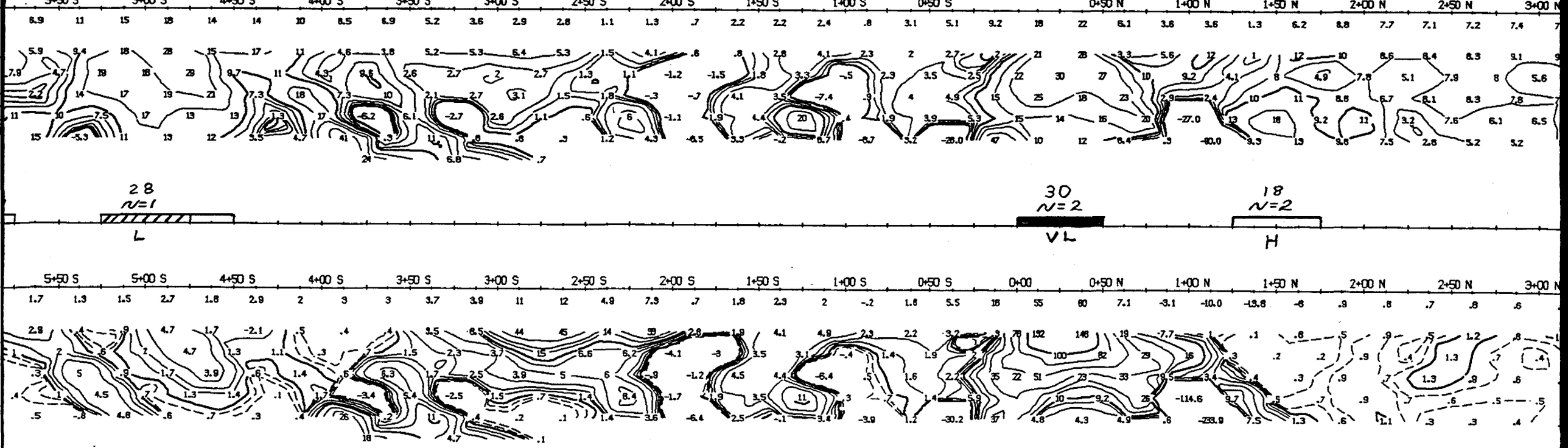
2+50 N
3+00 N


5+50 S
5+00 S
4+50 S
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3+00 S
2+50 S
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1+00 S
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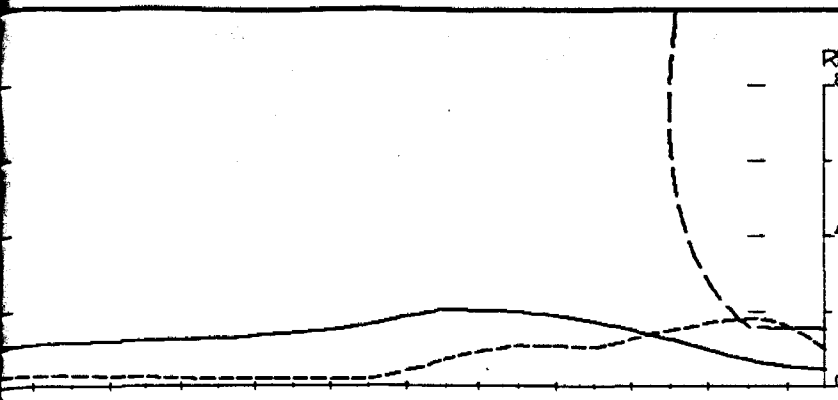
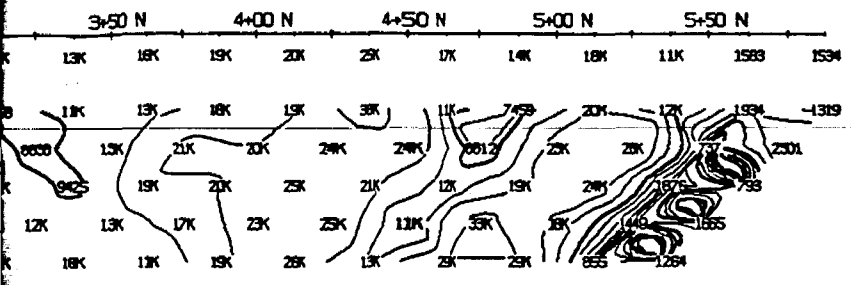
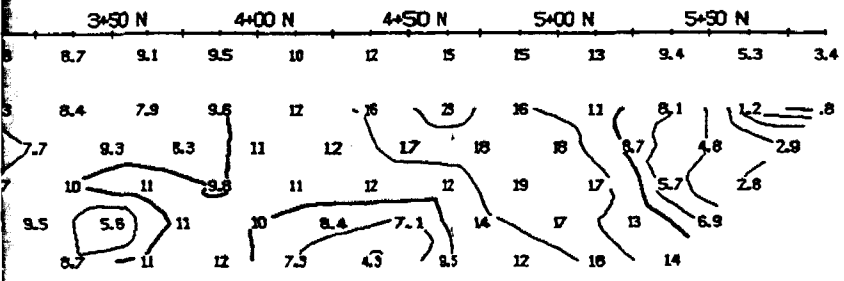
VL
18
N=2
H



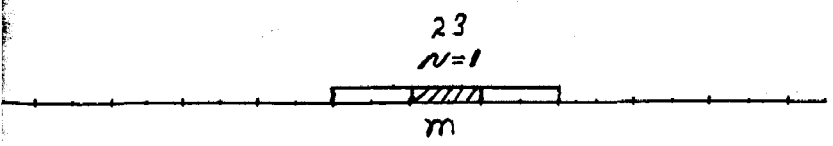
TOPOGRAPHY



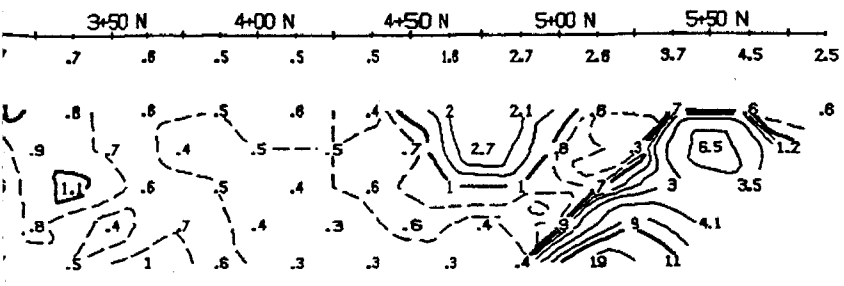
RESISTIVITY
(ohm_m)



PHASE
(milli-rad)



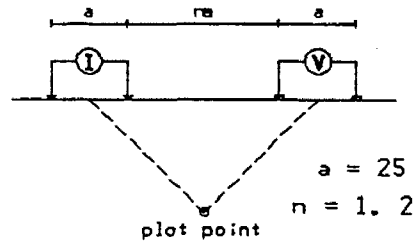
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 100 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

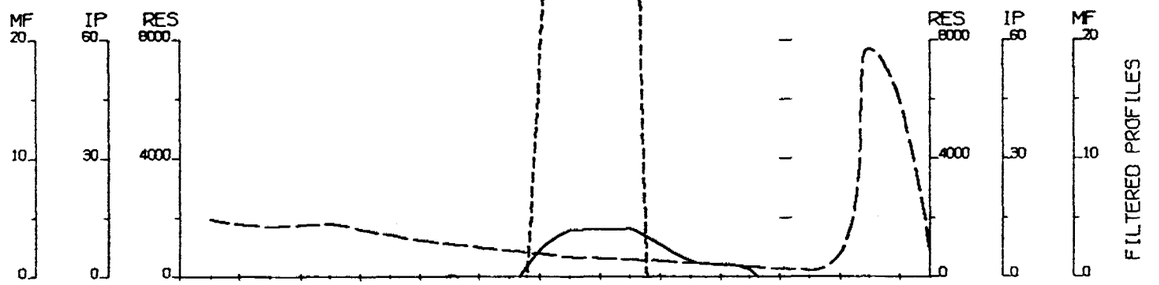
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

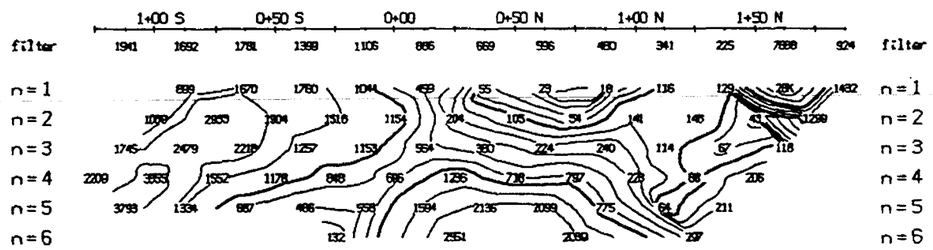
Date: N.T.S.

Scale: 1 : 2500

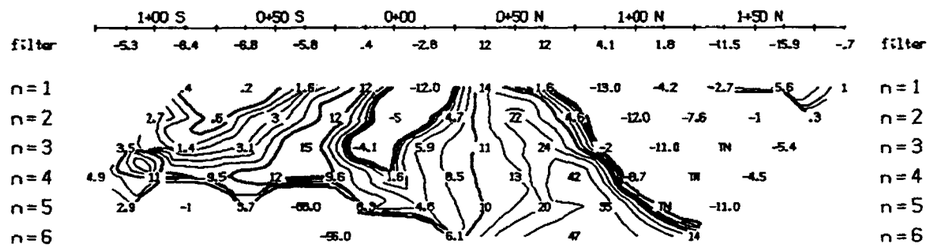
MERTENS & MacNEIL LTD.



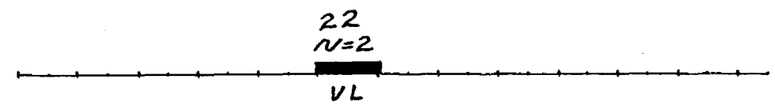
TOPOGRAPHY



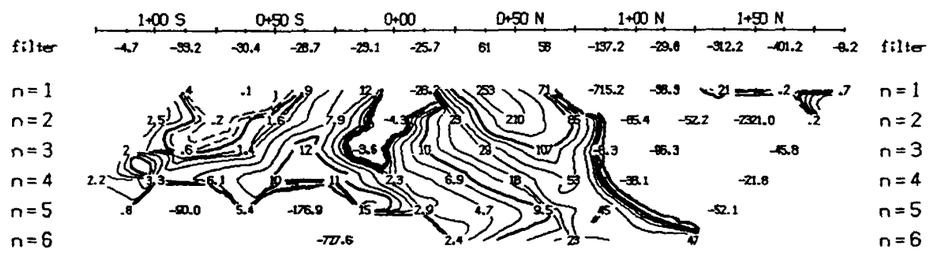
RESISTIVITY
(ohm_m)



PHASE
(milli-rad)



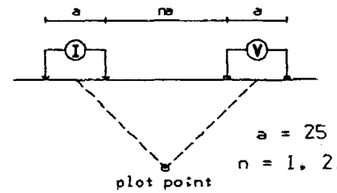
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 50 W

Dipole-Dipole Array



Filtered Profiles

	filter
Resistivity ————	*
Polarization ————	* *
Metal Factor - - - - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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PROVINCE OF ONTARIO

GENEVA LAKE MINERALS CORP.

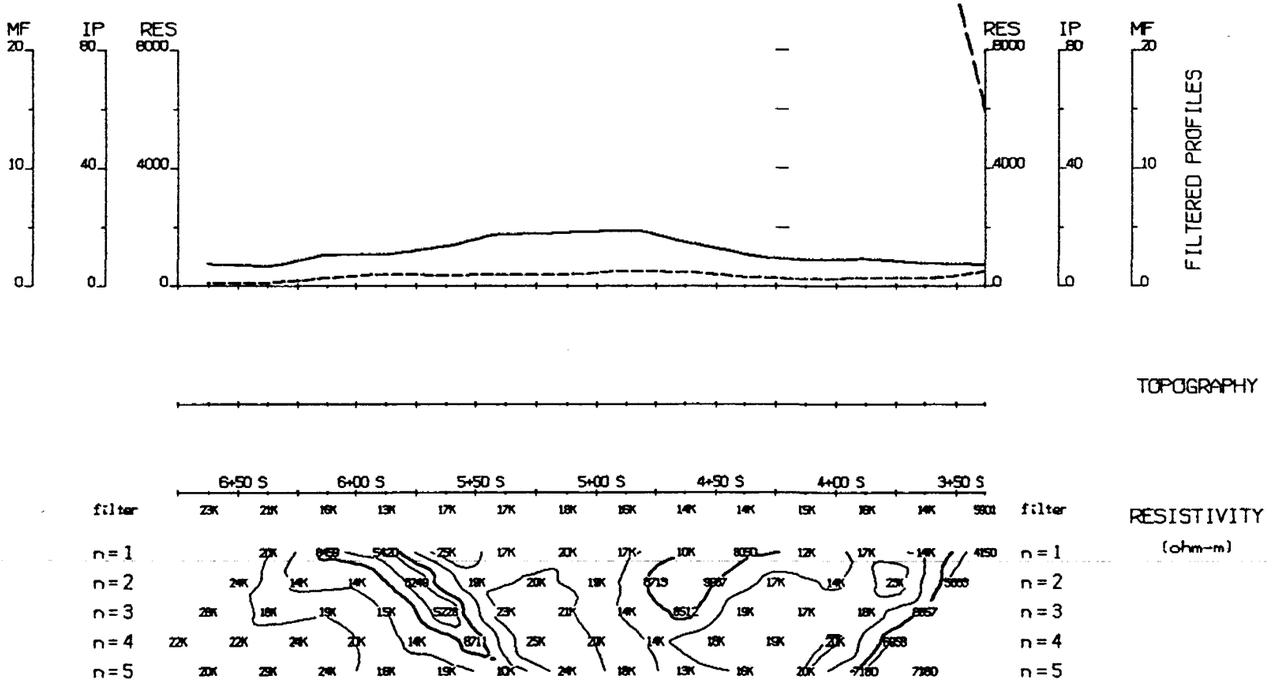
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

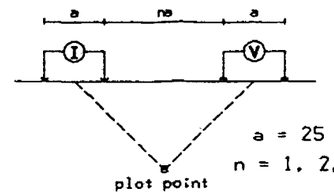
MERTENS & MacNEIL LTD.



GEOSOFT (tm) Software for the Earth Sciences, Toronto, Canada

Line 50 W

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity	*
Polarization	* *
Metal Factor	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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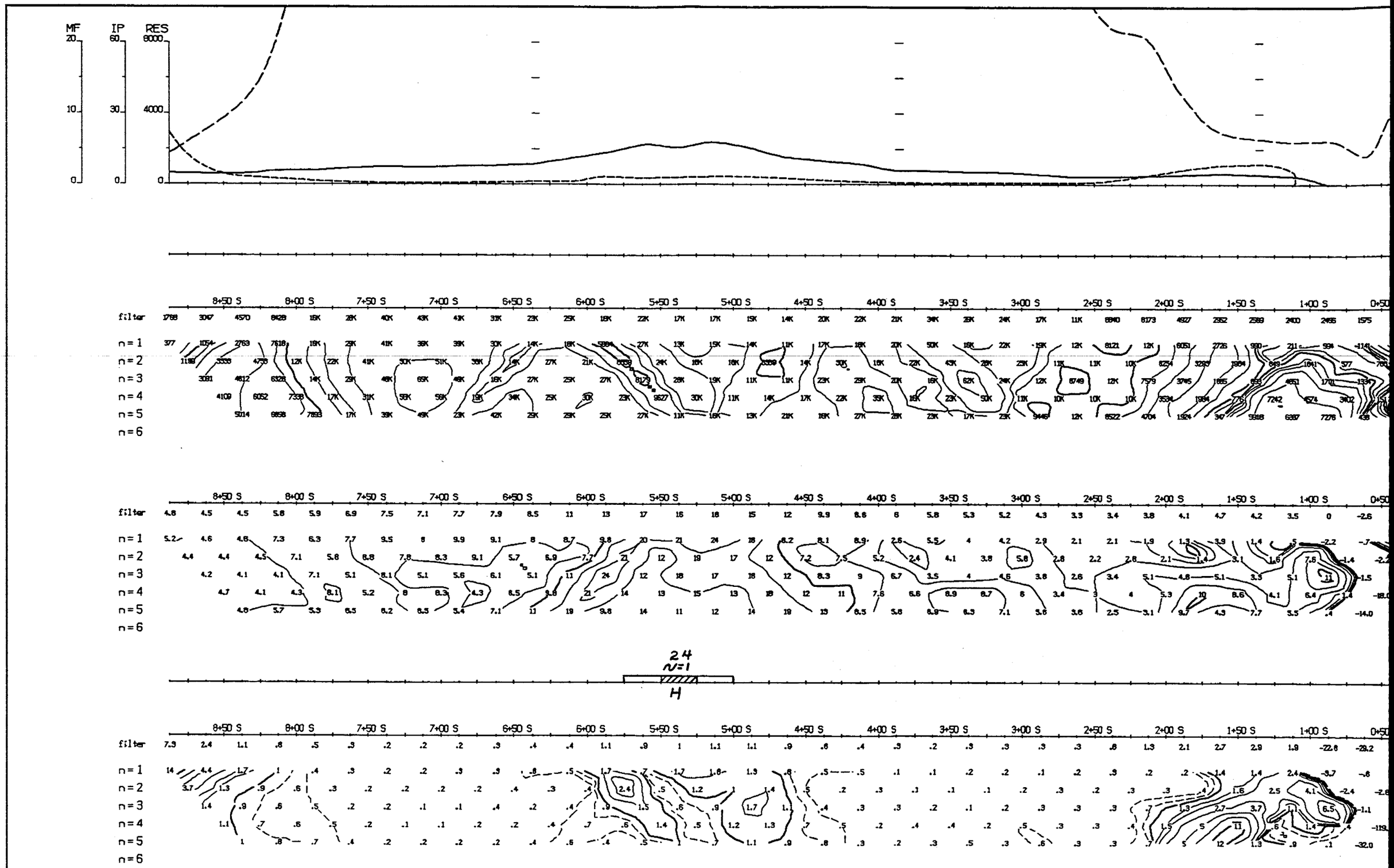
INDUCED POLARIZATION SURVEY

