

GEOCHEMICAL, GEOPHYSICAL  
& GEOLOGICAL REPORT ON THE

AM, AM No. 1 & RED No. 3  
Claim Groups

GIANT COPPER PROPERTY  
(26 Miles SE of Hope, B.C.)  
(121° 1' 49" 12')

By Donald L. Dick, B.Sc.  
Endorsed by

W.E. Clarke, B.Sc., P.Eng.

December 4, 1972

For

92H/3E

GIANT MASCOT MINES LIMITED

Dates: August 6, 1972 to  
November 10, 1972

4075

# 4075

GEOCHEMICAL, GEOPHYSICAL AND GEOLOGICAL REPORT

ON THE

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GIANT MASCOT MINES LIMITED

P.O. Box 10010, Pacific Centre  
700 West Georgia Street  
Vancouver 1, B.C.

Dates: August 6, 1972 - November 10, 1972

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 4075	MAP

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## INTRODUCTION

The Giant Copper property (formerly owned by Canam Copper Company Limited ) has a long history of exploration and development work dating back to the early 1930's.

Surface exploration on the property during the 1968 and 1969 field seasons disclosed two broad areas anomalous in copper, lead and zinc. The 26 Mile Area is located 2,000 feet southwest of the Main Breccia Zone, and the 10 Level Area lies 3,000 feet to the northeast.

Preliminary geophysical work during 1969 indicated that weak electromagnetic conductors and high magnetometer values were coincident with the geochemical anomalies.

This report describes additional surface exploration work done on the property in 1972.

In order to pinpoint drill targets, or areas that might be trenched within the anomalous zones, intermediate lines were soil and rock chip sampled, and the grids extended to cover open ended portions of the anomalies.

In addition, geophysical work in the form of a magnetometer survey and an I.P. survey, was performed in the grid areas as a follow-up to the preliminary geophysical work of 1969.

A rock chip geochemistry program was also carried out in trenches near the Main Breccia, and in the 10 Level Adit.

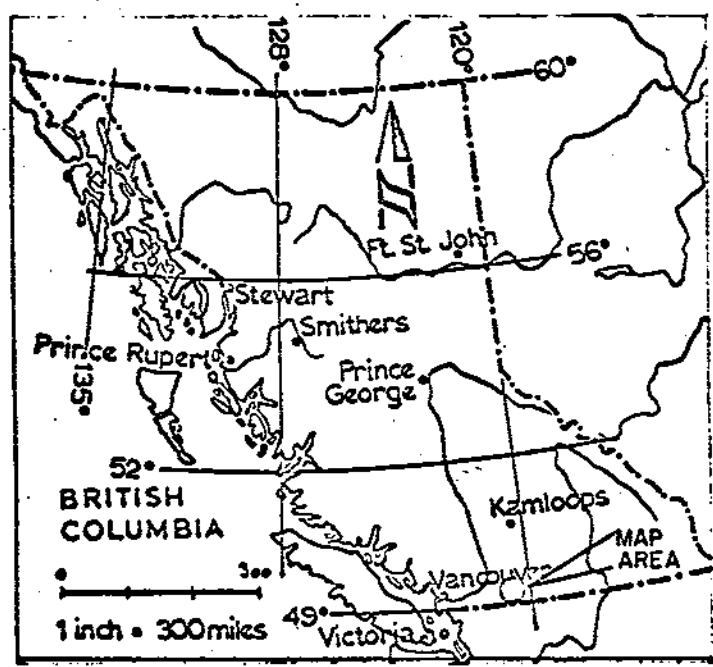
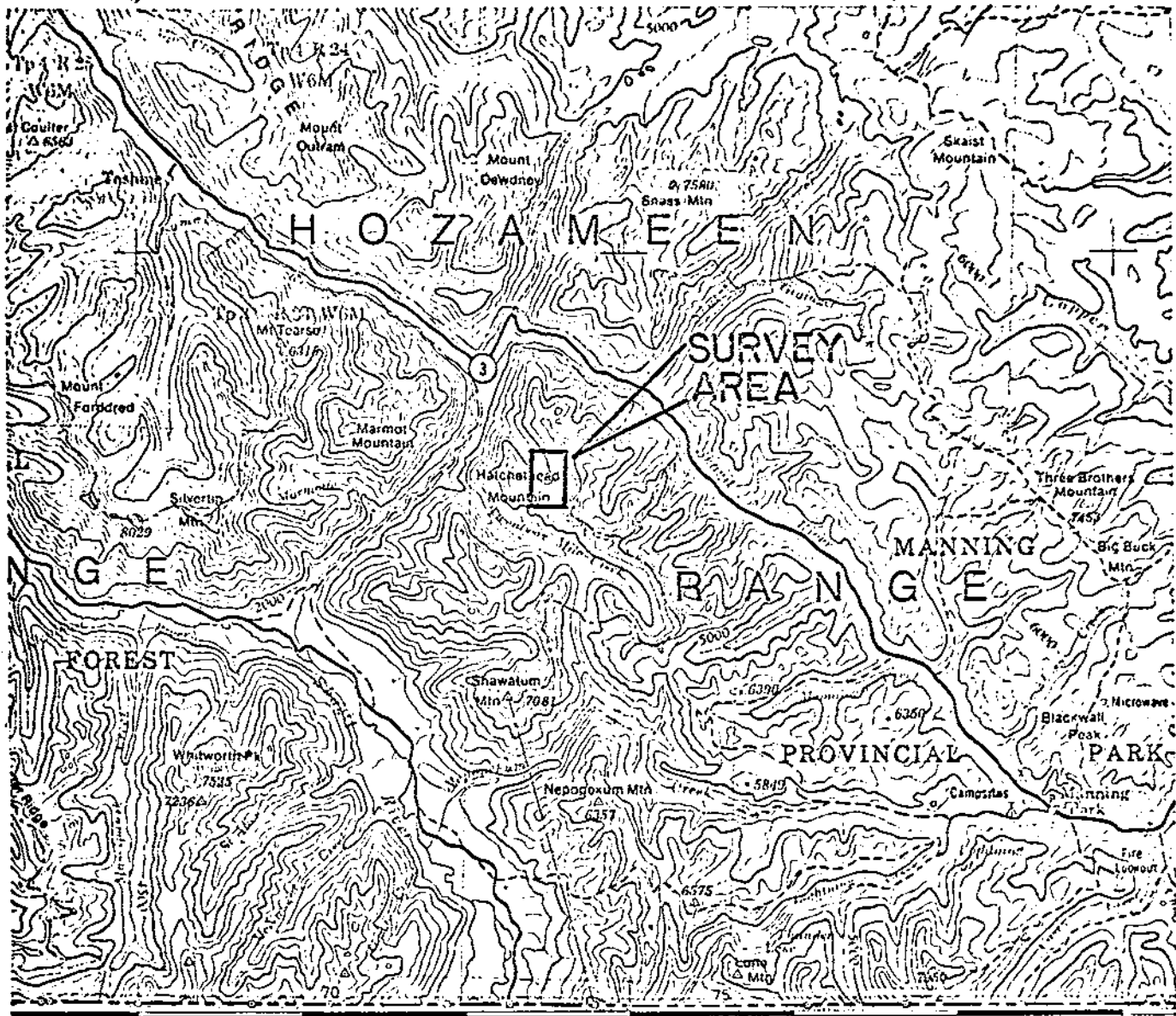
During the latter stages of the 1972 program trenching was carried out in the 26 Mile Area; the Main Breccia area was diamond drilled to a depth of 150 feet; and two short holes were drilled on a coincident I.P.-Mag anomaly on the 10 Level Grid.

#### LOCATION AND ACCESS

The property lies between elevations 4300 feet and 6,500 a.s.l., and is located approximately 23 miles southeast of Hope, B.C. Manning Provincial Park adjoins the northeast boundary of the property. Access is by blacktop highway to Mile 26 in the Hope-Princeton road, thence three miles south by secondary gravel road to the 15 Level Portal at elevation 4,340 feet.

#### PROPERTY

The Giant Copper property is comprised of 190 surveyed and unsurveyed fractional and full-sized mineral



**GIANT MASCOT MINES LTD.**

To accompany an assessment report dated Oct 1972 by D.L. Dick B.Sc. (geology) on the Giant Copper Claim Group Hope, NEW WEST M.D.

**GIANT COPPER PROJECT**

Property Location  
Map

Scale: 1" = 250,000	DWG. No.
Drawn by: D.L.D.	CS-0-42

*Walter A. Clarke*  
*D. Dick*

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. 4075 MAP #1



claims. Eight claims are Crown Granted and 182 are held by location.

The claims covered by the present survey are as follows:

AM Group

<u>Name</u>	<u>Record No.</u>
AM	L1586 C.G.
Lois No. 9	19245
Lois No. 10	19246

AM No. 1 Group

AM No. 1	L1579
AM No. 2	L1587
AM No. 3	L1577
Rex No. 1 Fr.	L1595
Lois Fr.	19237
Bank No. 2	12880
Bank No. 3	22906

RED No. 3 Group

Red No. 3	10228
Red No. 4	10229
Camborne No. 1	8065
Camborne No. 2	8066
AM No. 4	L1584
AM No. 5	L1581
GE #3 Fr.	20443
Augustus No. 5 Fr.	L1585

GEOLOGY

Regional

The general area is underlain by sedimentary rocks of two considerably different ages, separated by the Hozameen Fault, which is part of the Fraser River fault

system. Both groups have been intruded by large stocks and bosses of diorite and quartz diorite, and a still younger series of gabbroic-hornblendic dykes and sills.

The younger Dewdney Creek Group of sediments, which trends north-northwesterly and lies to the east of the Hozameen Fault, hosts the mineralized zones at Giant Copper. The older Hozameen sediments lie to the west of the fault, and do not appear to be related to the mineralization on the Giant Copper property. However, this rock hosts gold, silver, copper, lead and zinc mineralization at other locations.

A northwest trending fracture system extends from the Giant Copper area through to the vicinity of the Giant Nickel Mine, and thence to Harrison Lake, and is a locus along which a number of mineral showings occur.