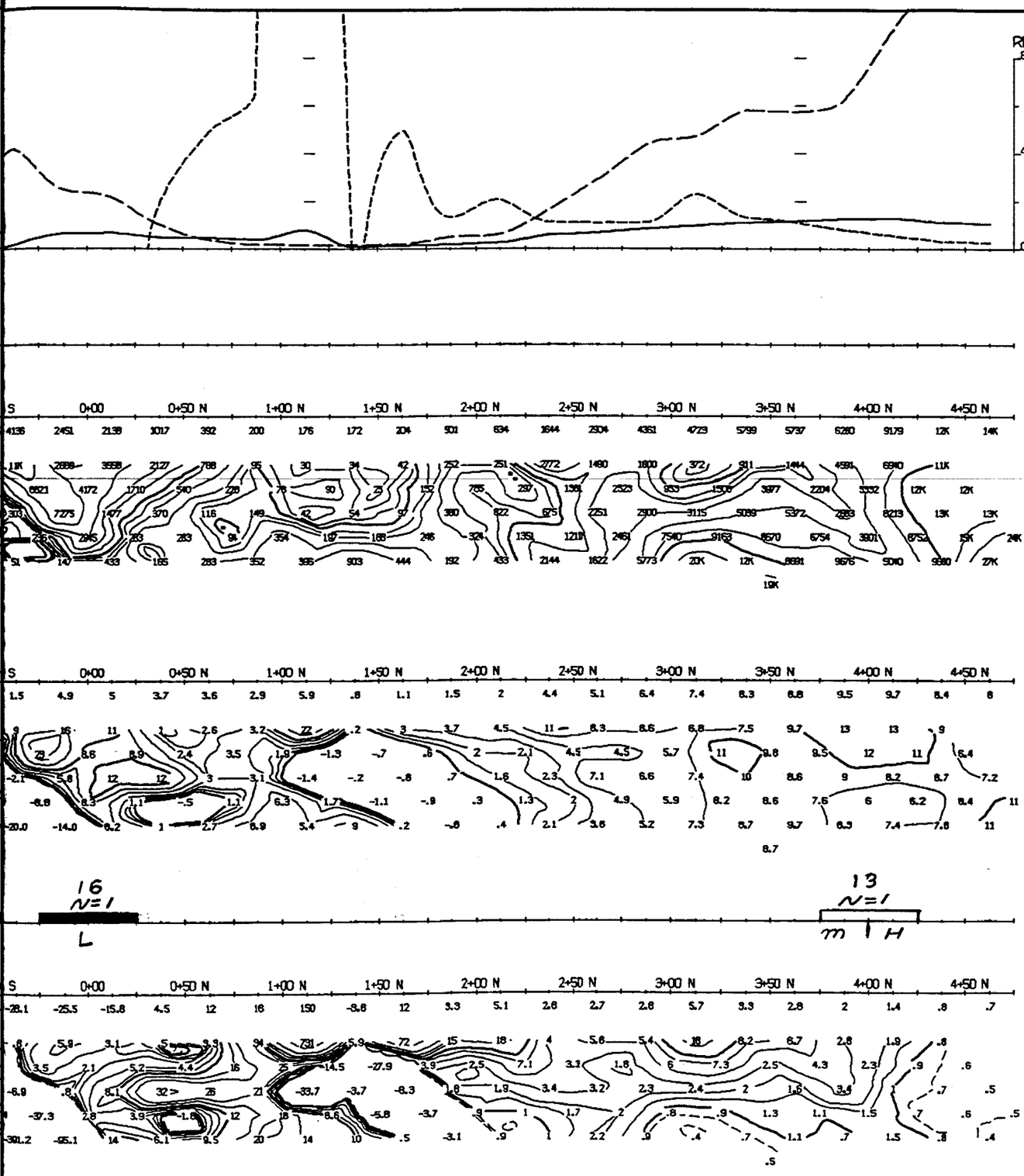
Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

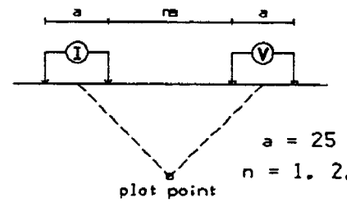
MERTENS & MacNEIL LTD.


MF
IP
RES
20
10
0
60
30
0
8000
4000
0
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50
filter
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
filter
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6
24
N=1
H
filter
n = 1
n = 2
n = 3
n = 4
n = 5
n = 6



Line 00

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity ————	*
Polarization ————	* *
Metal Factor - - - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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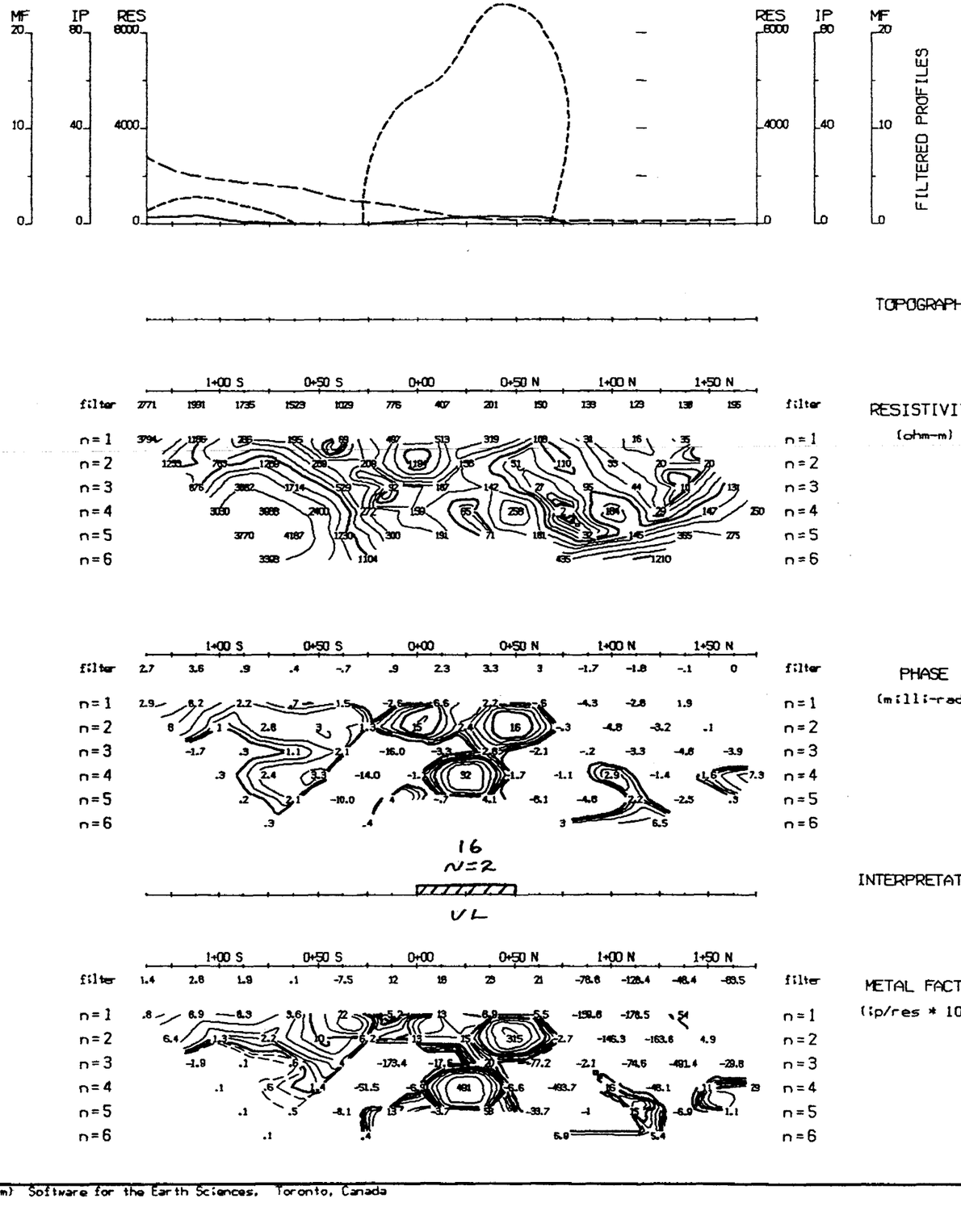
Date: N.T.S.

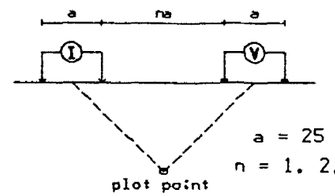
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



Line 50 E

Dipole-Dipole Array



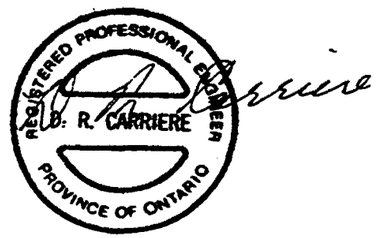
a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.



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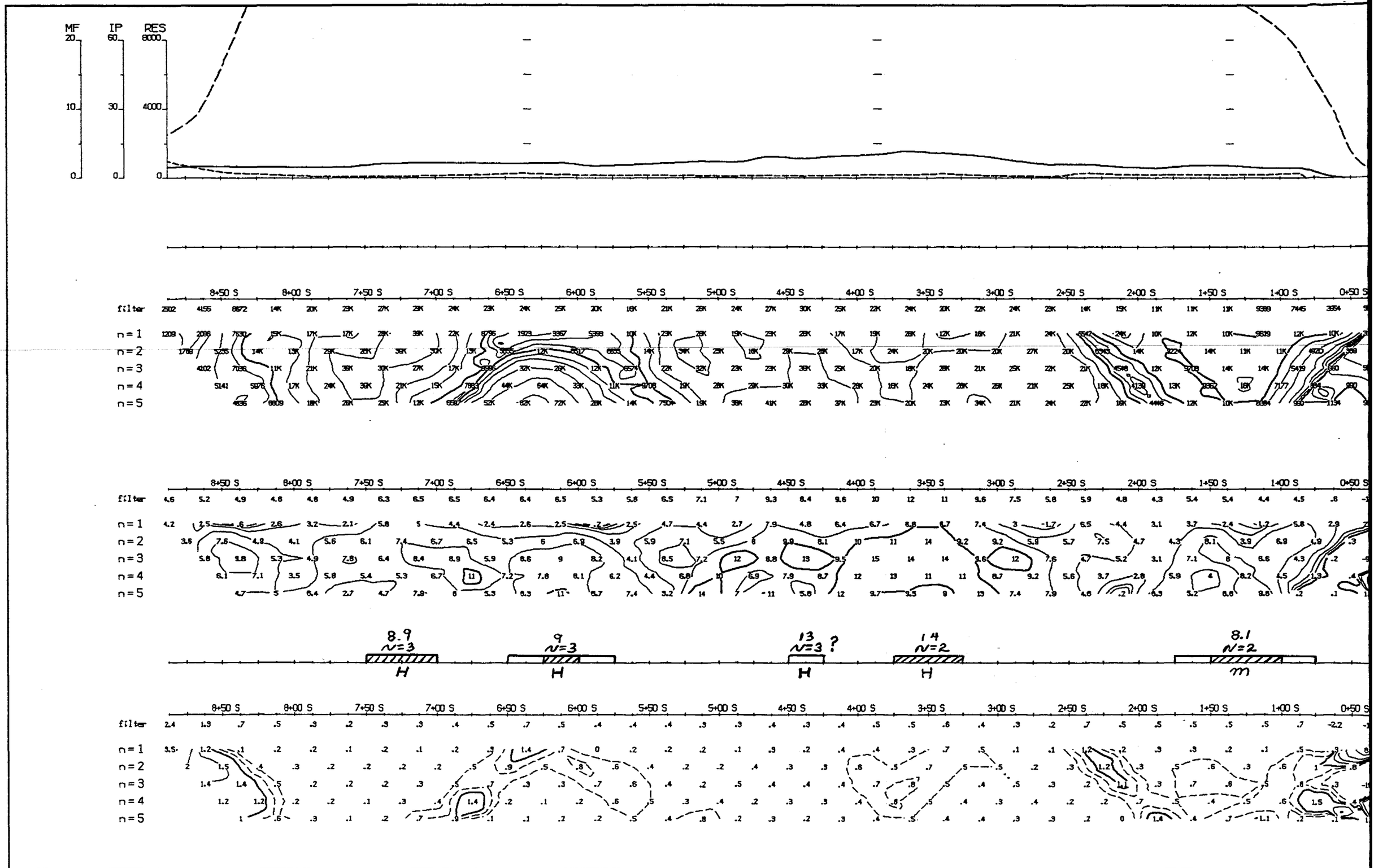
INDUCED POLARIZATION SURVEY

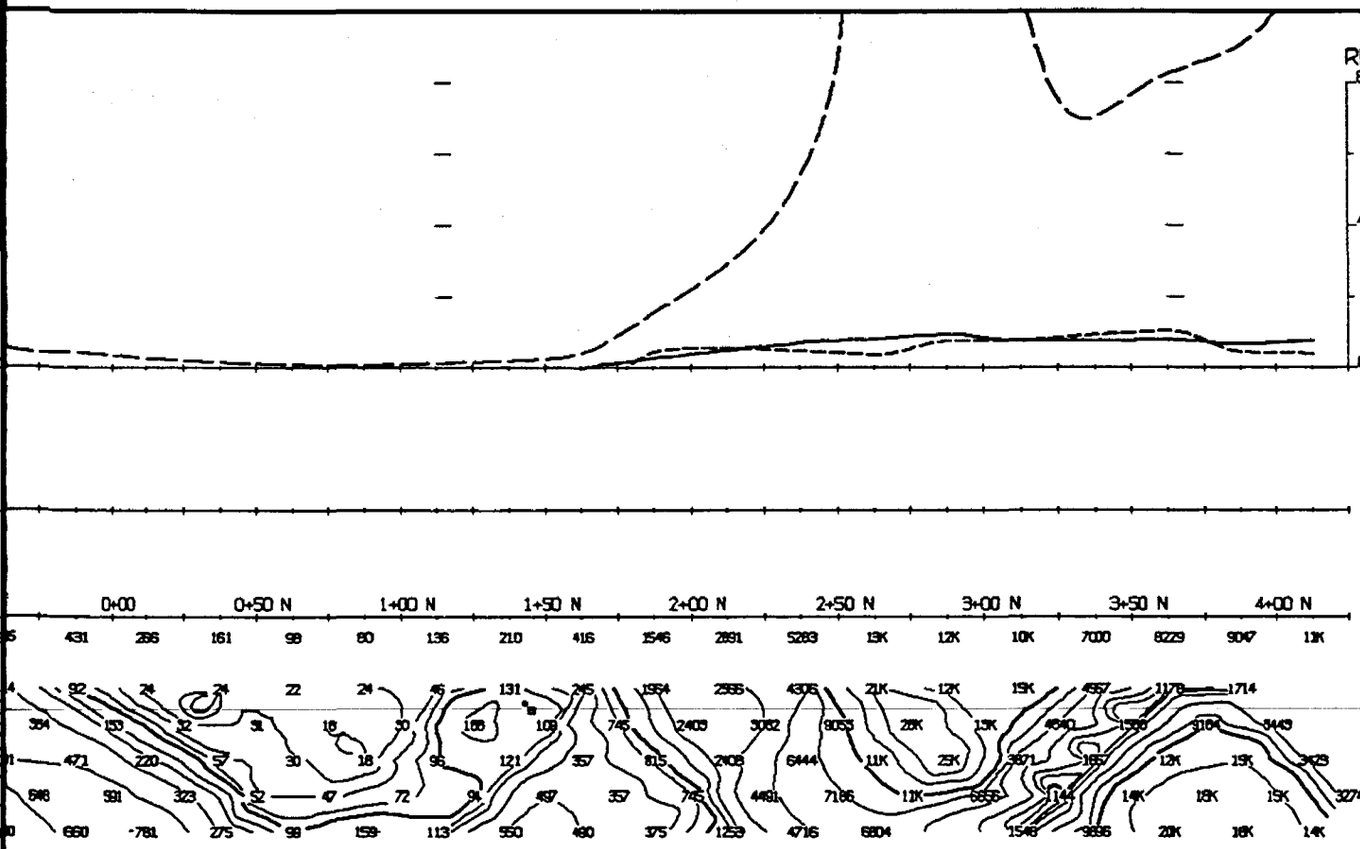
Benny Grid
Benny , Ontario.

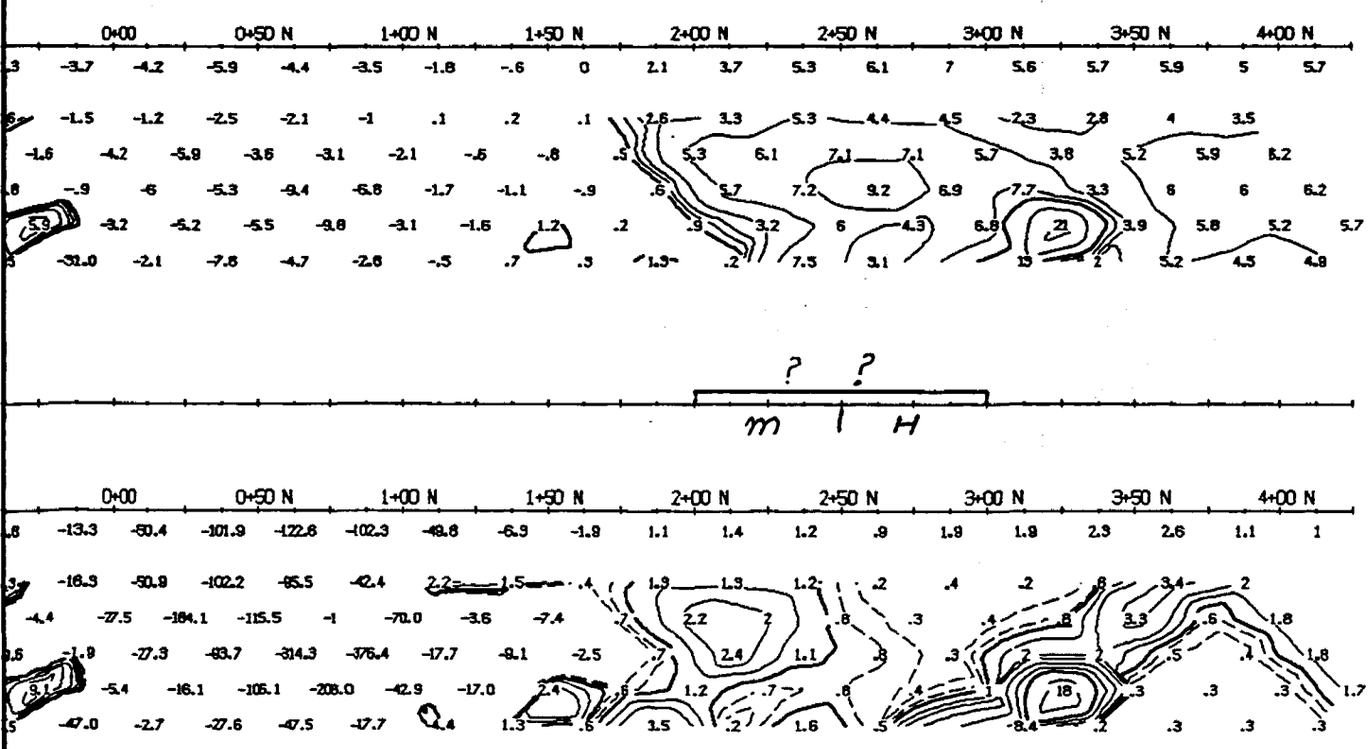
Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.

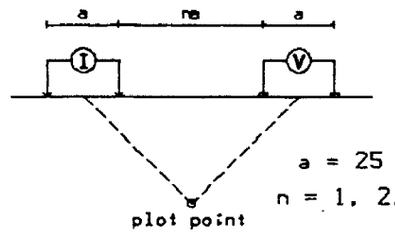

MF
IP
RES
20
10
0
60
30
0
8000
4000
0
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
8.9
N=3
H
9
N=3
H
13
N=3 ?
H
14
N=2
H
8.1
N=2
m





Line 100 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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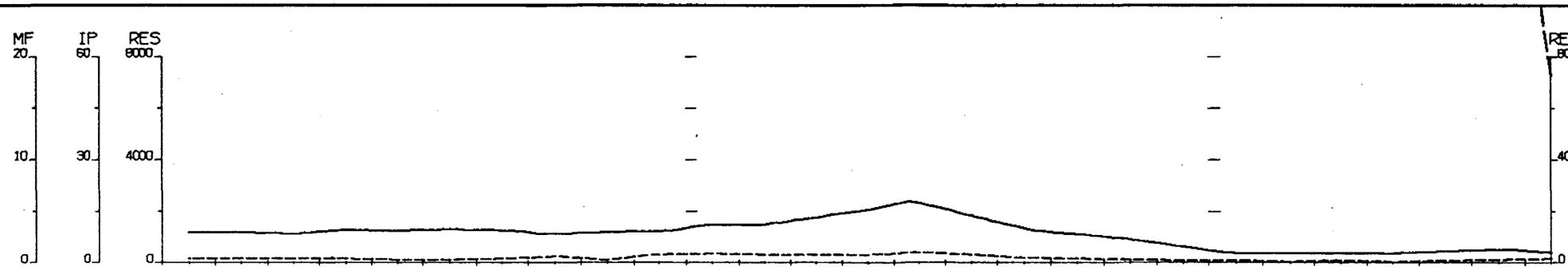
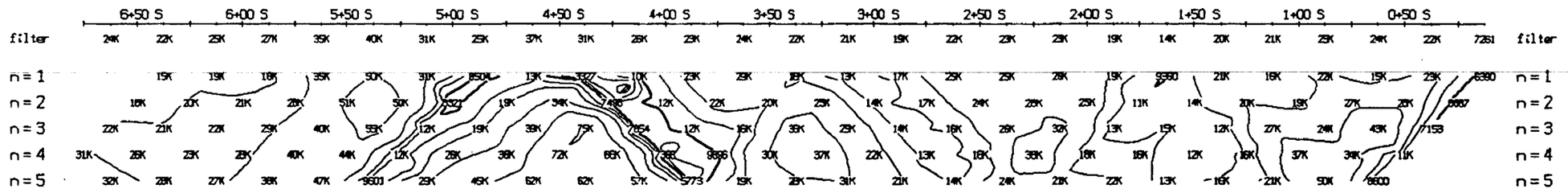
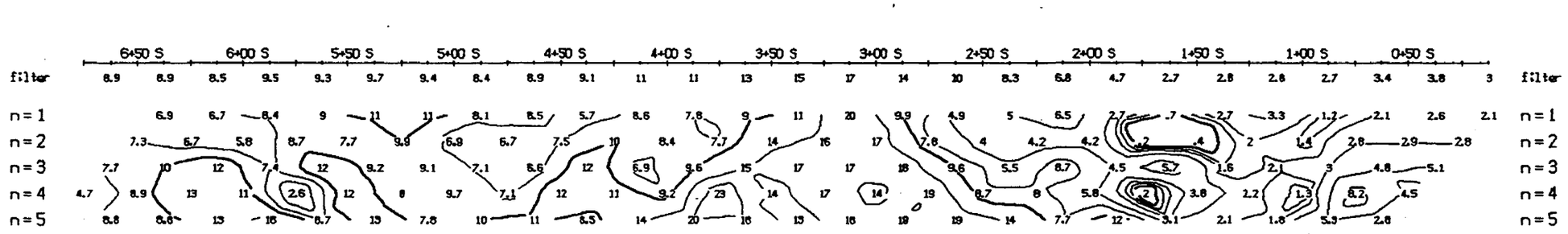


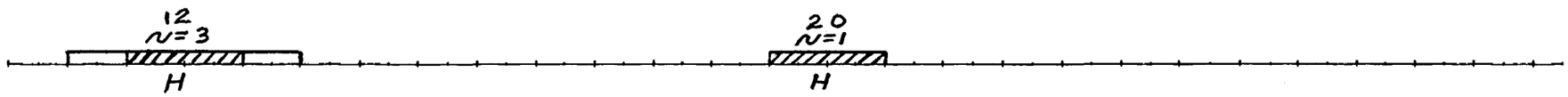
TOPOGRAPHY



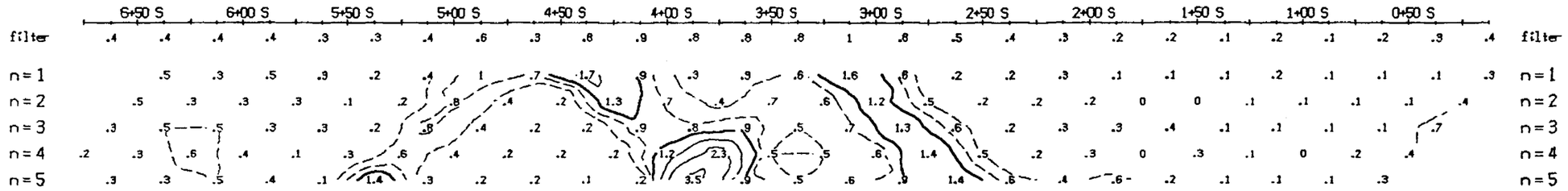
RESISTIVITY
(ohm_m)



PHASE
(milli-rad)



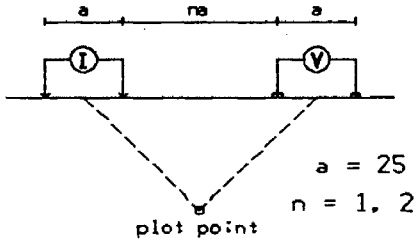
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 150 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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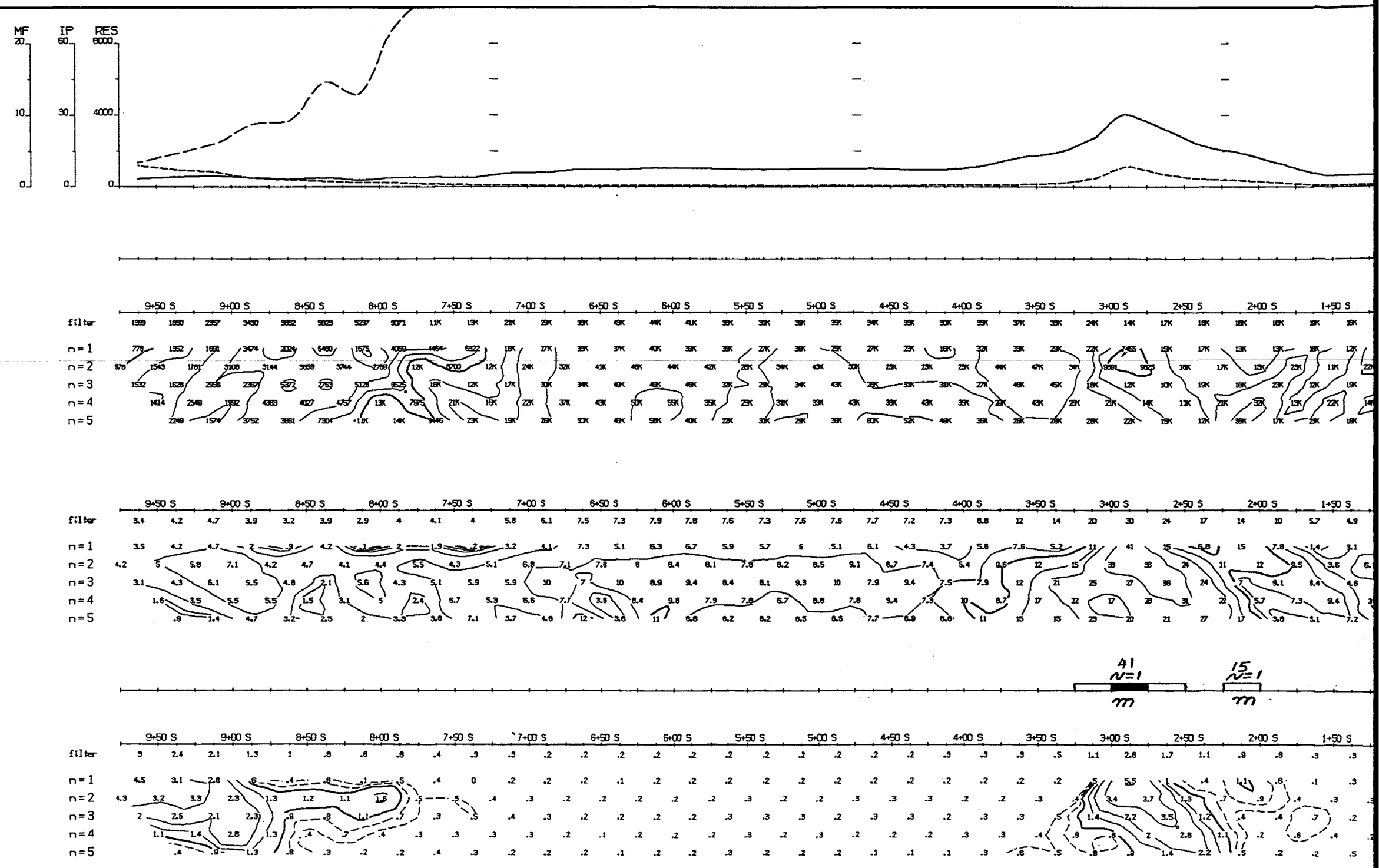
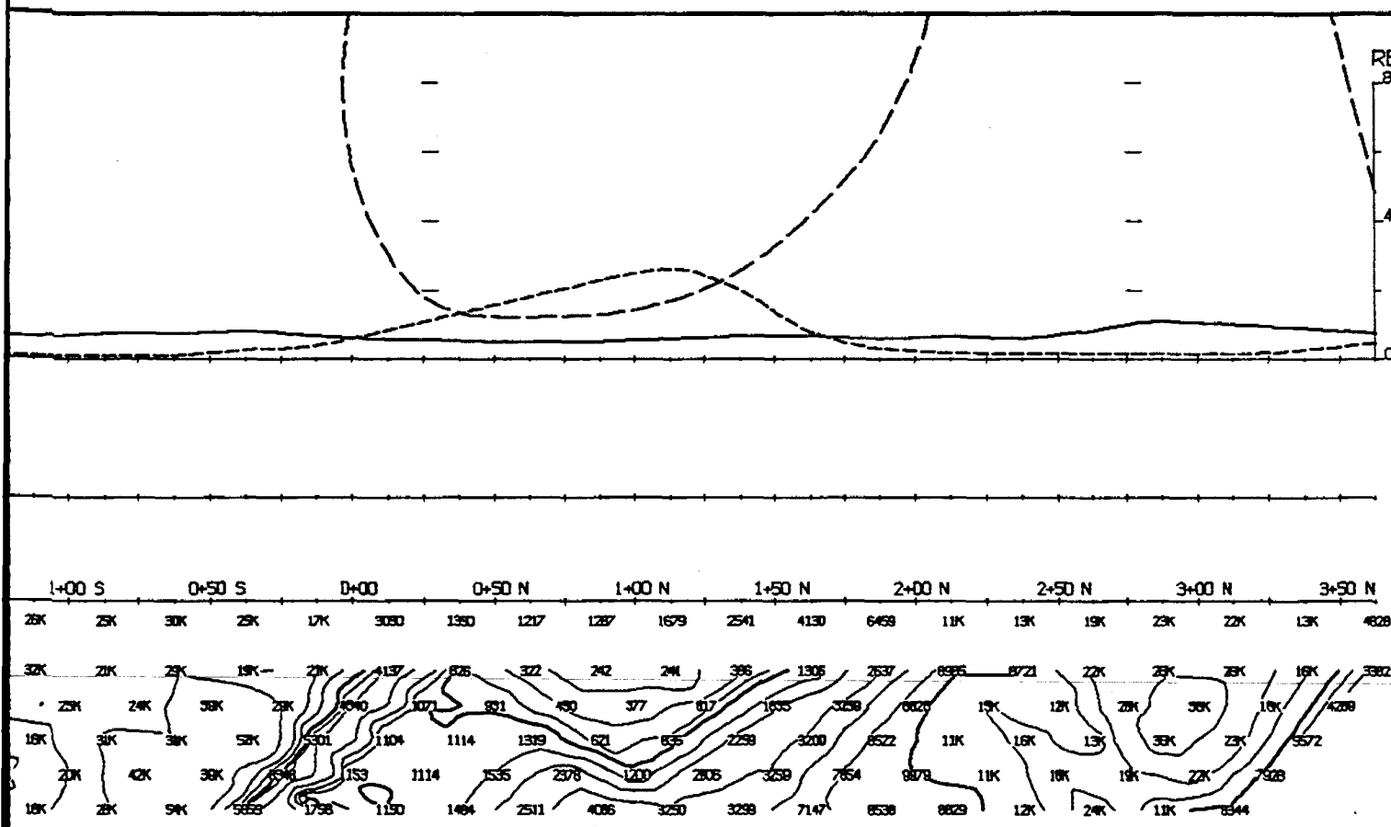
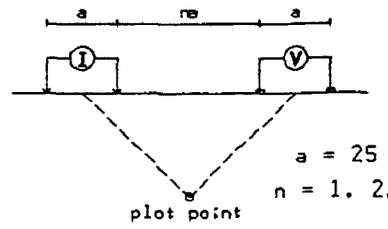
GEOSOFT


MF
IP
RES
20
10
0
60
30
0
8000
4000
0
9+50 S
9+00 S
8+50 S
8+00 S
7+50 S
7+00 S
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
filter
n = 1
n = 2
n = 3
n = 4
n = 5
41
N=1
m
15
N=1
m
filter
n = 1
n = 2
n = 3
n = 4
n = 5



Line 200 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

	filter
Resistivity ————	*
Polarization ————	* *
Metal Factor - - - - - - - -	* * *
	* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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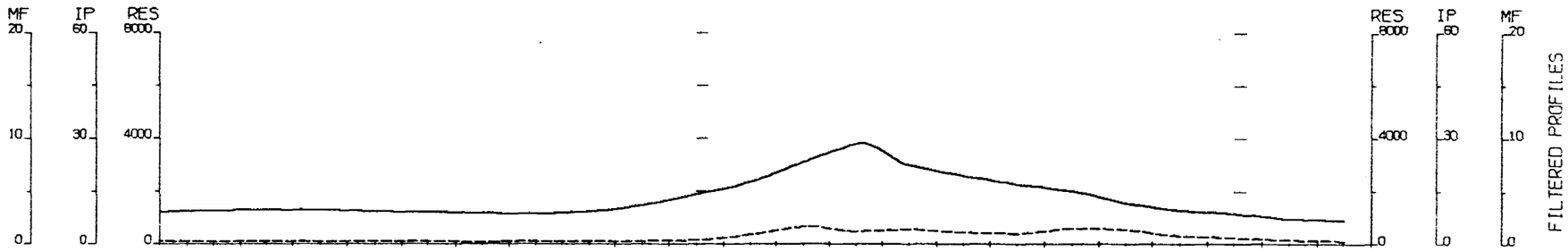
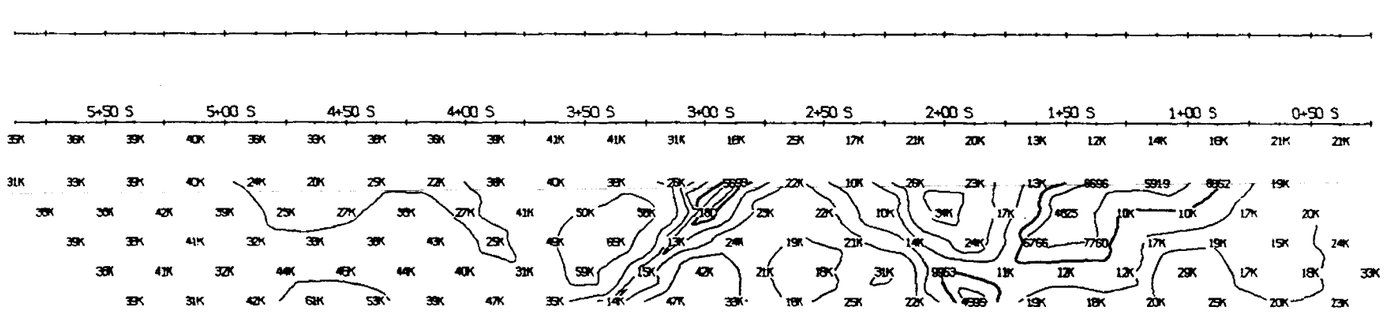
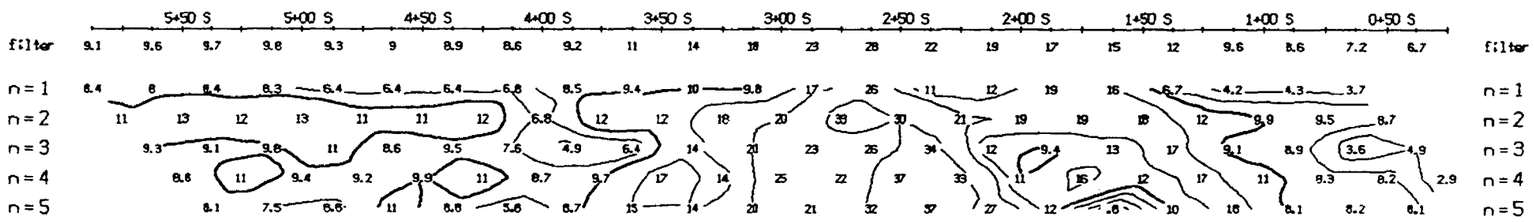


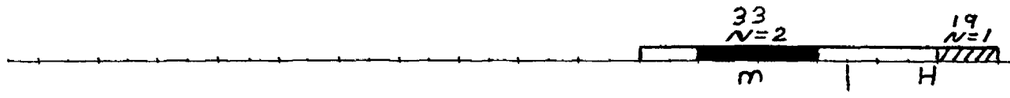


TOPOGRAPHY

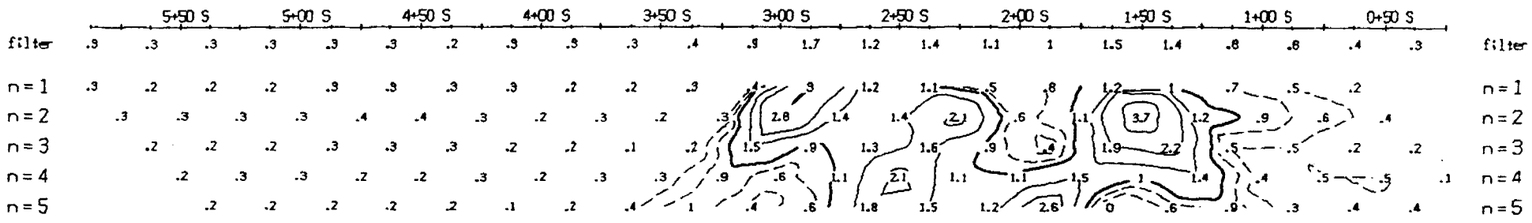
RESISTIVITY
(ohm_m)



PHASE
(milli-rad)



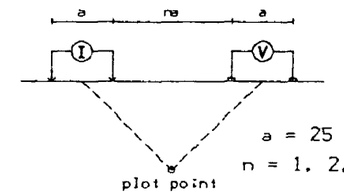
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 250 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,....