#### Local

The property is underlain by sediments of the Dewdney Group, which have been intruded by a large stock of diorite called the Invermay stock. The intrusive body measures approximately two miles north-south by one mile east-west, with a 3,000 foot apophysis extending southerly from the southeast corner of the main mass.

The Dewdney sediments trend northwest and dip steeply east, but are much disturbed and brecciated near

apophyses and irregularities in the diorite contact. The Main AM Breccia Zone is located in a large embayment.

Copper mineralization shows little preference for either of the two main facies of the Dewdney Group present on the ground. One rock is a dark grey to black, fine grained argillite, and the other is a light grey, fine grained quartzite.

Mafic rocks (gabbro, quartz diorite and coarse grained hornblendite) intrude the sedimentary horizons along strike faults, and to a lesser extent along crosscutting faults. The mafic intrusive rocks are older than the stock and are at times mineralized.

There are two main fault directions which have influenced the distribution of intrusive rocks, and the occurrence of sulphide mineralization. A northeast striking, steeply dipping set may disturb the continuity of sulphide concentrations in the Main Breccia, and may offset rock formations. A number of faults striking northwest represent the general trend of the country, and constitute part of a regional set having a variable easterly dip. These latter faults control many of the intrusive mafic dykes, and there is a noticeable increase in percent sulphides adjacent to such fault strands.

MINERALIZATION

The majority of the work, both underground and on surface, has been carried out on the Main AM Breccia Zone. Several other weakly mineralized breccia zones have received only limited surface exploration.

The Main AM Breccia Zone is a sedimentary breccia which has lateral dimensions of 1,200 feet north-south by 600 - 800 feet east-west. It has been traced in the vertical plane to a depth of 1,500 feet. The margins of the zone are sharp and the zone may be bounded by faults.

Sulphide mineralization, of which chalcopyrite is the predominant mineral, occurs almost exclusively in the matrix of the breccia, associated with pyrite and pyrrhotite, plus minor amounts of molybdenite, scheelite, galena, sphalerite and magnetite. Concentrations of these minerals have developed at the northern and southern boundaries of the zone, and this has been the site of most of the underground work. Although there is a gradual decrease in sulphide content away from the periphery of the contact, the entire breccia is mineralized.

Another showing on the Giant Copper property is located one mile north of the Main AM Breccia, and is a mineralized shear zone within the Invermay stock. Sulphide mineralization consists of galena, sphalerite, jamesonite, pyrite, pyrrhotite and chalcopyrite. The principal economic

mineral is silver with lesser amounts of lead and zinc. The diorite is brecciated on either side of the shear zone, and limited surface drilling has indicated low grade copper mineralization within the intrusive rock.

### SURVEY GRIDS

#### 10 Level Grid

The 1969 grid was reblazed and reflagged, and the grid extended southeast. The latter work constitutes 15,400 feet of line cutting.

The base line is directed east-west with crosslines spaced every 200 feet. The crosslines were blazed and flagged with stations every 100 feet.

#### Main Breccia

The trenches were surveyed by chain and compass and stations established every five feet throughout the length of the trenches.

Three lines, totalling 8,400 feet, were put in over the Main Breccia Area so that a brief I.P. survey could be conducted over the zone and thereby facilitate the interpretations of 10 Level I.P. data. The lines were cut and flagged north-south and spaced 200 feet apart.

#### 26 Mile Grid

Crosslines on the former grid (1969) were reblazed and reflagged. The base line is directed north-south and the crosslines run east-west with stations every 100 feet.

Intermediate lines were cut and the grid extended to the south and west. All of the above work totalled 29,100 feet of line cutting.

#### GEOCHEMICAL SURVEYS

Soil samples collected on the Giant Copper property during the 1972 field season were taken from the C-horizon of the soil profile.

The samples were taken every hundred feet on crosslines spaced 200 feet apart. They were labelled in the field with the station designation as per the established grid, that is, the sample taken at crossline four west 150 feet south was marked XL4W-1½S, and so on.

The soil samples were assayed by Fraser Laboratories Limited, 1175 West 15th Street, North Vancouver, B.C. A one-half gram of the dried and screened sample (-80 mesh) was digested for two hours in a mixture of perchloric and nitric acid. Following cooling, mixing and settling, the sample was diluted and run on a Techtron AA-5 atomic absorption spectrophotometer against matrix standards. Results were reported in PPM with 2% error. Samples giving more than 2,000 PPM were reported as percent metal, following normal assay procedures.

Rock chip samples were taken from outcrops on, or near, 26 Mile Grid stations, and therefore approximately 100 feet apart on 200 foot crosslines. Moreover,

a rock chip geochemistry investigation was carried out near known mineralization in the Main Breccia trenches. This latter sampling was initiated to assist in the interpretation of 26 Mile rock geochemistry, and to define mineralized zones in the Main Breccia Area. The samples were taken at five foot intervals along the trench wall, and 2 1/2 feet above and below each station. Rock chips were taken every 20 feet in the 10 Level adit as part of the rock geochemistry program.

Following crushing and pulverizing of the rock to -100 mesh size, the rock samples were analysed for their metal content as per the procedure for soil samples described previously.

Metal values for the 10 Level Grid soil sampling are shown on Map CS-0-44 and values in PPM for the 26 Mile Grid are depicted on Map CS-0-49.

Rock chip assays are reported in PPM for the 26 Mile Grid on Map CS-0-49 and values in both PPM and percentile figures are shown on Map CS-0-47 for the Main Breccia trenches.

#### MAGNETOMETER SURVEYS

The ground magnetometer survey was carried out using a McPhar M700 flux-gate magnetometer with readings taken every 100 feet on the crosslines.

The magnetometer measures the vertical component of the earth's magnetic field to 58 on the lowest scale range. Full scale ranges vary progressively from a minimum of 1,000 to a maximum of 100,000 .

Temperature compensation has been built directly into the instrument so that the only necessary corrections are those for diurnal variation. The variation was assumed to be linear; it was determined by closing every ten stations, and by noting the evening reading at the base station as compared to the morning value set at 450 .

#### GEOLOGICAL MAPPING

##### 10 Level Grid

Outcrop exposure on the 10 Level Grid is minimal. An area of rock measuring 900 square feet occurs in the northwest corner. The road cuts, the 10 Level grid and two diamond drill holes provided most of the information on which geological mapping is based.

##### Main Breccia

Rock exposed in the trenches was mapped. The trenches were surveyed by chain and compass, and tied in with No. 3, No. 6 and No. 7 Level adits. Three thousand feet of trenching work was done, and covered an area 700 feet north-south by 600 feet east-west.



### 26 Mile Grid

Mapping in the 26 Mile area was accomplished using the grid as control, and relating outcrops to given stations by pace and compass methods.

## DESCRIPTION AND INTERPRETATION OF RESULTS

### 10 Level Grid

#### Geochemistry

Soil sampling on the 10 Level Grid revealed a coincident lead-zinc-copper anomaly being developed south of, and roughly paralleling the 10 Level adit.

Rock chip samples taken within the adit and assayed for PPM lead-zinc-copper did not display any definite pattern indicative of mineralization within the wall.

#### Geophysics

The ground magnetometer survey resulted in the discovery of two prominent anomalous areas, one of which is an elongated zone of high readings generally coincident with the above noted geochemical anomaly. The second mag anomaly is a broad magnetic low immediately north of the 10 Level adit, and covers an area 700 feet east-west by 500 feet north-south.

An I.P. survey (Seigel's Fominoff and Lewis, September 27th, 1972 - separate report) was conducted on the 10 Level Grid and two major anomalies were outlined, both being coincident with the two mag anomalies previously mentioned. In both instances chargeabilities indicated disseminated, metallicly conducting mineralization in the range of 5 - 10% by volume.

### Geology

Geological mapping indicates that the 10 Level Grid is underlain by Dewdney sediments, consisting in the main of interbedded argillites, quartzites and sills of gabbro and diorite. Interpretation work suggests that the mag high in the grid area is closely associated with a northeasterly striking fault.

The Dewdney Creek argillite mapped in the 10 Level area is a light to dark grey, fine grained, tenacious rock. It is generally well bedded, with strikes and dips comparable with the northwest striking east-dipping regional trend.

The Dewdney Creek quartzite is less prevalent in the mapped area. The quartzite is a light to dark blue, generally very fine grained, well indurated rock. Bedding is rarely observed within the quartzite, the only structural elements in evidence being relic fractures.

Gabbro comprises about 20% of the outcrop area. It is a fine to coarse grained, light to dark grey, competent and generally fresh looking rock. The coarse grained phases of the gabbro exhibit alterations of the mafics to dolomite in the vicinity of shear zones. Near fault zones in the western part of the grid, the gabbro has been altered to a cream coloured, aplitic, limonite-stained silicified rock.

A rock, to which the field name diorite has been applied, occurs in a gradational relationship with the gabbro. The diorite has textural features and structural relationships comparable to those of the gabbro, however, the rock contains very few mafic minerals.

The country rock in the 10 Level Grid area contains a number of prominent structural features. A fault striking east-southeast is evidenced in the road cut from the base line north to crossline 6. An altered silicified gabbro is associated with the fault, and sedimentary rocks within the fault zone are intensely weathered and limonite-stained.

A strong northeast fault occurs inside the 10 Level drift, a distance of 1,600 feet from the portal. The fault is at the contact between sedimentary rocks and the Invermay quartz-diorite stock.

A fracture system, occurring in the wall of the adit in the interval 300 - 1,200 feet from the portal, strikes west and dips  $65^{\circ}$  east. The fractures are calcite filled and contain abundant pyrite.

#### Drilling

Diamond drilling later in the season explored the largest anomalous area north of the 10 Level adit to a depth of 200 feet, and laterally 300 feet across the centre of the magnetometer low and the highest I.P. chargeability values. The holes intersected a series of interbedded argillites, quartzites and gabbro-diorite sills. The entire sequence was mineralized with disseminated fine grained pyrrhotite and coarse grained pyrite and pyrrhotite as fracture fillings, only less than minor chalcopyrite was noted. Copper values for the core samples assayed were extremely low.