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

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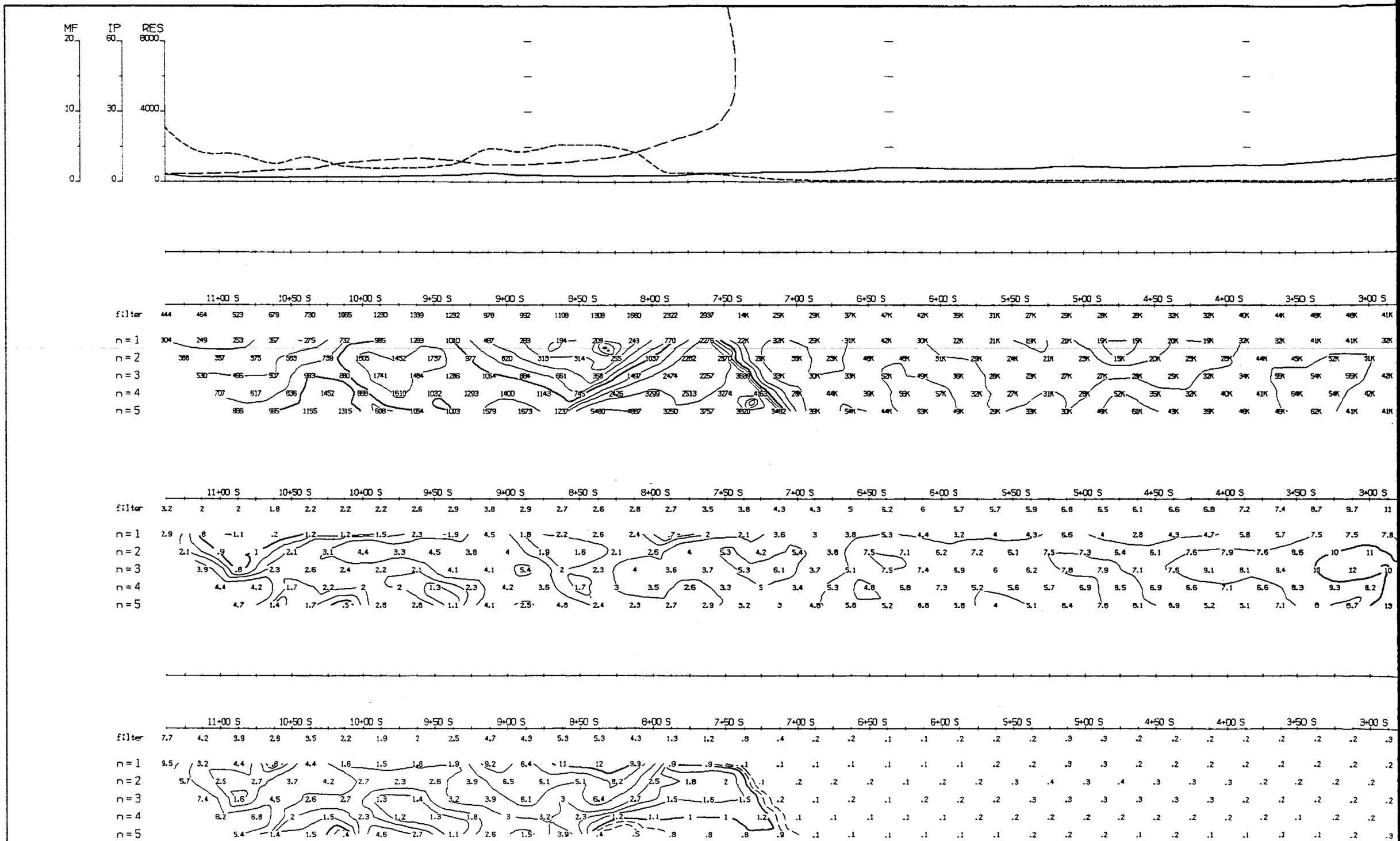
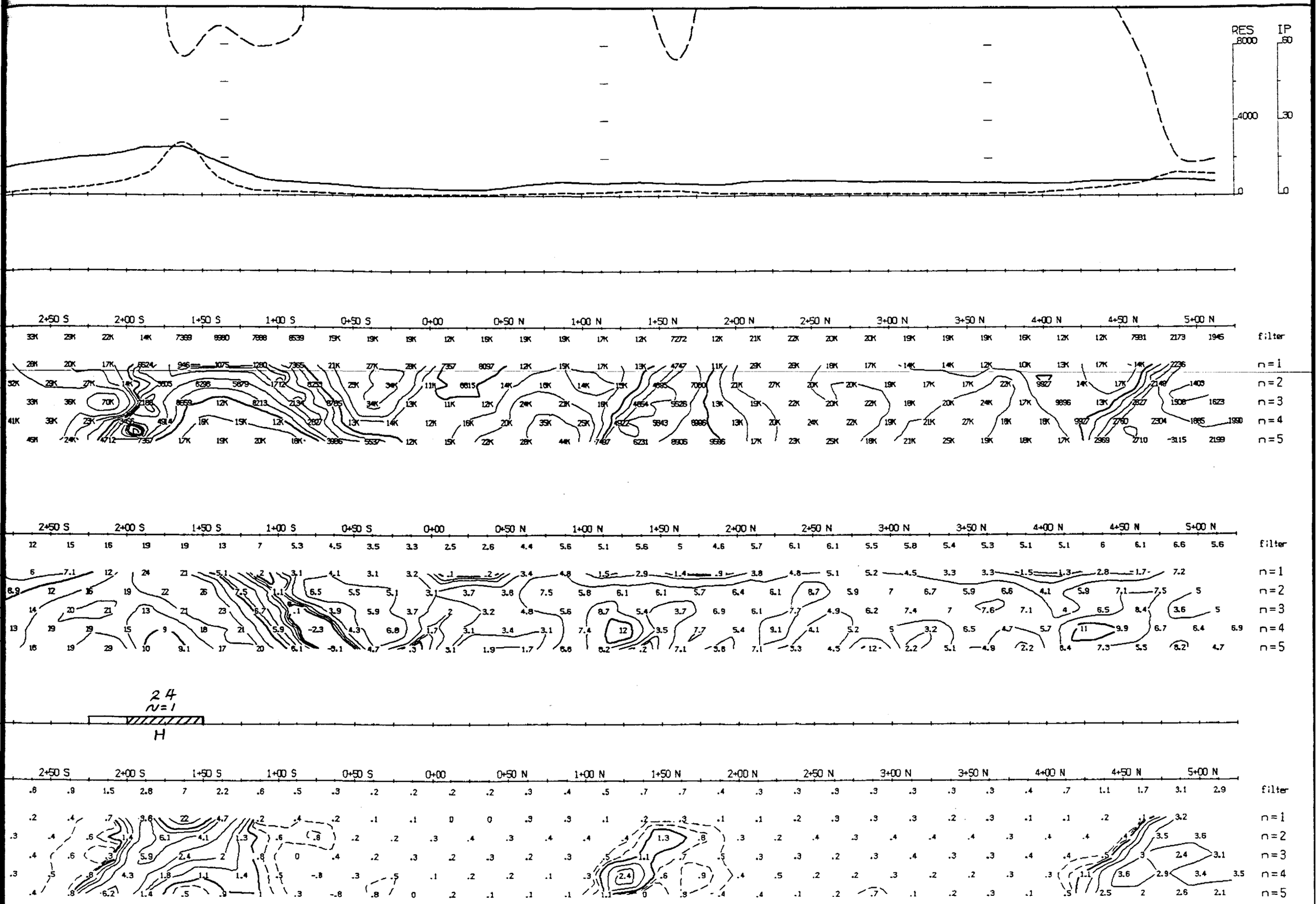



RES
IP
8000
4000
0
60
30
0
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
0+50 N
1+00 N
1+50 N
2+00 N
2+50 N
3+00 N
3+50 N
4+00 N
4+50 N
5+00 N
filter
n = 1
n = 2
n = 3
n = 4
n = 5
24
N = 1
H

MF
20
10
5
FILTERED PROFILES

TOPOGRAPHY

RESISTIVITY
(ohm_m)

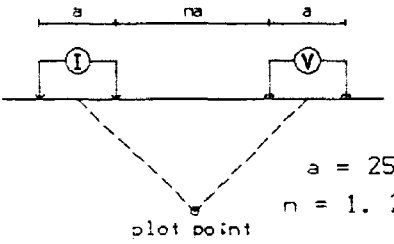
PHASE
(milli-rad)

INTERPRETATION

METAL FACTOR
(ip/res * 1000)

Line 300 E

Dipole-Dipole Array



a = 25 m
n = 1. 2. 3. 4. 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1. 1.5. 2. 3. 5. 7.5. 10....

Instruments: IPT1. IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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INDUCED POLARIZATION SURVEY

Benny Grid
Benny . Ontario.

Date: N.T.S.

Scale: 1 : 2500

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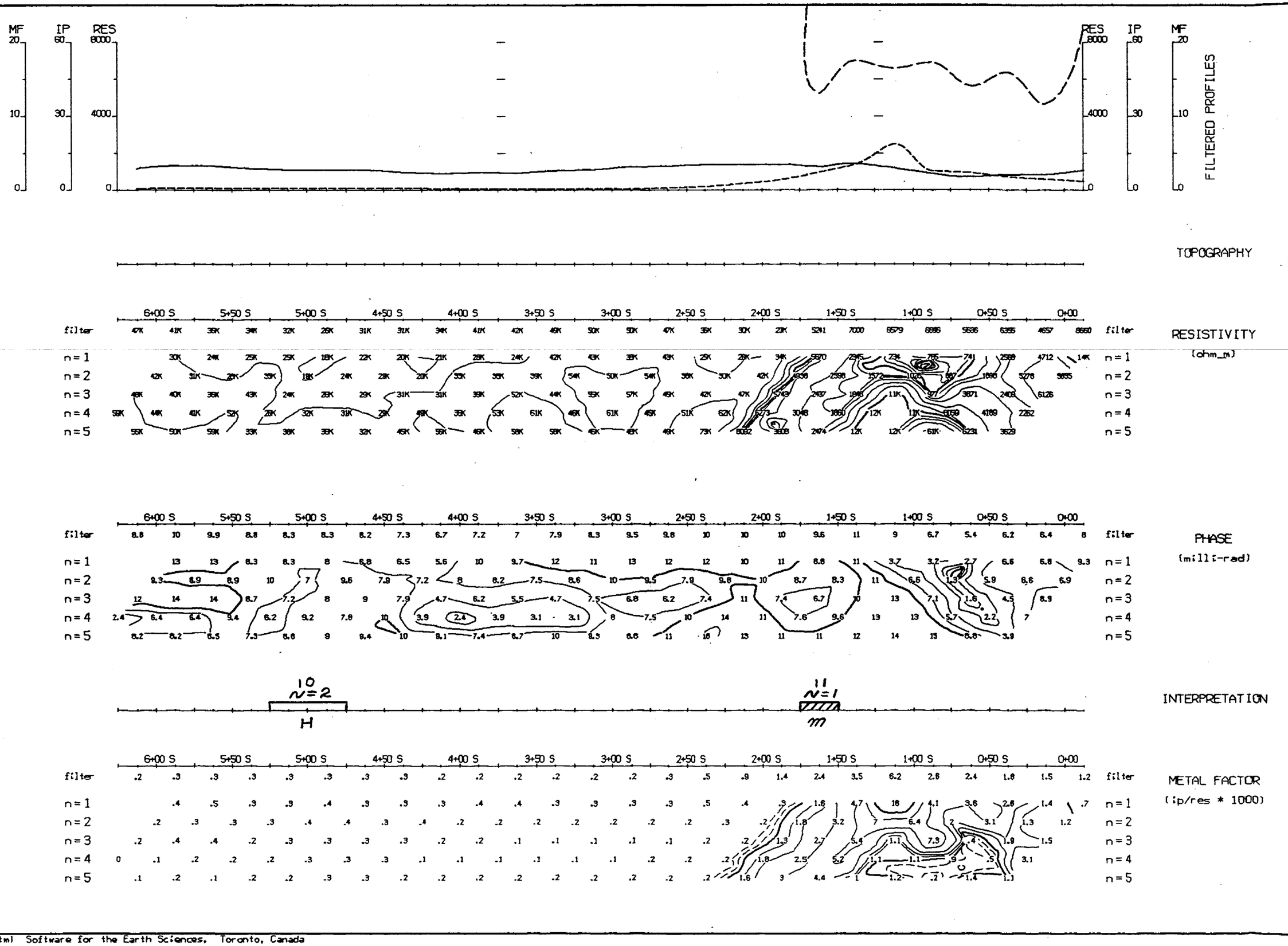
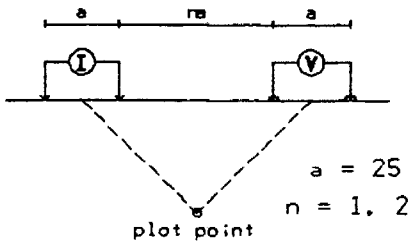

MF
IP
RES
20
10
0
60
30
0
8000
4000
0
RES
IP
MF
FILTERED PROFILES
TOPOGRAPHY
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
filter
n = 1
n = 2
n = 3
n = 4
n = 5
RESISTIVITY
(ohm_m)
PHASE
(milli-rad)
INTERPRETATION
10
N=2
H
11
N=1
m
METAL FACTOR
(ip/res * 1000)

Line 350 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	— — — —	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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D. R. CARRIERE
PROVINCE OF ONTARIO

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

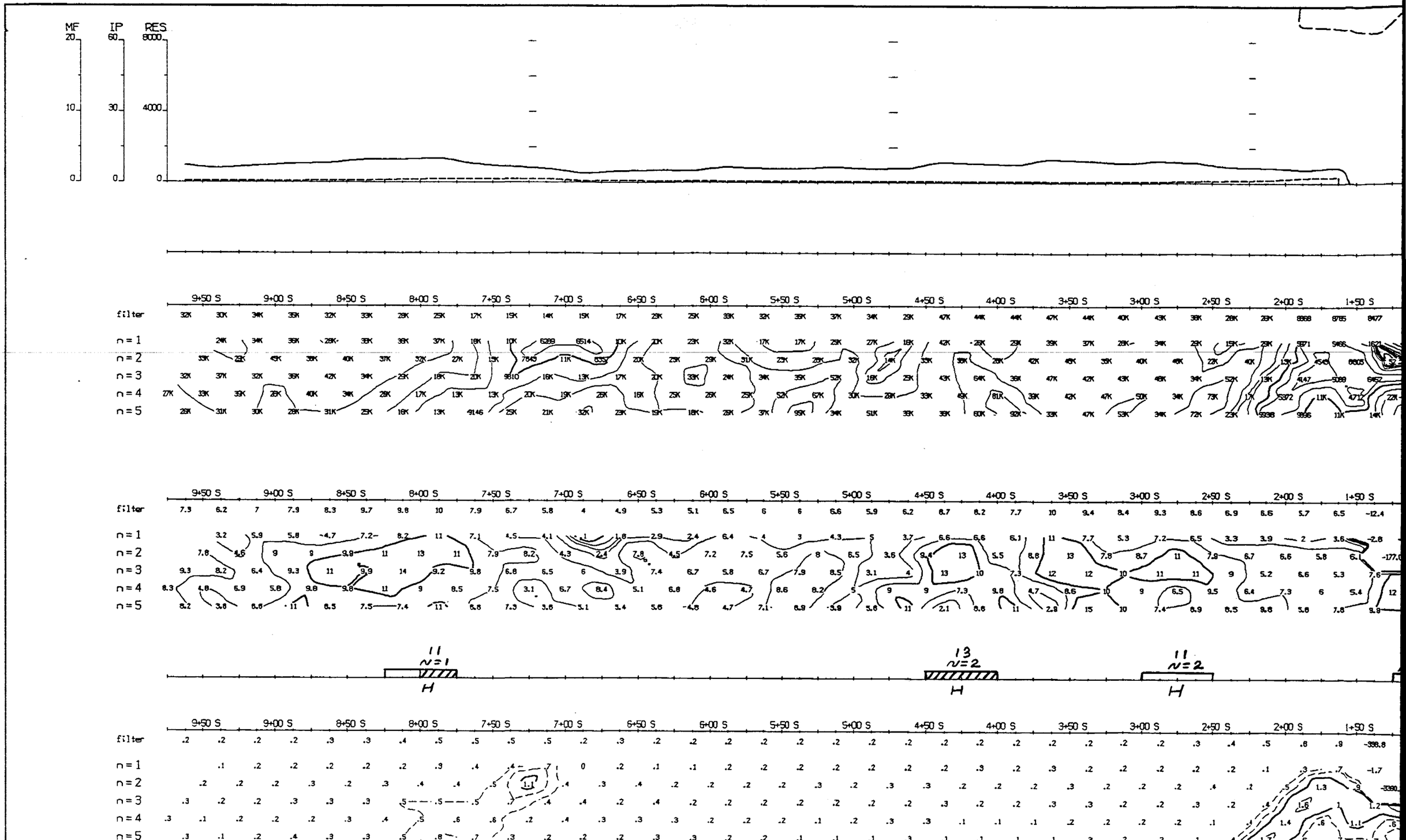
Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.

GEOSOFT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4000
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8+50 S
8+00 S
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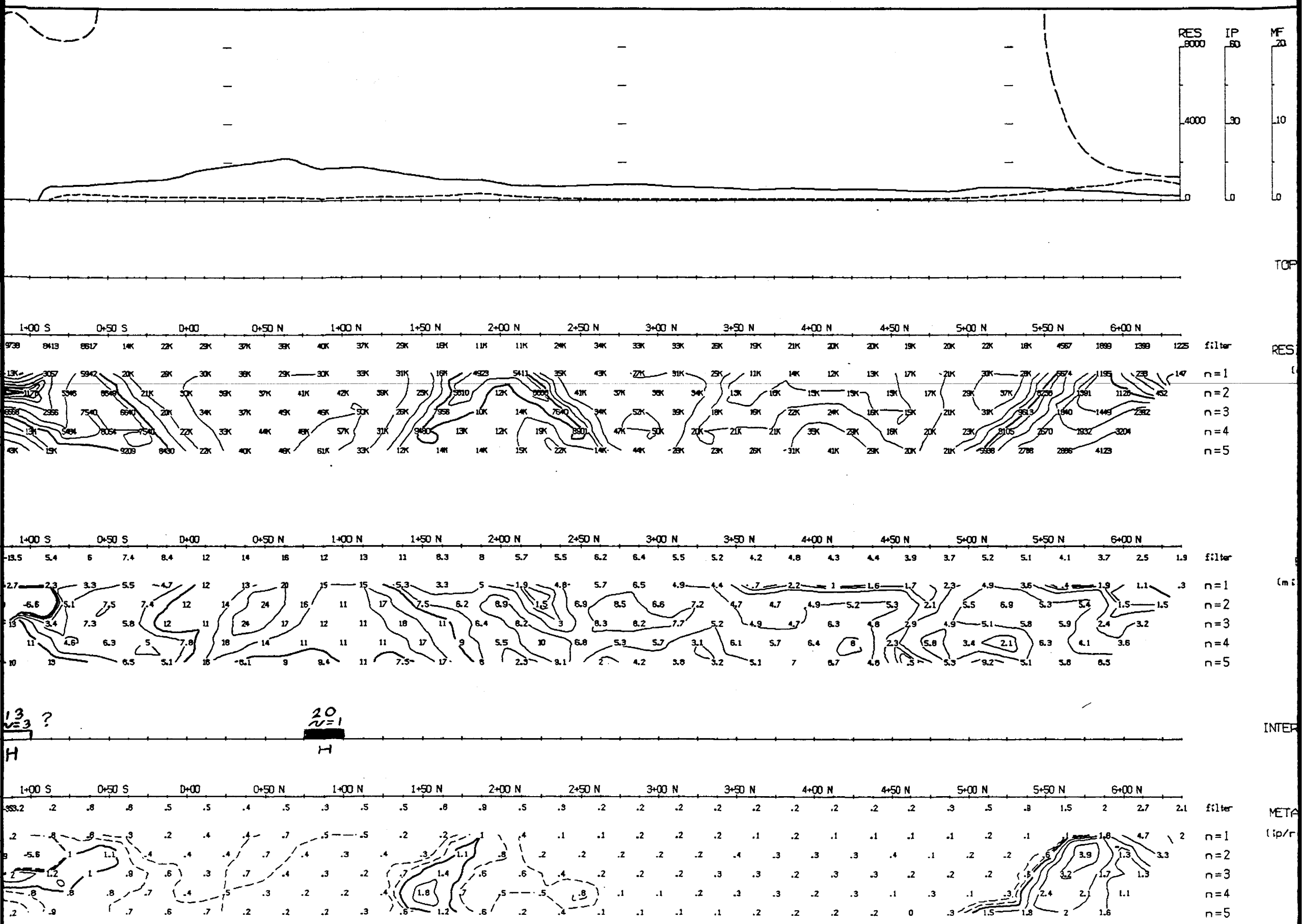
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
11
N=1
H
13
N=2
H
11
N=2
H


RES
IP
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30
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20
10
0
TOP
1+00 S
0+50 S
0+00
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1+00 N
1+50 N
2+00 N
2+50 N
3+00 N
3+50 N
4+00 N
4+50 N
5+00 N
5+50 N
6+00 N
filter
n=1
n=2
n=3
n=4
n=5
RES
13
n=3
?
20
n=1
H
H
INTER
META
(ip/r

FILTERED PROFILES

OGRAPHY

STIVITY
ohm_m)

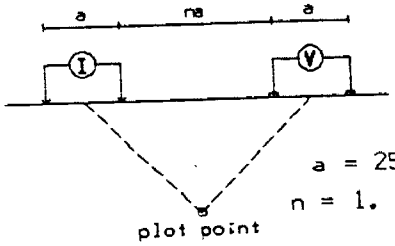
PHASE
li-rad)

PRETATION

L FACTOR
es * 1000)

Line 400 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10....

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

REGISTERED PROFESSIONAL ENGINEER
D. R. CARRIERE
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GENEVA LAKE MINERALS CORP.

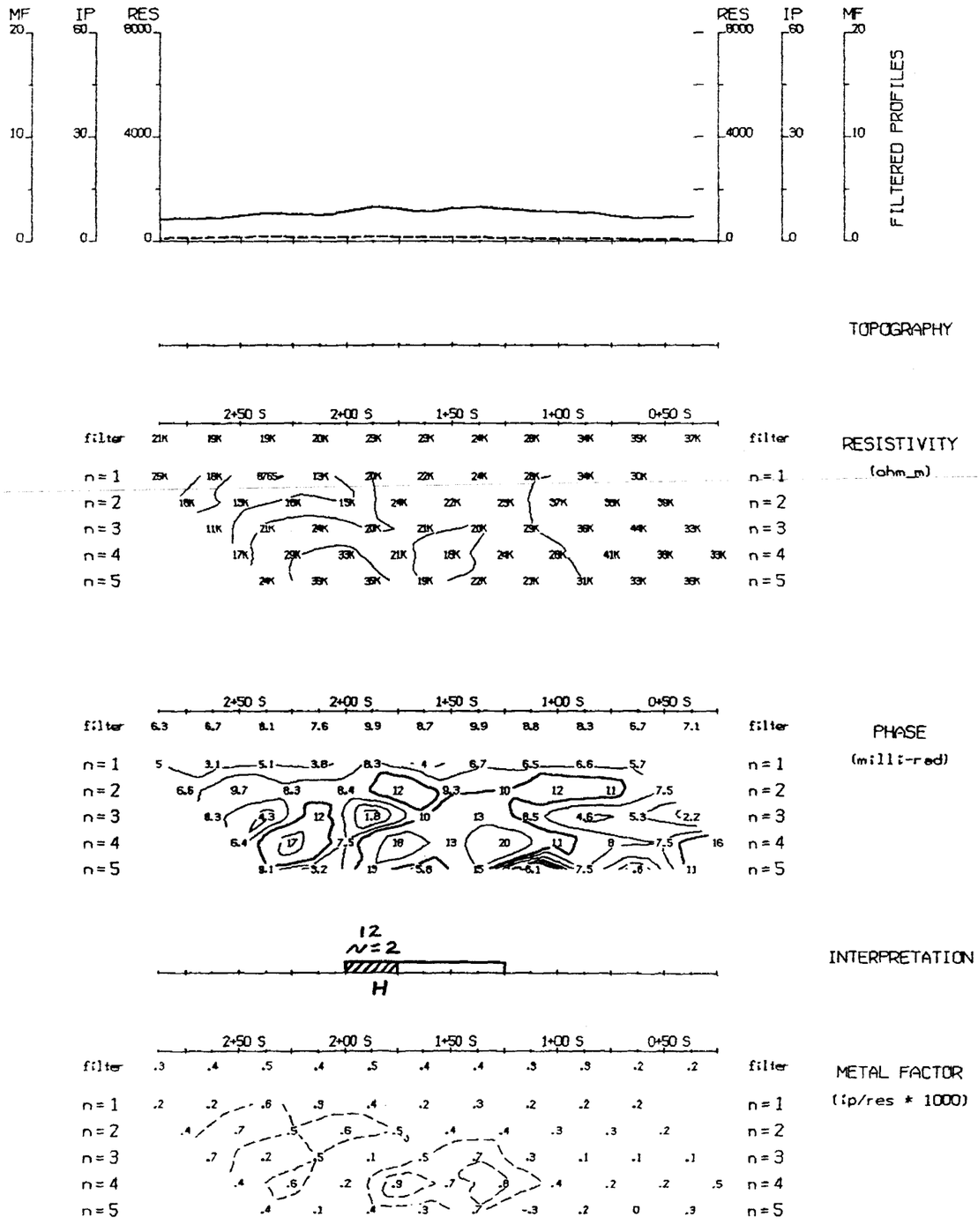
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

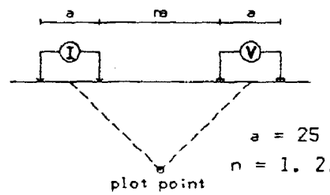
Scale: 1 : 2500

MERTENS & MacNEIL LTD.



Line 450 E

Dipole-Dipole Array



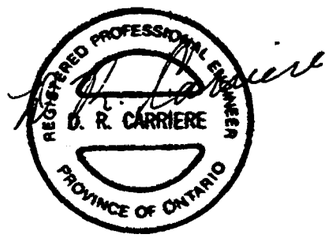
a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.



GENEVA LAKE MINERALS CORP.

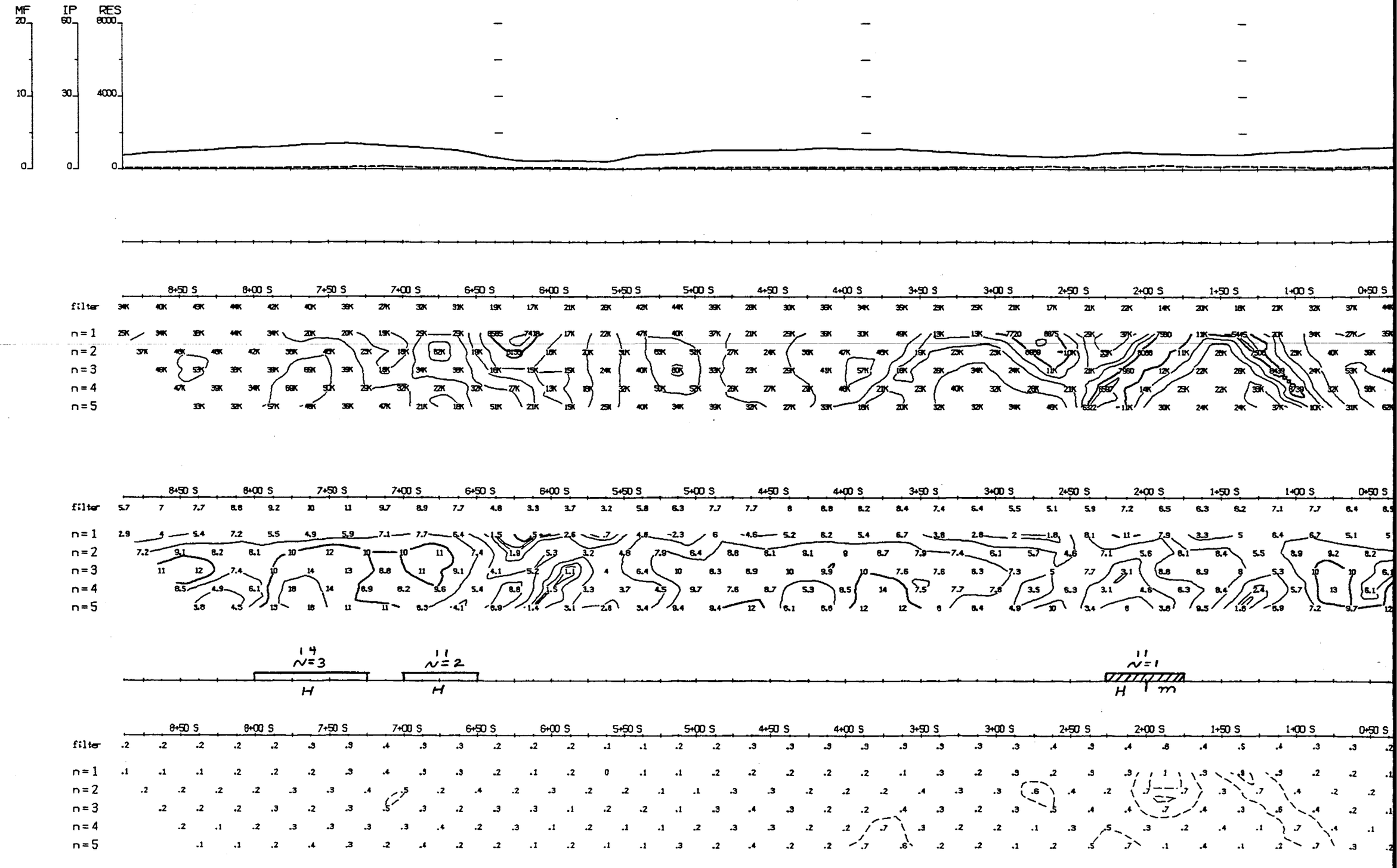
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.


MF
IP
RES
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60
30
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8000
4000
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8+50 S
8+00 S
7+50 S
7+00 S
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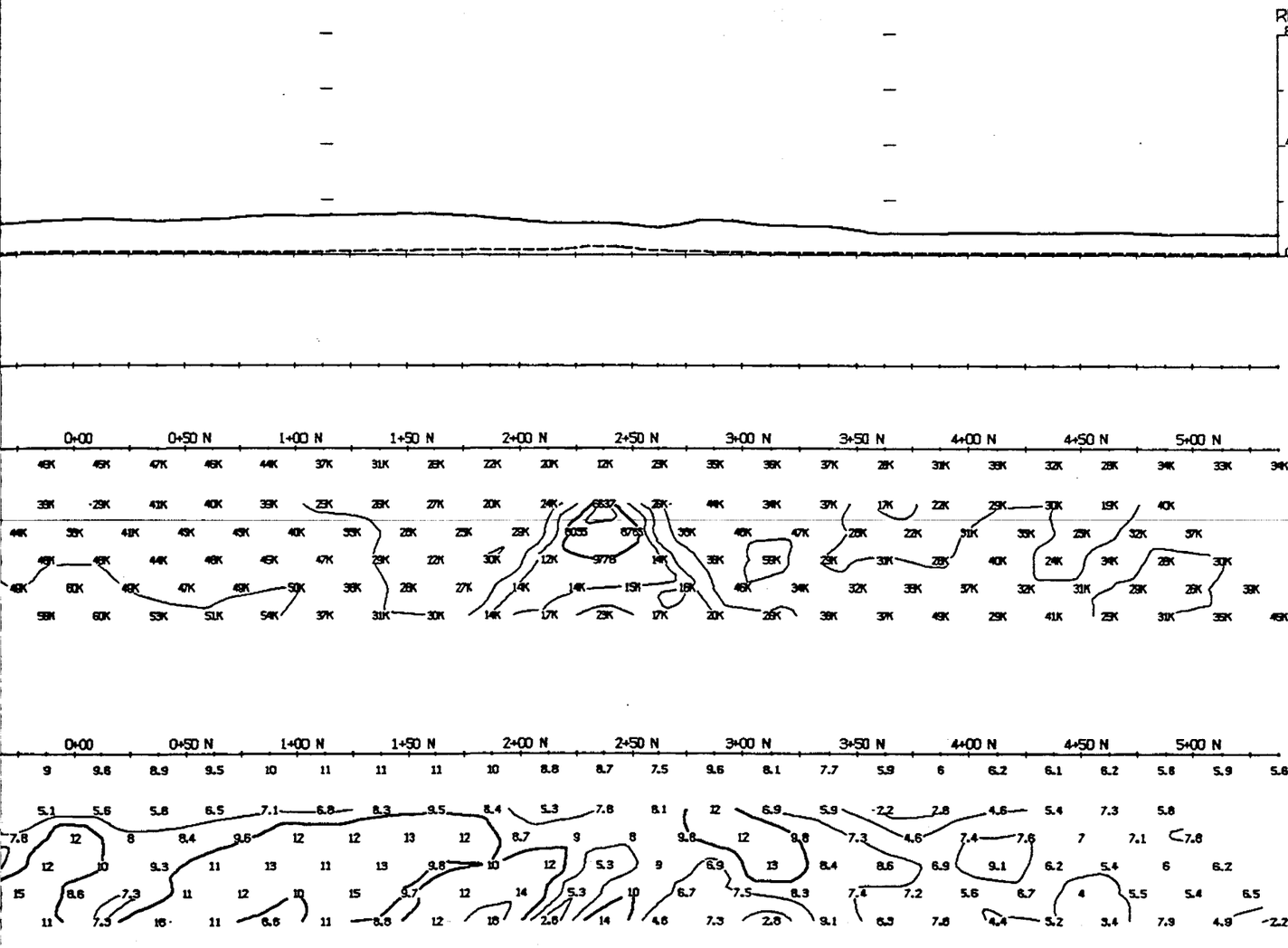
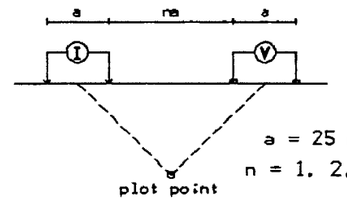
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
14
N=3
H
11
N=2
H
11
N=1
H
m