#### Main Breccia Area

##### Geochemistry

Rock chip sampling in 3,000 feet of trenches, over an area measuring 200 feet by 600 feet, revealed a partial PPM halo around those sectors of the trenches containing sufficient copper to be reported in percentile figures.

### Geophysics

Three I.P. lines put in over the Main Breccia zone (Fominoff & Lewis, September 27th, 1972) show high chargeability values, which, near points of maximum amplitude, could reflect 4 - 5% by volume of disseminated metallicly conducting mineralization.

### Geology

Quartzite of the Dewdney Creek group is the predominant metasediment in the immediate vicinity of the exposure. It is a light blue to dark blue, very fine grained to fine grained, hard, brittle rock. It is the most prevalent clast in the Breccia zone.

The breccia is usually altered to a soft bluish clay, sometimes pseudo-morphically replaced by limonite. In places where the brecciation is incomplete the quartzite is jointed over intervals of six to eight inches, and the fractured manganese-stained structure displays a variety of orientations. The breccia may possess limonite, or altered quartzite clasts, with a very low percentage of chlorite or limonite matrix.

The northwest striking fault set associated with the metasediments is commonly intruded by gabbro. The rock is light to dark grey, fine to coarse grained, occasionally hornblendic, and very tenacious.

The gabbro bleaches to a light green or white in the vicinity of shear zones. The rock has generally been altered and chloritized to a soft, crumbly, green-gray rock. However, in the same outcrop the gabbro can be quite fresh in appearance.

Diorite occurs near the northern contact of the breccia in the bottom trench. It is a light grey rock without significant alteration.

For the most part, the breccia is a friable, heavily iron stained and intensely sheared rock. Pods of hematite, limonite, chlorite and talc are common in the fault zones.

Malachite splashes are common and other copper staining to a lesser extent. In the middle and upper trenches the breccia hosts vugs containing crystals of quartz and tourmaline.

Chalcopyrite and minor molybdenum were the only economic sulphides noted in the Main Breccia Area. Pyrite and minor pyrrhotite were associated with these latter minerals.

The mineralization tended to occur in the matrix of the more competent breccia but was also noted filling fractures in the more limonite stained material.

Ore grade mineralization occurs near a sheared gabbro-quartzite contact on the south end of the breccia zone exposed in the middle trenches. The sulphides

are primarily deposited as vuggy replacements along the gougy shear contacts.

#### Drilling

A diamond drill hole was collared in the Main Breccia Area and drilled vertically to a depth of 128 feet. The hole was spotted in the trenched area and bottomed in breccia with the final 105 feet containing significant copper mineralization.

#### 26 Mile Grid

##### Geochemistry

During the 1972 season, the 26 Mile Grid was extended north and south to cover an area approximately 2,500 feet east-west by 1,700 feet north-south. Several intermediate lines were established to provide better control in the central area.

In general, soil sampling on the 26 Mile Grid has given rise to some very high values in lead and zinc, and moderately high values in copper. In 1969, two zones, anomalous in copper-lead-zinc, were discovered in grid area.

The detailed work of 1972 delineated five anomalous conditions on the 26 Mile Grid.

The first anomalous area is centered on

lines 1 and 1A, station 3E, and strikes toward line 4. Moderately high values in lead and zinc also occur above this point.

A second anomaly extends from line 1C (stations 1W and 3W) to the baseline on line 2A. Assay values in this locale were as high as 1,080 PPM lead and 1,240 PPM zinc. The I.P. anomaly (Fominoff & Lewis, 1972) is associated with this area.

A strong copper anomaly extends from line 2A station 4W to line 3C station 3W. Values in lead and zinc are low. Magnetometer work indicates the presence of high magnetic relief in this area.

On lines 4A and 4B in the vicinity of the baseline, a lead-zinc anomaly with moderate values in copper occurs.

A number of high values are found on the end of line 4B, and may be indicative of mineralization off the grid to the west.

Rock sampling on the 26 Mile Grid did not outline any anomalous areas, nor did this technique differentiate between rock types underlying the 26 Mile. A few high values did occur near a fault (brecciated?) zone near line 3B, station 1E.



### Geophysics

At least two moderately high mag anomalies have been outlined in the 26 Mile Grid area.

The first occurs in the northwest corner of the grid, and covers an area approximately 600 feet by 800 feet. The values range from a low of 200  $\gamma$  on the east, to a high of 300  $\gamma$  on the western part of the anomaly. The four areas of high lead-zinc values are situated to the northeast of the mag high. Moreover, the copper anomaly mentioned previously lies immediately west of the highest mag values.

A complex array of alternately high and low mag readings lies immediately west of the main geochemical anomaly. Many of the values are significantly higher than background, and thereby constitute a rather ill-defined mag high.

An I.P. survey conducted by Seigel Associates gave anomalous results coincident with geochem anomaly 2, and in the vicinity of the last mentioned mag high.

### Geology

Weathered, highly fractured Dewdney argillites and quartzites underly the 26 Mile Area. The later rocks are intruded by dykes and sills of gabbro. Current mapping suggests that this entire assemblage of rocks has been cut by north, east-northeast, and northwest striking fault

structures. Interpretive work relating to the geology of the 26 Mile Grid is still in progress, however, there are indications that the high geochem values, the mag anomalies, and areas of high chargeability are associated with the above described fault structures.

During the 1972 season, 2,000 feet of trenching was done on the 26 Mile Grid with the objective of eventually opening up a brecciated area centered on line 3B station 1E. However, the slope was too steep to reach this locale.

*Donald L. Dick*  
Donald L. Dick, B.Sc.

Endorsed by:

*Walter E. Clarke*  
W.E. Clarke, B.Sc., P.Eng.

DLD/lg

PERSONNEL

<u>EMPLOYEE</u>	<u>ADDRESS</u>	<u>CLASSIFICATION</u>
Don L. Dick	300-235-13th., St., North Vancouver, B.C.	Geologist
Greg Golos	7649 Hazel Street Hope, B.C.	Geo. Helper
Dave O. Marley	588 Alpine Ct., North Vancouver, B.C.	Exploration Assistant
Randy Marshall	680 Coquihalla St., Hope, B.C.	Surface Labourer
Gordon Martin	7892 - 112 B St., Delta, B.C.	Surface Labourer
George Sherban	1336 Granville St., Vancouver, B.C.	Surface Labourer
Rick Sumner	Silver Hope Rd., Hope, B.C.	Surface Labourer

EXPENDITURE SUMMARY

Labour Charges

<u>Name</u>	<u>Period worked</u>	<u>No. of shifts</u>	<u>Rate/Shift</u>	<u>Total labour charge</u>
Don Dick	Aug.9/72-Dec.4/72	65	\$42.00	\$2,730.00
Greg Golos	Aug.25/72-Oct.27/72	31	52.40	1,624.40
Randy Marshall	Aug.9/72-Sept.8/72	11	51.61	567.71
Gordon Martin	Aug.9/72-Sept.22/72	8	51.61	412.88
George Sherban	Aug.9/72-Aug.26/72	17	51.61	877.37
Rich Sumner	Aug.9/72-Aug.26/72	1	51.61	51.61
Dave Marley	Aug.9/72-Sept.2/72	20	26.33	<u>526.60</u>
			Total Labour	\$6,790.57

Labour	\$6,790
Camp operation	1,418
Assaying	1,005
Vehicles	950
Engineering supplies	<u>407</u>
Total Cost	\$10,570

Cost allocation

Main breccia	32.2% = \$3,404
10 Level grid	25.6% = 2,706
26 mile grid	42.2% = <u>4,460</u>
Total	\$10,570

Declared before me at the *City*  
of *Vancouver*, in the  
Province of British Columbia, this *11*  
day of *December* *1972*, A.D.



*Joan Turner*

A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia.

Sub-mining Recorder.

CERTIFICATE

I, Donald L. Dick, of the City of  
North Vancouver in the Province of British Columbia,  
hereby certify:

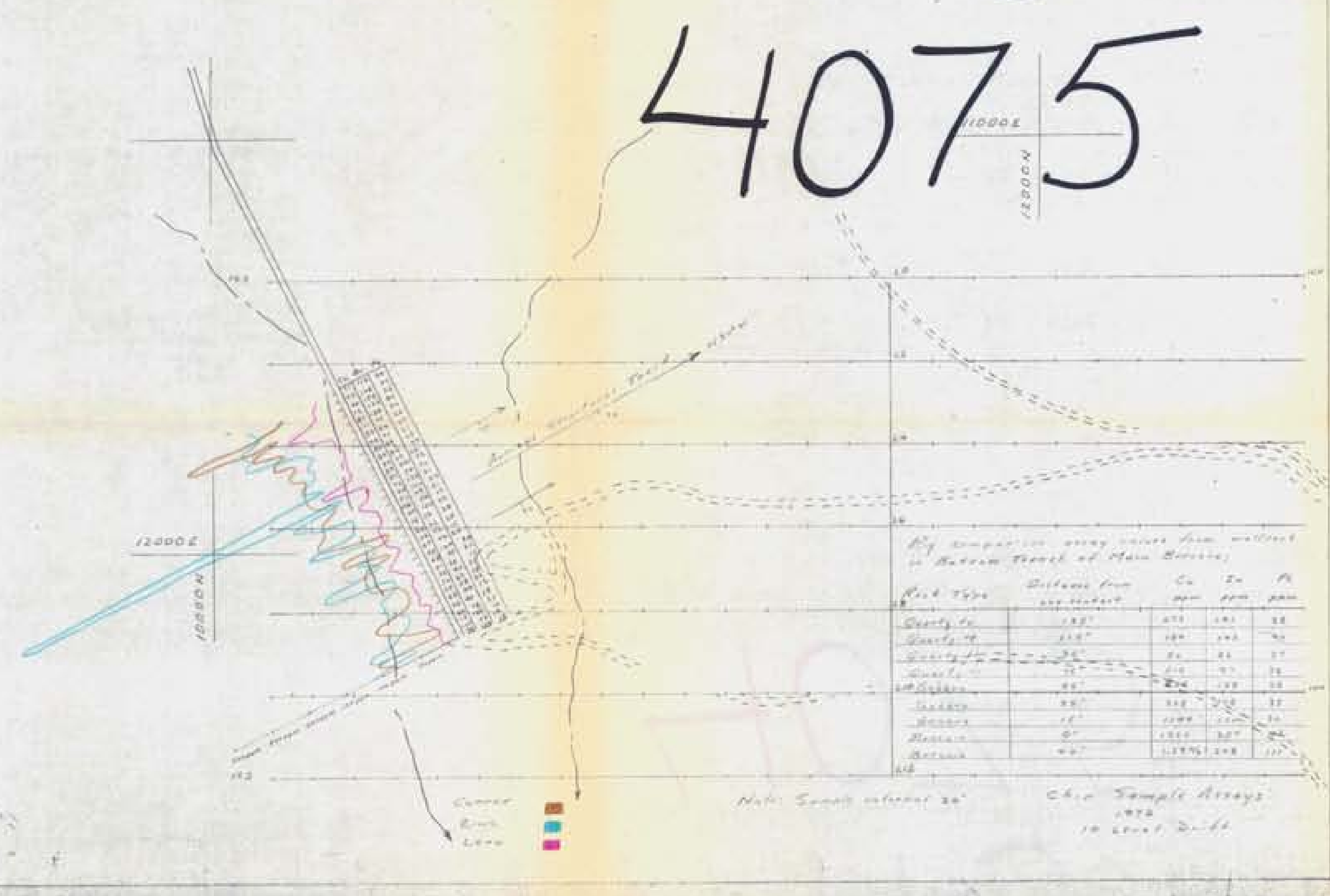
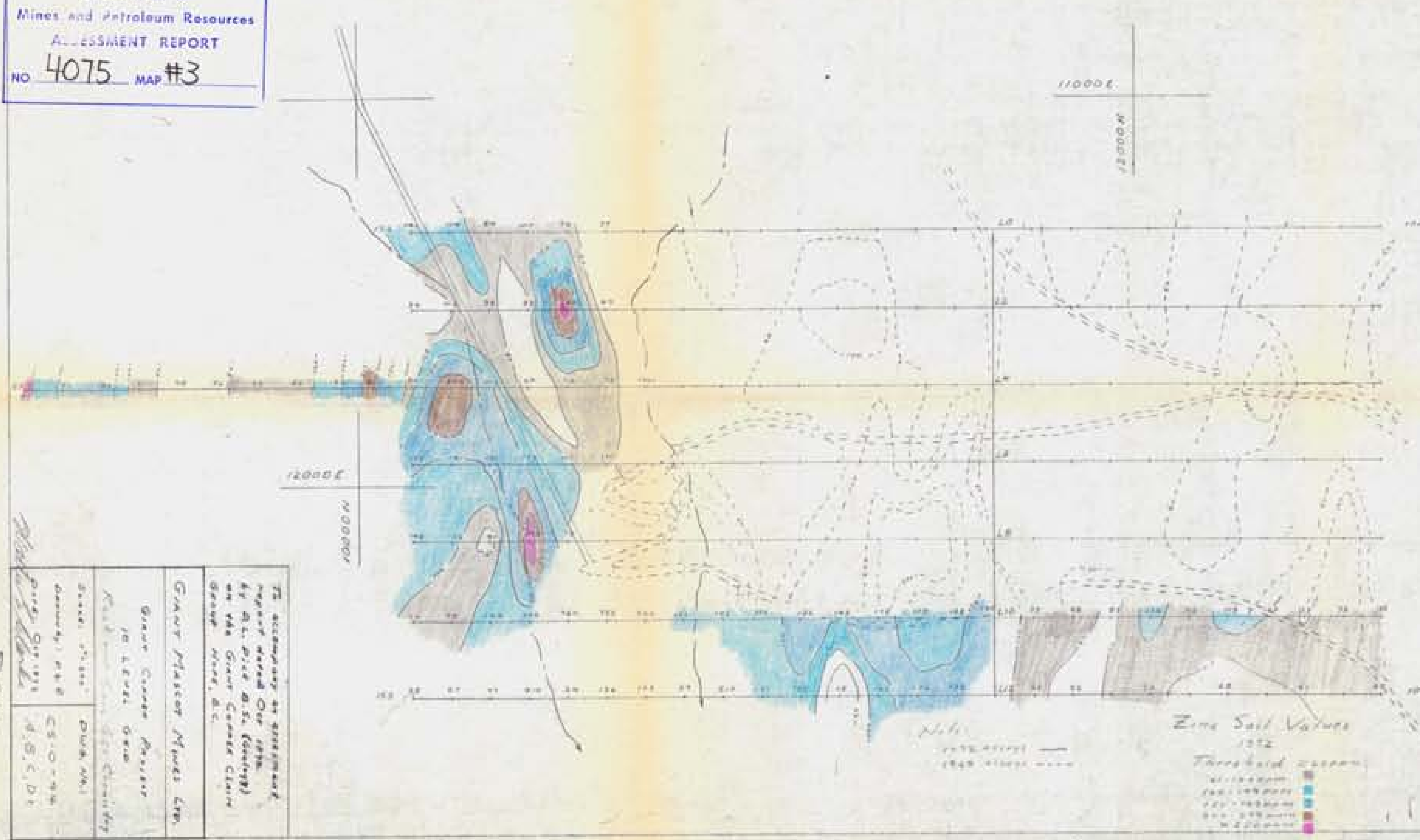
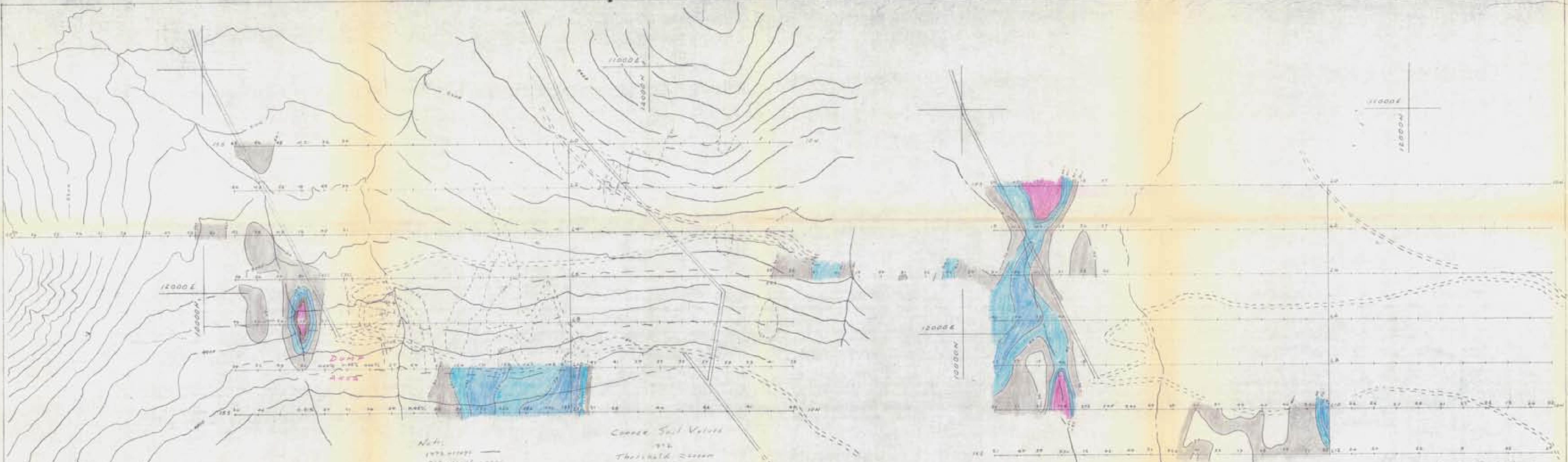
1. That I am engaged in work as a geologist and reside at #302 - 235 13th Street East, North Vancouver;
2. That I am a graduate of the University of Saskatchewan with a Bachelor of Science degree in geology;
3. That I have practiced as an exploration geologist for one year;
4. That I have personally done work on the claims mentioned in this report; and,
5. That I am presently employed by Giant Explorations Limited (N.P.L.).

DATED this fourth day of December, 1972.

Signed,

*Donald L. Dick*

Donald L. Dick



M-3  
4075

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO 4075 MAP #3

TS accompany the assessment report shall be filed with the Department of Mines and Petroleum Resources as required by the Environmental Protection Act, 1986.  
 Grant Minter Minter Ltd.  
 Grant Minter Minter  
 10 Level 9/10  
 100 St. George's Road  
 Perth, Western Australia  
 6850  
 08/11/91  
 D.S.D.

By comparison assay values from material in Bulk Sample of Main Orebody

Rock Type	Distance from Bulk Sample	Cu ppm	Zn ppm	Pb ppm
Quartzite	120'	250	180	20
Quartzite	110'	180	120	15
Quartzite	100'	150	100	12
Quartzite	90'	120	80	10
Quartzite	80'	100	60	8
Quartzite	70'	80	50	6
Quartzite	60'	60	40	4
Quartzite	50'	40	30	3
Quartzite	40'	30	20	2
Quartzite	30'	20	15	1
Quartzite	20'	15	10	1
Quartzite	10'	10	8	1

Chc Sample Assays  
1970  
10 Level Drill



1. CLAIMS SHOWN ARE BASED ON RECORDS OF THE BUREAU OF LAND MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C. AND THE STATE OF NEW MEXICO.  
 2. CLAIMS ARE SHOWN AS OF THE DATE OF THIS DRAWING.  
 3. CLAIMS ARE SHOWN AS OF THE DATE OF THIS DRAWING.  
 4. CLAIMS ARE SHOWN AS OF THE DATE OF THIS DRAWING.  
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 10. CLAIMS ARE SHOWN AS OF THE DATE OF THIS DRAWING.