Line 500 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

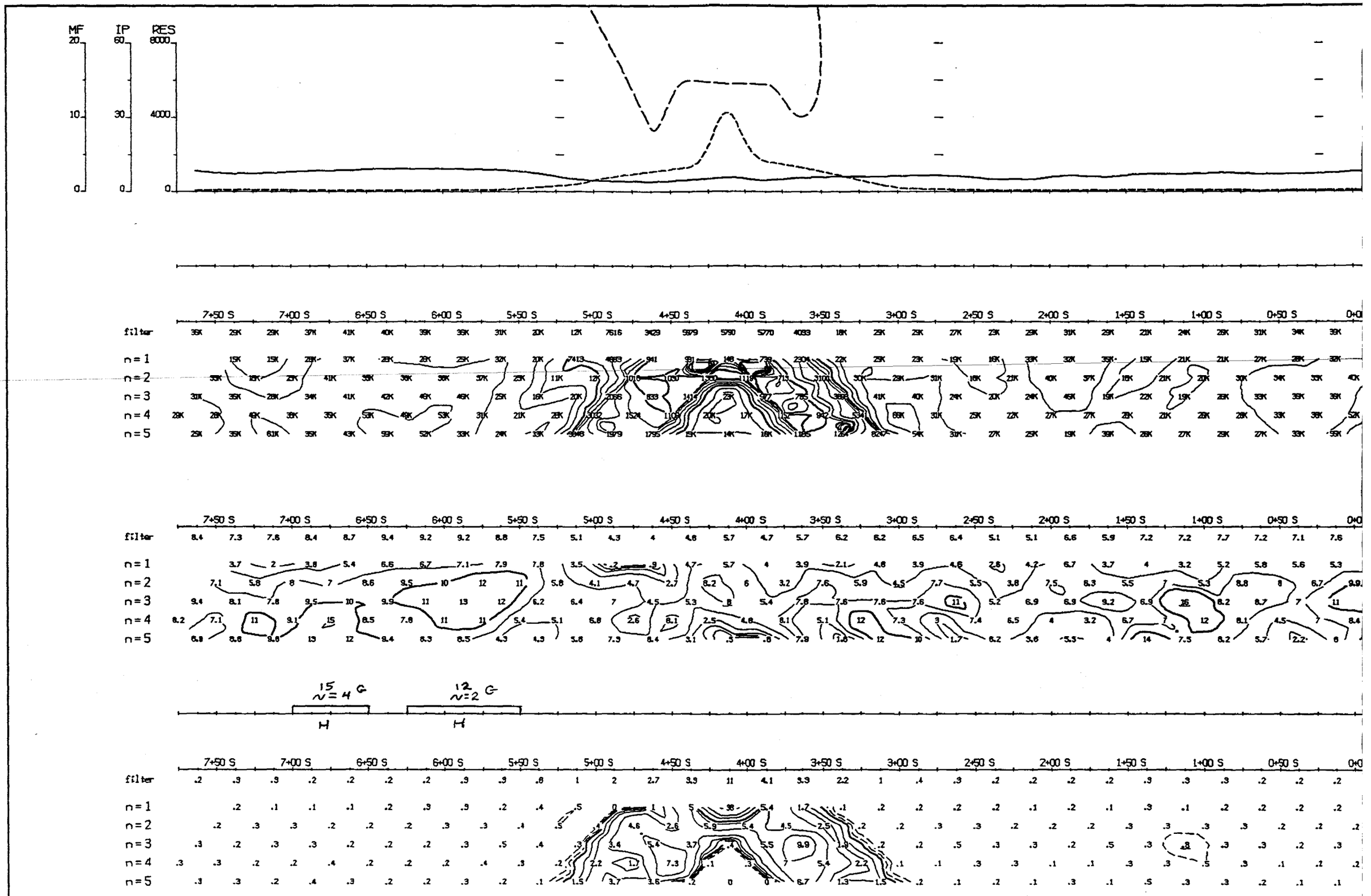
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.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8000
4000
0
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7+00 S
6+50 S
6+00 S
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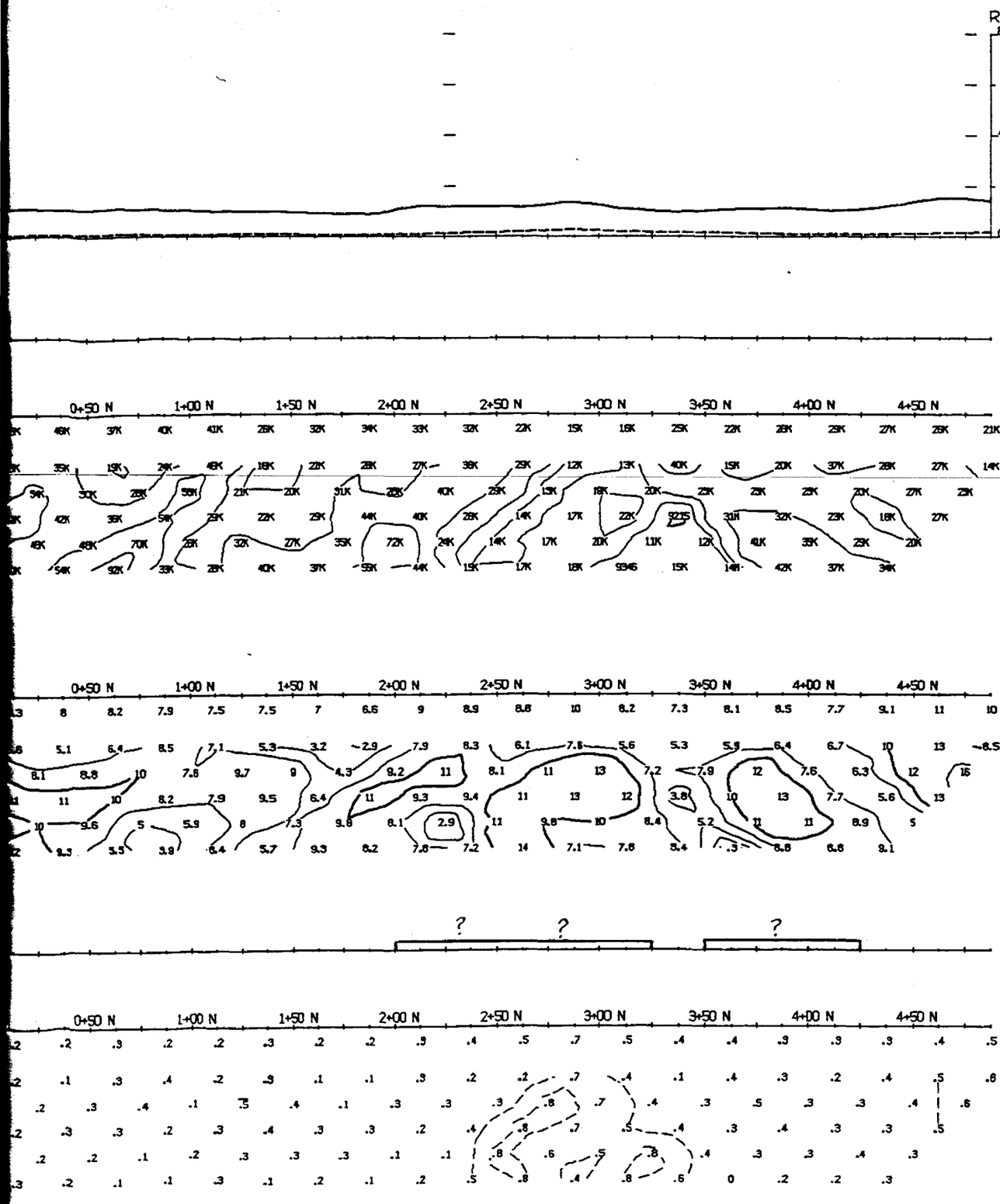
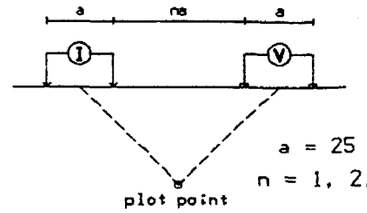
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
filter
n = 1
n = 2
n = 3
n = 4
n = 5
15
N = 4 G
H
12
N = 2 G
H



Line 600 E

Dipole-Dipole Array



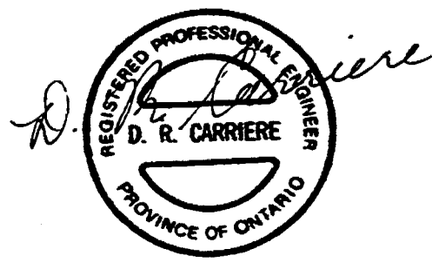
a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.



GENEVA LAKE MINERALS CORP.

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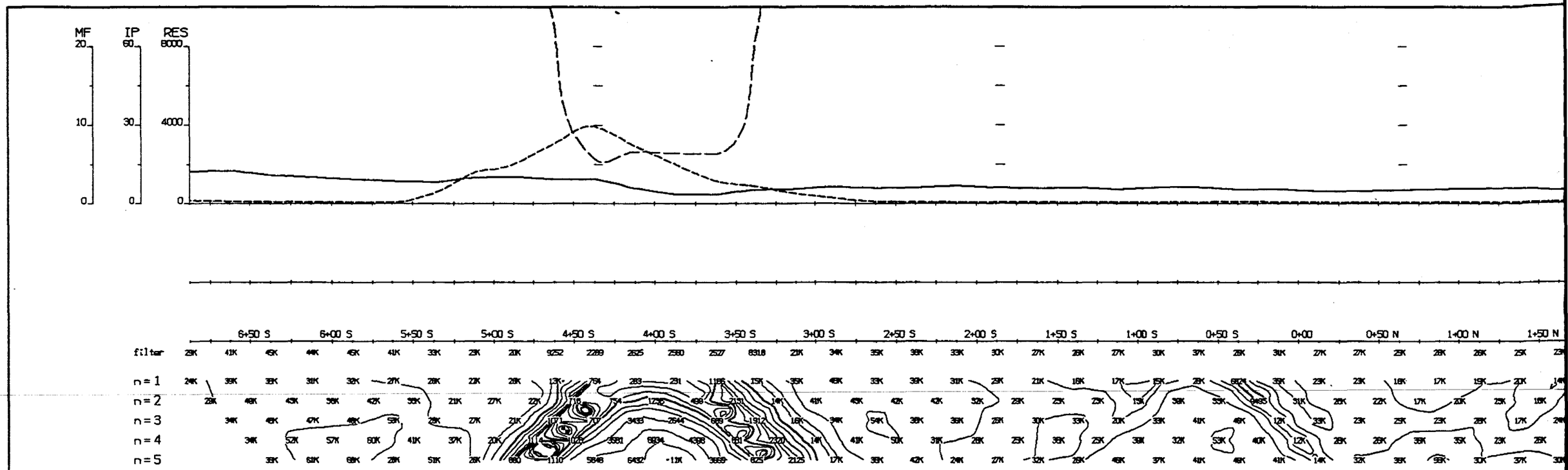
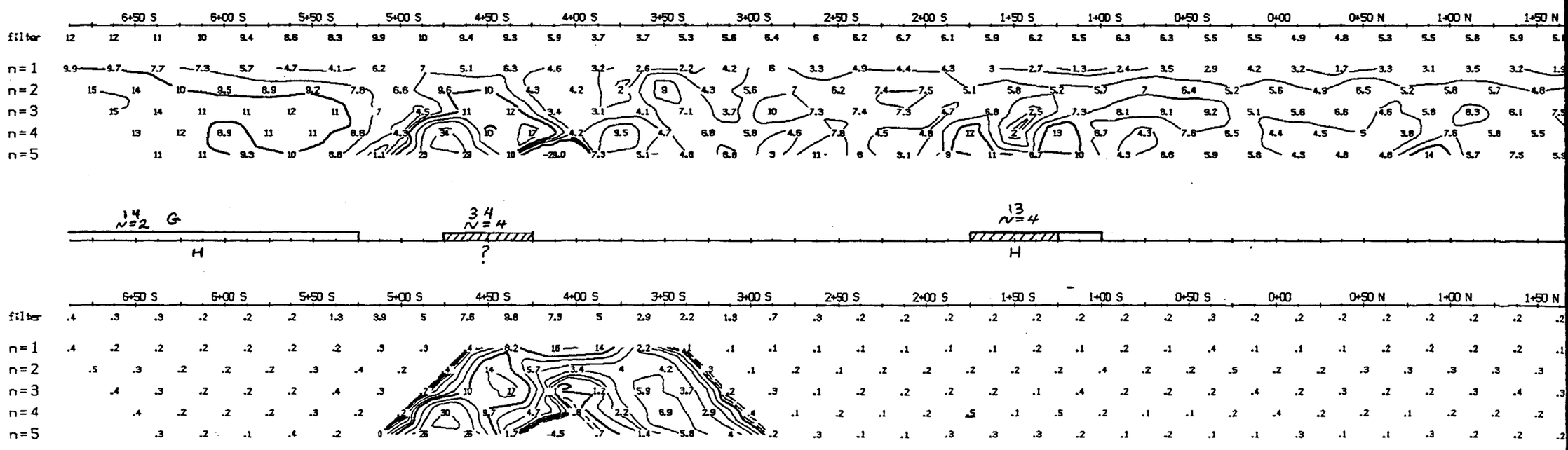
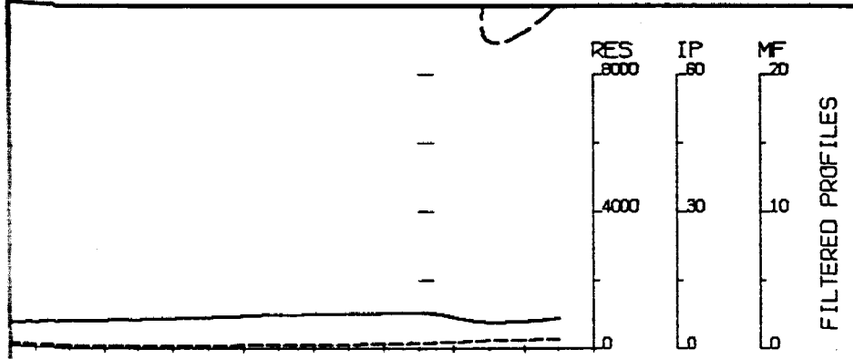
Scale: 1 : 2500

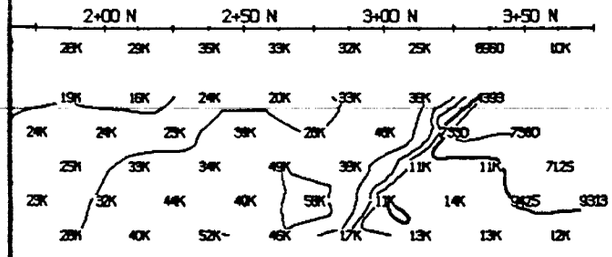
MERTENS & MacNEIL LTD.


MF
IP
RES
20
10
0
60
30
0
8000
4000
0
6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
0+50 N
1+00 N
1+50 N
filter
n = 1
n = 2
n = 3
n = 4
n = 5

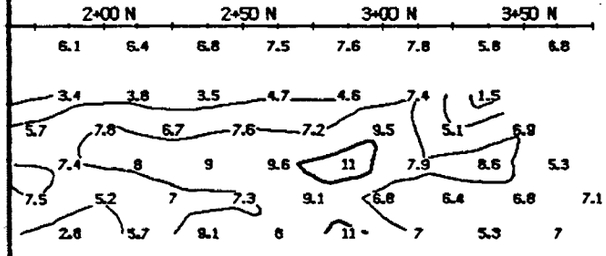

6+50 S
6+00 S
5+50 S
5+00 S
4+50 S
4+00 S
3+50 S
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
0+50 N
1+00 N
1+50 N
filter
n = 1
n = 2
n = 3
n = 4
n = 5
14
N=2
G
H
34
N=4
?
13
N=4
H



TOPOGRAPHY

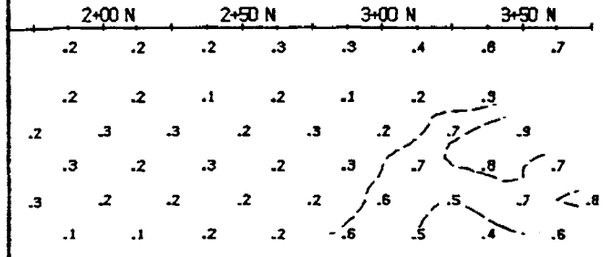


RESISTIVITY
(ohm_m)



PHASE
(milli-rad)

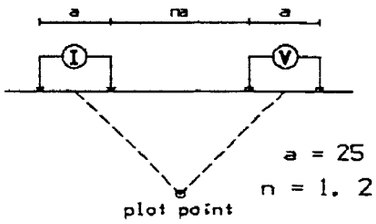
INTERPRETATION



METAL FACTOR
(ip/res * 1000)

Line 700 E

Dipole-Dipole Array



a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

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GENEVA LAKE MINERALS CORP.

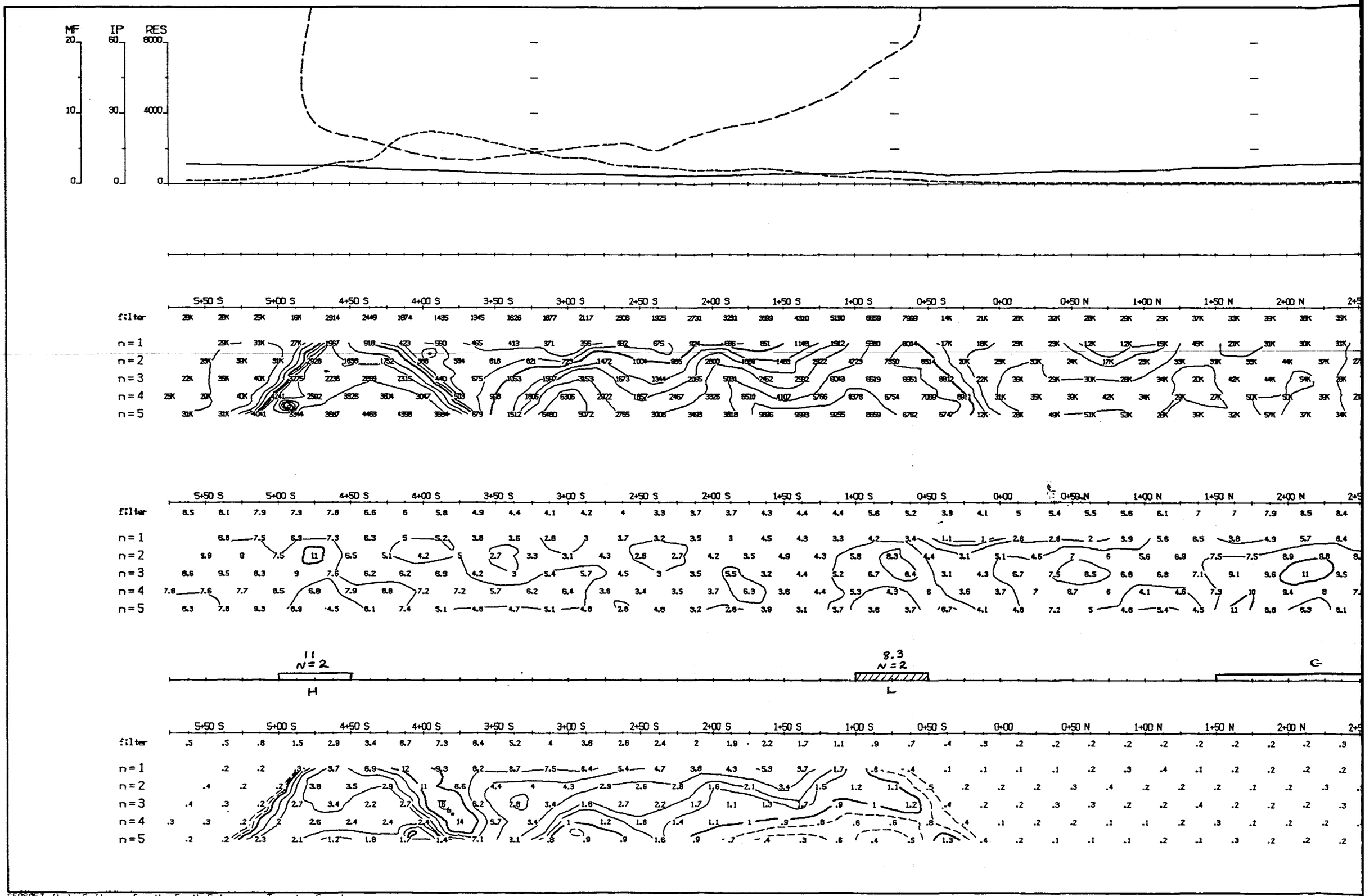
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.


MF
IP
RES
20
10
0
60
30
0
8000
4000
0
5+50 S
5+00 S
4+50 S
4+00 S
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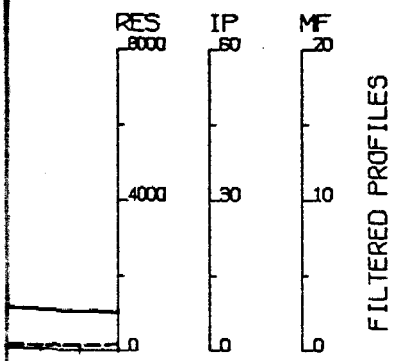
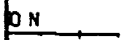
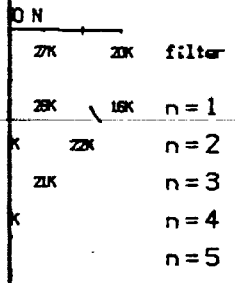
3+00 S
2+50 S
2+00 S
1+50 S
1+00 S
0+50 S
0+00
0+50 N
1+00 N
1+50 N
2+00 N
filter
n = 1
n = 2
n = 3
n = 4
n = 5
11
N = 2
H
8.3
N = 2
L



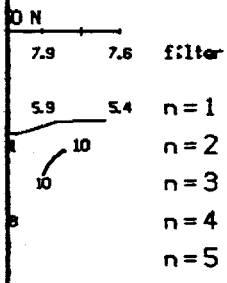
TOPOGRAPHY



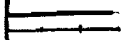
RESISTIVITY
(ohm_m)



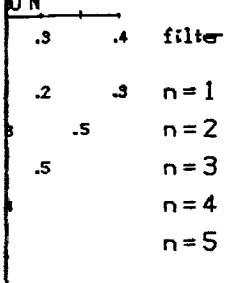
PHASE
(milli-rad)



INTERPRETATION



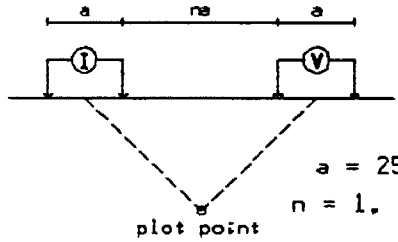
METAL FACTOR
(ip/res * 1000)



GEOSOF

Line 800 E

Dipole-Dipole Array



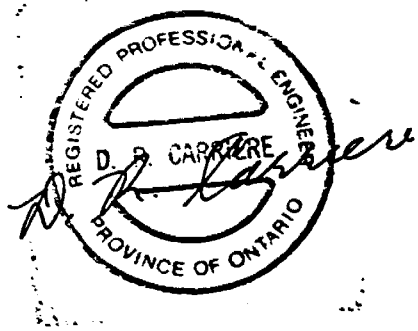
a = 25 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	- - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.



GENEVA LAKE MINERALS CORP.

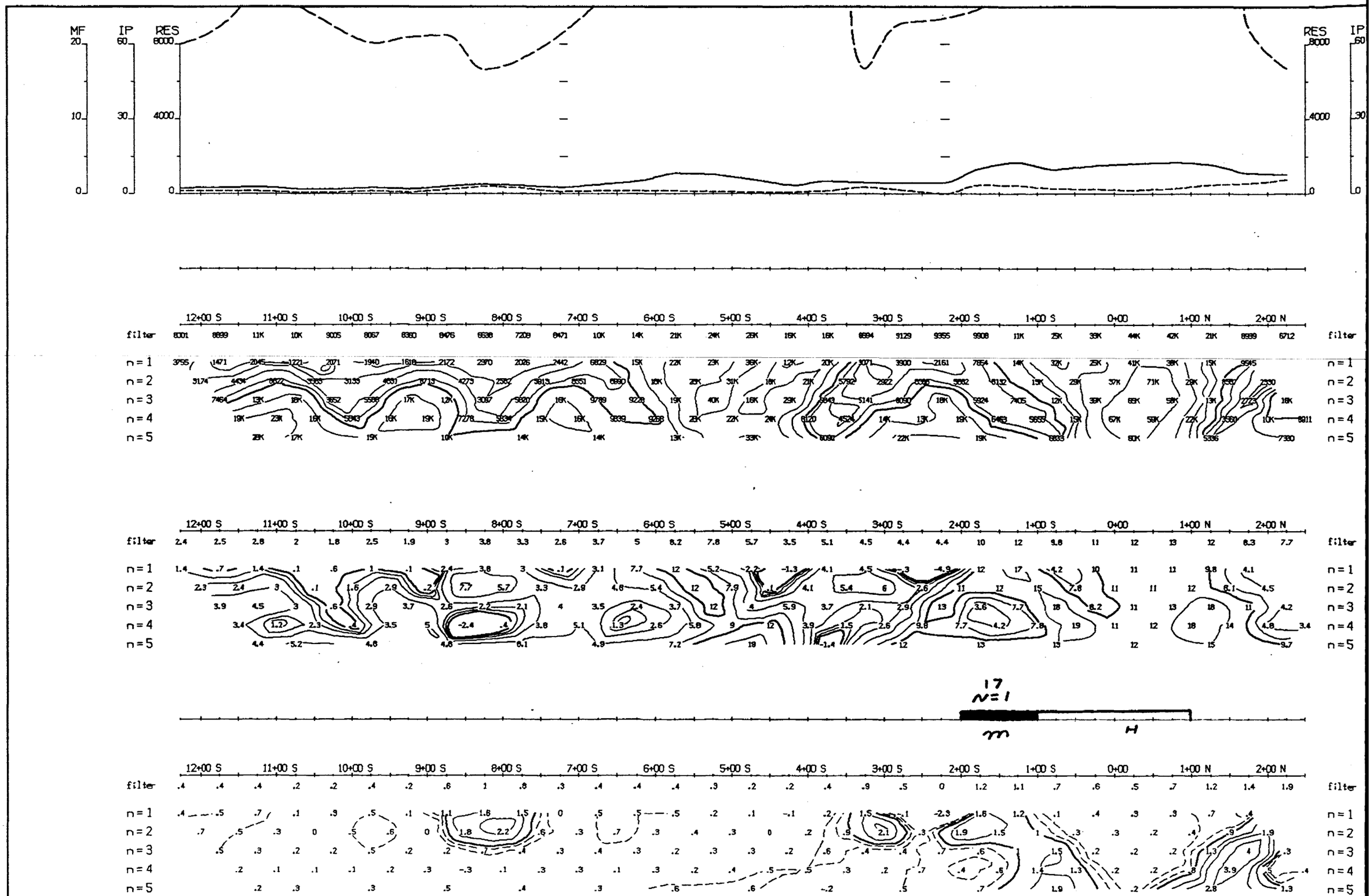
INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 2500

MERTENS & MacNEIL LTD.


MF
IP
RES
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4000
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11+00 S
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4+00 S
3+00 S
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0+00
1+00 N
2+00 N
filter
n = 1
n = 2
n = 3
n = 4
n = 5
17
N=1
m
H

MF
20
10
0
FILTERED PROFILES

TOPOGRAPHY

RESISTIVITY
(ohm_m)

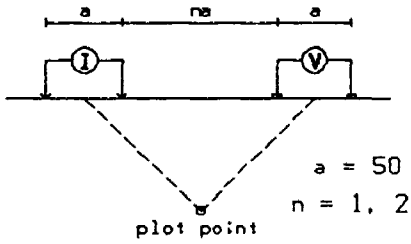
PHASE
(milli-rad)

INTERPRETATION

METAL FACTOR
(ip/res * 1000)

Line 400 W

Dipole-Dipole Array



a = 50 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

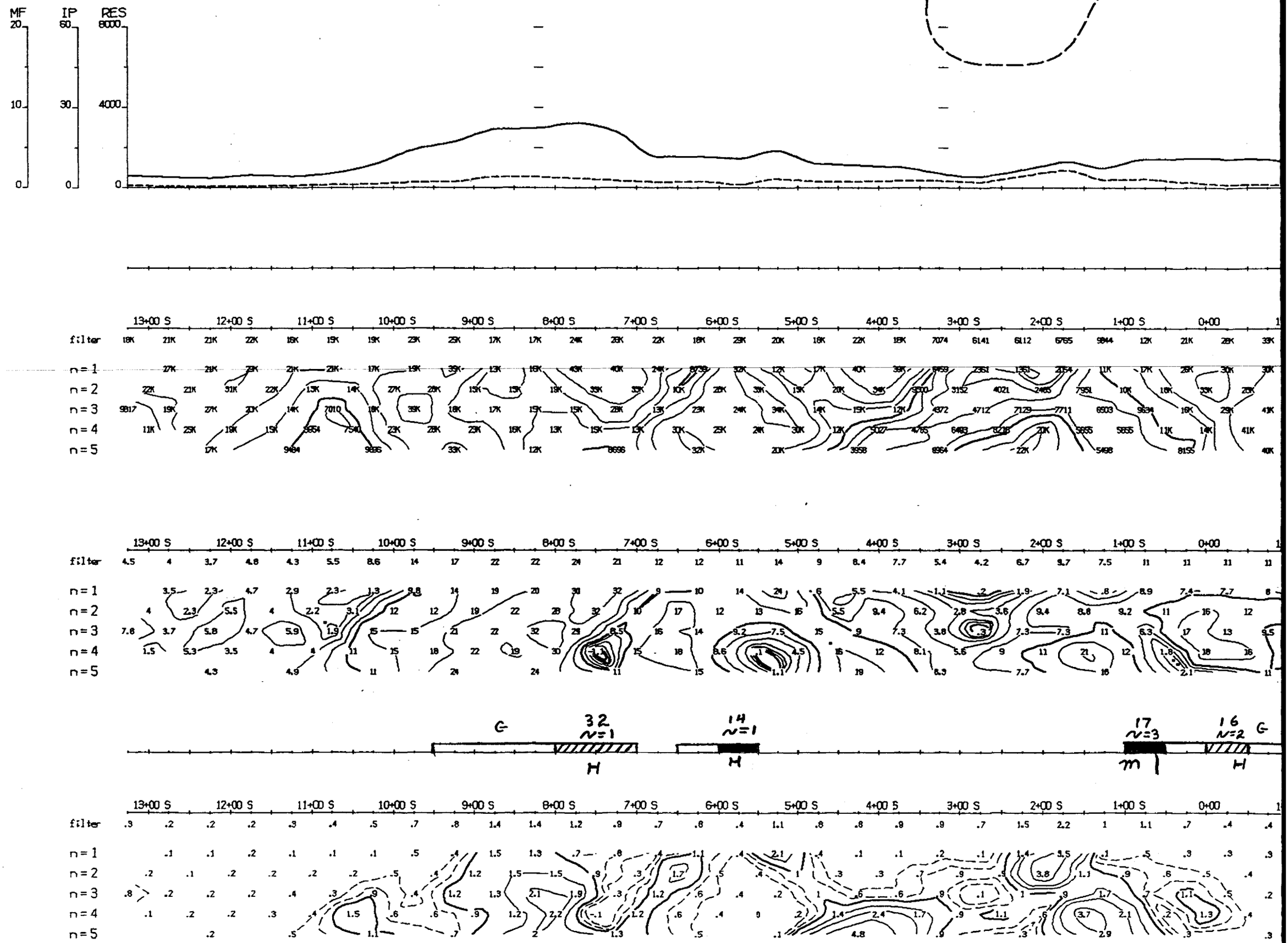
Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 5000

MERTENS & MacNEIL LTD.

GEOSOFT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10+00 S
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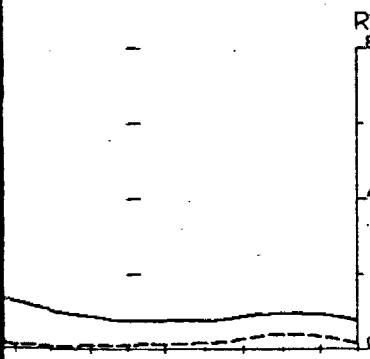
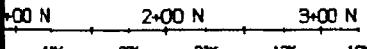
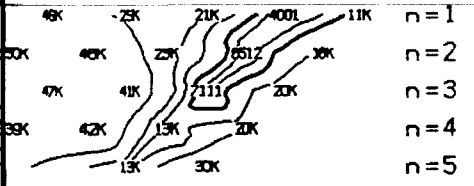
8+00 S
7+00 S
6+00 S
5+00 S
4+00 S
3+00 S
2+00 S
1+00 S
0+00
filter
n = 1
n = 2
n = 3
n = 4
n = 5
G
32
N=1
H
14
N=1
H
17
N=3
m
16
N=2
H
G

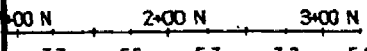


TOPOGRAPHY

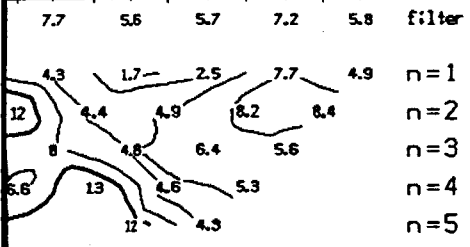


RESISTIVITY
(ohm_m)

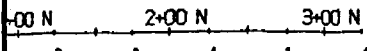




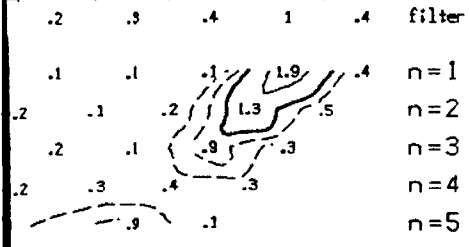
PHASE
(milli-rad)



INTERPRETATION

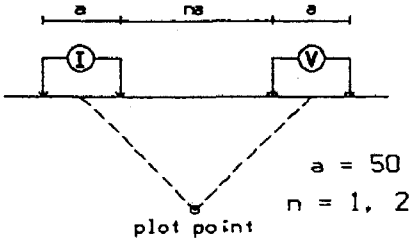


METAL FACTOR
(ip/res * 1000)



Line 300 W

Dipole-Dipole Array

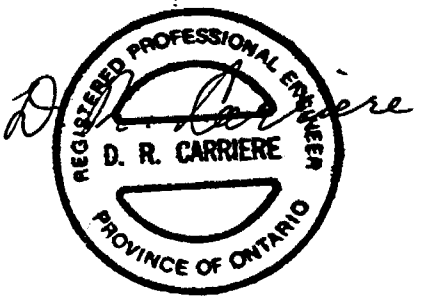


Filtered Profiles

		filter
Resistivity	———	*
Polarization	———	* *
Metal Factor	- - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.



GENEVA LAKE MINERALS CORP.

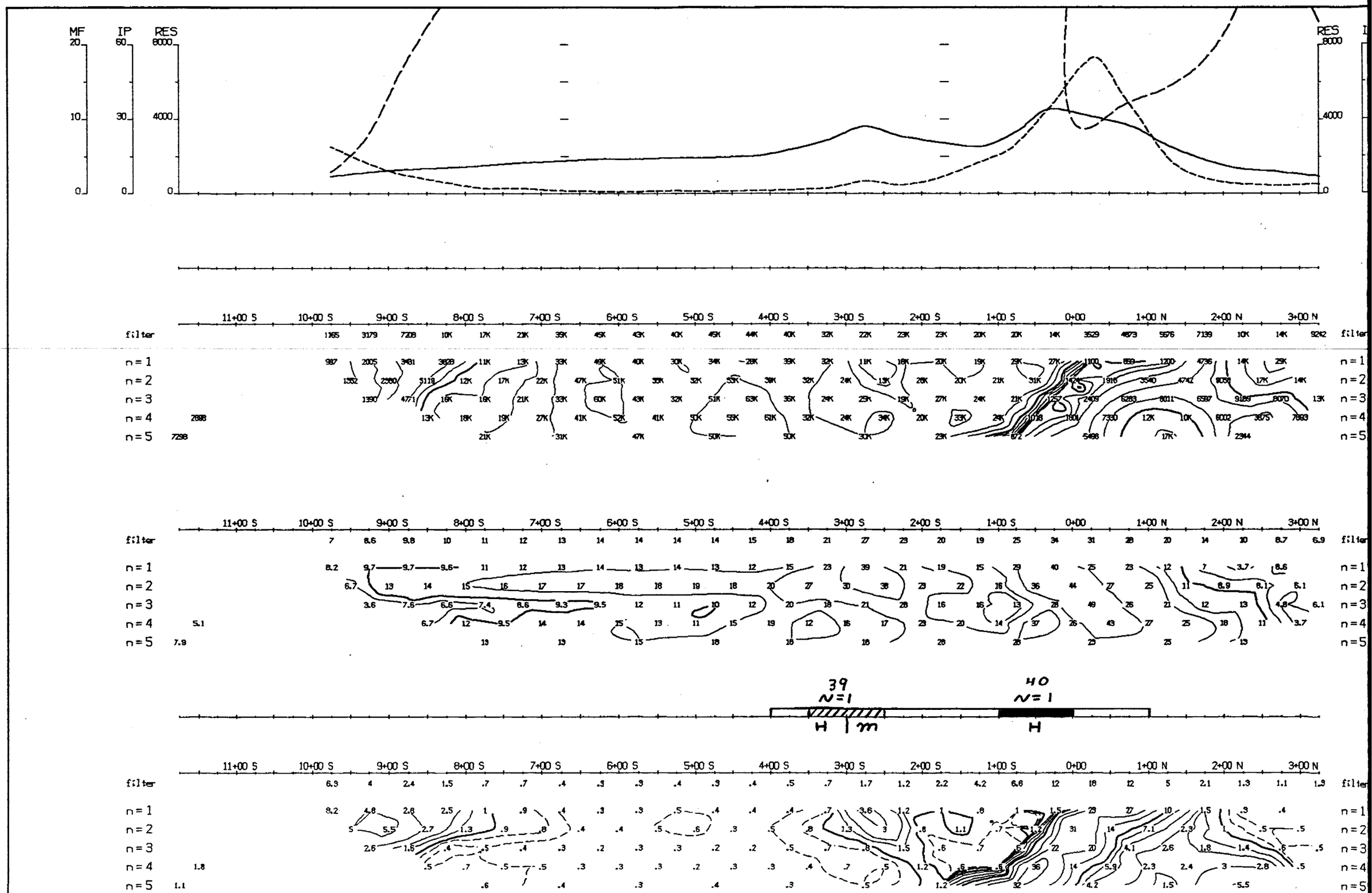
INDUCED POLARIZATION SURVEY

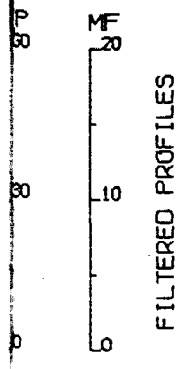
Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 5000

MERTENS & MacNEIL LTD.


MF
IP
RES
20
10
0
60
30
0
8000
4000
0
RES
8000
4000
0
11+00 S
10+00 S
9+00 S
8+00 S
7+00 S
6+00 S
5+00 S
4+00 S
3+00 S
2+00 S
1+00 S
0+00
1+00 N
2+00 N
3+00 N
filter
n = 1
n = 2
n = 3
n = 4
n = 5
39
N=1
40
N=1
H
m
H



TOPOGRAPHY

RESISTIVITY
(ohm_m)

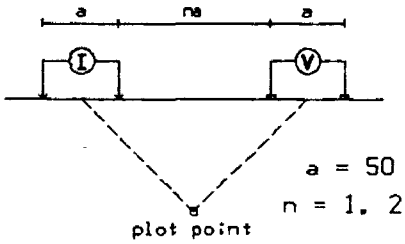
PHASE
(milli-rad)

INTERPRETATION

METAL FACTOR
(ip/res * 1000)

Line 200 E

Dipole-Dipole Array



a = 50 m
n = 1, 2, 3, 4, 5

Filtered Profiles

		filter
Resistivity	————	*
Polarization	————	* *
Metal Factor	- - - - - - - -	* * *
		* * * *

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instruments: IPT1, IPV4
Frequency: 1.0 Hz
Operator: J.M.N.

REGISTERED PROFESSIONAL ENGINEER
D. R. CARRIERE
PROVINCE OF ONTARIO

GENEVA LAKE MINERALS CORP.

INDUCED POLARIZATION SURVEY

Benny Grid
Benny , Ontario.

Date: N.T.S.