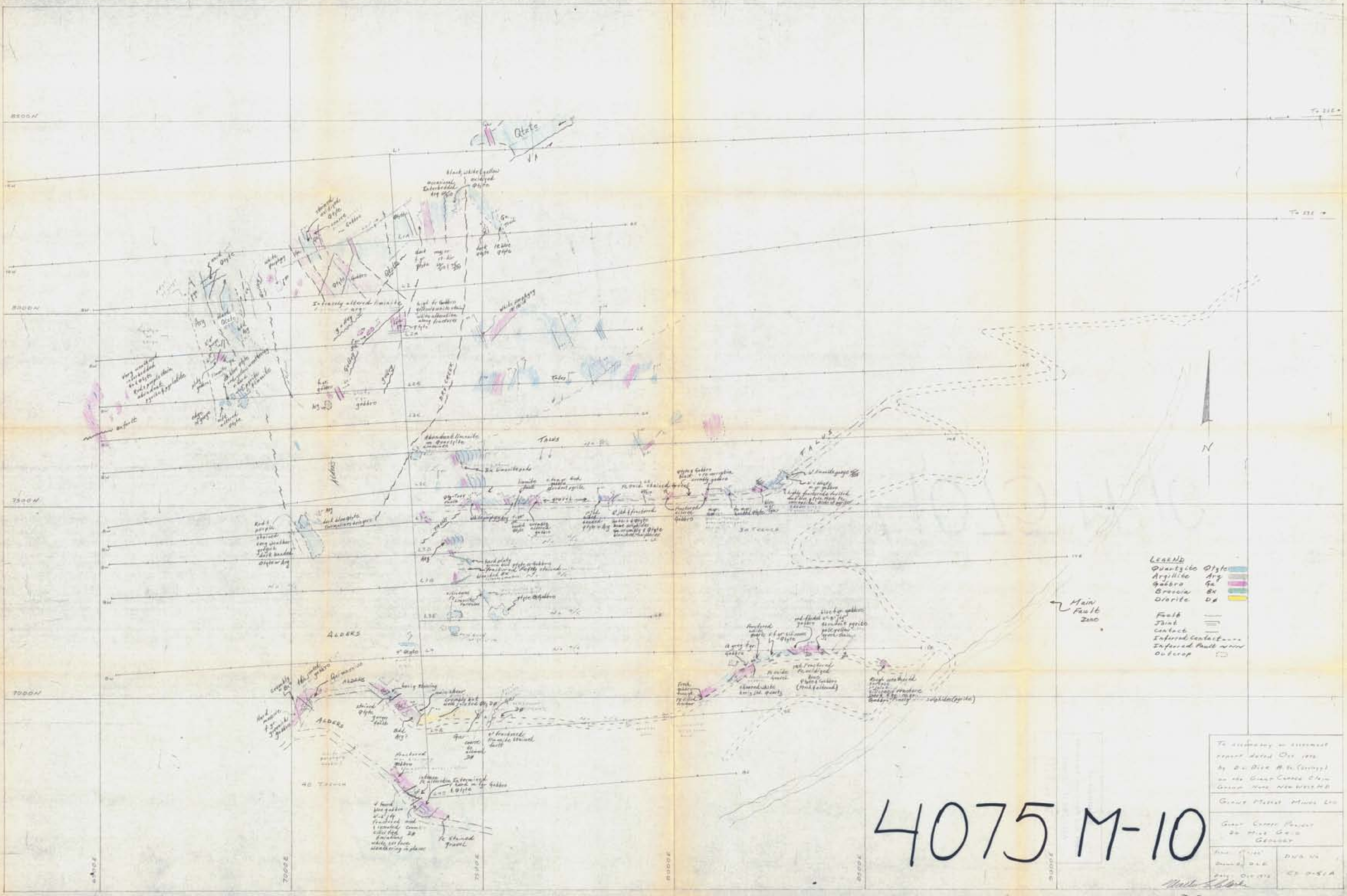


4075 M-2

GIANT MASCOT MINES LIMITED	
GIANT COPPER PROJECT	
CLAIM MAP	
AND	
GRID LOCATION	
SCALE 1" = 1000'	ELEV.
DWG. DATE 5/8	DWG. No.
CALC. DATE 5/8	CS-0-43

To accompany an assessment report dated Oct. 1976 by D.L. Dick B.Sc. (geology) on the Giant Copper Claim Geogr. Horiz. New West M.A.





**Legend**

Quartzite Qtz  
 Argillite Arg  
 Gabbro Ga  
 Basalt Ba  
 Ororite Or

Fault  
 Fault Zone  
 Contact  
 Inferred Contact  
 Inferred Fault  
 Outcrop

4075 M-10

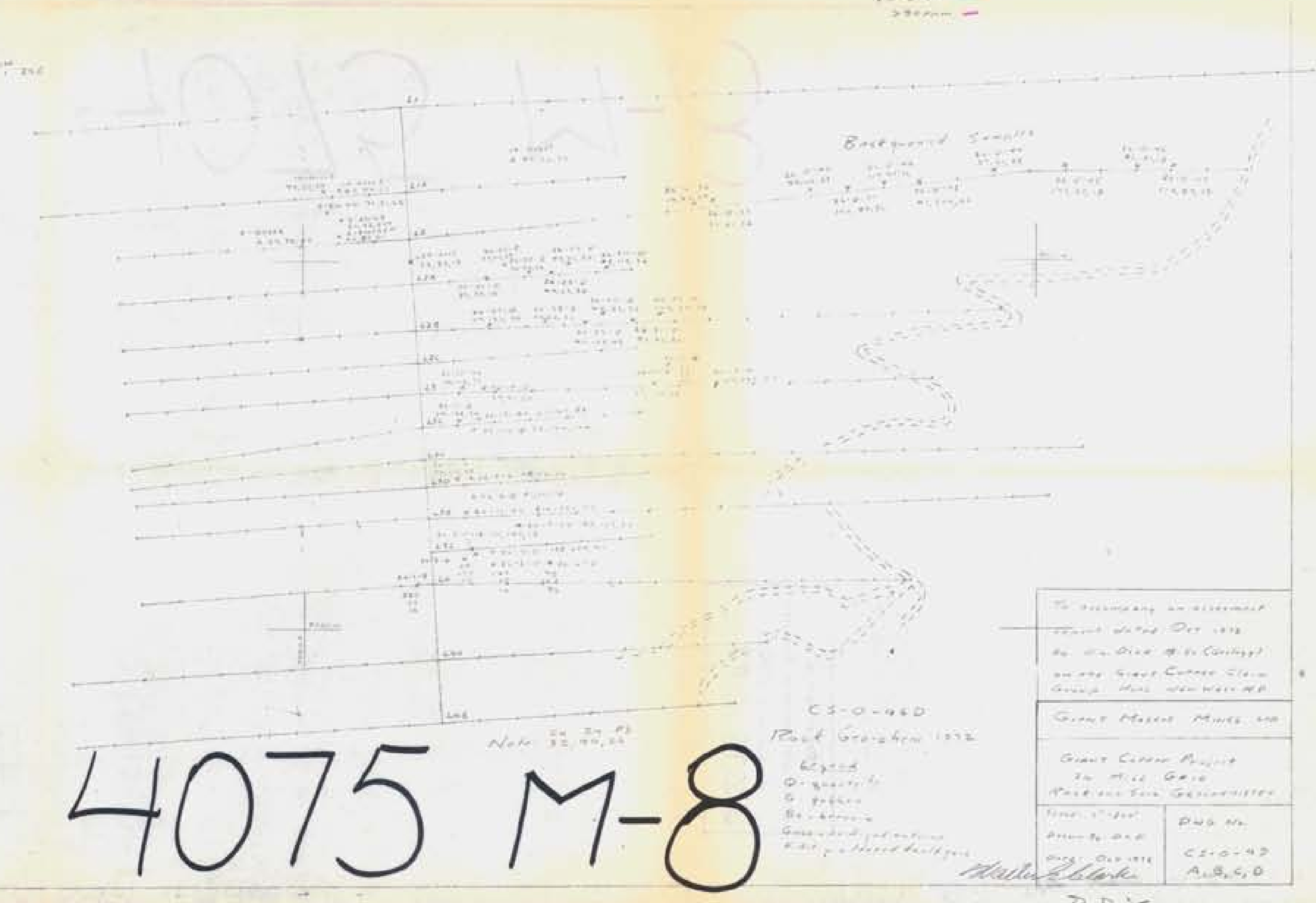
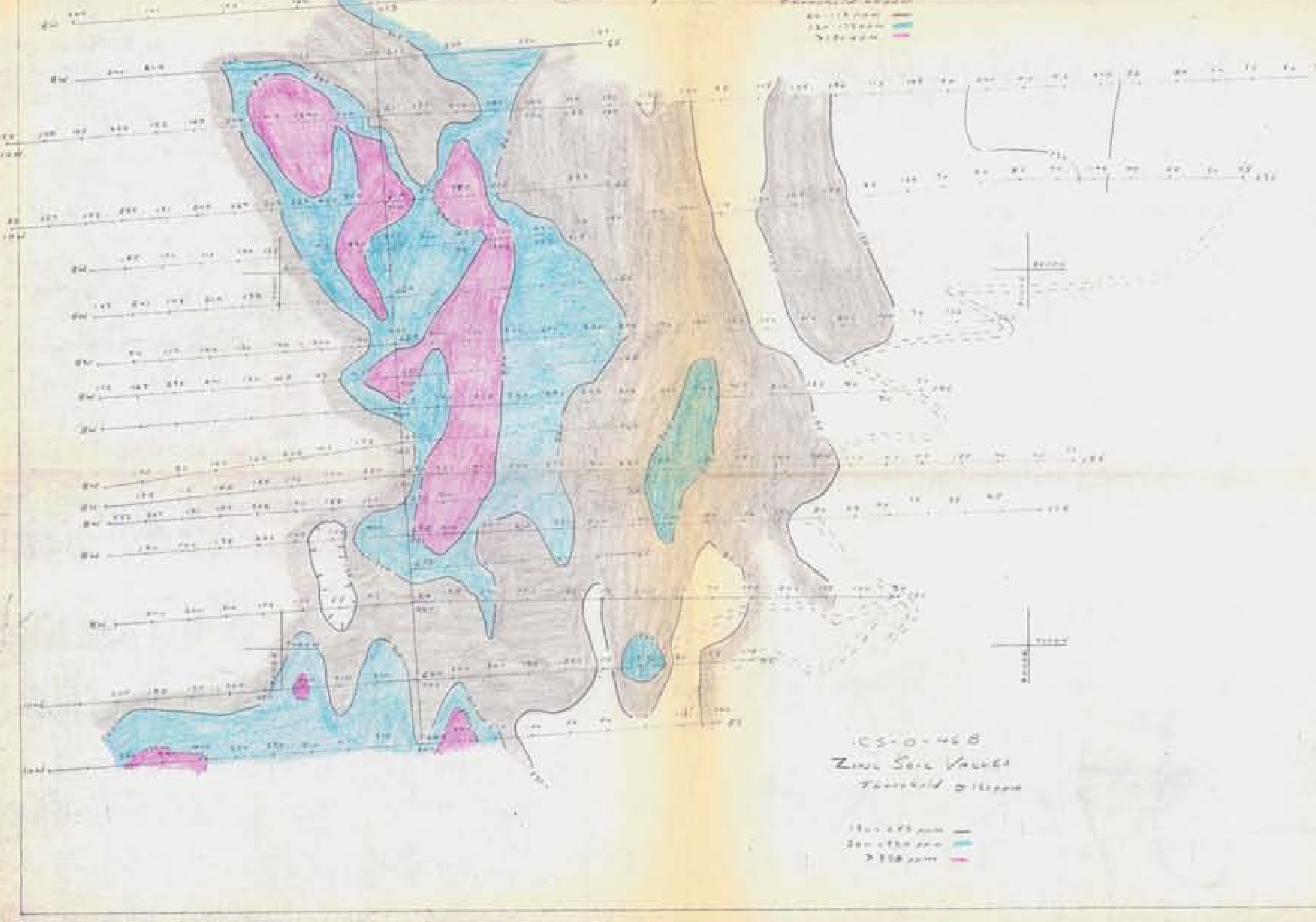
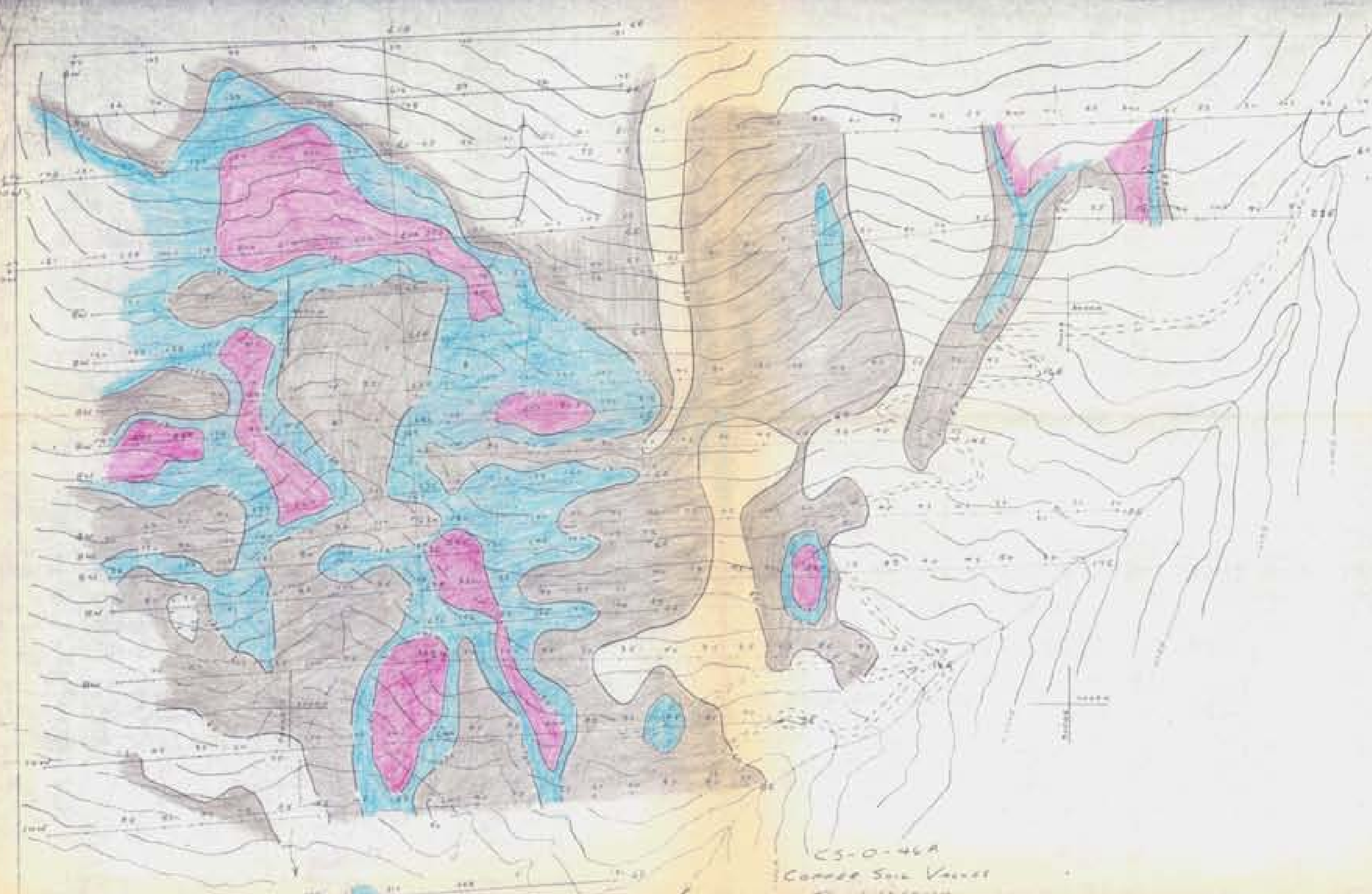
To accompany an assessment report dated Oct 1976 by G. W. Dick & Co. (Geology) on the Grand Canyon Chain Group near New Hope, NB.