Scale: 1 : 5000

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GEOSOFT (tm

9400 E
9600 E
9800 E
10000 E
10200 E
10400 E
10600 E
10800 E
9200 E
9000 E
8800 E
10800 N
10600 N
10400 N
10200 N
10000 N
9800 N
9600 N
9400 N

Trench No. 2
Exit Rse.
Trench No. 1
Vein on Marsh Blm.
205 Rse
204 Sub. Dr. W
202 Rse
No. 9 Manway
235 Dr. W.
Exit Rse.
201 Rse
235 Dr. E
SHAFT
INCLINE SHAFT
501 Dr. E.
Diabase
D.D. No. 37
D.D. No. 40
D.D. No. 51
525 E
526 E.
525 W.
526 W.
615 Dr. W.
D.D. No. 6
-70°
Altered Diorite With Diabase Phases
D.D. No. 39
D.D. No. 41
D.D. No. 42
D.D. No. 43
D.D. No. 44
D.D. No. 45

Geneva Lake Minerals Corporation
Benny, Ontario

Surface Plan of
Underground Working

63.6125

Date : Sept. 1989	Scale : 1" = 50'
Dwg. : S. Bell	App. :

MAP - 4

Shaft

0 - 00'

0 - 00'

Hole 51 - M - 3
Assays 4·5% Combined Pb & Zn.
4·0'

235

315

375

Diabase Dike

Diabase Dike

Incline Shaft

0 - 500'

0 - 500'

D·D Hole No. 42
(280' W. of Shaft)
14·8 Zn , 5·02 Pb
3' - 6"

550

D·D Hole No. 44
(80' W. of Shaft)
11·5 Zn - 2·4 Pb
4' - 9"

D·D Hole No. 43
180' W. of Shaft
10·4 Zn - 3·78 Pb
6' - 7"

635

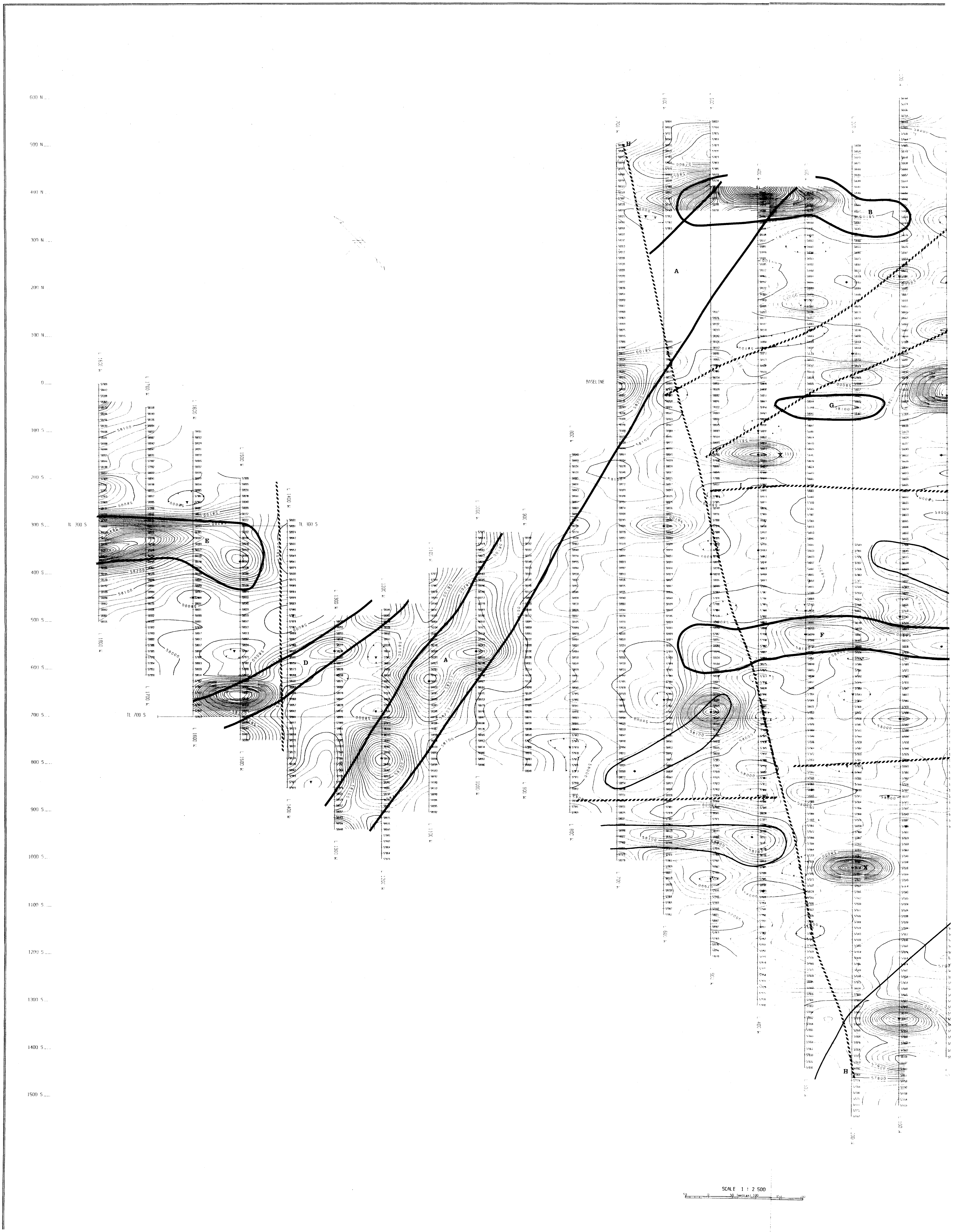
GEOLOGICAL ASSOCIATION OF CANADA
DAVID W. CONSTABLE
FELLOW

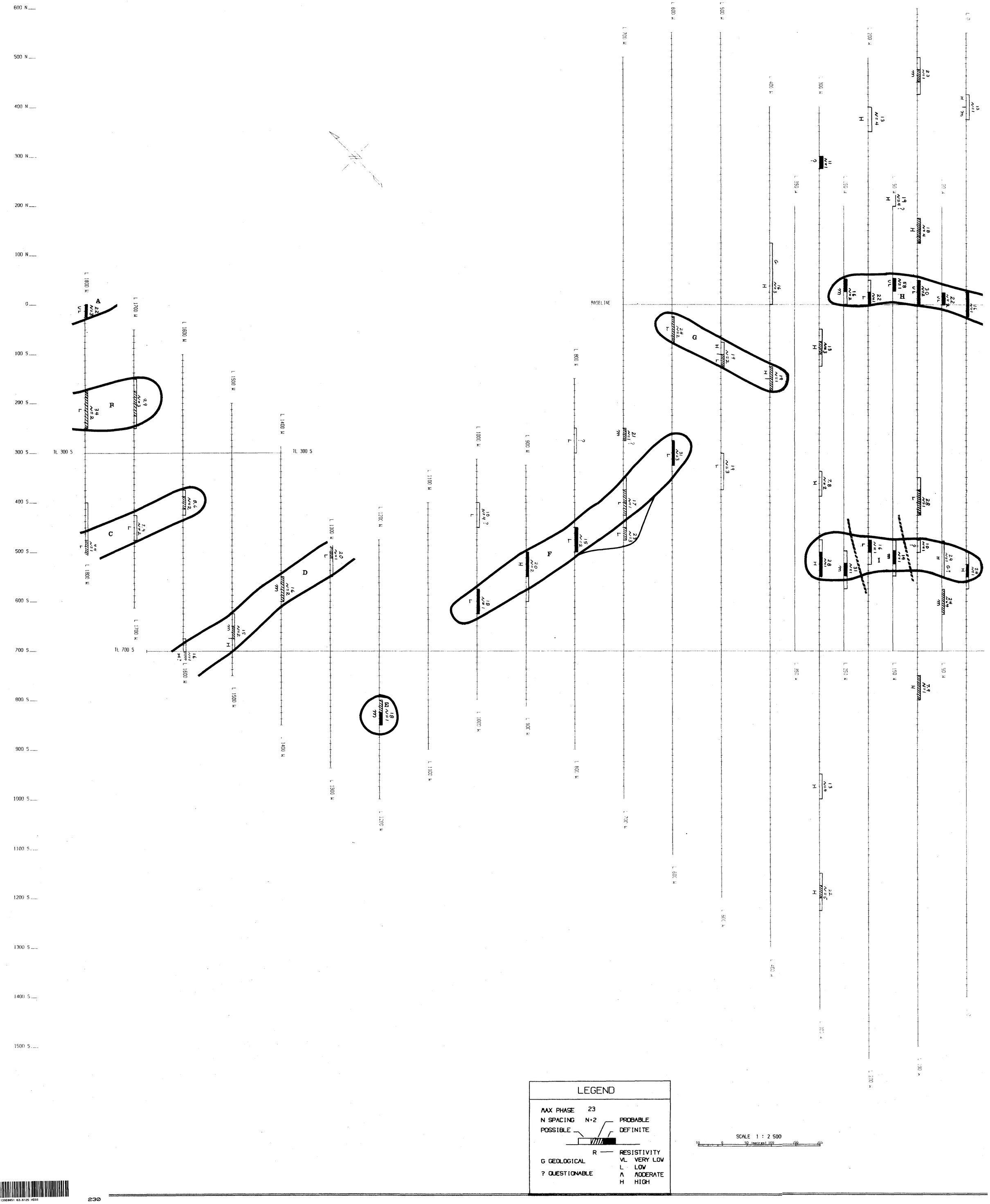
Geneva Lake Minerals Corporation
Benny, Ontario

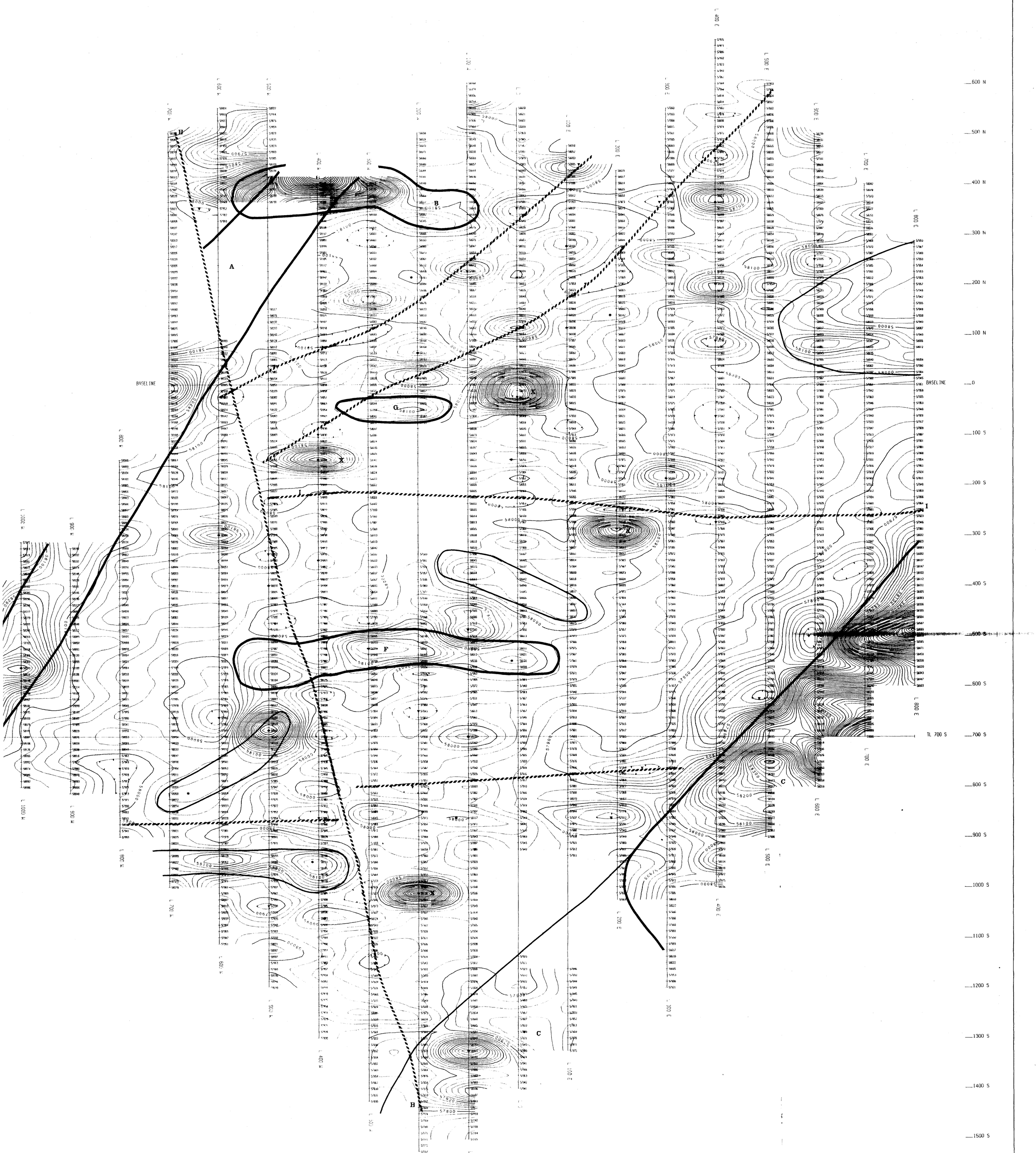
Elevation View of Shafts

63.6125

Scale : 1" = 50'	Date : Sept 89	Map - 5
App. :	Dwg. : S. Bell	


600 N
500 N
400 N
300 N
200 N
100 N
0
100 S
200 S
300 S
400 S
500 S
600 S
700 S
800 S
900 S
1000 S
1100 S
1200 S
1300 S
1400 S
1500 S
BASELINE
TL 300 S
TL 700 S
A
B
D
E
F
G
H
SCALE 1 : 2 500


BASELINE
TL 300 S
TL 700 S
L 1800 N
L 1700 N
L 1600 N
L 1500 N
L 1400 N
L 1300 N
L 1200 N
L 1100 N
L 1000 N
L 900 N
L 800 N
L 700 N
L 600 N
L 500 N
L 400 N
L 300 N
L 200 N
L 100 N
L 0
L 350 W
L 150 W
L 50 W
L 150 E
L 350 E
600 N
500 N
400 N
300 N
200 N
100 N
0
100 S
200 S
300 S
400 S
500 S
600 S
700 S
800 S
900 S
1000 S
1100 S
1200 S
1300 S
1400 S
1500 S
A
R
C
D
E
F
G
LEGEND
MAX PHASE 23
N SPACING N=2
PROBABLE
POSSIBLE
DEFINITE
R — RESISTIVITY
G GEOLOGICAL
VL VERY LOW
L LOW
M MODERATE
? QUESTIONABLE
H HIGH
SCALE 1 : 2 500
50 0 50 100 150 200 metres



SCALE 1 : 2 500

50 0 50 100 150 200 metres

GENEVA LAKE MINERALS CORPORATION

Benny Project
Benny , Ontario .

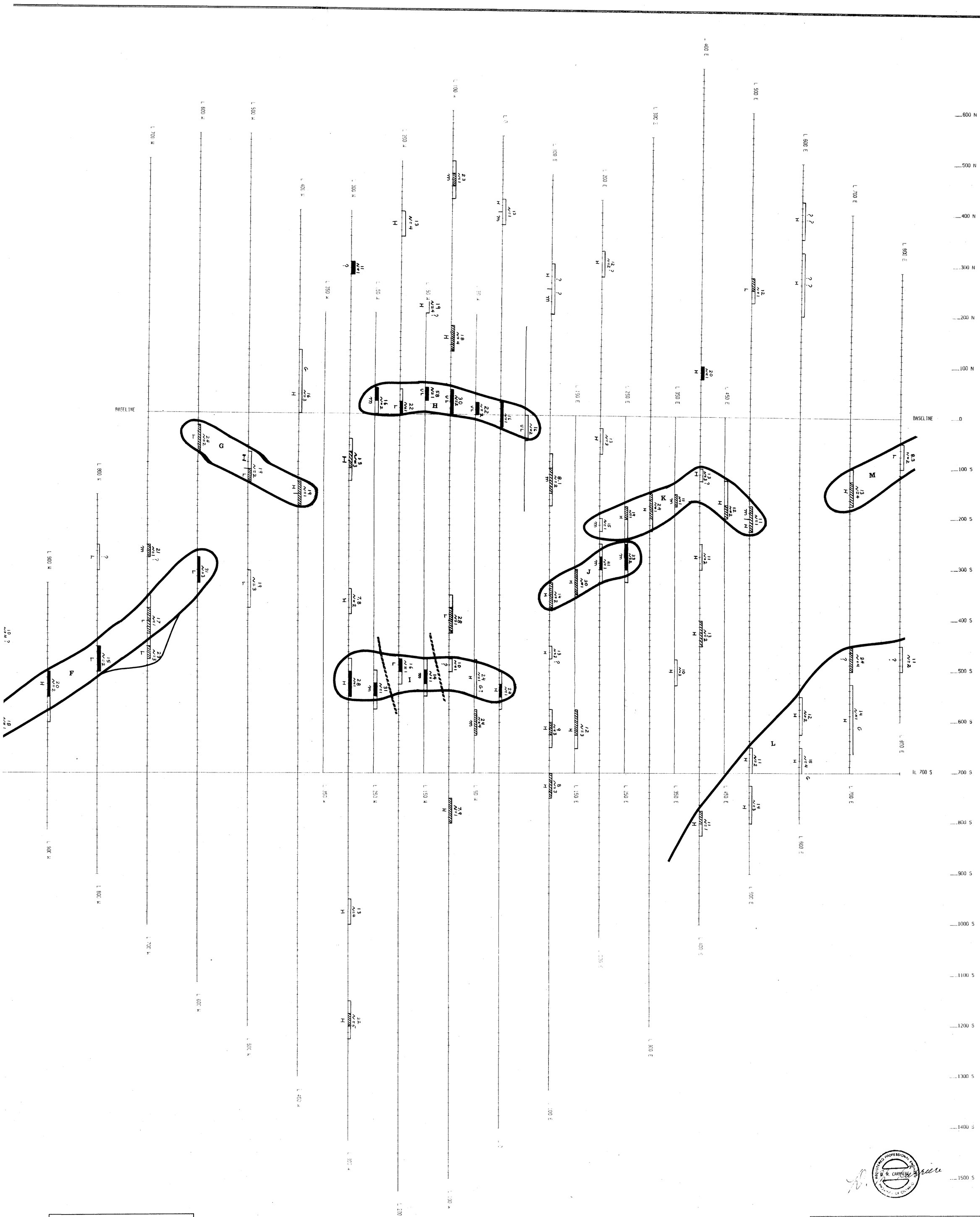
Total Magnetic Field Contours

63.6125

Ground Magnetic Survey

Basic contour interval: 20 nT
Instrument : Scintrex MP-3

MERTENS & MacNEIL LTD. MAP 1



LEGEND

MAX PHASE 23
N SPACING N=2
PROBABLE
POSSIBLE
DEFINITE
R — RESISTIVITY
VL VERY LOW
L LOW
M MODERATE
H HIGH
G GEOLOGICAL
? QUESTIONABLE

SCALE 1 : 2 500

50 0 50 (metres) 100 150 200

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GENEVA LAKE MINERALS CORPORATION

Benny Project
Benny , Ontario .

Interpertation Map 63.6125

Induced Polarization Survey

MERTENS & MacNEIL LTD. MAP 2