Geology Project Plans Ltd.

Geology Project Plans Ltd.  
 20 Prince George Street  
 GEORGETOWN

Scale 1:50,000  
 Date 1976  
 Drawn by G. W. Dick

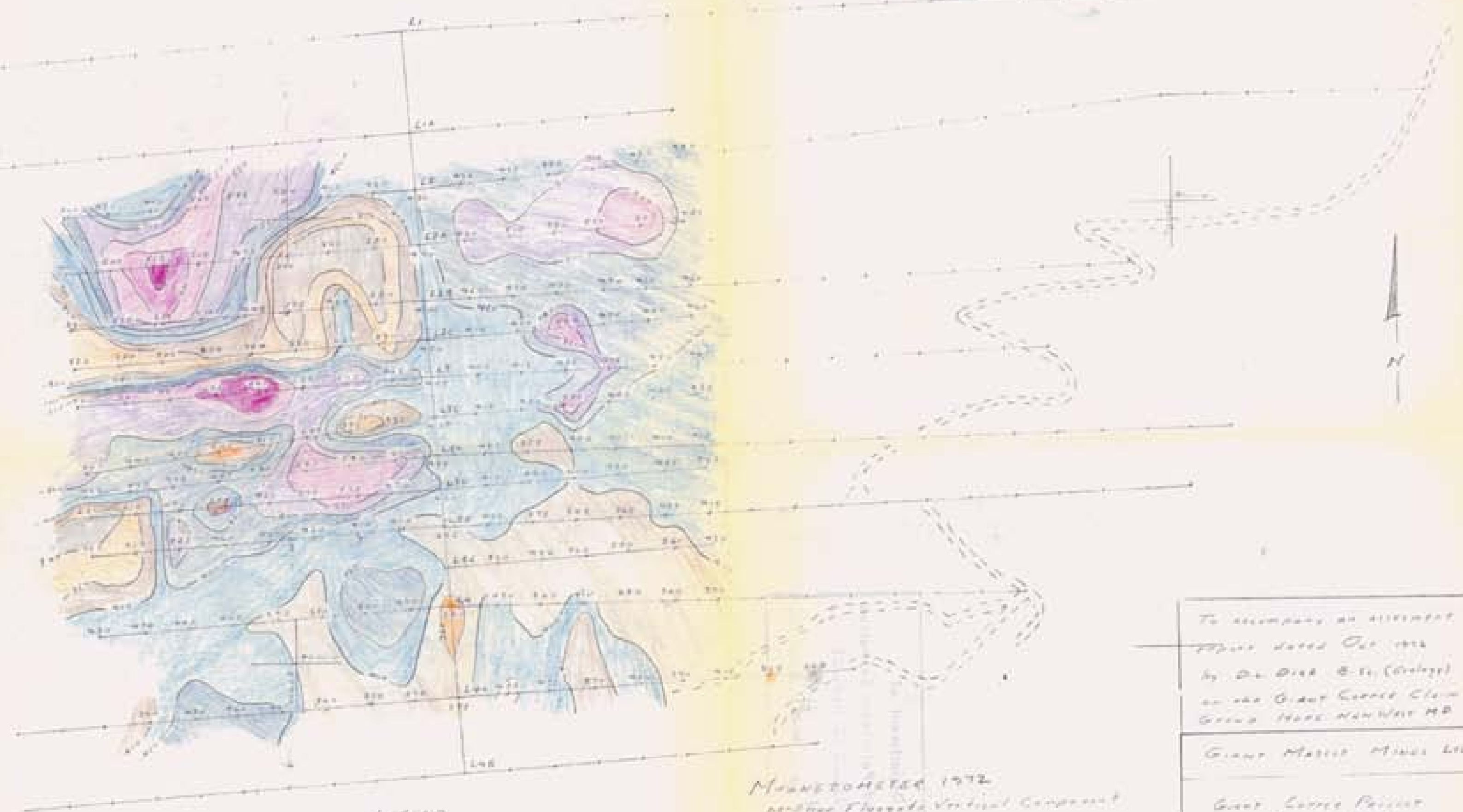
W. W. Dick  
 D. W. Dick



4075 M-8

To accompany an assessment report dated Dec 1978 by Mr. Dick M. S. Collins on the Great Canyon Steam Plant Mill Run Waterway	
Great Canyon Project	
To Mill Creek Park and Soil Geomorphology	
Map No.	DWG No.
CS-O-46B	CS-O-46B
CS-O-46C	A, B, C, D
D. Dier	

4075 M-9



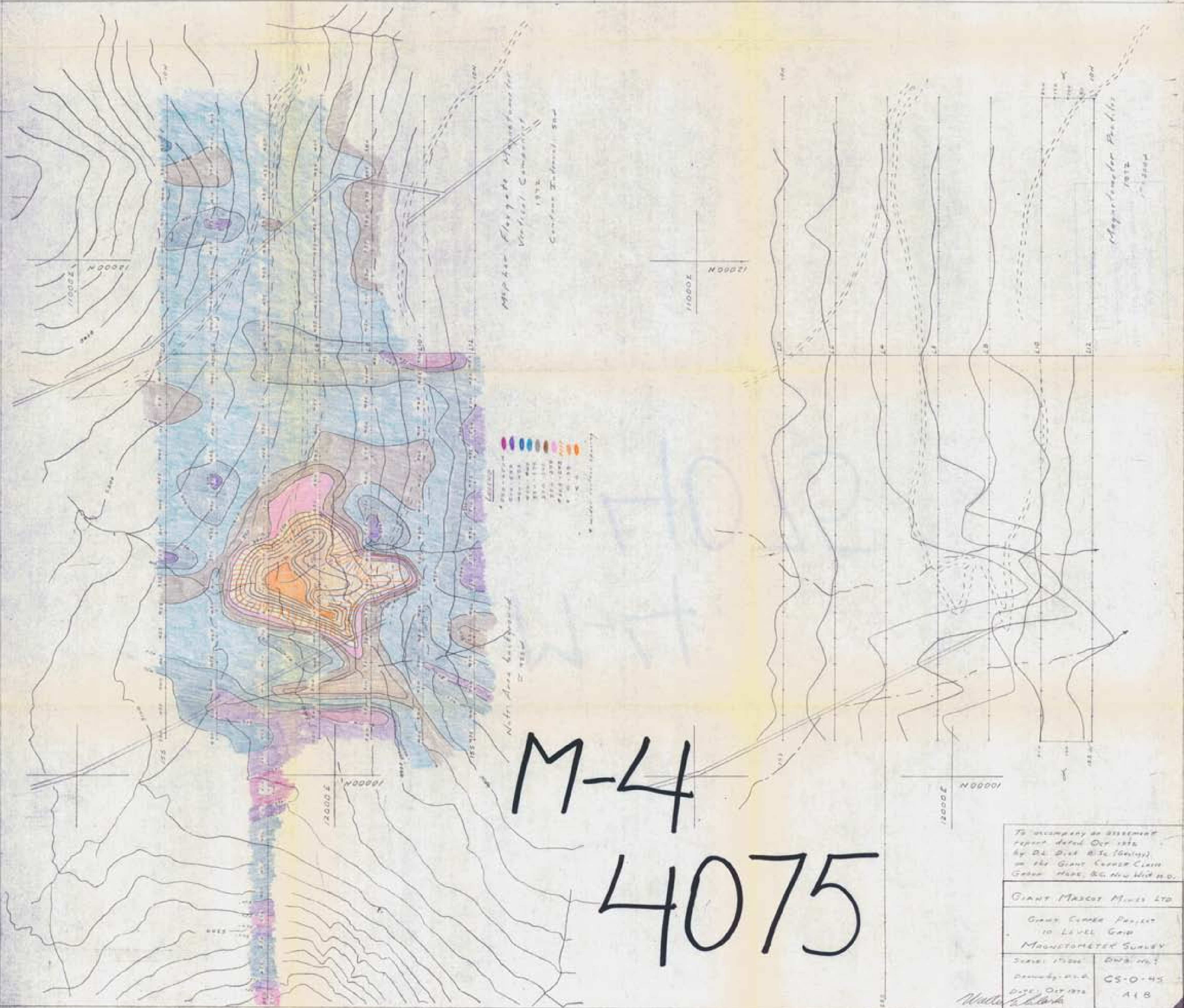
- LEGEND
- China
  - Stratite
  - Wolframite
  - 400-450
  - 450-500
  - 500-550
  - 550-600
  - 600-650
  - 650-700
  - 700-750
  - 750-800
  - 800-850
  - 850-900
  - 900-950
  - 950-1000
  - 1000-1050
  - 1050-1100
  - 1100-1150
  - 1150-1200
  - 1200-1250
  - 1250-1300
  - 1300-1350
  - 1350-1400
  - 1400-1450
  - 1450-1500
  - 1500-1550
  - 1550-1600
  - 1600-1650
  - 1650-1700
  - 1700-1750
  - 1750-1800
  - 1800-1850
  - 1850-1900
  - 1900-1950
  - 1950-2000
  - 2000-2050
  - 2050-2100
  - 2100-2150
  - 2150-2200
  - 2200-2250
  - 2250-2300
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  - 3100-3150
  - 3150-3200
  - 3200-3250
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  - 4100-4150
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  - 4200-4250
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  - 9650-9700
  - 9700-9750
  - 9750-9800
  - 9800-9850
  - 9850-9900
  - 9900-9950
  - 9950-10000

MAGNETOMETER 1972  
 at the Flycatcher Vertical Component  
 50m Contour Interval  
 Background 2000

4075 M-9

To accompany an agreement dated 1972 Oct 1972 by Dr. D. D. S. (Geology) and the Giant Copper Claim Grant Mine New York MD	
Giant Magnet Mine Ltd	
Giant Copper Project 20 Magnet Gold MAGNETOMETER	
Scale 1:500	Date Oct 1972
Drawn by PLS	DWG No
	CS-D-50A

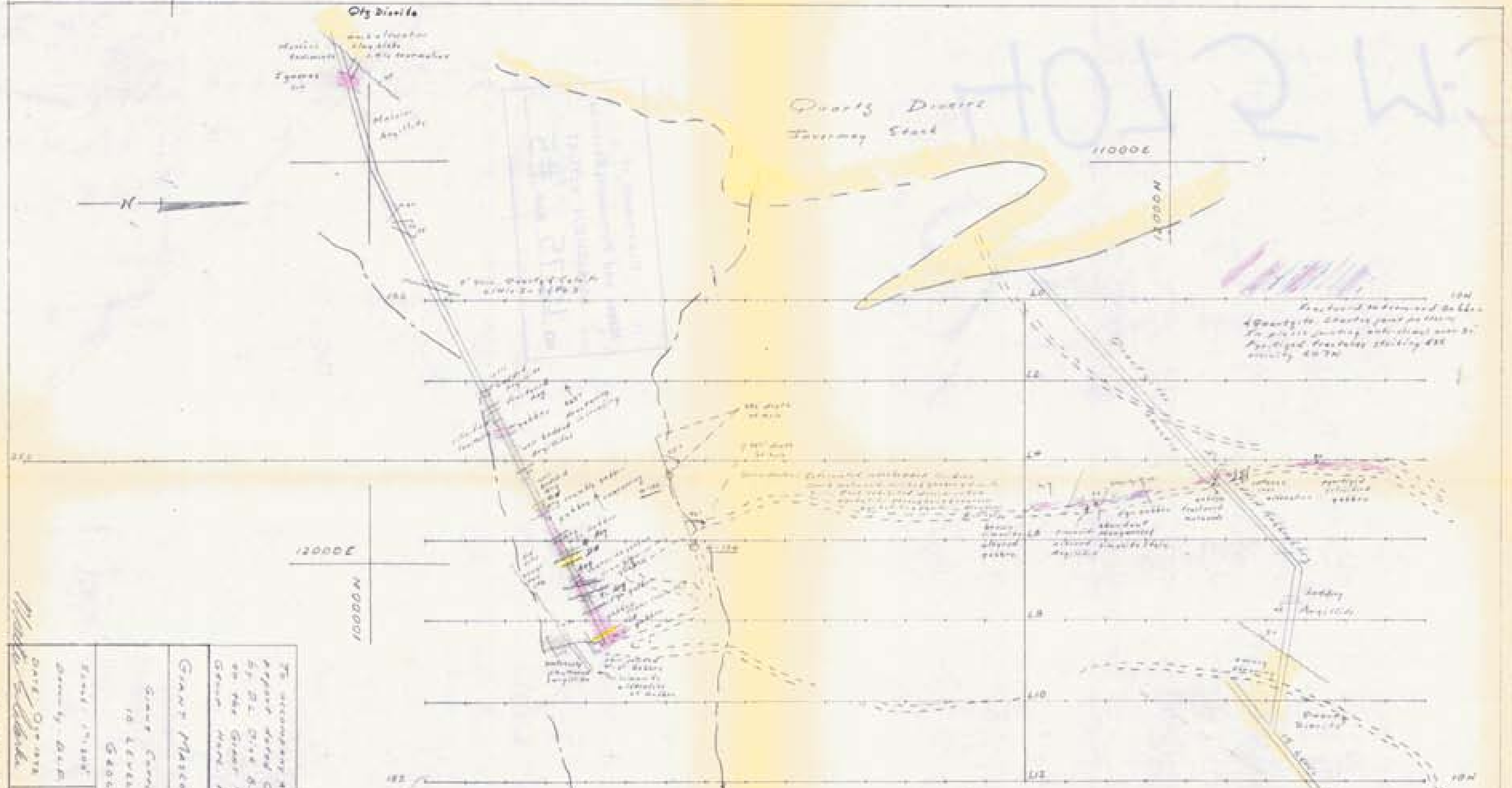
D. D. S.



M-4  
4075

To accompany an assessment report dated Oct. 1976 by Dr. Dick B. J. (Gibson) on the Giant Magnetometer Survey  
 Giant Magnetometer Survey Ltd  
 Giant Magnetometer Project  
 10 Level Grid  
 MAGNETOMETER SURVEY  
 Scale: 1:5000  
 Drawing No. CS-0-45  
 Date: Oct 1976  
 A18

D. Dier



City Diorite  
 and a fracture  
 along which  
 a dyke intrudes  
 Mainly  
 Amphibole  
 Igneous  
 rock

Quartz Diorite  
 Tertiary Stock

11000E

10000N

10000E  
 10000N

Fractured to form a bubble  
 of Quartzite. Quartz joint pattern  
 in place of quartz and almost pure  
 quartzite fracture striking 45°  
 roughly 40-70°

- LEGEND
- Amphibole Arg - [Symbol]
  - Quartzite Qzts - [Symbol]
  - Gabbro Gg - [Symbol]
  - Diorite Dd - [Symbol]
  - Fault [Symbol]
  - Joint [Symbol]
  - Contact [Symbol]
  - Inferred Contact - - -

10 LEVEL GALLERY  
 1972

4075 M.5

The accompanying geologic map  
 prepared during our visit  
 by Dr. D. G. S. (Smith)  
 on the Grand Canyon Camp  
 Grand Hill, New West 1972.

Grand Mosaic Mount Co.  
 Grand Canyon Park  
 10 Level Gabbro  
 GEOLOGY

Scale 1:1000  
 D/G/S/W

Date of Map  
 G.S. D. G. S.

D. G. S.

3400E

3600E

3800E

10000E

10200E

8000N

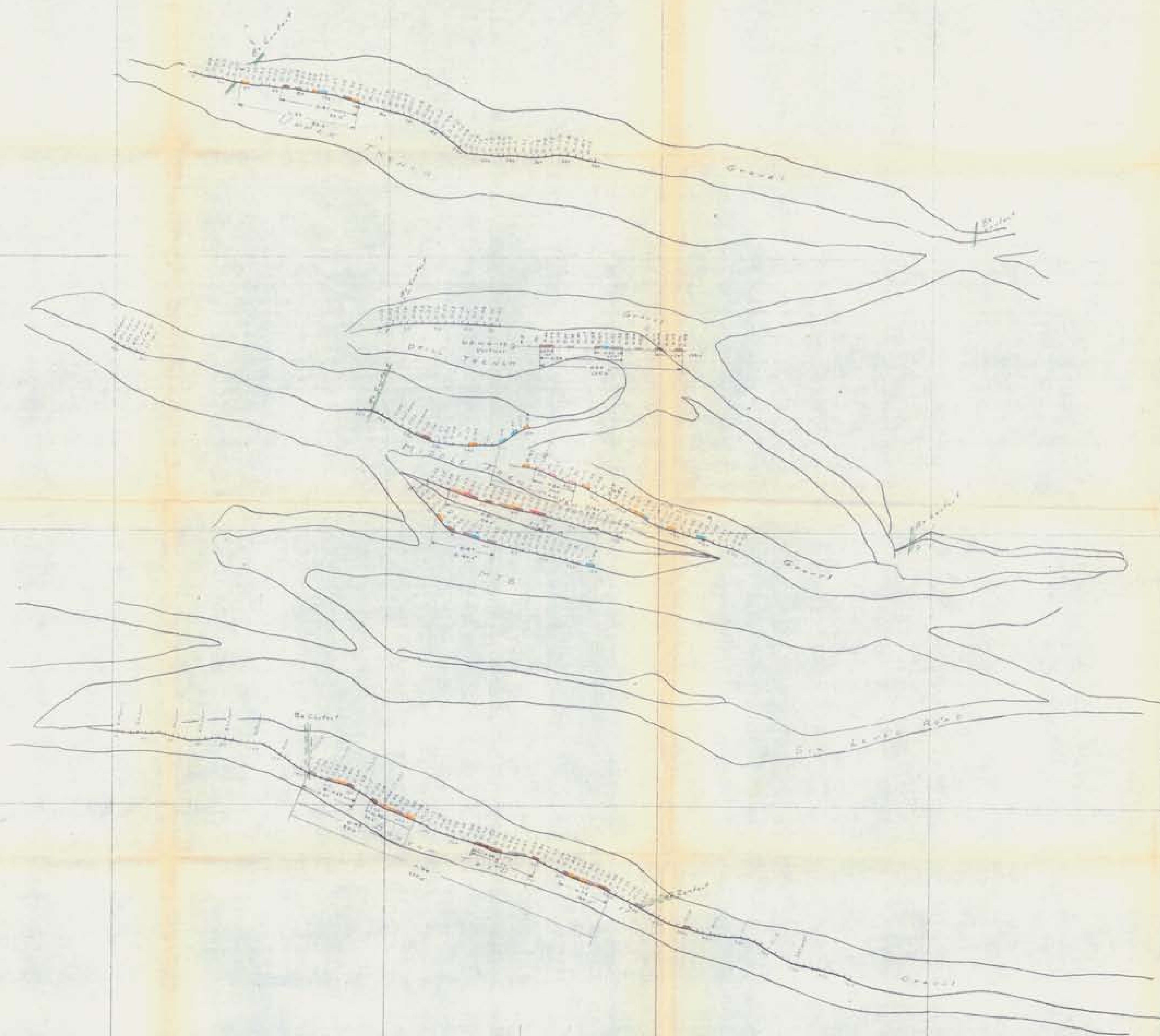
8000N

8100N

8400N

8600N

8800N



M-6  
4075

Color Code

- 21-25%
- 18-21%
- 15-18%
- 12-15%
- 9-12%
- 6-9%

Note: Cu Values Only

To accompany an assessment report dated Oct. 1952 by P.L. Dick & Co. (Contract) on the Grant Copper Claim Group, Grant, New Mexico.

Grant Prospect Mines

Grant Lumber Project  
Main Building Road  
Geochronology

Scale: 1" = 400'  
Date: Nov. 1952

Drawn by: P.L.D.  
Map No.: 45-0-47

Walter S. ...  
P. Dick

3400E

3600E

3800E

10000E

10200E

8800N

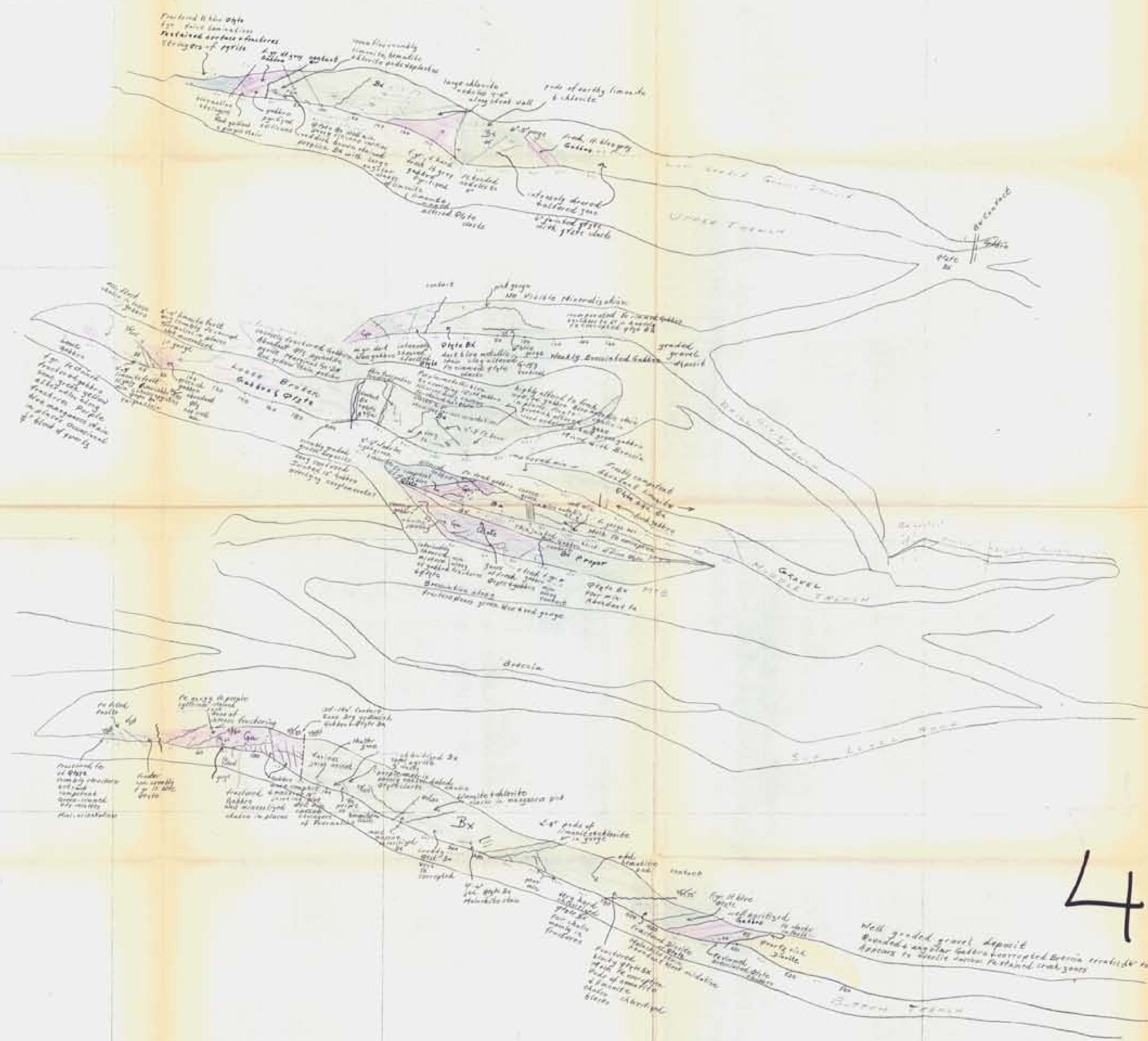
9000N

9200N

9400N

9600N

9800N



**LEGEND**

- Quartzite (light blue)
- Granite (pink)
- Gneiss (yellow)
- Schist (green)
- Fault (dashed line)
- Stream (solid line)
- Contour (dotted line)
- Gravel (stippled pattern)
- Chert (cross-hatched pattern)
- Shale (horizontal lines)
- Sandstone (vertical lines)
- Limestone (diagonal lines)
- Claystone (horizontal lines)
- Siltstone (vertical lines)
- Coal (wavy lines)

4075 M-7

To be returned to the  
 original owner, Dr. J. H.  
 by the U.S. Geological Survey  
 on the receipt of the  
 original receipt.

**Giant Magnet Mines**

Great Lakes Region  
 Iron-Steel Area  
 Michigan

Scale 1:25,000      Date Nov 1916  
 Sheet No. 612      Month  
 Walter H. Clark      C-10-75  
 D. D. Cox